

World Obesity Atlas 2024

Obesity and its consequences

- Global, regional and national estimates of the contribution of obesity to leading noncommunicable diseases in adults
- Global, regional and national predictions of the effects of obesity on children's higher risk of non-communicable diseases
- 186 national scorecards for child and adult obesity and its consequences

March 2024

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www.worldobesity.org #worldobesityatlas

Suggested Citation: World Obesity Federation. World Obesity Atlas 2024. London: World Obesity Federation, 2024. https://data.worldobesity.org/publications/?cat=22

Acknowledgements:

The World Obesity Federation is indebted to the World Health Organization, the NCD Risk Factor Collaboration, The Institute for Health Metrics and Evaluation, The International Energy Authority, and the UN Population Division for the use of their downloadable data in the present Atlas. The World Obesity Federation would also like to thank RTI International for calculating the projected obesity prevalence data used in this Atlas.

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For further details please see the data sources and methods section in Annex 1.



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Acronyms

AFRO	African Region	LMIC	Low Middle Income Countries
BMI	Body Mass Index	NCD	Non-Communicable Disease
DALY	Disability-Adjusted Life-Years	PAHO	Region of the Americas
EMRO	Eastern Mediterranean Region	SD	Standard Deviation
EURO	European Region	SEARO	South-East Asia Region
GHG	Greenhouse Gas	WHO	World Health Organization
HDL	High-Density Lipoprotein	WPRO	Western Pacific Region
IHME	Institute for Health Metrics and Evaluation		

Foreword



Professor Louise Baur The University of Sydney



Johanna Ralston CEO, World Obesity Federation



World Obesity Day 2024 sees the publication of the sixth World Obesity Atlas. Each Atlas has reported estimates for national obesity prevalence levels and trends, and each has also focused on a theme: these include the rise in childhood obesity, the likelihood of meeting global targets, the impact of obesity on COVID-19 risk, and the economic impact of overweight and obesity.

This year the theme is "Obesity and..." the diseases it drives, with specific focus on obesity as a preventable cause of non-communicable diseases (NCDs). We look at major NCDs (type II diabetes, stroke, coronary heart disease, and cancer) and the proportions of these diseases that are attributable to high body mass index (overweight and obesity) in adulthood. To further illustrate obesity's role in wider NCD challenges that are occurring at ever-younger ages, we also provide estimates of the numbers of children with the early signs of NCDs (hyperglycaemia, high blood pressure, and low HDL cholesterol), and the proportion of these attributable to high body mass index. We also estimate the numbers of children who might be spared from developing these conditions if they were not experiencing excess body weight.

We then take a brief look at the role planetary health and the changing climate are playing in the development and degree of overweight and obesity, recognising the associations between economic development and the changing nature of food supplies, transport, urbanisation and pollution. While obesity has been recognised as a disease, its rapid increase in recent years has been exacerbated by some of the drivers of rapid economic growth. Efforts to address obesity and climate change share many common obstacles including siloed, fragmented, and insufficiently resourced approaches when comprehensive, integrated, and well-supported efforts are the only way to achieve long-term success and impact.

This focus also underscores a critical finding of the Atlas: the countries where disability and death attributable to overweight and obesity are highest are in the Eastern Mediterranean including North Africa, the Americas and South-East Asia. This further dismantles misconceptions that obesity is limited to wealthier and older populations in the Global North, and is easily prevented and managed by calling on individuals to eat less and move more. Our Atlas demonstrates that obesity is global, affecting rich and poor, at ever younger ages. Preventing, detecting and managing obesity could be seen as the single most important way to reduce premature deaths due to cancer, cardiovascular disease and diabetes, the main causes of death the world over. By taking this on, we can improve the health of the population and the planet.

The Atlas is completed by a series of national scorecards for 186 countries, presenting our data for overweight and non-communicable disease based on current estimates and projected for young people to 2035. These serve as a wealth of evidence for advocacy directed at policymakers who have the power to make a difference.

Voices of people living with obesity



Living with obesity can impact your life in many ways, especially if you are a child or teenager who is the target of jokes and teasing because of your weight. I have kept my weight under control for over six years, and I believe that a key factor enabling me to do this is knowing that obesity is a disease that must be managed every day. For this to happen, it is very important to take care of the environment in which I live and to accept that there will still be moments of ups and downs along the way. Don't give up!

Gabriel Chamon, Youth



The environment around us influences our choices, so let's talk about our food systems, our parks, public spaces, and the workplace. Living with obesity also shapes our world and to lead the healthiest life possible, we need supporting environments: safe spaces free from stigma, real science-based information free from diet gurus and influencers, and health systems that are prepared for the obesity epidemic. Picture community gardens where children learn to grow fruits and vegetables, connecting with the earth and understanding the value of healthy eating. Envision cities designed with green spaces where families can play and exercise together, free from pollution. These are not just dreams; they are achievable goals. Together, we can advocate for policies that support these



initiatives, reducing obesity by creating environments that promote physical activity and provide nutritious food choices for all. Let's transform our world into a healthier place, step by step, starting today.

Dr María Eugenia Anselmi, Our World





I was born with childhood obesity. This March 4 on World Obesity Day, we are talking about obesity and various health topics. Did you know that one out of every seven individuals around you is living with obesity? That equals 1 billion people globally living with obesity. And obesity is a complex disease caused by both behavioural, genetic and environmental factors. This is an important point to understand to ensure that when we work and interact with people living with obesity, we are not blaming them for bringing obesity onto themselves.

Stephen Ogweno, Health



Headline findings in the World Obesity Atlas 2024

Of the 41 million adult deaths each year due to NCDs, 5 million are driven by high BMI (≥ 25 kg/m²). Nearly 4 million of these are from diabetes, stroke, coronary heart disease and cancer alone. A high BMI is responsible for over 120 million adult person-years lost to these four leading NCDs each year. Three quarters of this avoidable death and disease in adults is occurring in middle-income countries. Put simply, most people living with and dying from NCDs have underlying high BMI, and the majority of these NCD deaths are occurring among people in lower resource settings and developing countries.

On present trends, by 2035 more than 750 million children (age 5-19 years) are expected to be living with overweight and obesity as measured by body mass. That is equivalent to two children in every five globally, and most of these children will be living in middle-income countries.

Because of their high BMI, these 750 million children are at higher risk of experiencing the early signs of noncommunicable diseases while still in childhood. In 2035, an estimated 68 million children will be suffering from high blood pressure due to their high BMI, an estimated 27 million will be living with hyperglycaemia due to their high BMI, and 76 million will have low HDL cholesterol due to their high BMI. The symptoms of these precursors to serious disease are largely invisible, but the children will be entering adulthood already on track for strokes, diabetes and heart disease. Despite some laudable efforts to address this, without major and coordinated

Box 1: Definition of overweight, obesity, high BMI

In adults, overweight and obesity are defined as a BMI ≥25 kg/m². In children, overweight and obesity are defined as a BMI >1sd above the WHO median child reference values. Both overweight and obesity in adults and children are referred to as high BMI throughout the document.

Although widely used, BMI has well documented limitations. As a measure of size not health, it is useful as a screening tool at the individual level and for estimating overweight and obesity at a population level. It is not recommended that it be used in isolation as a diagnostic tool in a clinical setting.

action, rates of obesity will continue to rise, and more and more people will die prematurely from obesity or one of the diseases attributable to obesity. Moreover, the NCDs associated with obesity that were once only seen in adults are now becoming increasingly common among children.

To reinforce how much this has become an issue of emerging and more recently developed economies, the Atlas also shows the correlation between high BMI and economic development. Countries with economies that are expanding at an accelerated rate also have rapid rises in the prevalence of overweight, albeit from a low level. The data shows how high BMI is linked to the mounting environmental crisis facing the globe, with greenhouse gas emissions, urbanisation, plastic waste, a lack of physical activity and consumption of animal products all playing a role in creating unhealthy environments that contribute to obesity.

Reducing obesity prevalence and improving its management will have substantial benefits for health services and improve the likelihood of meeting global targets for tackling NCDs in adults. This will ensure better health for future generations.

Section 1: Global overweight and obesity (high BMI)

Section 1: Global overweight and obesity (high BMI)

Every country is affected by high BMI, with some lower income countries showing the highest increases in the last decade. As reported in the World Obesity Atlas 2023 (World Obesity Federation, 2023a), preventing and treating obesity may require financial investment, but the cost of failing to prevent and treat obesity will be far higher, with high BMI reducing the global economy by over US\$4 trillion in 2035, nearly 3% of global gross domestic product.

The estimates for global levels of high BMI suggest that nearly 3.3 billion adults may be affected by 2035, compared with 2.2 billion in 2020. This reflects an increase from 42% of adults in 2020 to over 54% by 2035. For young people aged 5 to 19 years, the figure rises from 22% experiencing high BMI (430 million) to over 39% (770 million) by 2035.

High BMI and the risk of non-communicable diseases in adults

Based on data trends for 2000-2016, and assuming no interventions, the projected rise in the prevalence and numbers of adults with high BMI is shown in Table 1.1.

Table 1.1: Global estimate (2020) and projected number of adults (2025-2035) with high BMI

	2020	2025	2030	2035
Adults with overweight (BMI \ge 25 to 30 kg/m ²)	1.39bn	1.52bn	1.65bn	1.77bn
Adults with obesity (BMI \geq 30 kg/m ²)	0.81bn	1.01bn	1.25bn	1.53bn
Adults with overweight or obesity as a proportion of all adults globally	42%	46%	50%	54%

Source: World Obesity Federation, 2023b

For regional data see sections 2 and 3.

Table 1.2: Top 20 countries for the highest proportion of adult men and women living withhigh BMI 2020

	Proportion of men with high BMI		Proportion of women with high BMI
Tonga	80%	Tonga	87%
Samoa	79%	Samoa	86%
United States	79%	Kuwait	79%
Malta	78%	Jordan	78%
Kuwait	77%	Saudi Arabia	78%
New Zealand	76%	Qatar	77%
Australia	76%	Turkey	76%
Israel	76%	Libya	75%

	Proportion of men with high BMI		Proportion of women with high BMI
Qatar	76%	Lebanon	75%
Canada	76%	Oman	74%
Saudi Arabia	75%	United Arab Emirates	74%
Spain	74%	Egypt	74%
United Kingdom	74%	Bahamas	73%
Jordan	74%	Fiji	73%
Czechia	74%	Iraq	73%
Greece	74%	Algeria	73%
Bulgaria	73%	Tunisia	72%
Lebanon	73%	Bahrain	72%
Iceland	73%	Iran	72%
Montenegro	73%	Mexico	71%

Source: World Obesity Federation, 2023b

Table 1.3: Top 20 countries for the most rapid increase in the proportion of adults livingwith high BMI 2000-2016

	Compound annual growth in adult obesity 2000-2016 (%)
Lao People's Democratic Republic	3.8
Viet Nam	3.8
Maldives	3.7
Thailand	3.5
Bangladesh	3.5
Bhutan	3.4
Indonesia	3.4
Timor-Leste	3.3
Nepal	3.2
Myanmar	3.2
India	3.1
Afghanistan	3.1
Cambodia	3.1
Burkina Faso	3.0
Sri Lanka	3.0
Rwanda	2.9
Pakistan	2.8

	Compound annual growth in adult obesity 2000-2016 (%)
Malaysia	2.8
China	2.8
Angola	2.8

Source: World Obesity Federation analysis of NCD RisC, 2024

According to the 2024 Global Burden of Disease study (IHME, 2024) recent estimates indicate that over 56 million people (adults and children) die each year, and 2.5 billion years of healthy life are lost to disease or injuries or other causes of ill-health (DALYs, or disability-adjusted life-years). Of these, some 42 million deaths and 1.6 billion DALYs are caused by non-communicable diseases (NCDs). Two-thirds of these NCD deaths and 40% of the NCD DALYs are caused by just four conditions: cancers (neoplasms), coronary heart disease, stroke and diabetes. Each of these conditions is associated with, and accelerated by, overweight and obesity.

The Global Burden of Disease study has also provided estimates of the proportion of these deaths and DALYs for which risk factors are known, including the risk factor of a high body mass index (BMI \geq 25 kg/m²). As shown in Tables 1.4 and 1.5, a high BMI accounts for between 5% and 42% of adult deaths from the four leading NCDs, and between 5% and 52% of adult DALYs from these NCDs.

	Total deaths 2019	Of which, attributable to high BMI
All causes	50.3m	5.0m (10%)
Of which non-communicable	41.0m	5.0m (12%)
diseases		
Of which		
Diabetes mellitus (Type 2)	1.47m	0.62m (42%)
Coronary heart disease	9.1m	1.7m (19%)
Neoplasms	9.9m	0.46m (5%)
Stroke	6.5m	1.1m (17%)

Table 1.4: Deaths of adults attributable to high BMI (millions)

Source: IHME, 2024

Table 1.5: Adult person-years lost to disease (DALYs) attributable to high BMI (millions)

	Total DALYs 2019	Of which, attributable to high BMI
All causes	1,871m	160m (9%)
Of which non-communicable	1,454m	160m (11%)
diseases		
Of which		
Diabetes mellitus (Type 2)	66.1m	34.4m (52%)
coronary heart disease	181m	41.4m (23%)
Neoplasms	241m	11.2m (5%)
Stroke	141m	34.8m (25%)

Source: IHME, 2024

The importance of a high BMI as a contributory risk to major NCDs has gradually increased relative to other known risk factors in the last two decades. This is considered to be due, in part, to a decline in the contribution of other risk factors such as poor interior air or use of tobacco products, but also in part due to the increasing evidence of the influence of overweight on a range of diseases and its effects in younger age groups. The trends are reflected in all four of the leading NCDs considered in this Atlas, as shown in Figures 1.1 and 1.2 below.



Figure 1.1: High BMI as a contributor (in %) to deaths from leading NCDs: adults 1990-2019

Source: World Obesity Federation analysis from IHME, 2024



Figure 1.2: High BMI as a contributor (in %) to the years of healthy life lost (DALYs) to leading NCDs: adults 1990-2019

Source: World Obesity Federation analysis from IHME, 2024

Early signs of non-communicable diseases in childhood

Based on data trends for 2000-2016, and assuming no interventions, the prevalence and numbers of young people (aged 5-19 years) with overweight or obesity is predicted to rise from over 430m young people (22% of the global population of this age group) to 770m (39%) by 2035 – see Table 1.6.

Table 1.6: Global estimate (2020) and projected number of young people (2025-2035) with overweight (BMI >1sd – 2sd)* and obesity (BMI >2sd)*

	2020	2025	2030	2035
Children with overweight	260m	310m	350m	390m
Children with obesity	175m	240m	310m	380m
Children with overweight or obesity as a proportion of all children globally	22%	28%	33%	39%

Source World Obesity Federation, 2023a

For regional data see sections 2 and 3.

* Definitions according to World Health Organization child growth reference charts.

Table 1.7: Top 20 countries for the highest proportion of children living with high BMI 2020

	Proportion of boys with high BMI		Proportion of girls with high BMI
Tonga	63%	Tonga	72%
Samoa	57%	Samoa	66%
United States	51%	Fiji	46%
Kuwait	50%	United States	46%
Saudi Arabia	46%	Kuwait	44%
China	46%	Vanuatu	44%
Greece	46%	Egypt	44%
Qatar	46%	New Zealand	42%
Oman	45%	El Salvador	41%
Cyprus	45%	Costa Rica	41%
Argentina	45%	Mexico	41%
New Zealand	45%	Bahamas	40%
Lebanon	44%	Oman	40%
Italy	44%	Saudi Arabia	39%
Malta	43%	Portugal	39%
Egypt	43%	Dominican Republic	39%
Mexico	42%	Qatar	39%
Portugal	42%	Jordan	38%
Bahamas	42%	Algeria	38%
Spain	42%	Panama	38%

Source: World Obesity Federation, 2023b

Table 1.8: Top 20 countries for the most rapid increase in the proportion of children livingwith high BMI 2000-2016

	Compound annual growth in child obesity 2000-2016 (%)
Viet Nam	10.0
South Africa	9.1
Lao People's Democratic Republic	8.1
India	7.9
Maldives	7.9
Sri Lanka	7.8
Nepal	7.7

	Compound annual growth in child obesity 2000-2016 (%)
Bhutan	7.7
Lesotho	7.7
Cambodia	7.6
Namibia	7.5
China	7.5
Eswatini	7.3
Timor-Leste	7.2
Burkina Faso	7.2
Afghanistan	7.2
Bangladesh	7.1
Myanmar	6.9
Indonesia	6.6
Thailand	6.5

Source: World Obesity Federation analysis from NCD RisC, 2024

Early signs of the development of non-communicable diseases include high blood pressure, a major risk factor for cardiovascular disease and especially strokes, and hyperglycaemia or poor glucose tolerance, indicating early signs of type 2 diabetes. We also consider the levels of high-density lipoprotein (HDL) cholesterol in blood, as this form of circulating cholesterol is protective of heart health, and low levels of HDL cholesterol are an early warning sign for coronary heart disease.

On the basis of the known prevalence of these three early signs of NCDs in young people in different BMI categories, we can estimate the likely number of cases in the population (for our methods see Annex 1: Sources of data). We can also compare this with the number of cases that might be found if all children had a BMI below the WHO reference for overweight (i.e. BMI < 1sd above the median) – see Table 1.9.

Table 1.9: Global estimate: Number of cases of young people with early signs of non-communicable disease, estimate for 2020

	Cases of low HDL cholesterol	Cases of high blood pressure	Cases of hyperglycaemia
Not excess body weight	122m	47m	100m
Overweight (1sd - 2sd)	41m	17m	25m
Obesity (>2sd)	36m	31m	18m
Total cases	199m	95m	143m
Cases if all children not overweight (<1sd)	157m	60m	128m
Cases attributable to excess body weight	41m	34m	15m

Source: World Obesity Federation analysis of IHME, 2024

With the numbers of children experiencing overweight and obesity projected to 2035 we can estimate the numbers of cases of young people carrying these early signs of NCDs that are attributable to overweight and obesity. The results are shown in Figure 1.3.

The estimates suggest that, in 2035 and assuming no interventions to reduce overweight and obesity, some 27 million children will experience hyperglycaemia, 68 million will experience high blood pressure, and 76 million will experience low levels of HDL cholesterol, all attributable to their high BMI. Most of these children will be in middle-income countries, and for the most part their conditions will not be detected or treated.

Figure 1.3: Projected numbers of children with NCD risks attributable to high BMI.



NB: Children with high BMI may experience more than one of the early signs of disease.

Source: World Obesity Federation analysis of IHME, 2024

Obesity and the health of the planet

The World Obesity Atlas 2024 has a main theme of obesity as a preventable cause of non-communicable diseases. In this section, we look at additional correlates of obesity and their relationship to planetary health.

The relationship between high body mass and planetary health is two-directional, with climate change and its causes contributing to increased obesity levels, while on a population level some evidence suggests that the needs of a growing population with a high BMI will increase greenhouse gas (GHG) emissions, by small margins compared to other sources of emissions (Swinburn et al, 2019).

The growth of economies and societies is closely associated with an increasing proportion of the population living with a high BMI. The World Obesity Atlas 2021 (World Obesity Federation, 2021) noted the correlation between countries' levels of GDP per capita and the prevalence of obesity. For the present Atlas, we have re-analysed the

available data for comparable years from the World Bank (2000-2016) (World Bank, 2024a) and NCD RisC (2000-2016) (NCD RisC, 2024) in order to examine the rate of increase in GDP in the last two decades, and the rate of increase in the prevalence of high BMI (defined for adults as a BMI \geq 25 kg/m² and for children as a BMI >1sd above reference).

Table 1.10: Correlations between GDP per capita, GDP annual growth,	adult and child high
BMI prevalence and the annual change in prevalence, 2000-2016	

	GDP per capita 2016 (n=182)	Annualised growth in GDP per capita 2000-2016 (n=178)
Adult high BMI prevalence 2016	r= 0.41 (p<0.001)	r= - 0.24 (p<0.005)
Annualised increase in adult high BMI prevalence 2000-2016	r= - 0.50 (p<0.001)	r= 0.26 (p<0.001)
Child high BMI prevalence 2016	r= 0.35 (p<0.001)	r= - 0.30 (p<0.001)
Annualised increase in child high BMI prevalence 2000-2016	r= - 0.61 (p<0.001)	r= 0.34 (p<0.001)
GDP per capita 2016		r= - 0.22 (p<0.005)

Sources: World Obesity Federation analysis of NCD RisC, 2024 and World Bank, 2024a

The results confirm the general association between higher GDP per capita and higher prevalence of high BMI among both adults and children. They also show a positive correlation between annualised growth in GDP per capita and annualised increase in the prevalence of high BMI, for both adults and children. However, countries with the most rapid growth in GDP are generally those starting from a low level, and that is supported by the inverse relationship (negative correlation) between current GDP and the rate of increase in obesity levels, for both adults and children. Conversely, the most rapid increase in overweight and obesity tends to be in countries starting from a low level, so we find a positive relationship between the most rapid increases in high BMI for both children and adults and the rate of increase in GDP.

In summary, high BMI prevalence for both adults and children is positively correlated with the economic performance of a country (as far as can be measured by GDP). This can be stated while recognising that any wealth generated by improved economic performance is often not shared by all and that may indeed be exacerbating inequities. The data also reveal that those countries showing the most rapid growth in wealth will likely also show a rapid rise in the prevalence of high BMI, albeit from low levels.

It follows that the environmental consequences of rising economic wealth are expected to be linked (positively correlated) to the prevalence of high BMI. This can be shown in terms of the use of fossil fuels and greenhouse gas (GHG) emissions, and in the proportion of a nation's population living in urban areas. All of these have implications for the development of high BMI, through the use of mechanised industrial processes, sedentary working practices, use of motorised transport and less need and opportunity for active transport and active recreation.

Similarly, more people living in cities tends to be associated with greater availability of processed foods in the food supply, and increased use of food packaging including wrapping and bottling using plastic products.

Furthermore, increased processed food supplies and increased national wealth are reflected in national dietary patterns, with countries experiencing high GDP levels also likely to shift to diets containing greater levels of animal proteins and processed sugar-containing foods. Moreover, people living with a high BMI are predisposed to maintain metabolism, body heat and movement through greater intake of food energy, and this increased consumption can be shown at a national population level. These environmental issues can be shown to correlate with the prevalence of high BMI in a population as shown in Table 1.11 and Figures 1.4 and 1.5.

In simple terms, the data show that with increased national wealth (i.e. increased GDP) we see increased levels of high BMI. We also see a similar correlation between high BMI and GHG emissions, increased urban population, plastic waste usage, insufficient inactivity, and the consumption of animal proteins, sugars and sweeteners – mainly adverse consequences of economic wealth. This highlights the challenge faced by lower- and middle-income countries which are indeed seeing rising levels of obesity.

	GHG emissions CO2 equivalent tonnes/ capita/year (2015)	% urban population (2020)	Plastic waste kg/capita (latest year)	% adults taking insufficient physical activity (2016)	% youth 11- 19y taking insufficient physical activity (2016)	Consumption of animal protein g/ cap/day (2021)	Consumption of sugar and sweeteners kg/cap/yr (2021)
Countries with data	n=144	n=182	n=147	n=153	n=127	n=176	n=176
Adult high BMI prevalence 2016	r= 0.48 (p<0.001)	r= 0.57 (p<0.001)	r= 0.45 (p<0.001)	r= 0.48 (p<0.001)	r= -0.19 (p<0.05)	r= 0.67 (p<0.001)	r= 0.49 (p<0.001)
Child high BMI prevalence 2016	r= 0.54 (p<0.001)	r= 0.47 (p<0.001)	r= 0.46 (p<0.001)	r= 0.49 (p<0.001)	r= -0.07 (ns)	r= 0.61 (p<0.001)	r= 0.44 (p<0.001)

Table 1.11: Correlations between adult and child high BMI and environmental indicators

ns = not significant

Sources: See Annex 1



Figure 1.4: Correlation between adult BMI and annual GHG emissions per capita

Source: World Obesity Federation analysis using data from NCD RisC, 2024 and International Energy Authority, 2023.





Source: World Obesity Federation analysis using data from NCD RisC, 2024 and World Bank, 2023b

In modern food systems, more than 3 kcal of fossil fuel energy is required to produce 1 kcal of food energy (Hall et al, 2009). As noted above, high body mass implies a greater need for food energy which in turn creates a greater consumption of food products (10%-30% greater energy intake) (Prentice et al, 1996) and greater fuel consumption when motorised transport is used (Hammond and Levine, 2010). The amounts are not trivial, with one estimate suggesting that high BMI adds an extra 700 megatons of greenhouse gas (CO₂ equivalent) emissions annually - the equivalent of 1.6% of worldwide GHG emissions (Magkos et al, 2020).

Care should be taken not to focus responsibility for these effects on the environment on individual consumers, and in particular, to avoid stigmatising individuals living with high BMI. An individual's increase in body mass index is a consequence of larger system effects, especially systems that are structured to incentivise high levels of consumption of food and fossil fuel, along with trends towards sedentary behaviour in the workplace and at home. In particular, food and beverage companies have a specific interest in rising levels of high BMI among adults and children: the excess food energy consumed to maintain metabolism. The additional consumption for children in the USA alone is estimated to be worth over \$20bn in food and beverage sales each year (Lobstein et al, 2015) and far more for adults in the USA, and an order of magnitude greater worldwide.

As noted in the 2019 Lancet Commission on Obesity report (Swinburn et al, 2019), the food system is driving unprecedented environmental damage, accounting for 29% of human-caused greenhouse gas emissions and causing rapid deforestation, soil degradation and massive biodiversity loss. Meat production is at the centre of these costs, and, as shown earlier, animal protein consumption is closely associated with obesity prevalence at national levels.

In the World Obesity Atlas 2022 (World Obesity Federation, 2022), we noted globally successful food and beverage companies operate in a highly competitive market and may pursue models of production and market expansion which harm the health of both people and planet - through, for example, intensive marketing and promotion of unhealthy food produced in an unsustainable and environmentally damaging way. This has been recognised in a large number of reports on the global impact of current food systems, most recently with the report on the need for food system transformation (Food System Economic Commission, 2024) which points out "the recent evolution of food systems has fuelled – and continues to inflame – some of the greatest and gravest challenges facing humanity, notably persistent hunger, undernutrition, the obesity epidemic, loss of biodiversity, environmental damage and climate change. The economic value of this human suffering and planetary harm is well above 10 trillion USD a year, more than food systems contribute to global GDP. In short, our food systems are destroying more value than they create." (page 7)

As a recent Lancet editorial commented, "Obesity is a product of not only an individual's circumstances and behaviour, but also society at large, shaped by global food markets and trade agreements. Multidimensional approaches are needed to curb the effects of the obesogenic environment, particularly against an international industry that promotes overproduction of cheap food and drinks." (Lancet editorial, 2024). To this we would add the neglect of obesity within health systems, along with lack of consistent data, stigma and fragmented policy approaches.

In order to protect the health of the planet and its citizens, there is an urgent need for a realignment of priorities. Instead of competitive market economics which require cost reduction, long shelf-lives, mass production and everincreasing sales expansion dictating what is and is not produced, we need to be guided by what sustains our planet and our bodies. And in order to protect people from developing and dying from NCDs including several types of cancer and diabetes, we need to address and manage overweight and obesity in health systems. For this, policies and incentives are needed to protect consumers, health systems and societies more broadly.

BOX 2: Obesity in climate-vulnerable countries

The effects of climate change are not felt evenly by countries. It is notable that some of the most climate-vulnerable countries, such as Small Island Developing States (SIDS), are also countries that report high prevalence of obesity (e.g. the Pacific Island countries). These countries are therefore extremely vulnerable both to further planetary degradation, and the impact of overweight and obesity, putting their resilience to economic, social and climate crises at risk. Both epidemics, of climate and obesity, are to have the greatest impact on developing nations, and need to be viewed intrinsically together as a development issue to deliver efforts in joint solutions for the benefit of the planet and people.

Section 2: High BMI and the risk of non-communicable disease in adults: Analyses of numbers and trends by WHO regions and World Bank income groups

Section 2. High BMI and the risk of noncommunicable disease in adults: Analyses of numbers and trends by WHO regions and World Bank income groups

This section considers the distribution of high BMI according to WHO region and according to World Bank income group, and the deaths and lost healthy life-years (DALYs) caused by non-communicable disease attributable to high BMI.

WHO regional data

Overweight and obesity trends 2020 to 2035

This section considers the numbers of adults estimated to experience overweight (excluding obesity, i.e. BMI \geq 25 to 30 kg/m²) and obesity (BMI \geq 30 kg/m²) in 2020 and their rising numbers and prevalence levels through to 2035, assuming no significant interventions to alter current trends.

		2020	2025	2030	2035
African region	Adults with overweight (millions)	118.28	143.51	172.80	204.43
(AFRO)	Adults with obesity (millions)	68.39	94.72	131.78	182.00
	Prevalence of overweight and obesity (high BMI)	35%	39%	43%	47%
Eastern	Adults with overweight (millions)	111.58	123.25	135.48	147.75
Mediterranean	Adults with obesity (millions)	105.60	133.68	168.98	211.99
region (EMRO)	Prevalence of overweight and obesity (high BMI)	51%	54%	57%	61%
European region (EURO)	Adults with overweight (millions)	256.85	255.11	251.67	246.11
	Adults with obesity (millions)	191.08	212.73	236.88	263.15
	Prevalence of overweight and obesity (high BMI)	63%	66%	68%	71%
Region of the Americas (PAHO)	Adults with overweight (millions)	238.10	245.40	247.55	243.84
	Adults with obesity (millions)	246.32	292.55	342.87	394.55
	Prevalence of overweight and obesity (high BMI)	67%	71%	74%	77%

Table 2.1 Adult overweight and obesity 2020-2035, WHO regions

		2020	2025	2030	2035
South-East Asia	Adults with overweight (millions)	256.16	305.86	356.39	404.95
region (SEARO)	Adults with obesity (millions)	78.79	110.28	151.18	202.62
	Prevalence of overweight and obesity (high BMI)	26%	30%	34%	39%
Western Pacific	Adults with overweight (millions)	405.61	449.30	488.83	520.52
region (WPRO)	Adults with obesity (millions)	120.20	160.25	210.73	272.16
	Prevalence of overweight and obesity (high BMI)	36%	41%	46%	51%

Source: World Obesity Federation, 2023b

Deaths attributed to high body-mass index

For 2019, the IHME (2024) has provided estimates of the numbers of deaths in the WHO regions, and the proportion of these attributable to high BMI, shown in Table 2.2.

Table 2.2: Deaths of adults and the numbers and proportions attributable to high BMI,WHO regions

		Total deaths 2019	Of which, attributable to high BMI
Global	All causes	50.3m	5.0m (10%)
	Of which non-communicable diseases	41.0m	5.0m (12%)
African region	All causes	4.7m	0.4m (8%)
	Of which non-communicable diseases	2.5m	0.4m (15%)
Eastern Mediterranean region	All causes	3.2m	0.5m (16%)
	Of which non-communicable diseases	2.5m	0.5m (21%)
European region	All causes	9.3m	1.2m (13%)
	Of which non-communicable diseases	8.4m	1.2m (15%)
Region of the Americas	All causes	6.9m	0.9m (14%)
	Of which non-communicable diseases	5.9m	0.9m (16%)
South-East Asia region	All causes	12.0m	0.9m (8%)
	Of which non-communicable diseases	9.0m	0.9m (10%)
Western Pacific region	All causes	14.1m	1.0m (7%)
	Of which non-communicable diseases	12.5m	1.0m (8%)

Source: IHME, 2024

For the four major NCDs the distribution across regions is shown in Figure 2.1



Figure 2.1: Proportion (%) of deaths from leading NCDs attributable to high BMI

Years of life lost to disease (DALYs) attributed to high body-mass index

For 2019, the IHME (2024) has provided estimates of the numbers of healthy life-years lost to disease (DALYs) in the WHO regions, and the proportion of these attributable to high BMI, shown in Table 2.3.

Iable 2.3: Adult person-year	ears lost to disea	se (DALYs) attribu	utable to high BMI,	WHO regions
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		Total DALYs 2019	Of which, attributable to high BMI
Global	All causes	1,871m	160m (9%)
	Of which non-communicable diseases	1,454m	160m (11%)
African region	All causes	213m	12m (5%)
	Of which non-communicable diseases	113m	12m (11%)
Eastern Mediterranean region	All causes	143m	18m (13%)
	Of which non-communicable diseases	109m	18m (16%)
European region	All causes	282m	32m (12%)
	Of which non-communicable diseases	243m	32m (13%)
Region of the Americas	All causes	262m	30m (12%)
	Of which non-communicable diseases	215m	30m (14%)

		Total DALYs 2019	Of which, attributable to high BMI
South-East Asia region	All causes	490m	34m (7%)
	Of which non-communicable diseases	360m	34m (9%)
Western Pacific region	All causes	477m	33m (7%)
	Of which non-communicable diseases	410m	33m (8%)

Source: IHME, 2024

For the four major NCDs the distribution of DALYs across WHO regions is shown in Figure 2.2.





Source: IHME, 2024

World Bank income groups

Overweight and obesity trends 2020 to 2035

This section considers the numbers of adults estimated to experience overweight (excluding obesity, i.e. BMI \geq 25 to 30 kg/m²) and obesity (BMI \geq 30 kg/m²) in 2020 and their rising numbers and prevalence levels through to 2035, assuming no significant interventions to alter current trends.

		2020	2025	2030	2035
Low	Adults with overweight (millions)	45.33	57.76	72.56	89.34
	Adults with obesity (millions)	27.56	41.23	60.33	85.69
	Prevalence of overweight and obesity	25%	29%	33%	37%
Lower-Middle	Adults with overweight (millions)	409.58	479.29	553.95	628.55
	Adults with obesity (millions)	193.29	254.82	336.35	440.47
	Prevalence of overweight and obesity	32%	36%	40%	45%
Upper-Middle	Adults with overweight (millions)	617.28	669.30	713.32	745.12
	Adults with obesity (millions)	315.01	392.20	485.15	594.51
	Prevalence of overweight and obesity	46%	51%	56%	61%
High	Adults with overweight (millions)	314.39	316.07	312.89	304.59
	Adults with obesity (millions)	271.90	312.85	356.67	401.27
	Prevalence of overweight and obesity	61%	64%	67%	70%

Table 2.4: Adult overweight and obesity 2020-2035, World Bank income groups*

Source: World Obesity Federation, 2023b

*Further analysis comparing Low & Middle Income Countries (LMICs) combined with High income countries can be found in Annex 2

Deaths attributed to high body-mass index

For 2019, the IHME (2024) has provided estimates of the numbers of deaths in the World Bank income groups, and the proportion of these attributable to high BMI, shown in Table 2.5.

Table 2.5: Deaths of adults attributable to high BMI, World Bank income groups*

		Total deaths 2019	Of which, attributable to high BMI
Global	All causes	50.3m	5.0m (10%)
	Of which non-communicable diseases	41.0m	5.0m (12%)
Low Income	All causes	3.0m	0.2m (6%)
	Of which non-communicable diseases	1.8m	0.2m (11%)
Lower-Middle Income	All causes	17.6m	1.7m (9%)
	Of which non-communicable diseases	13.2m	1.7m (13%)
Upper-Middle Income	All causes	18.9m	2.0m (11%)
	Of which non-communicable diseases	16.5m	2.0m (12%)
High Income	All causes	10.7m	1.1m (11%)
	Of which non-communicable diseases	9.6m	1.1m (12%)

Source: IHME, 2024

*Further analysis comparing LMICs combined with High income countries can be found in Annex 2

For the four major NCDs the distribution across the income groups is shown in Figure 2.3.



Figure 2.3: Proportion (%) of adult deaths from leading NCDs attributable to high BMI: World Bank income groups

Years of life lost to disease (DALYs) attributed to high body-mass index

For 2019, the IHME (2024) has provided estimates of the numbers of healthy life-years lost to disease (DALYs) in the World Bank income groups, and the proportion of these attributable to high BMI, shown in Table 2.6.

Table 2.6: Adult person-years lost to disease (DALYs) attributable to high BMI, World Bank income groups*

		Total DALYs 2019	Of which, attributable to high BMI
Global	All causes	1,871m 160m (9%)	
	Of which non-communicable diseases	1,454m	160m (11%)
Low Income	All causes	135m	6.5m (5%)
	Of which non-communicable diseases	77m	6.5m (8%)
Lower-Middle Income	All causes	727m	57.6m (8%)
	Of which non-communicable diseases	527m	57.6m (11%)
Upper-Middle Income	All causes	673m	63.2m (9%)
	Of which non-communicable diseases	558m	63.2m (11%)
High Income	All causes	336m	32.4m (10%)
	Of which non-communicable diseases	293m	32.4m (11%)

Source: IHME, 2024

*Further analysis comparing LMICs combined with High income countries can be found in Annex 2

For the four major NCDs the distribution of DALYs across income groups is shown in Figure 2.4

Figure 2.4: Proportion (%) of adult DALYs from leading NCDs attributable to high BMI: World Bank income groups



Source: IHME, 2024

Section 3: **High BMI and** the risk of noncommunicable disease in childhood: **Analyses of numbers** and trends by WHO regions and World Bank income groups

Section 3. High BMI and the risk of noncommunicable disease in childhood: Analyses of numbers and trends by WHO regions and World Bank income groups

This section considers the distribution of high BMI in childhood (age under 20 years) according to WHO region and according to World Bank income group, and the early signs of non-communicable disease they may experience attributable to high BMI.

WHO regional data

Overweight and obesity trends 2020-2035

This section considers the numbers of children estimated to experience high BMI in 2020 and their rising numbers and prevalence levels through to 2035, assuming no significant interventions to alter current trends. Overweight is defined as a BMI >1sd to 2sd above the WHO median child reference values. Obesity is a BMI >2sd above the reference value.

		2020	2025	2030	2035
African region (AFRO)	Children with overweight (millions)	44.74	62.63	84.78	114.02
	Children with obesity (millions)	15.55	25.86	40.37	60.96
	Prevalence of overweight and obesity (high BMI)	15%	19%	24%	31%
Eastern	Children with overweight (millions)	28.44	34.56	40.05	45.20
Mediterranean	Children with obesity (millions)	26.33	36.82	49.17	64.33
region (EMRO)	Prevalence of overweight and obesity (high BMI)	23%	28%	33%	39%
European region	Children with overweight (millions)	88.73	103.68	115.57	125.52
(EURO)	Children with obesity (millions)	69.99	94.85	122.97	156.24
	Prevalence of overweight and obesity (high BMI)	25%	29%	34%	40%
Region of the	Children with overweight (millions)	45.98	47.24	47.42	47.41
Americas (PAHO)	Children with obesity (millions)	42.25	48.85	55.15	62.32
	Prevalence of overweight and obesity (high BMI)	39%	43%	48%	53%
South-East Asia region (SEARO)	Children with overweight (millions)	41.22	53.07	66.23	81.08
	Children with obesity (millions)	22.02	33.21	48.10	67.71
	Prevalence of overweight and obesity (high BMI)	12%	17%	23%	31%
Western Pacific region (WPRO)	Children with overweight (millions)	66.73	78.45	77.93	69.63
	Children with obesity (millions)	51.24	74.69	91.14	98.74
	Prevalence of overweight and obesity (high BMI)	33%	42%	52%	60%

Table 3.1: Child overweight and obesity 2020-2035, WHO regions

Source: World Obesity Federation, 2023b

WORLD BESITY

On the basis of prevalence data for the three leading signs of risk for non-communicable disease in children of different weight status (see Annex 1) we can estimate the numbers of children with such signs attributable to their high BMI. The predicted numbers are shown in the following three figures.



Figure 3.1: Numbers of children (millions) with low HDL cholesterol attributable to high BMI 2020-2035, WHO regions

Source: World Obesity Federation, 2023b

Figure 3.2: Numbers of children (millions) with high blood pressure attributable to high BMI 2020-2035, WHO regions



Source: World Obesity Federation, 2023b



Figure 3.3 Numbers of children (millions) with hyperglycaemia attributable to high BMI 2020-2035, WHO regions

Source: World Obesity Federation, 2023b

World Bank income group data

Overweight and obesity trends 2020-2035

This section considers the numbers of children estimated to experience high BMI in 2020 and their rising numbers and prevalence levels through to 2035, assuming no significant interventions to alter current trends. Overweight is defined as a BMI >1sd to 2sd above the WHO median child reference values. Obesity is a BMI >2sd above the reference value.

Table 3.2: Child overweight and obesit	ty 2020-2035, World Bank income g	groups*
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		2020	2025	2030	2035
Low	Children with overweight (millions)	20.2	29.2	41.3	58.1
	Children with obesity (millions)	8.2	13.2	20.9	33.0
	Prevalence of overweight and obesity (high BMI)	12%	16%	20%	27%
Lower-Middle	Children with overweight (millions)	87.2	113.1	142.0	175.5
	Children with obesity (millions)	44.3	65.7	93.8	131.1
	Prevalence of overweight and obesity (high BMI)	14%	19%	25%	32%
Upper-Middle	Children with overweight (millions)	109.1	124.8	125.8	116.8
	Children with obesity (millions)	86.3	120.9	149.0	168.3
	Prevalence of overweight and obesity (high BMI)	34%	43%	51%	59%
High	Children with overweight (millions)	42.4	43.3	42.8	42.0
	Children with obesity (millions)	35.2	40.1	44.1	48.4
	Prevalence of overweight and obesity (high BMI)	37%	41%	44%	48%

Source: World Obesity Federation, 2023b

WORLD BESITY



Figure 3.4: Numbers of children (millions) with low HDL cholesterol attributable to high BMI 2020-2035, World Bank income groups

Figure 3.5: Numbers of children (millions) with high blood pressure attributable to high BMI 2020-2035, World Bank income groups



Source: World Obesity Federation, 2023b



Figure 3.6: Numbers of children (millions) with hyperglycaemia attributable to high BMI 2020-2035, World Bank income groups

Source: World Obesity Federation, 2023b
Section 4: Accelerating action on Obesity



Section 4. Accelerating action on Obesity: catalysing a multi-sectoral approach

Today, no country in the world is on track to reach the target to 'halt the rise' of obesity prevalence by 2030, as set in 2013 by the World Health Organization and approved by all governments. In reality, rather than a zero increase, the World Obesity Atlas 2022 (World Obesity Federation, 2022) estimated that global obesity is likely to have doubled over this time.

By 2035, over half the world's population will be above a healthy weight. The majority of these people will be in middle-income countries, where obesity is often poorly understood and capacity is lacking to address it. Over 65% of adults who live with obesity globally were living in low- and middle-income countries in 2020, and this is expected to rise to 7 in 10 adults with obesity in 2030.

Obesity is both a disease in its own right and a risk factor for many other non-communicable diseases (NCDs), which are increasingly putting the health of children at risk. 80% of children living with obesity were living in lowand middle-income countries in 2020.

The number of people with obesity is increasing globally, and as highlighted in the World Obesity Atlas 2023 (World Obesity Federation, 2023a) - with significant economic impact.

There are marked differences between regions and levels of economic development that require urgent and tailored action to address obesity and reduce the prevalence.

Low-income and middle-income countries face a double burden of malnutrition, whereby overnutrition and undernutrition coexist within the same individual, household, or population. The double burden of malnutrition has increased in the poorest low- and middle-income countries, particularly in south and east Asia and sub-Saharan Africa, mainly due to overweight and obesity increases (Popkin et al, 2019). Many countries, including Small Island Developing States (SIDS), are experiencing a triple burden with the direct and indirect impacts of climate change exacerbating the burden. The impact of overweight and obesity in poorer communities not only increases their vulnerability health-wise, but their resilience to economic, social and climate crises. It is often the people least able to afford the consequences who will face the heaviest financial burden of the rise of obesity prevalence: paying out-of-pocket for treatment for obesity-related diseases, losing out on work income, and having to take time off work and school to care for family members. The global economic impact of overweight and obesity was estimated to be 2.4% of GDP in 2020, and is estimated to increase to \$4.32 trillion by 2035.

"The multiple overlapping crises. The climate crisis and the COVID-19 pandemic, combined with poverty, unemployment, inequality and the marginalization of minority communities are fuelling an increase in obesity, noncommunicable diseases and mental health conditions."

Dr Tedros, Director-General WHO

The belief that obesity can be addressed through single silo solutions was put to rest during COVID-19, when underlying overweight and obesity combined with increased exposure to unhealthy diet and physical inactivity led to more people becoming ill and dying of COVID-19. The High-Level Meeting on Universal Health Coverage at the United Nations General Assembly in 2023 was a moment for recognising that inclusion of and financing for both prevention and treatment of obesity as part of Universal Health Coverage (UHC) would be essential. Obesity is not only a part of worldwide health, its far-reaching nature means it is at the heart of global health.

However, financing for obesity is nowhere near reflective of the level of impact of obesity on health and economies worldwide. Sustainable, effective funding is urgently needed, alongside effective public health policies and professionals trained to understand and manage obesity. Such financing must be accompanied by coordinated and robust efforts across sectors – public and private, food and health, high-, middle- and low-income countries and all populations. To date, policies to address obesity across the globe have been impeded by lack of political funding, financial support, and coordinated efforts. Fragmentation is best addressed by multisectoral approaches that incorporate immediate action into long-term plans, and that recognise, align and resource the wide range of stakeholders around common objectives and shared accountability.

Fortunately, the approval in 2022 of the obesity recommendations and WHO Acceleration Plan (Branca et al, 2023) offer frameworks and a roadmap for action on obesity, with national plans, evidence-based policies, effective treatment options, training and global coordination. Now, commitments and financing are needed to move from plans to action, and the remaining challenge is to break down the silos, looking for solutions and catalytic funding across sectors. World Obesity's 2023 Global Obesity Forum in New York during the UN General Assembly touched upon many of these challenges, and the discussion paper 'An economic Imperative: Catalysing funding to address obesity' highlights some possible courses of action:

- Making the case for the prevention and treatment of obesity as a public health emergency should appeal to the heads, hearts and pockets of those who hold the purse strings, both within and outside government.
- Mainstreaming obesity, both as part of NCDs but also of other agendas, by fostering collaboration and partnerships that take a holistic, people-centred approach.
- Building the evidence case on the economic impact and the benefits of action on obesity.
- Supporting rapid, sustainable and permanent action to ensure that the environments where we live, learn, work and play are actively supportive of health and of weight maintenance.

Obesity is at the heart of many other agendas but is often not framed as such: building a case for proactively addressing obesity from new areas will have benefits far beyond obesity. As the obesity community advances as part of a wider, positive change in global health, breaking out of disease silos, it positions itself at the heart of this change, and is impossible to ignore.

Section 5: Country scorecards

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Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	790,510	22,044
of which diabetes mellitus	137,641	2,475
of which coronary (ischaemic) heart disease	263,091	8,121
of which stroke	181,883	4,870
of which cancers (neoplasms)	23,546	769

Deaths from NCDs due to high BMI in adults 2019

6.2% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

9.0% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	13%	34%
Numbers of children with high BMI	1,957,201	7,166,800
of which, children with high blood pressure attributable to high BMI	139,918	605,324
of which, children with hyperglycaemia attributable to high BMI	66,009	248,473
of which, children with low HDL cholesterol attributable to high BMI	179,431	695,913

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	26.0
	Annual increase in urbanisation 1995–2020 (%)	0.74
Ă	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	88.1
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	10.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	13.4
	•	

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	81,871	3,120
of which diabetes mellitus	8,929	75
of which coronary (ischaemic) heart disease	26,643	1,301
of which stroke	23,622	1,007
of which cancers (neoplasms)	5,276	232

Deaths from NCDs due to high BMI in adults 2019

0.7% Annual growth rate

2020-2035

2.3%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	31%	56%
Numbers of children with high BMI	163,068	228,071
of which, children with high blood pressure attributable to high BMI	11,956	21,075
of which, children with hyperglycaemia attributable to high BMI	5,521	8,039
of which, children with low HDL cholesterol attributable to high BMI	15,074	22,904

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.3
	Annual increase in GHG emissions 2000–2015 (%)	1.9
-BA	Proportion of the population living in urban areas 2020 (%)	62.1
	Annual increase in urbanisation 1995–2020 (%)	1.89
Ă	Plastic waste (latest year) (kg per capita)	36.6
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	73.9
•	Consumption of animal proteins 2021 (grams per capita per day)	66.7
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	48.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,175,127	36,085
of which diabetes mellitus	234,202	2,890
of which coronary (ischaemic) heart disease	397,896	15,642
of which stroke	202,711	6,022
of which cancers (neoplasms)	34,889	1,427

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

4.4% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	39%	62%
Numbers of children with high BMI	4,480,040	8,572,081
of which, children with high blood pressure attributable to high BMI	385,402	858,534
of which, children with hyperglycaemia attributable to high BMI	155,833	306,977
of which, children with low HDL cholesterol attributable to high BMI	437,953	888,622

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	3.3
	Annual increase in GHG emissions 2000–2015 (%)	3.4
	Proportion of the population living in urban areas 2020 (%)	73.7
	Annual increase in urbanisation 1995–2020 (%)	1.10
	Plastic waste (latest year) (kg per capita)	51.5
	Proportion of adults taking insufficient physical activity 2016 (%)	33.6
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	83.8
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	26.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	32.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	259,775	6,972
of which diabetes mellitus	71,468	1,375
of which coronary (ischaemic) heart disease	40,972	1,342
of which stroke	71,961	1,990
of which cancers (neoplasms)	9,374	323

Deaths from NCDs due to high BMI in adults 2019

6.1% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

9.0% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	15%	34%
Numbers of children with high BMI	1,849,560	6,696,391
of which, children with high blood pressure attributable to high BMI	108,711	467,529
of which, children with hyperglycaemia attributable to high BMI	60,669	225,032
of which, children with low HDL cholesterol attributable to high BMI	159,730	609,228

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.8
	Annual increase in GHG emissions 2000–2015 (%)	7.1
	Proportion of the population living in urban areas 2020 (%)	66.8
	Annual increase in urbanisation 1995–2020 (%)	1.67
	Plastic waste (latest year) (kg per capita)	22.7
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	13.9
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	20.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

Antigua and Barbuda

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	3,051	91
of which diabetes mellitus	1,185	26
of which coronary (ischaemic) heart disease	374	15
of which stroke	452	15
of which cancers (neoplasms)	160	6

Deaths from NCDs due to high BMI in adults 2019

3.5% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

3.5% Annual growth rate

in the projected numbers of children

> with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	15%	29%
Numbers of children with high BMI	2,777	4,650
of which, children with high blood pressure attributable to high BMI	400	670
of which, children with hyperglycaemia attributable to high BMI	108	181
of which, children with low HDL cholesterol attributable to high BMI	339	567

Environmental correlates of obesity⁽²⁾⁽³⁾

Greenhouse gas (GHG) emissions CO2 equivalent 2015 (tonnes per capita per year) Annual increase in GHG emissions 2000–2015 (%)	n/a
Annual increase in GHG emissions 2000–2015 (%)	
	n/a
Proportion of the population living in urban areas 2020 (%)	24.4
Annual increase in urbanisation 1995–2020 (%)	1.32
A Plastic waste (latest year) (kg per capita)	41.1
Proportion of adults taking insufficient physical activity 2016 (%)	n/a
Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	79.2
Or Consumption of animal proteins 2021 (grams per capita per day)	62.9
Consumption of sugar and sweeteners 2021 (kg per capita per year)	50.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,020,392	36,675
of which diabetes mellitus	228,385	4,878
of which coronary (ischaemic) heart disease	195,691	9,116
of which stroke	174,825	5,741
of which cancers (neoplasms)	108,382	4,963

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

0.8% Annual growth rate

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	39%	49%
Numbers of children with high BMI	4,234,788	4,796,994
of which, children with high blood pressure attributable to high BMI	370,405	455,689
of which, children with hyperglycaemia attributable to high BMI	147,745	169,986
of which, children with low HDL cholesterol attributable to high BMI	416,529	486,928

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	4.2
	Annual increase in GHG emissions 2000–2015 (%)	1.3
	Proportion of the population living in urban areas 2020 (%)	92.1
	Annual increase in urbanisation 1995–2020 (%)	0.17
	Plastic waste (latest year) (kg per capita)	60.9
	Proportion of adults taking insufficient physical activity 2016 (%)	41.6
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.8
•	Consumption of animal proteins 2021 (grams per capita per day)	75.9
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	38.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	123,057	4,463
of which diabetes mellitus	30,167	703
of which coronary (ischaemic) heart disease	46,429	2,117
of which stroke	17,301	586
of which cancers (neoplasms)	7,990	335

Deaths from NCDs due to high BMI in adults 2019

0.7% Annual growth rate

2020-2035

1.0%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	21%	28%
Numbers of children with high BMI	113,835	131,468
of which, children with high blood pressure attributable to high BMI	6,971	8,856
of which, children with hyperglycaemia attributable to high BMI	3,754	4,395
of which, children with low HDL cholesterol attributable to high BMI	9,948	11,826

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.8
	Annual increase in GHG emissions 2000–2015 (%)	3.4
	Proportion of the population living in urban areas 2020 (%)	63.3
	Annual increase in urbanisation 1995–2020 (%)	-0.17
	Plastic waste (latest year) (kg per capita)	19.3
	Proportion of adults taking insufficient physical activity 2016 (%)	22.6
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	77.7
•	Consumption of animal proteins 2021 (grams per capita per day)	56.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	50.5
0 **	Consumption of animal proteins 2021 (grams per capita per day) Consumption of sugar and sweeteners 2021 (kg per capita per year)	56.4 50.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	523,193	18,712
of which diabetes mellitus	105,848	1,917
of which coronary (ischaemic) heart disease	101,852	5,498
of which stroke	50,459	1,831
of which cancers (neoplasms)	74,685	3,588

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	38%	46%
Numbers of children with high BMI	1,787,382	2,203,057
of which, children with high blood pressure attributable to high BMI	139,703	192,078
of which, children with hyperglycaemia attributable to high BMI	61,149	76,816
of which, children with low HDL cholesterol attributable to high BMI	168,849	216,432

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	15.9
	Annual increase in GHG emissions 2000–2015 (%)	-0.7
	Proportion of the population living in urban areas 2020 (%)	86.2
	Annual increase in urbanisation 1995–2020 (%)	0.06
	Plastic waste (latest year) (kg per capita)	42.7
	Proportion of adults taking insufficient physical activity 2016 (%)	30.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	89.0
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	77.7
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	104.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).



1.9% Annual growth rate in the projected numbers of adults with high BMI 2020–2035

1.4% Annual growth rate in the projected numbers of childrer with high BMI 2020–2035⁽¹⁾

2030

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

2025

2020

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	203,239	8,982
of which diabetes mellitus	42,631	875
of which coronary (ischaemic) heart disease	47,412	2,930
of which stroke	17,975	651
of which cancers (neoplasms)	23,894	1,214

Deaths from NCDs due to high BMI in adults 2019

2035

1.0% Annual growth rate in the projected

2020-2035

1.6%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	30%	39%
Numbers of children with high BMI	389,847	496,197
of which, children with high blood pressure attributable to high BMI	27,781	38,566
of which, children with hyperglycaemia attributable to high BMI	13,142	16,960
of which, children with low HDL cholesterol attributable to high BMI	35,703	46,784

Environmental correlates of obesity⁽²⁾⁽³⁾

7.1 -0.5
-0.5
58.7
-0.19
65.3
30.1
77.8
67.2
40.9

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	438,650	14,333
of which diabetes mellitus	70,938	1,268
of which coronary (ischaemic) heart disease	179,773	7,132
of which stroke	96,976	3,187
of which cancers (neoplasms)	22,393	797

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

1.1%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	21%	31%
Numbers of children with high BMI	502,524	590,775
of which, children with high blood pressure attributable to high BMI	31,427	42,021
of which, children with hyperglycaemia attributable to high BMI	16,621	19,909
of which, children with low HDL cholesterol attributable to high BMI	44,189	54,071

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	3.2
	Annual increase in GHG emissions 2000–2015 (%)	-0.5
	Proportion of the population living in urban areas 2020 (%)	56.4
	Annual increase in urbanisation 1995–2020 (%)	0.31
	Plastic waste (latest year) (kg per capita)	23.9
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	37.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	51.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	15,392	441
of which diabetes mellitus	4,364	79
of which coronary (ischaemic) heart disease	2,541	89
of which stroke	2,331	70
of which cancers (neoplasms)	933	35

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

0.2%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	41%	54%
Numbers of children with high BMI	37,786	38,908
of which, children with high blood pressure attributable to high BMI	3,414	3,859
of which, children with hyperglycaemia attributable to high BMI	1,326	1,391
of which, children with low HDL cholesterol attributable to high BMI	3,762	4,018

Environmental correlates of obesity⁽²⁾⁽³⁾

n/a
n/a
83.2
0.11
88.7
43.3
84.4
67.6
46.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	48,919	1,127
of which diabetes mellitus	24,241	474
of which coronary (ischaemic) heart disease	10,291	333
of which stroke	4,276	98
of which cancers (neoplasms)	1,769	63

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

1.4%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	38%	48%
Numbers of children with high BMI	105,241	130,298
of which, children with high blood pressure attributable to high BMI	9,487	12,863
of which, children with hyperglycaemia attributable to high BMI	3,692	4,653
of which, children with low HDL cholesterol attributable to high BMI	10,469	13,429

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	22.1
	Annual increase in GHG emissions 2000–2015 (%)	-0.1
	Proportion of the population living in urban areas 2020 (%)	89.5
	Annual increase in urbanisation 1995–2020 (%)	0.05
	Plastic waste (latest year) (kg per capita)	49.4
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	81.0
•	Consumption of animal proteins 2021 (grams per capita per day)	59.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	52.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,641,679	43,801
of which diabetes mellitus	347,702	5,797
of which coronary (ischaemic) heart disease	387,917	12,401
of which stroke	602,006	17,271
of which cancers (neoplasms)	41,539	1,519

Deaths from NCDs due to high BMI in adults 2019

4.7% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

6.0% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	13%	33%
Numbers of children with high BMI	5,946,677	14,280,437
of which, children with high blood pressure attributable to high BMI	399,037	1,110,340
of which, children with hyperglycaemia attributable to high BMI	198,663	488,134
of which, children with low HDL cholesterol attributable to high BMI	534,266	1,346,595

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.5
	Annual increase in GHG emissions 2000–2015 (%)	7.4
	Proportion of the population living in urban areas 2020 (%)	38.2
	Annual increase in urbanisation 1995–2020 (%)	2.29
	Plastic waste (latest year) (kg per capita)	4.4
	Proportion of adults taking insufficient physical activity 2016 (%)	27.8
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	66.1
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	13.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	10.4

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	13,475	451
of which diabetes mellitus	5,395	145
of which coronary (ischaemic) heart disease	1,688	75
of which stroke	1,888	69
of which cancers (neoplasms)	1,241	54

Deaths from NCDs due to high BMI in adults 2019

1.4% Annual growth rate in the projected

2020-2035

2.1%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	32%	51%
Numbers of children with high BMI	16,679	22,876
of which, children with high blood pressure attributable to high BMI	1,444	2,262
of which, children with hyperglycaemia attributable to high BMI	581	817
of which, children with low HDL cholesterol attributable to high BMI	1,634	2,359

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	31.2
	Annual increase in urbanisation 1995–2020 (%)	-0.53
Ă	Plastic waste (latest year) (kg per capita)	106.5
	Proportion of adults taking insufficient physical activity 2016 (%)	42.9
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	81.8
\mathbf{I}	Consumption of animal proteins 2021 (grams per capita per day)	62.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	82.9

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	481,844	19,272
of which diabetes mellitus	28,571	201
of which coronary (ischaemic) heart disease	256,969	12,645
of which stroke	108,050	3,804
of which cancers (neoplasms)	29,364	1,200

Deaths from NCDs due to high BMI in adults 2019

0.3% Annual growth rate

2020-2035

1.5%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	27%	42%
Numbers of children with high BMI	434,547	547,091
of which, children with high blood pressure attributable to high BMI	31,910	45,897
of which, children with hyperglycaemia attributable to high BMI	14,717	18,945
of which, children with low HDL cholesterol attributable to high BMI	40,191	52,994

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	5.6
	Annual increase in GHG emissions 2000–2015 (%)	0.4
	Proportion of the population living in urban areas 2020 (%)	79.5
	Annual increase in urbanisation 1995–2020 (%)	0.63
	Plastic waste (latest year) (kg per capita)	54.1
	Proportion of adults taking insufficient physical activity 2016 (%)	14.1
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	69.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	55.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	220,261	8,573
of which diabetes mellitus	48,797	617
of which coronary (ischaemic) heart disease	43,495	2,429
of which stroke	26,745	1,075
of which cancers (neoplasms)	32,467	1,689

Deaths from NCDs due to high BMI in adults 2019

1.0% Annual growth rate

2020-2035

-0.2%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	27%	29%
Numbers of children with high BMI	529,529	516,175
of which, children with high blood pressure attributable to high BMI	35,136	36,073
of which, children with hyperglycaemia attributable to high BMI	17,661	17,349
of which, children with low HDL cholesterol attributable to high BMI	47,408	46,975

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	8.2
	Annual increase in GHG emissions 2000–2015 (%)	-2.0
	Proportion of the population living in urban areas 2020 (%)	98.1
	Annual increase in urbanisation 1995–2020 (%)	0.05
	Plastic waste (latest year) (kg per capita)	57.9
	Proportion of adults taking insufficient physical activity 2016 (%)	35.8
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	83.5
•	Consumption of animal proteins 2021 (grams per capita per day)	71.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	50.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	10,670	298
of which diabetes mellitus	3,944	91
of which coronary (ischaemic) heart disease	1,618	58
of which stroke	1,521	45
of which cancers (neoplasms)	480	17

Deaths from NCDs due to high BMI in adults 2019

3.1% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

2.5%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	32%	48%
Numbers of children with high BMI	36,982	53,368
of which, children with high blood pressure attributable to high BMI	3,113	5,068
of which, children with hyperglycaemia attributable to high BMI	1,281	1,891
of which, children with low HDL cholesterol attributable to high BMI	3,587	5,417

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	46.0
	Annual increase in urbanisation 1995–2020 (%)	-0.03
Ă	Plastic waste (latest year) (kg per capita)	53.6
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	80.3
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	41.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	45.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.





- Children



Adults

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

Benin

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	146,372	4,069
of which diabetes mellitus	31,514	663
of which coronary (ischaemic) heart disease	26,224	898
of which stroke	44,106	1,250
of which cancers (neoplasms)	5,546	195

Deaths from NCDs due to high BMI in adults 2019

2035



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	15%	31%
Numbers of children with high BMI	684,022	2,073,984
of which, children with high blood pressure attributable to high BMI	42,107	149,611
of which, children with hyperglycaemia attributable to high BMI	22,576	70,046
of which, children with low HDL cholesterol attributable to high BMI	59,869	190,699

Environmental correlates of obesity⁽²⁾⁽³⁾

CO2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.5
	Annual increase in GHG emissions 2000–2015 (%)	5.9
	Proportion of the population living in urban areas 2020 (%)	48.4
	Annual increase in urbanisation 1995–2020 (%)	1.10
Ă	Plastic waste (latest year) (kg per capita)	9.1
	Proportion of adults taking insufficient physical activity 2016 (%)	15.9
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	76.0
•	Consumption of animal proteins 2021 (grams per capita per day)	13.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	9.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI >30kg/m²).

World Obesity Atlas 2024

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

5.4% Annual growth rate in the projected numbers of adults with high BMI 2020-2035

7.7% Annual growth rate in the projected numbers of children with high BMI 2020-2035(1)





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	10,626	307
of which diabetes mellitus	2,575	49
of which coronary (ischaemic) heart disease	3,003	103
of which stroke	1,938	60
of which cancers (neoplasms)	428	16

Deaths from NCDs due to high BMI in adults 2019

4.5% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

4.6% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	15%	40%
Numbers of children with high BMI	29,981	58,886
of which, children with high blood pressure attributable to high BMI	2,147	4,931
of which, children with hyperglycaemia attributable to high BMI	1,011	2,039
of which, children with low HDL cholesterol attributable to high BMI	2,750	5,700

Environmental correlates of obesity⁽²⁾⁽³⁾

	n/a
Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	11/ a
Annual increase in GHG emissions 2000–2015 (%)	n/a
Proportion of the population living in urban areas 2020 (%)	42.3
Annual increase in urbanisation 1995–2020 (%)	2.94
A Plastic waste (latest year) (kg per capita)	21.1
Proportion of adults taking insufficient physical activity 2016 (%)	23.0
Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.1
Or Consumption of animal proteins 2021 (grams per capita per day)	33.3
Consumption of sugar and sweeteners 2021 (kg per capita per year)	14.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



Bolivia Annual growth rate in the projected Adults - Children Annual growth rate in the projected numbers of children

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	274,472	8,981
of which diabetes mellitus	78,240	2,065
of which coronary (ischaemic) heart disease	45,133	1,795
of which stroke	51,737	1,596
of which cancers (neoplasms)	18,537	739

Deaths from NCDs due to high BMI in adults 2019

2020-2035

3.3%

with high BMI 2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	35%	53%
Numbers of children with high BMI	1,260,038	2,045,167
of which, children with high blood pressure attributable to high BMI	91,528	172,360
of which, children with hyperglycaemia attributable to high BMI	42,602	70,878
of which, children with low HDL cholesterol attributable to high BMI	116,123	198,432

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.7
	Annual increase in GHG emissions 2000–2015 (%)	5.0
	Proportion of the population living in urban areas 2020 (%)	70.1
	Annual increase in urbanisation 1995–2020 (%)	0.68
	Plastic waste (latest year) (kg per capita)	21.1
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	85.5
•	Consumption of animal proteins 2021 (grams per capita per day)	42.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	85.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI >30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	161,923	5,845
of which diabetes mellitus	46,645	1,129
of which coronary (ischaemic) heart disease	39,899	1,948
of which stroke	34,400	1,358
of which cancers (neoplasms)	13,039	572

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	27%	47%
Numbers of children with high BMI	136,639	195,425
of which, children with high blood pressure attributable to high BMI	9,160	16,063
of which, children with hyperglycaemia attributable to high BMI	4,564	6,743
of which, children with low HDL cholesterol attributable to high BMI	12,272	18,791

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	5.5
	Annual increase in GHG emissions 2000–2015 (%)	3.5
	Proportion of the population living in urban areas 2020 (%)	49.0
823	Annual increase in urbanisation 1995–2020 (%)	0.74
Ă	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	25.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	39.6
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	45.7

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	68,912	2,137
of which diabetes mellitus	22,832	647
of which coronary (ischaemic) heart disease	11,500	398
of which stroke	14,559	447
of which cancers (neoplasms)	3,250	120

Deaths from NCDs due to high BMI in adults 2019

4.0% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

6.2%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	26%	56%
Numbers of children with high BMI	201,807	496,152
of which, children with high blood pressure attributable to high BMI	15,636	46,993
of which, children with hyperglycaemia attributable to high BMI	6,894	17,572
of which, children with low HDL cholesterol attributable to high BMI	19,007	50,305

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	3.0
	Annual increase in GHG emissions 2000–2015 (%)	1.7
	Proportion of the population living in urban areas 2020 (%)	70.9
	Annual increase in urbanisation 1995–2020 (%)	1.49
	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	21.7
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	87.5
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	31.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	54.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	5,799,277	177,929
of which diabetes mellitus	1,565,659	33,811
of which coronary (ischaemic) heart disease	1,202,620	45,210
of which stroke	1,111,290	35,125
of which cancers (neoplasms)	380,859	15,565

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

1.8%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	34%	50%
Numbers of children with high BMI	15,583,308	20,390,263
of which, children with high blood pressure attributable to high BMI	1,255,580	1,913,882
of which, children with hyperglycaemia attributable to high BMI	535,864	720,870
of which, children with low HDL cholesterol attributable to high BMI	1,487,826	2,060,098

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	2.2
	Annual increase in GHG emissions 2000–2015 (%)	1.9
	Proportion of the population living in urban areas 2020 (%)	87.1
	Annual increase in urbanisation 1995–2020 (%)	0.46
Ă	Plastic waste (latest year) (kg per capita)	51.2
	Proportion of adults taking insufficient physical activity 2016 (%)	47.0
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	83.6
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	64.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	36.9
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	36.9

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



Brunei Darussalam

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	7,822	187
of which diabetes mellitus	3,481	63
of which coronary (ischaemic) heart disease	1,344	44
of which stroke	1,076	28
of which cancers (neoplasms)	502	17

Deaths from NCDs due to high BMI in adults 2019

3.1% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

2.6%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	32%	52%
Numbers of children with high BMI	32,651	47,945
of which, children with high blood pressure attributable to high BMI	3,144	5,116
of which, children with hyperglycaemia attributable to high BMI	1,160	1,740
of which, children with low HDL cholesterol attributable to high BMI	3,332	5,102

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	14.2
	Annual increase in GHG emissions 2000–2015 (%)	0.5
	Proportion of the population living in urban areas 2020 (%)	78.3
	Annual increase in urbanisation 1995–2020 (%)	0.53
	Plastic waste (latest year) (kg per capita)	81.8
	Proportion of adults taking insufficient physical activity 2016 (%)	27.3
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	87.1
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	n/a
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	n/a

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	552,903	22,742
of which diabetes mellitus	63,313	1,138
of which coronary (ischaemic) heart disease	157,371	7,580
of which stroke	140,756	5,668
of which cancers (neoplasms)	32,932	1,387

Deaths from NCDs due to high BMI in adults 2019

-0.8%

2020-2035

1.3%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	33%	49%
Numbers of children with high BMI	324,062	393,266
of which, children with high blood pressure attributable to high BMI	25,786	36,372
of which, children with hyperglycaemia attributable to high BMI	11,120	13,864
of which, children with low HDL cholesterol attributable to high BMI	30,805	39,507

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	6.1
	Annual increase in GHG emissions 2000–2015 (%)	1.1
	Proportion of the population living in urban areas 2020 (%)	75.7
	Annual increase in urbanisation 1995–2020 (%)	0.44
	Plastic waste (latest year) (kg per capita)	49.5
	Proportion of adults taking insufficient physical activity 2016 (%)	38.6
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	73.3
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	51.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	37.4

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	199,725	5,789
of which diabetes mellitus	44,806	957
of which coronary (ischaemic) heart disease	37,343	1,341
of which stroke	54,254	1,522
of which cancers (neoplasms)	6,145	235

Deaths from NCDs due to high BMI in adults 2019

6.1% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

8.3% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	10%	24%
Numbers of children with high BMI	812,771	2,702,985
of which, children with high blood pressure attributable to high BMI	36,578	124,277
of which, children with hyperglycaemia attributable to high BMI	25,846	86,147
of which, children with low HDL cholesterol attributable to high BMI	65,511	218,966

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
- ARia	Proportion of the population living in urban areas 2020 (%)	30.6
	Annual increase in urbanisation 1995–2020 (%)	2.87
	Plastic waste (latest year) (kg per capita)	12.8
	Proportion of adults taking insufficient physical activity 2016 (%)	20.3
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	20.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	7.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	65,068	1,809
of which diabetes mellitus	14,180	308
of which coronary (ischaemic) heart disease	10,780	346
of which stroke	21,157	587
of which cancers (neoplasms)	2,697	93

Deaths from NCDs due to high BMI in adults 2019

6.2% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

7.8%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	14%	31%
Numbers of children with high BMI	664,192	2,041,646
of which, children with high blood pressure attributable to high BMI	34,928	124,508
of which, children with hyperglycaemia attributable to high BMI	21,488	67,298
of which, children with low HDL cholesterol attributable to high BMI	55,641	178,204

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
B a	Proportion of the population living in urban areas 2020 (%)	13.7
	Annual increase in urbanisation 1995–2020 (%)	2.61
	Plastic waste (latest year) (kg per capita)	9.7
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	3.1
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	5.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	10,679	342
of which diabetes mellitus	2,570	54
of which coronary (ischaemic) heart disease	2,322	99
of which stroke	2,384	70
of which cancers (neoplasms)	1,028	40

Deaths from NCDs due to high BMI in adults 2019

4.0% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

4.5% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	18%	38%
Numbers of children with high BMI	28,451	55,352
of which, children with high blood pressure attributable to high BMI	1,840	4,233
of which, children with hyperglycaemia attributable to high BMI	945	1,887
of which, children with low HDL cholesterol attributable to high BMI	2,527	5,190

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
B a	Proportion of the population living in urban areas 2020 (%)	66.7
	Annual increase in urbanisation 1995–2020 (%)	1.26
Ă	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	19.7
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{O}	Consumption of animal proteins 2021 (grams per capita per day)	30.1
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	28.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	187,918	5,254
of which diabetes mellitus	46,270	894
of which coronary (ischaemic) heart disease	30,667	1,054
of which stroke	59,862	1,781
of which cancers (neoplasms)	9,849	339

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	16%	39%
Numbers of children with high BMI	729,100	1,845,429
of which, children with high blood pressure attributable to high BMI	48,784	140,476
of which, children with hyperglycaemia attributable to high BMI	24,347	62,862
of which, children with low HDL cholesterol attributable to high BMI	65,446	172,759

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.5
	Annual increase in GHG emissions 2000–2015 (%)	7.9
B a	Proportion of the population living in urban areas 2020 (%)	24.2
	Annual increase in urbanisation 1995–2020 (%)	1.35
	Plastic waste (latest year) (kg per capita)	6.1
	Proportion of adults taking insufficient physical activity 2016 (%)	10.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	91.6
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	20.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	52.4

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).



4.4% Annual growth rate in the projected numbers of adults with high BMI 2020–2035







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	461,063	13,523
of which diabetes mellitus	109,804	2,831
of which coronary (ischaemic) heart disease	78,852	2,822
of which stroke	134,961	3,759
of which cancers (neoplasms)	16,710	629

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	17%	33%
Numbers of children with high BMI	1,660,826	4,544,634
of which, children with high blood pressure attributable to high BMI	99,397	319,803
of which, children with hyperglycaemia attributable to high BMI	54,608	152,904
of which, children with low HDL cholesterol attributable to high BMI	144,175	414,512

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.3
	Annual increase in GHG emissions 2000–2015 (%)	2.3
B a	Proportion of the population living in urban areas 2020 (%)	57.6
	Annual increase in urbanisation 1995–2020 (%)	1.21
	Plastic waste (latest year) (kg per capita)	5.0
	Proportion of adults taking insufficient physical activity 2016 (%)	28.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	13.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	11.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).



5.3% Annual growth rate in the projected numbers of adults with high BMI 2020–2035

6.9% Annual growth rate in the projected numbers of children with high BMI 2020–2035⁽¹⁾




Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	832,147	29,814
of which diabetes mellitus	162,509	3,230
of which coronary (ischaemic) heart disease	202,183	10,318
of which stroke	90,296	2,872
of which cancers (neoplasms)	122,109	5,726

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

1.6%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	37%	48%
Numbers of children with high BMI	2,307,815	2,915,844
of which, children with high blood pressure attributable to high BMI	186,018	266,482
of which, children with hyperglycaemia attributable to high BMI	79,364	102,562
of which, children with low HDL cholesterol attributable to high BMI	220,370	291,584

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	15.1
	Annual increase in GHG emissions 2000–2015 (%)	-0.5
	Proportion of the population living in urban areas 2020 (%)	81.6
	Annual increase in urbanisation 1995–2020 (%)	0.20
Ă	Plastic waste (latest year) (kg per capita)	21.2
	Proportion of adults taking insufficient physical activity 2016 (%)	28.6
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	76.3
•	Consumption of animal proteins 2021 (grams per capita per day)	66.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	50.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	50.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



Central African Republic

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	48,474	1,323
of which diabetes mellitus	11,766	237
of which coronary (ischaemic) heart disease	7,677	240
of which stroke	14,664	406
of which cancers (neoplasms)	1,258	42

Deaths from NCDs due to high BMI in adults 2019

5.7%

Annual growth rate in the projected numbers of adults with high BMI

2020-2035

7.7%

in the projected numbers of children

> with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	13%	27%
Numbers of children with high BMI	298,302	902,497
of which, children with high blood pressure attributable to high BMI	17,688	64,020
of which, children with hyperglycaemia attributable to high BMI	9,796	30,402
of which, children with low HDL cholesterol attributable to high BMI	25,827	82,530

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	42.2
	Annual increase in urbanisation 1995–2020 (%)	0.51
Ă	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	14.3
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
	Consumption of animal proteins 2021 (grams per capita per day)	19.6
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	8.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	8.0

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	96,937	2,710
of which diabetes mellitus	21,272	456
of which coronary (ischaemic) heart disease	15,554	540
of which stroke	31,330	858
of which cancers (neoplasms)	2,815	101

Deaths from NCDs due to high BMI in adults 2019

5.9% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

8.5% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	11%	24%
Numbers of children with high BMI	727,248	2,462,017
of which, children with high blood pressure attributable to high BMI	38,272	145,223
of which, children with hyperglycaemia attributable to high BMI	23,530	80,796
of which, children with low HDL cholesterol attributable to high BMI	60,935	212,837

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	23.5
	Annual increase in urbanisation 1995–2020 (%)	0.36
Ă	Plastic waste (latest year) (kg per capita)	6.9
	Proportion of adults taking insufficient physical activity 2016 (%)	23.3
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	28.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	10.0

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



World Obesity Atlas 2024

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	422,597	14,095
of which diabetes mellitus	105,491	1,799
of which coronary (ischaemic) heart disease	64,129	2,849
of which stroke	67,045	2,262
of which cancers (neoplasms)	50,611	2,337

Deaths from NCDs due to high BMI in adults 2019

2035



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	38%	49%
Numbers of children with high BMI	1,415,728	1,630,339
of which, children with high blood pressure attributable to high BMI	118,952	150,706
of which, children with hyperglycaemia attributable to high BMI	49,038	57,470
of which, children with low HDL cholesterol attributable to high BMI	137,210	163,748

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	4.5
	Annual increase in GHG emissions 2000–2015 (%)	2.4
-101	Proportion of the population living in urban areas 2020 (%)	87.7
	Annual increase in urbanisation 1995–2020 (%)	0.15
	Plastic waste (latest year) (kg per capita)	36.4
	Proportion of adults taking insufficient physical activity 2016 (%)	26.6
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	87.6
•	Consumption of animal proteins 2021 (grams per capita per day)	60.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	46.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

Chile

Annual growth rate in the projected numbers of adults with high BMI 2020–2035

0.9% Annual growth rate in the projected numbers of children with high BMI 2020–2035⁽¹⁾



in the projected numbers of adults with high BMI 2020–2035

Annual growth rate

2.0% Annual growth rate in the projected numbers of children with high BMI 2020–2035⁽¹⁾

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	24,815,266	764,695
of which diabetes mellitus	3,737,576	47,530
of which coronary (ischaemic) heart disease	5,073,254	203,609
of which stroke	8,188,302	266,755
of which cancers (neoplasms)	2,669,799	100,442

2025

Deaths from NCDs due to high BMI in adults 2019

2035



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	37%	72%
Numbers of children with high BMI	97,049,832	130,131,816
of which, children with high blood pressure attributable to high BMI	8,068,450	13,260,665
of which, children with hyperglycaemia attributable to high BMI	3,355,363	4,676,718
of which, children with low HDL cholesterol attributable to high BMI	9,369,994	13,585,149

2030

Environmental correlates of obesity⁽²⁾⁽³⁾

Greenhouse gas (GHG) emissions CO2 equivalent 2015 (tonnes per capita per year) 6.6 Annual increase in GHG emissions 2000–2015 (%) 6.8 Proportion of the population living in urban areas 2020 (%) 61.4 Annual increase in urbanisation 1995–2020 (%) 61.4 Plastic waste (latest year) (kg per capita) 27.7 Proportion of adults taking insufficient physical activity 2016 (%) 14.1			
Annual increase in GHG emissions 2000–2015 (%) 6.8 Proportion of the population living in urban areas 2020 (%) 61.4 Annual increase in urbanisation 1995–2020 (%) 61.4 Plastic waste (latest year) (kg per capita) 27.7 Proportion of adults taking insufficient physical activity 2016 (%) 14.1	CO 2	Greenhouse gas (GHG) emissions CO ₂ equivalent 2015 (tonnes per capita per year)	6.6
Proportion of the population living in urban areas 2020 (%) 61.4 Annual increase in urbanisation 1995–2020 (%) 2.77 Plastic waste (latest year) (kg per capita) 27.7 Proportion of adults taking insufficient physical activity 2016 (%) 14.1		Annual increase in GHG emissions 2000–2015 (%)	6.8
Image: Annual increase in urbanisation 1995–2020 (%) 2.77 Image: Annual increase in urbanisatincrease in urbanisation 1995–2020 (%)		Proportion of the population living in urban areas 2020 (%)	61.4
Plastic waste (latest year) (kg per capita) 27.7 Properties of adults taking insufficient physical activity 2016 (%) 14.1		Annual increase in urbanisation 1995–2020 (%)	2.77
Proportion of adults taking insufficient physical activity 2016 (%)	Ă	Plastic waste (latest year) (kg per capita)	27.7
		Proportion of adults taking insufficient physical activity 2016 (%)	14.1
Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) 84.3		Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.3
 Consumption of animal proteins 2021 (grams per capita per day) 48.8 	\mathbf{I}	Consumption of animal proteins 2021 (grams per capita per day)	48.8
Consumption of sugar and sweeteners 2021 (kg per capita per year) 99.0		Consumption of sugar and sweeteners 2021 (kg per capita per year)	99.0

REFERENCES:

350,000,000

175,000,000

2020

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



China (Hong Kong SAR)

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases		
of which diabetes mellitus		
of which coronary (ischaemic) heart disease		
of which stroke		
of which cancers (neoplasms)		

Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	12%	18%
Numbers of children with high BMI	101,114	134,156
of which, children with high blood pressure attributable to high BMI	14,560	19,318
of which, children with hyperglycaemia attributable to high BMI	3,943	5,232
of which, children with low HDL cholesterol attributable to high BMI	12,336	16,367

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	5.9
	Annual increase in GHG emissions 2000–2015 (%)	-0.2
- ARa	Proportion of the population living in urban areas 2020 (%)	n/a
822	Annual increase in urbanisation 1995–2020 (%)	n/a
Ă	Plastic waste (latest year) (kg per capita)	163.3
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	103.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	47.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	47.0

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).





Annual growth rate in the projected

2020-2035

1.9%

2020-2035(1)

Colombia

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	903,543	25,729
of which diabetes mellitus	282,351	3,275
of which coronary (ischaemic) heart disease	182,346	8,104
of which stroke	118,093	3,655
of which cancers (neoplasms)	54,278	2,287

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

1.8%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	29%	42%
Numbers of children with high BMI	3,332,770	4,346,256
of which, children with high blood pressure attributable to high BMI	226,394	345,282
of which, children with hyperglycaemia attributable to high BMI	111,540	149,098
of which, children with low HDL cholesterol attributable to high BMI	300,578	412,910

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.6
	Annual increase in GHG emissions 2000–2015 (%)	0.9
	Proportion of the population living in urban areas 2020 (%)	81.4
822	Annual increase in urbanisation 1995–2020 (%)	0.50
	Plastic waste (latest year) (kg per capita)	33.6
	Proportion of adults taking insufficient physical activity 2016 (%)	44.0
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.0
•	Consumption of animal proteins 2021 (grams per capita per day)	44.9
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	57.7

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

WORLD BESITY





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	9,955	309
of which diabetes mellitus	2,102	52
of which coronary (ischaemic) heart disease	1,726	61
of which stroke	2,771	81
of which cancers (neoplasms)	519	19

Deaths from NCDs due to high BMI in adults 2019

4.3% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

6.2%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	16%	32%
Numbers of children with high BMI	43,422	107,019
of which, children with high blood pressure attributable to high BMI	2,638	7,861
of which, children with hyperglycaemia attributable to high BMI	1,431	3,625
of which, children with low HDL cholesterol attributable to high BMI	3,786	9,899

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	29.4
	Annual increase in urbanisation 1995–2020 (%)	0.15
Ă	Plastic waste (latest year) (kg per capita)	5.9
	Proportion of adults taking insufficient physical activity 2016 (%)	14.3
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	24.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	20.4

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	106,948	3,043
of which diabetes mellitus	27,937	589
of which coronary (ischaemic) heart disease	19,382	654
of which stroke	27,378	778
of which cancers (neoplasms)	4,231	150

Deaths from NCDs due to high BMI in adults 2019

5.1% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

6.5% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	13%	27%
Numbers of children with high BMI	281,282	722,524
of which, children with high blood pressure attributable to high BMI	15,719	49,504
of which, children with hyperglycaemia attributable to high BMI	9,167	24,212
of which, children with low HDL cholesterol attributable to high BMI	23,951	65,341

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.6
	Annual increase in GHG emissions 2000–2015 (%)	9.6
	Proportion of the population living in urban areas 2020 (%)	67.8
	Annual increase in urbanisation 1995–2020 (%)	0.74
	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	28.0
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	29.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	10.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	101,197	2,804
of which diabetes mellitus	29,227	276
of which coronary (ischaemic) heart disease	19,702	831
of which stroke	9,926	302
of which cancers (neoplasms)	8,016	336

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	39%	61%
Numbers of children with high BMI	436,819	571,508
of which, children with high blood pressure attributable to high BMI	35,572	54,643
of which, children with hyperglycaemia attributable to high BMI	15,048	20,278
of which, children with low HDL cholesterol attributable to high BMI	41,863	58,160

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.4
	Annual increase in GHG emissions 2000–2015 (%)	1.4
	Proportion of the population living in urban areas 2020 (%)	80.8
	Annual increase in urbanisation 1995–2020 (%)	1.58
	Plastic waste (latest year) (kg per capita)	33.8
	Proportion of adults taking insufficient physical activity 2016 (%)	46.1
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	82.0
•	Consumption of animal proteins 2021 (grams per capita per day)	53.1
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	45.8

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).



2.1% Annual growth rate in the projected numbers of adults with high BMI 2020–2035

1.8% Annual growth rat in the projected numbers of childre with high BMI

2020-2035(1)





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	311,328	8,147
of which diabetes mellitus	70,111	1,471
of which coronary (ischaemic) heart disease	57,700	1,871
of which stroke	91,593	2,345
of which cancers (neoplasms)	11,422	390

Deaths from NCDs due to high BMI in adults 2019

5.3% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

6.7%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	17%	33%
Numbers of children with high BMI	1,679,686	4,428,142
of which, children with high blood pressure attributable to high BMI	110,460	347,896
of which, children with hyperglycaemia attributable to high BMI	55,950	151,624
of which, children with low HDL cholesterol attributable to high BMI	149,966	419,062

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.4
	Annual increase in GHG emissions 2000–2015 (%)	0.5
	Proportion of the population living in urban areas 2020 (%)	51.7
	Annual increase in urbanisation 1995–2020 (%)	0.91
	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	33.1
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	15.6
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	12.8

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	189,461	7,659
of which diabetes mellitus	36,800	545
of which coronary (ischaemic) heart disease	52,156	2,916
of which stroke	33,594	1,389
of which cancers (neoplasms)	20,353	979

Deaths from NCDs due to high BMI in adults 2019

0.2% Annual growth rate

2020-2035

1.9%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	33%	53%
Numbers of children with high BMI	199,841	265,134
of which, children with high blood pressure attributable to high BMI	16,400	25,268
of which, children with hyperglycaemia attributable to high BMI	6,894	9,401
of which, children with low HDL cholesterol attributable to high BMI	19,205	26,947

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	3.7
	Annual increase in GHG emissions 2000–2015 (%)	-0.1
-BA	Proportion of the population living in urban areas 2020 (%)	57.6
	Annual increase in urbanisation 1995–2020 (%)	0.39
Ă	Plastic waste (latest year) (kg per capita)	101.9
	Proportion of adults taking insufficient physical activity 2016 (%)	31.1
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	76.8
•	Consumption of animal proteins 2021 (grams per capita per day)	68.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	70.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	70.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	382,065	11,920
of which diabetes mellitus	97,464	955
of which coronary (ischaemic) heart disease	95,112	4,382
of which stroke	58,574	2,092
of which cancers (neoplasms)	34,294	1,430

Deaths from NCDs due to high BMI in adults 2019

in the projected

2020-2035

2.0%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	15%	24%
Numbers of children with high BMI	274,778	367,695
of which, children with high blood pressure attributable to high BMI	39,568	52,948
of which, children with hyperglycaemia attributable to high BMI	10,716	14,340
of which, children with low HDL cholesterol attributable to high BMI	33,523	44,859

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	2.5
	Annual increase in GHG emissions 2000–2015 (%)	0.1
	Proportion of the population living in urban areas 2020 (%)	77.2
	Annual increase in urbanisation 1995–2020 (%)	0.15
Ă	Plastic waste (latest year) (kg per capita)	22.9
	Proportion of adults taking insufficient physical activity 2016 (%)	36.9
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	33.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	51.9

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	23,224	802
of which diabetes mellitus	6,836	154
of which coronary (ischaemic) heart disease	5,650	251
of which stroke	2,285	83
of which cancers (neoplasms)	1,931	90

Deaths from NCDs due to high BMI in adults 2019

1.6% Annual growth rate in the projected

2020-2035

1.8%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	41%	54%
Numbers of children with high BMI	79,271	104,038
of which, children with high blood pressure attributable to high BMI	6,213	8,950
of which, children with hyperglycaemia attributable to high BMI	2,713	3,619
of which, children with low HDL cholesterol attributable to high BMI	7,496	10,170

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	7.1
	Annual increase in GHG emissions 2000–2015 (%)	-1.8
	Proportion of the population living in urban areas 2020 (%)	66.8
	Annual increase in urbanisation 1995–2020 (%)	-0.07
	Plastic waste (latest year) (kg per capita)	94.8
	Proportion of adults taking insufficient physical activity 2016 (%)	44.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	58.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	66.6

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	482,868	17,453
of which diabetes mellitus	133,816	1,697
of which coronary (ischaemic) heart disease	140,724	7,938
of which stroke	56,972	2,176
of which cancers (neoplasms)	54,478	2,608

Deaths from NCDs due to high BMI in adults 2019

0.4% Annual growth rate

2020-2035

1.9%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	29%	41%
Numbers of children with high BMI	475,502	633,593
of which, children with high blood pressure attributable to high BMI	35,715	54,718
of which, children with hyperglycaemia attributable to high BMI	16,162	22,054
of which, children with low HDL cholesterol attributable to high BMI	44,313	62,027

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	9.5
	Annual increase in GHG emissions 2000–2015 (%)	-1.6
	Proportion of the population living in urban areas 2020 (%)	74.1
	Annual increase in urbanisation 1995–2020 (%)	-0.03
	Plastic waste (latest year) (kg per capita)	11.0
	Proportion of adults taking insufficient physical activity 2016 (%)	31.1
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	77.4
•	Consumption of animal proteins 2021 (grams per capita per day)	62.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	40.6

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



Democratic Republic of the Congo

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	728,282	20,730
of which diabetes mellitus	187,248	3,567
of which coronary (ischaemic) heart disease	114,525	3,888
of which stroke	193,303	5,649
of which cancers (neoplasms)	22,485	807

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	13%	29%
Numbers of children with high BMI	4,610,399	16,883,688
of which, children with high blood pressure attributable to high BMI	271,453	1,174,606
of which, children with hyperglycaemia attributable to high BMI	151,264	567,071
of which, children with low HDL cholesterol attributable to high BMI	398,356	1,534,304

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.0
	Annual increase in GHG emissions 2000–2015 (%)	4.5
-101A	Proportion of the population living in urban areas 2020 (%)	45.6
	Annual increase in urbanisation 1995–2020 (%)	1.33
Å	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	23.9
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	3.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	2.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).



5.8% Annual growth rate in the projected numbers of adults with high BMI 2020–2035

9.0% Annual growth rate in the projected numbers of children with high BMI 2020–2035⁽¹⁾





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	107,027	4,128
of which diabetes mellitus	22,468	519
of which coronary (ischaemic) heart disease	19,469	1,107
of which stroke	14,494	568
of which cancers (neoplasms)	17,176	856

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	29%	34%
Numbers of children with high BMI	285,343	338,501
of which, children with high blood pressure attributable to high BMI	19,338	24,451
of which, children with hyperglycaemia attributable to high BMI	9,546	11,435
of which, children with low HDL cholesterol attributable to high BMI	25,716	31,138

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	5.7
	Annual increase in GHG emissions 2000–2015 (%)	-3.3
	Proportion of the population living in urban areas 2020 (%)	88.1
	Annual increase in urbanisation 1995–2020 (%)	0.14
Ă	Plastic waste (latest year) (kg per capita)	13.6
	Proportion of adults taking insufficient physical activity 2016 (%)	28.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.5
\mathbf{I}	Consumption of animal proteins 2021 (grams per capita per day)	75.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	54.7
		0117

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).



1.2% Annual growth rate in the projected numbers of adults with high BMI 2020–2035

1.1% Annual growth rate in the projected numbers of children with high BMI 2020–2035⁽¹⁾





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	13,212	359
of which diabetes mellitus	3,275	71
of which coronary (ischaemic) heart disease	2,291	73
of which stroke	3,719	101
of which cancers (neoplasms)	674	23

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	6%	11%
Numbers of children with high BMI	21,582	40,308
of which, children with high blood pressure attributable to high BMI	3,108	5,804
of which, children with hyperglycaemia attributable to high BMI	842	1,572
of which, children with low HDL cholesterol attributable to high BMI	2,633	4,918

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	78.1
	Annual increase in urbanisation 1995–2020 (%)	0.09
Ă	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	85.2
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	16.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	47.6

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).



4.6% Annual growth rate in the projected numbers of adults with high BMI 2020–2035

4.3% Annual growth rate in the projected numbers of children with high BMI 2020–2035⁽¹⁾

Dominican Republic

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	309,807	9,131
of which diabetes mellitus	66,978	1,395
of which coronary (ischaemic) heart disease	94,161	3,248
of which stroke	70,763	2,112
of which cancers (neoplasms)	14,237	512

Deaths from NCDs due to high BMI in adults 2019

2.6% Annual growth rate in the projected

2020-2035

2.8%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	40%	61%
Numbers of children with high BMI	1,191,575	1,793,118
of which, children with high blood pressure attributable to high BMI	105,205	182,379
of which, children with hyperglycaemia attributable to high BMI	41,644	64,417
of which, children with low HDL cholesterol attributable to high BMI	117,613	187,050

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	2.1
	Annual increase in GHG emissions 2000–2015 (%)	0.0
	Proportion of the population living in urban areas 2020 (%)	82.5
	Annual increase in urbanisation 1995–2020 (%)	1.45
	Plastic waste (latest year) (kg per capita)	38.6
	Proportion of adults taking insufficient physical activity 2016 (%)	39.0
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	41.6
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	44.6

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	432,148	13,453
of which diabetes mellitus	123,881	2,794
of which coronary (ischaemic) heart disease	74,581	2,781
of which stroke	65,759	1,861
of which cancers (neoplasms)	26,661	1,060

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

2.3%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	34%	52%
Numbers of children with high BMI	1,621,261	2,294,498
of which, children with high blood pressure attributable to high BMI	119,115	193,475
of which, children with hyperglycaemia attributable to high BMI	54,913	79,527
of which, children with low HDL cholesterol attributable to high BMI	149,976	222,666

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	2.3
	Annual increase in GHG emissions 2000–2015 (%)	3.1
	Proportion of the population living in urban areas 2020 (%)	64.2
	Annual increase in urbanisation 1995–2020 (%)	0.42
	Plastic waste (latest year) (kg per capita)	37.5
	Proportion of adults taking insufficient physical activity 2016 (%)	27.2
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	86.5
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	36.7
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	74.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



Egypt

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	4,209,720	130,323
of which diabetes mellitus	636,508	13,420
of which coronary (ischaemic) heart disease	1,825,286	64,467
of which stroke	649,550	17,260
of which cancers (neoplasms)	175,508	6,078

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

3.5% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	43%	63%
Numbers of children with high BMI	14,103,252	23,506,255
of which, children with high blood pressure attributable to high BMI	1,274,257	2,351,403
of which, children with hyperglycaemia attributable to high BMI	495,001	841,580
of which, children with low HDL cholesterol attributable to high BMI	1,404,196	2,435,573

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	2.0
	Annual increase in GHG emissions 2000–2015 (%)	2.5
	Proportion of the population living in urban areas 2020 (%)	42.8
	Annual increase in urbanisation 1995–2020 (%)	0.00
Ă	Plastic waste (latest year) (kg per capita)	31.1
	Proportion of adults taking insufficient physical activity 2016 (%)	31.0
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	87.5
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	27.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	23.6
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	23.0

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	168,628	5,259
of which diabetes mellitus	55,157	1,158
of which coronary (ischaemic) heart disease	30,145	1,314
of which stroke	15,439	476
of which cancers (neoplasms)	6,602	276

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

1.7%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	38%	58%
Numbers of children with high BMI	659,757	852,181
of which, children with high blood pressure attributable to high BMI	53,173	79,689
of which, children with hyperglycaemia attributable to high BMI	22,688	30,106
of which, children with low HDL cholesterol attributable to high BMI	62,997	85,974

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.1
	Annual increase in GHG emissions 2000–2015 (%)	1.3
	Proportion of the population living in urban areas 2020 (%)	73.4
	Annual increase in urbanisation 1995–2020 (%)	1.24
	Plastic waste (latest year) (kg per capita)	26.7
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	86.1
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	36.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	34.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	17,360	506
of which diabetes mellitus	5,406	120
of which coronary (ischaemic) heart disease	2,492	91
of which stroke	3,749	106
of which cancers (neoplasms)	912	34

Deaths from NCDs due to high BMI in adults 2019

4.9%

Annual growth rate in the projected numbers of adults with high BMI

2020-2035

7.7% Annual growth rate

in the projected numbers of children

with high BMI <u>202</u>0–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	14%	30%
Numbers of children with high BMI	71,584	216,525
of which, children with high blood pressure attributable to high BMI	4,235	15,247
of which, children with hyperglycaemia attributable to high BMI	2,350	7,286
of which, children with low HDL cholesterol attributable to high BMI	6,193	19,753

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	2.5
	Annual increase in GHG emissions 2000–2015 (%)	10.7
	Proportion of the population living in urban areas 2020 (%)	73.1
	Annual increase in urbanisation 1995–2020 (%)	2.39
	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	n/a
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	n/a

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).

For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to $BMI \ge 30 \text{kg/m}^2$). (2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	55,698	1,684
of which diabetes mellitus	13,381	326
of which coronary (ischaemic) heart disease	7,761	262
of which stroke	16,419	486
of which cancers (neoplasms)	2,566	92

Deaths from NCDs due to high BMI in adults 2019

7.7% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

9.2%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	3%	9%
Numbers of children with high BMI	37,776	141,584
of which, children with high blood pressure attributable to high BMI	5,440	20,388
of which, children with hyperglycaemia attributable to high BMI	1,473	5,522
of which, children with low HDL cholesterol attributable to high BMI	4,609	17,273

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.1
	Annual increase in GHG emissions 2000–2015 (%)	-3.6
	Proportion of the population living in urban areas 2020 (%)	41.3
	Annual increase in urbanisation 1995–2020 (%)	2.46
Ă	Plastic waste (latest year) (kg per capita)	n/a
.	Proportion of adults taking insufficient physical activity 2016 (%)	22.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	n/a
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	n/a

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	62,460	3,026
of which diabetes mellitus	6,693	73
of which coronary (ischaemic) heart disease	16,976	1,016
of which stroke	6,639	241
of which cancers (neoplasms)	5,740	281

Deaths from NCDs due to high BMI in adults 2019

0.2% Annual growth rate

2020-2035

1.4%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	22%	29%
Numbers of children with high BMI	46,320	56,881
of which, children with high blood pressure attributable to high BMI	3,159	4,305
of which, children with hyperglycaemia attributable to high BMI	1,551	1,936
of which, children with low HDL cholesterol attributable to high BMI	4,183	5,314

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	10.8
	Annual increase in GHG emissions 2000–2015 (%)	0.2
	Proportion of the population living in urban areas 2020 (%)	69.2
	Annual increase in urbanisation 1995–2020 (%)	-0.06
	Plastic waste (latest year) (kg per capita)	68.6
	Proportion of adults taking insufficient physical activity 2016 (%)	32.0
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.1
•	Consumption of animal proteins 2021 (grams per capita per day)	78.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	80.4

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	39,266	1,279
of which diabetes mellitus	14,463	457
of which coronary (ischaemic) heart disease	5,274	187
of which stroke	7,083	227
of which cancers (neoplasms)	2,592	91

Deaths from NCDs due to high BMI in adults 2019

3.3% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

5.9% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	22%	50%
Numbers of children with high BMI	87,399	205,835
of which, children with high blood pressure attributable to high BMI	6,936	20,398
of which, children with hyperglycaemia attributable to high BMI	2,998	7,355
of which, children with low HDL cholesterol attributable to high BMI	8,300	21,247

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.9
	Annual increase in GHG emissions 2000–2015 (%)	-1.1
	Proportion of the population living in urban areas 2020 (%)	24.2
	Annual increase in urbanisation 1995–2020 (%)	0.33
Ă	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	28.0
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	19.1
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	50.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	521,810	14,946
of which diabetes mellitus	123,531	2,866
of which coronary (ischaemic) heart disease	84,265	2,808
of which stroke	145,719	4,028
of which cancers (neoplasms)	18,343	664

Deaths from NCDs due to high BMI in adults 2019

5.5%

Annual growth rate in the projected numbers of adults with high BMI

2020-2035

7.3% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	11%	24%
Numbers of children with high BMI	4,725,842	13,653,668
of which, children with high blood pressure attributable to high BMI	217,838	682,576
of which, children with hyperglycaemia attributable to high BMI	150,658	439,144
of which, children with low HDL cholesterol attributable to high BMI	383,067	1,128,989

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.1
	Annual increase in GHG emissions 2000–2015 (%)	4.9
-BA	Proportion of the population living in urban areas 2020 (%)	21.7
	Annual increase in urbanisation 1995–2020 (%)	1.83
Ă	Plastic waste (latest year) (kg per capita)	1.5
	Proportion of adults taking insufficient physical activity 2016 (%)	14.9
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{O}	Consumption of animal proteins 2021 (grams per capita per day)	7.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	7.9

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	80,501	2,352
of which diabetes mellitus	40,634	1,144
of which coronary (ischaemic) heart disease	16,920	543
of which stroke	8,853	243
of which cancers (neoplasms)	2,421	85

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

2.5%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	41%	58%
Numbers of children with high BMI	104,186	150,584
of which, children with high blood pressure attributable to high BMI	7,673	12,978
of which, children with hyperglycaemia attributable to high BMI	3,530	5,240
of which, children with low HDL cholesterol attributable to high BMI	9,645	14,731

Environmental correlates of obesity⁽²⁾⁽³⁾

Greenhouse gas (GHG) emissions CO2 equivalent 2015 (tonnes per capita per year) n/a Annual increase in GHG emissions 2000–2015 (%) n/a Proportion of the population living in urban areas 2020 (%) 57.2 Annual increase in urbanisation 1995–2020 (%) 0.92			
Annual increase in GHG emissions 2000–2015 (%) n/4 Proportion of the population living in urban areas 2020 (%) 57.3 Annual increase in urbanisation 1995–2020 (%) 0.92		Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
Proportion of the population living in urban areas 2020 (%)57.1Annual increase in urbanisation 1995–2020 (%)0.92		Annual increase in GHG emissions 2000–2015 (%)	n/a
Annual increase in urbanisation 1995–2020 (%)		Proportion of the population living in urban areas 2020 (%)	57.2
		Annual increase in urbanisation 1995–2020 (%)	0.92
Plastic waste (latest year) (kg per capita)	Ă	Plastic waste (latest year) (kg per capita)	16.4
Proportion of adults taking insufficient physical activity 2016 (%)		Proportion of adults taking insufficient physical activity 2016 (%)	17.4
Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) 83.		Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	83.3
Or Consumption of animal proteins 2021 (grams per capita per day) 36.	\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	36.4
Consumption of sugar and sweeteners 2021 (kg per capita per year) 144.		Consumption of sugar and sweeteners 2021 (kg per capita per year)	144.0

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	138,503	5,581
of which diabetes mellitus	27,864	182
of which coronary (ischaemic) heart disease	38,269	2,348
of which stroke	16,956	668
of which cancers (neoplasms)	16,164	839

Deaths from NCDs due to high BMI in adults 2019

1.1% Annual growth rate in the projected

2020-2035

0.3%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	32%	41%
Numbers of children with high BMI	294,410	306,818
of which, children with high blood pressure attributable to high BMI	21,668	24,809
of which, children with hyperglycaemia attributable to high BMI	9,975	10,557
of which, children with low HDL cholesterol attributable to high BMI	27,250	29,331

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	7.7
	Annual increase in GHG emissions 2000–2015 (%)	-2.1
-R34	Proportion of the population living in urban areas 2020 (%)	85.5
	Annual increase in urbanisation 1995–2020 (%)	0.22
	Plastic waste (latest year) (kg per capita)	8.2
	Proportion of adults taking insufficient physical activity 2016 (%)	16.6
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	75.4
•	Consumption of animal proteins 2021 (grams per capita per day)	79.6
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	48.4

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,094,365	46,898
of which diabetes mellitus	177,781	4,462
of which coronary (ischaemic) heart disease	179,767	10,508
of which stroke	128,679	4,938
of which cancers (neoplasms)	194,569	10,247

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	33%	40%
Numbers of children with high BMI	3,865,973	4,287,714
of which, children with high blood pressure attributable to high BMI	252,156	304,696
of which, children with hyperglycaemia attributable to high BMI	128,624	144,477
of which, children with low HDL cholesterol attributable to high BMI	344,294	392,321

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	4.6
	Annual increase in GHG emissions 2000–2015 (%)	-1.8
	Proportion of the population living in urban areas 2020 (%)	81.0
	Annual increase in urbanisation 1995–2020 (%)	0.31
	Plastic waste (latest year) (kg per capita)	49.3
	Proportion of adults taking insufficient physical activity 2016 (%)	29.3
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	87.0
•	Consumption of animal proteins 2021 (grams per capita per day)	80.1
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	38.0

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



French Polynesia

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases		
of which diabetes mellitus		
of which coronary (ischaemic) heart disease		
of which stroke		
of which cancers (neoplasms)		

Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	34%	52%
Numbers of children with high BMI	23,451	30,034
of which, children with high blood pressure attributable to high BMI	3,377	4,325
of which, children with hyperglycaemia attributable to high BMI	915	1,171
of which, children with low HDL cholesterol attributable to high BMI	2,861	3,664

Environmental correlates of obesity⁽²⁾⁽³⁾

Greenhouse gas (GHG) emissions CO2 equivalent 2015 (tonnes per capita per year) n/ Annual increase in GHG emissions 2000–2015 (%) n/ Proportion of the population living in urban areas 2020 (%) n/ Annual increase in urbanisation 1995–2020 (%) n/	
Annual increase in GHG emissions 2000–2015 (%) n/ Proportion of the population living in urban areas 2020 (%) n/ Annual increase in urbanisation 1995–2020 (%) n/	ı/a
Proportion of the population living in urban areas 2020 (%) n/	ı/a
Annual increase in urbanisation 1995–2020 (%)	ı/a
	ı/a
Image: Plastic waste (latest year) (kg per capita)10.	0.7
Proportion of adults taking insufficient physical activity 2016 (%) n/	ı/a
Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) n/	ı/a
 Consumption of animal proteins 2021 (grams per capita per day) 68. 	8.0
Consumption of sugar and sweeteners 2021 (kg per capita per year)36.	5.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

WORLD BESITY



2.3% Annual growth rate in the projected numbers of adults with high BMI 2020–2035

1.7%

2020-2035(1)





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	42,665	1,309
of which diabetes mellitus	13,489	323
of which coronary (ischaemic) heart disease	6,776	247
of which stroke	8,479	254
of which cancers (neoplasms)	2,287	85

Deaths from NCDs due to high BMI in adults 2019

4.4% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

5.8% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	21%	39%
Numbers of children with high BMI	156,912	365,775
of which, children with high blood pressure attributable to high BMI	10,376	28,400
of which, children with hyperglycaemia attributable to high BMI	5,231	12,500
of which, children with low HDL cholesterol attributable to high BMI	14,033	34,475

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.6
	Annual increase in GHG emissions 2000–2015 (%)	2.2
	Proportion of the population living in urban areas 2020 (%)	90.1
	Annual increase in urbanisation 1995–2020 (%)	0.75
	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	25.3
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	44.9
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	20.8
● ● ● ●	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) Consumption of animal proteins 2021 (grams per capita per day) Consumption of sugar and sweeteners 2021 (kg per capita per year)	n/a 44.9 20.8

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	29,056	855
of which diabetes mellitus	5,472	129
of which coronary (ischaemic) heart disease	5,939	212
of which stroke	8,147	226
of which cancers (neoplasms)	2,345	74

Deaths from NCDs due to high BMI in adults 2019

5.8% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

7.0% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	16%	34%
Numbers of children with high BMI	160,980	446,525
of which, children with high blood pressure attributable to high BMI	10,107	33,465
of which, children with hyperglycaemia attributable to high BMI	5,327	15,172
of which, children with low HDL cholesterol attributable to high BMI	14,172	41,581

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
-BA	Proportion of the population living in urban areas 2020 (%)	62.6
	Annual increase in urbanisation 1995–2020 (%)	1.48
Ă	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	21.1
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	21.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	71.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	211,842	8,568
of which diabetes mellitus	35,767	677
of which coronary (ischaemic) heart disease	61,110	2,899
of which stroke	54,875	2,072
of which cancers (neoplasms)	10,710	429

Deaths from NCDs due to high BMI in adults 2019

0.6% Annual growth rate

2020-2035

2.5%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	22%	33%
Numbers of children with high BMI	161,683	234,449
of which, children with high blood pressure attributable to high BMI	11,390	18,723
of which, children with hyperglycaemia attributable to high BMI	5,441	8,050
of which, children with low HDL cholesterol attributable to high BMI	14,752	22,314

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	2.3
	Annual increase in GHG emissions 2000–2015 (%)	4.9
	Proportion of the population living in urban areas 2020 (%)	59.5
	Annual increase in urbanisation 1995–2020 (%)	0.40
	Plastic waste (latest year) (kg per capita)	6.5
	Proportion of adults taking insufficient physical activity 2016 (%)	18.0
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	39.7
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	45.7

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	2,491,130	106,142
of which diabetes mellitus	568,322	8,703
of which coronary (ischaemic) heart disease	547,496	32,620
of which stroke	237,349	9,331
of which cancers (neoplasms)	313,168	16,216

Deaths from NCDs due to high BMI in adults 2019

0.5% Annual growth rate

2020-2035

1.5%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	30%	37%
Numbers of children with high BMI	3,385,315	4,242,580
of which, children with high blood pressure attributable to high BMI	246,477	334,513
of which, children with hyperglycaemia attributable to high BMI	114,499	145,357
of which, children with low HDL cholesterol attributable to high BMI	312,223	402,002

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	8.9
	Annual increase in GHG emissions 2000–2015 (%)	-0.7
	Proportion of the population living in urban areas 2020 (%)	77.5
	Annual increase in urbanisation 1995–2020 (%)	0.19
	Plastic waste (latest year) (kg per capita)	79.2
	Proportion of adults taking insufficient physical activity 2016 (%)	42.2
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	83.7
•	Consumption of animal proteins 2021 (grams per capita per day)	73.7
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	48.9

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.





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(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).

For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI \ge 30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	599,902	17,777
of which diabetes mellitus	139,306	3,286
of which coronary (ischaemic) heart disease	109,448	4,004
of which stroke	192,181	5,512
of which cancers (neoplasms)	23,713	912

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	14%	28%
Numbers of children with high BMI	1,556,138	3,699,844
of which, children with high blood pressure attributable to high BMI	89,842	247,316
of which, children with hyperglycaemia attributable to high BMI	50,926	123,533
of which, children with low HDL cholesterol attributable to high BMI	133,711	332,006

Environmental correlates of obesity⁽²⁾⁽³⁾

Greenhouse gas (GHG) emissions $\rm CO_2$ equivalent 2015 (tonnes per capita per year)	0.5
Annual increase in GHG emissions 2000–2015 (%)	4.5
Proportion of the population living in urban areas 2020 (%)	57.3
Annual increase in urbanisation 1995–2020 (%)	1.44
Plastic waste (latest year) (kg per capita)	6.6
Proportion of adults taking insufficient physical activity 2016 (%)	21.8
Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	87.5
Consumption of animal proteins 2021 (grams per capita per day)	19.4
Consumption of sugar and sweeteners 2021 (kg per capita per year)	18.4
	Greenhouse gas (GHG) emissions CO2 equivalent 2015 (tonnes per capita per year) Annual increase in GHG emissions 2000–2015 (%) Proportion of the population living in urban areas 2020 (%) Annual increase in urbanisation 1995–2020 (%) Plastic waste (latest year) (kg per capita) Proportion of adults taking insufficient physical activity 2016 (%) Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) Consumption of animal proteins 2021 (grams per capita per day) Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:

WORLD BESITY

23,713 912



5.9% Annual growth rate in the projected numbers of children with high BMI 2020–2035⁽¹⁾






Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	302,971	13,080
of which diabetes mellitus	49,743	555
of which coronary (ischaemic) heart disease	85,144	4,557
of which stroke	46,879	2,212
of which cancers (neoplasms)	29,173	1,573

Deaths from NCDs due to high BMI in adults 2019

0.4% Annual growth rate

2020-2035

-0.4%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	41%	51%
Numbers of children with high BMI	658,884	616,259
of which, children with high blood pressure attributable to high BMI	50,401	51,216
of which, children with hyperglycaemia attributable to high BMI	22,462	21,305
of which, children with low HDL cholesterol attributable to high BMI	61,784	59,491

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	6.0
	Annual increase in GHG emissions 2000–2015 (%)	-2.0
	Proportion of the population living in urban areas 2020 (%)	79.7
822	Annual increase in urbanisation 1995–2020 (%)	0.40
	Plastic waste (latest year) (kg per capita)	73.4
	Proportion of adults taking insufficient physical activity 2016 (%)	37.7
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.5
•	Consumption of animal proteins 2021 (grams per capita per day)	65.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	41.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	4,264	126
of which diabetes mellitus	1,599	36
of which coronary (ischaemic) heart disease	597	23
of which stroke	681	22
of which cancers (neoplasms)	289	11

Deaths from NCDs due to high BMI in adults 2019

3.7% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

5.2% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	14%	30%
Numbers of children with high BMI	4,043	8,706
of which, children with high blood pressure attributable to high BMI	582	1,254
of which, children with hyperglycaemia attributable to high BMI	158	340
of which, children with low HDL cholesterol attributable to high BMI	493	1,062

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	n/a
	Annual increase in urbanisation 1995–2020 (%)	n/a
Ă	Plastic waste (latest year) (kg per capita)	45.9
	Proportion of adults taking insufficient physical activity 2016 (%)	28.7
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.3
\mathbf{I}	Consumption of animal proteins 2021 (grams per capita per day)	60.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	30.5
	consumption of sugar and sweetchers 2021 (kg per capital per year)	50.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.





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Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	309,382	8,172
of which diabetes mellitus	140,973	2,985
of which coronary (ischaemic) heart disease	41,486	1,521
of which stroke	36,176	981
of which cancers (neoplasms)	10,815	405

Deaths from NCDs due to high BMI in adults 2019

3.5%

Annual growth rate in the projected numbers of adults with high BMI

2020-2035

3.1% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	35%	55%
Numbers of children with high BMI	1,978,192	3,127,764
of which, children with high blood pressure attributable to high BMI	149,073	276,566
of which, children with hyperglycaemia attributable to high BMI	67,274	109,340
of which, children with low HDL cholesterol attributable to high BMI	184,556	308,894

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.0
	Annual increase in GHG emissions 2000–2015 (%)	1.8
	Proportion of the population living in urban areas 2020 (%)	51.8
	Annual increase in urbanisation 1995–2020 (%)	0.68
	Plastic waste (latest year) (kg per capita)	29.3
	Proportion of adults taking insufficient physical activity 2016 (%)	37.1
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	86.9
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	28.7
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	56.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.





2030

5.3% Annual growth rate in the projected numbers of adults with high BMI 2020–2035

7.0% Annual growth rate in the projected numbers of children with high BMI 2020–2035⁽¹⁾

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

2025

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	131,040	3,906
of which diabetes mellitus	27,387	671
of which coronary (ischaemic) heart disease	21,943	794
of which stroke	38,767	1,095
of which cancers (neoplasms)	7,269	256

Deaths from NCDs due to high BMI in adults 2019

2035



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	12%	26%
Numbers of children with high BMI	598,688	1,660,320
of which, children with high blood pressure attributable to high BMI	32,095	102,075
of which, children with hyperglycaemia attributable to high BMI	19,413	54,788
of which, children with low HDL cholesterol attributable to high BMI	50,410	145,264

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	36.9
823	Annual increase in urbanisation 1995–2020 (%)	0.90
Ă	Plastic waste (latest year) (kg per capita)	2.9
	Proportion of adults taking insufficient physical activity 2016 (%)	14.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	14.1
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	18.5

REFERENCES:

2,500,000

1,250,000

2020

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	22,570	618
of which diabetes mellitus	4,775	111
of which coronary (ischaemic) heart disease	4,265	138
of which stroke	7,296	192
of which cancers (neoplasms)	641	22

Deaths from NCDs due to high BMI in adults 2019

5.5% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

7.0% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	15%	33%
Numbers of children with high BMI	111,881	307,055
of which, children with high blood pressure attributable to high BMI	6,599	21,366
of which, children with hyperglycaemia attributable to high BMI	3,672	10,313
of which, children with low HDL cholesterol attributable to high BMI	9,672	27,905

Environmental correlates of obesity⁽²⁾⁽³⁾

Greenhouse gas (GHG) emissions CO2 equivalent 2015 (tonnes per capita per year) Annual increase in GHG emissions 2000–2015 (%)	n/a n/a
Annual increase in GHG emissions 2000–2015 (%)	n/a
Proportion of the population living in urban areas 2020 (%)	44.2
Annual increase in urbanisation 1995–2020 (%)	1.01
Plastic waste (latest year) (kg per capita)	n/a
Proportion of adults taking insufficient physical activity 2016 (%)	n/a
Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
Or Consumption of animal proteins 2021 (grams per capita per day)	9.4
Consumption of sugar and sweeteners 2021 (kg per capita per year)	10.7

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	38,819	1,129
of which diabetes mellitus	13,183	300
of which coronary (ischaemic) heart disease	7,364	258
of which stroke	7,928	249
of which cancers (neoplasms)	1,139	40

Deaths from NCDs due to high BMI in adults 2019

3.8% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

5.5% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	13%	29%
Numbers of children with high BMI	29,328	65,325
of which, children with high blood pressure attributable to high BMI	4,223	9,407
of which, children with hyperglycaemia attributable to high BMI	1,144	2,548
of which, children with low HDL cholesterol attributable to high BMI	3,578	7,970

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	2.7
	Annual increase in GHG emissions 2000–2015 (%)	1.4
	Proportion of the population living in urban areas 2020 (%)	26.8
	Annual increase in urbanisation 1995–2020 (%)	-0.33
	Plastic waste (latest year) (kg per capita)	34.1
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.0
•	Consumption of animal proteins 2021 (grams per capita per day)	53.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	67.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.





Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

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115

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	209,210	5,584
of which diabetes mellitus	64,517	1,247
of which coronary (ischaemic) heart disease	38,404	1,293
of which stroke	57,735	1,640
of which cancers (neoplasms)	5,223	187

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	36%	64%
Numbers of children with high BMI	1,280,701	2,431,869
of which, children with high blood pressure attributable to high BMI	105,082	241,160
of which, children with hyperglycaemia attributable to high BMI	44,177	86,914
of which, children with low HDL cholesterol attributable to high BMI	123,067	251,094

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.3
	Annual increase in GHG emissions 2000–2015 (%)	3.7
-BA	Proportion of the population living in urban areas 2020 (%)	57.1
	Annual increase in urbanisation 1995–2020 (%)	2.27
Ă	Plastic waste (latest year) (kg per capita)	27.0
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{O}	Consumption of animal proteins 2021 (grams per capita per day)	13.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	24.6
••••	Consumption of sugar and sweeteners 2021 (kg per capita per year)	n/a 13.2 24.6

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI >30kg/m²).

World Obesity Atlas 2024

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



3.4% Annual growth rate in the projected numbers of adults with high BMI 2020-2035

4.4% Annual growth rate in the projected numbers of children with high BMI 2020-2035(1)





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	192,287	5,620
of which diabetes mellitus	45,002	541
of which coronary (ischaemic) heart disease	36,238	1,484
of which stroke	41,483	1,341
of which cancers (neoplasms)	9,948	392

Deaths from NCDs due to high BMI in adults 2019

3.5%

Annual growth rate in the projected numbers of adults with high BMI

2020-2035

3.5% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	34%	56%
Numbers of children with high BMI	1,081,522	1,810,684
of which, children with high blood pressure attributable to high BMI	82,553	163,590
of which, children with hyperglycaemia attributable to high BMI	36,857	63,551
of which, children with low HDL cholesterol attributable to high BMI	101,341	180,278

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.1
	Annual increase in GHG emissions 2000–2015 (%)	3.0
	Proportion of the population living in urban areas 2020 (%)	58.4
	Annual increase in urbanisation 1995–2020 (%)	1.24
Ă	Plastic waste (latest year) (kg per capita)	34.2
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	83.8
•	Consumption of animal proteins 2021 (grams per capita per day)	25.9
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	50.6

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	518,281	20,490
of which diabetes mellitus	90,769	1,340
of which coronary (ischaemic) heart disease	166,059	8,654
of which stroke	78,173	2,797
of which cancers (neoplasms)	52,743	2,400

Deaths from NCDs due to high BMI in adults 2019

0.1% Annual growth rate

2020-2035

2.5%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	31%	46%
Numbers of children with high BMI	451,492	655,431
of which, children with high blood pressure attributable to high BMI	36,402	60,993
of which, children with hyperglycaemia attributable to high BMI	15,527	23,134
of which, children with low HDL cholesterol attributable to high BMI	43,117	66,000

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	4.3
	Annual increase in GHG emissions 2000–2015 (%)	-1.2
	Proportion of the population living in urban areas 2020 (%)	71.9
	Annual increase in urbanisation 1995–2020 (%)	0.39
	Plastic waste (latest year) (kg per capita)	50.3
	Proportion of adults taking insufficient physical activity 2016 (%)	38.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	79.5
•	Consumption of animal proteins 2021 (grams per capita per day)	55.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	53.6

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	5,825	204
of which diabetes mellitus	1,156	10
of which coronary (ischaemic) heart disease	1,443	79
of which stroke	543	19
of which cancers (neoplasms)	791	38

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	32%	36%
Numbers of children with high BMI	21,916	24,457
of which, children with high blood pressure attributable to high BMI	1,609	1,916
of which, children with hyperglycaemia attributable to high BMI	742	837
of which, children with low HDL cholesterol attributable to high BMI	2,027	2,312

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	6.1
	Annual increase in GHG emissions 2000–2015 (%)	-1.5
-101A	Proportion of the population living in urban areas 2020 (%)	93.9
	Annual increase in urbanisation 1995–2020 (%)	0.10
Å	Plastic waste (latest year) (kg per capita)	59.0
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	80.3
•	Consumption of animal proteins 2021 (grams per capita per day)	100.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	89.9

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).



1.5% Annual growth rate in the projected numbers of adults with high BMI 2020–2035

0.7% Annual growth rate in the projected numbers of children with high BMI 2020–2035⁽¹⁾

World Obesity Atlas 2024

REFERENCES:

WORLD BESITY

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI >30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

Proportion of the population living in urban areas 2020 (%)

Proportion of adults taking insufficient physical activity 2016 (%)

Consumption of animal proteins 2021 (grams per capita per day) Consumption of sugar and sweeteners 2021 (kg per capita per year)

Annual increase in urbanisation 1995–2020 (%)

Plastic waste (latest year) (kg per capita)

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Proportion of youth (age 11-19y) taking insufficient physical activity 2016 (%)

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

of w	hich, children with hyperglycaemia attributable to high BMI	1,127,345	2,845,192
of w	hich, children with low HDL cholesterol attributable to high BMI	3,023,630	7,839,815
Envir	onmental correlates of obesity ⁽²⁾⁽³⁾		
	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)		1.5
	Annual increase in GHG emissions 2000–2015 (%)		4.1

Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$		
	2020	2035
Prevalence of children with high BMI	9%	24%
Numbers of children with high BMI	33,824,957	83,325,567
of which, children with high blood pressure attributable to high BMI	2,233,151	6,436,936
of which, children with hyperglycaemia attributable to high BMI	1 127 345	2 845 192

	2020	2035
Prevalence of children with high BMI	9%	24%
Numbers of children with high BMI	33,824,957	83,325,567
of which, children with high blood pressure attributable to high BMI	2,233,151	6,436,936
of which, children with hyperglycaemia attributable to high BMI	1,127,345	2,845,192
of which, children with low HDL cholesterol attributable to high BMI	3.023.630	7.839.815

to high BMI, 2019

Non-communicable diseases (NCDs) in adults attributed

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	21,005,319	579,074
of which diabetes mellitus	5,312,046	89,812
of which coronary (ischaemic) heart disease	6,898,797	226,415
of which stroke	3,868,113	116,035
of which cancers (neoplasms)	626,180	23,548

Deaths from NCDs due to high BMI in adults 2019









34.9

1.09

n/a

34.0

119

India

Projected numbers of adults and children with high Body Mass Index (BMI)

۲





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	7,000,188	186,620
of which diabetes mellitus	1,864,819	43,848
of which coronary (ischaemic) heart disease	1,272,494	38,670
of which stroke	2,325,052	63,499
of which cancers (neoplasms)	268,006	8,726

Deaths from NCDs due to high BMI in adults 2019

4.0% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

5.6% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	23%	53%
Numbers of children with high BMI	15,655,672	35,590,754
of which, children with high blood pressure attributable to high BMI	1,294,760	3,511,051
of which, children with hyperglycaemia attributable to high BMI	540,778	1,270,656
of which, children with low HDL cholesterol attributable to high BMI	1,508,681	3,667,119

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.8
	Annual increase in GHG emissions 2000–2015 (%)	2.7
	Proportion of the population living in urban areas 2020 (%)	56.6
	Annual increase in urbanisation 1995–2020 (%)	1.82
	Plastic waste (latest year) (kg per capita)	35.0
	Proportion of adults taking insufficient physical activity 2016 (%)	22.6
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	86.4
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	29.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	27.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,986,069	61,412
of which diabetes mellitus	473,443	7,700
of which coronary (ischaemic) heart disease	603,615	23,913
of which stroke	284,647	8,413
of which cancers (neoplasms)	85,560	3,434

Deaths from NCDs due to high BMI in adults 2019

2.0% Annual growth rate in the projected

2020-2035

2.8%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	34%	55%
Numbers of children with high BMI	6,539,943	9,930,218
of which, children with high blood pressure attributable to high BMI	527,988	956,100
of which, children with hyperglycaemia attributable to high BMI	224,966	352,817
of which, children with low HDL cholesterol attributable to high BMI	624,845	1,013,330

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	6.8
	Annual increase in GHG emissions 2000–2015 (%)	2.4
	Proportion of the population living in urban areas 2020 (%)	75.9
	Annual increase in urbanisation 1995–2020 (%)	0.93
Ă	Plastic waste (latest year) (kg per capita)	18.9
	Proportion of adults taking insufficient physical activity 2016 (%)	33.2
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	25.7
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	35.0
	Consumption of sugar and sweeteners zozi (kg per capita per year)	

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



Iraq الله اکبر Annual growth rate in the projected numbers of adults with high BMI Projected numbers of adults and children with high Body Mass Index (BMI) 2020-2035 Adults - Children 30,000,000 22,500,000 Annual growth rate 15,000,000 in the projected numbers of children 7,500,000 with high BMI

2030

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

2025

2020

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,234,666	36,479
of which diabetes mellitus	292,073	5,789
of which coronary (ischaemic) heart disease	390,936	14,395
of which stroke	297,201	8,591
of which cancers (neoplasms)	35,904	1,304

Deaths from NCDs due to high BMI in adults 2019

2035

3.8%

3.6%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	37%	52%
Numbers of children with high BMI	5,564,610	9,472,248
of which, children with high blood pressure attributable to high BMI	481,071	916,053
of which, children with hyperglycaemia attributable to high BMI	193,730	336,839
of which, children with low HDL cholesterol attributable to high BMI	544,967	968,290

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	2.6
	Annual increase in GHG emissions 2000–2015 (%)	-0.7
	Proportion of the population living in urban areas 2020 (%)	70.9
	Annual increase in urbanisation 1995–2020 (%)	0.12
	Plastic waste (latest year) (kg per capita)	19.2
	Proportion of adults taking insufficient physical activity 2016 (%)	52.0
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	85.0
•	Consumption of animal proteins 2021 (grams per capita per day)	14.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	22.0

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI >30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	85,310	2,977
of which diabetes mellitus	15,860	190
of which coronary (ischaemic) heart disease	21,117	1,105
of which stroke	8,888	324
of which cancers (neoplasms)	13,061	630

Deaths from NCDs due to high BMI in adults 2019

2.0% Annual growth rate in the projected

2020-2035

1.4%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	37%	52%
Numbers of children with high BMI	372,311	458,271
of which, children with high blood pressure attributable to high BMI	27,158	38,828
of which, children with hyperglycaemia attributable to high BMI	12,596	15,897
of which, children with low HDL cholesterol attributable to high BMI	34,359	44,550

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	7.5
	Annual increase in GHG emissions 2000–2015 (%)	-2.3
	Proportion of the population living in urban areas 2020 (%)	63.7
	Annual increase in urbanisation 1995–2020 (%)	0.38
	Plastic waste (latest year) (kg per capita)	74.2
	Proportion of adults taking insufficient physical activity 2016 (%)	32.7
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	71.8
•	Consumption of animal proteins 2021 (grams per capita per day)	87.1
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	88.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	137,350	5,134
of which diabetes mellitus	41,182	1,064
of which coronary (ischaemic) heart disease	19,924	1,088
of which stroke	13,473	485
of which cancers (neoplasms)	15,832	805

Deaths from NCDs due to high BMI in adults 2019

in the projected

2020-2035

2.1%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	38%	42%
Numbers of children with high BMI	849,944	1,159,591
of which, children with high blood pressure attributable to high BMI	61,861	89,285
of which, children with hyperglycaemia attributable to high BMI	28,746	39,573
of which, children with low HDL cholesterol attributable to high BMI	78,380	108,979

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	7.6
	Annual increase in GHG emissions 2000–2015 (%)	-0.9
	Proportion of the population living in urban areas 2020 (%)	92.6
	Annual increase in urbanisation 1995–2020 (%)	0.07
	Plastic waste (latest year) (kg per capita)	116.0
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.7
•	Consumption of animal proteins 2021 (grams per capita per day)	78.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	60.7

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,454,677	64,136
of which diabetes mellitus	364,711	7,406
of which coronary (ischaemic) heart disease	238,909	15,018
of which stroke	140,788	6,479
of which cancers (neoplasms)	178,406	9,483

Deaths from NCDs due to high BMI in adults 2019

0.5% Annual growth rate

2020-2035

-0.6%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	40%	49%
Numbers of children with high BMI	3,341,892	3,041,124
of which, children with high blood pressure attributable to high BMI	246,082	240,101
of which, children with hyperglycaemia attributable to high BMI	113,232	104,217
of which, children with low HDL cholesterol attributable to high BMI	309,375	288,292

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	5.5
	Annual increase in GHG emissions 2000–2015 (%)	-2.0
-BA	Proportion of the population living in urban areas 2020 (%)	71.0
	Annual increase in urbanisation 1995–2020 (%)	0.24
Ă	Plastic waste (latest year) (kg per capita)	57.9
	Proportion of adults taking insufficient physical activity 2016 (%)	41.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	88.6
\mathbf{O}	Consumption of animal proteins 2021 (grams per capita per day)	69.1
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	35.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	55.4

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	104,927	3,434
of which diabetes mellitus	42,927	1,169
of which coronary (ischaemic) heart disease	11,060	460
of which stroke	18,846	655
of which cancers (neoplasms)	5,529	231

Deaths from NCDs due to high BMI in adults 2019

1.6% Annual growth rate in the projected

2020-2035

0.8% Annual growth rate

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	36%	55%
Numbers of children with high BMI	230,111	258,160
of which, children with high blood pressure attributable to high BMI	19,916	25,624
of which, children with hyperglycaemia attributable to high BMI	8,013	9,228
of which, children with low HDL cholesterol attributable to high BMI	22,545	26,665

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	2.4
	Annual increase in GHG emissions 2000–2015 (%)	-3.0
	Proportion of the population living in urban areas 2020 (%)	56.3
	Annual increase in urbanisation 1995–2020 (%)	0.43
	Plastic waste (latest year) (kg per capita)	44.5
	Proportion of adults taking insufficient physical activity 2016 (%)	32.6
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	46.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	53.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,360,140	51,822
of which diabetes mellitus	228,163	1,510
of which coronary (ischaemic) heart disease	166,639	9,666
of which stroke	248,443	7,705
of which cancers (neoplasms)	207,154	11,741

Deaths from NCDs due to high BMI in adults 2019

0.9% Annual growth rate

2020-2035

-0.5% Annual growth rate

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	17%	20%
Numbers of children with high BMI	2,723,896	2,509,136
of which, children with high blood pressure attributable to high BMI	169,994	167,780
of which, children with hyperglycaemia attributable to high BMI	90,069	83,781
of which, children with low HDL cholesterol attributable to high BMI	239,376	225,181

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	9.1
	Annual increase in GHG emissions 2000–2015 (%)	0.0
	Proportion of the population living in urban areas 2020 (%)	91.8
	Annual increase in urbanisation 1995–2020 (%)	0.65
	Plastic waste (latest year) (kg per capita)	37.1
	Proportion of adults taking insufficient physical activity 2016 (%)	35.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	52.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	27.7

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	261,802	7,548
of which diabetes mellitus	66,817	1,336
of which coronary (ischaemic) heart disease	65,979	2,322
of which stroke	38,721	1,105
of which cancers (neoplasms)	11,750	445

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

2.4%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	39%	57%
Numbers of children with high BMI	1,348,656	1,915,506
of which, children with high blood pressure attributable to high BMI	113,673	185,461
of which, children with hyperglycaemia attributable to high BMI	46,741	68,132
of which, children with low HDL cholesterol attributable to high BMI	130,858	195,900

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	2.5
	Annual increase in GHG emissions 2000–2015 (%)	-1.2
	Proportion of the population living in urban areas 2020 (%)	91.4
	Annual increase in urbanisation 1995–2020 (%)	0.63
	Plastic waste (latest year) (kg per capita)	48.1
	Proportion of adults taking insufficient physical activity 2016 (%)	11.9
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.8
•	Consumption of animal proteins 2021 (grams per capita per day)	25.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	45.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	703,012	22,827
of which diabetes mellitus	113,281	1,563
of which coronary (ischaemic) heart disease	213,011	9,167
of which stroke	213,605	7,062
of which cancers (neoplasms)	44,396	1,692

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

4.0% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	22%	32%
Numbers of children with high BMI	1,055,005	1,904,446
of which, children with high blood pressure attributable to high BMI	73,948	150,964
of which, children with hyperglycaemia attributable to high BMI	35,474	65,308
of which, children with low HDL cholesterol attributable to high BMI	96,104	180,790

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	10.3
	Annual increase in GHG emissions 2000–2015 (%)	2.1
	Proportion of the population living in urban areas 2020 (%)	57.7
	Annual increase in urbanisation 1995–2020 (%)	0.13
	Plastic waste (latest year) (kg per capita)	69.4
	Proportion of adults taking insufficient physical activity 2016 (%)	27.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	64.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	37.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	539,114	15,017
of which diabetes mellitus	119,120	2,621
of which coronary (ischaemic) heart disease	80,551	2,593
of which stroke	163,471	4,529
of which cancers (neoplasms)	31,391	1,097

Deaths from NCDs due to high BMI in adults 2019

5.2% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

6.2% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	15%	32%
Numbers of children with high BMI	2,850,477	7,053,534
of which, children with high blood pressure attributable to high BMI	162,128	483,089
of which, children with hyperglycaemia attributable to high BMI	93,107	236,352
of which, children with low HDL cholesterol attributable to high BMI	243,906	637,799

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.3
	Annual increase in GHG emissions 2000–2015 (%)	1.3
	Proportion of the population living in urban areas 2020 (%)	28.0
	Annual increase in urbanisation 1995–2020 (%)	1.72
Ă	Plastic waste (latest year) (kg per capita)	25.3
	Proportion of adults taking insufficient physical activity 2016 (%)	15.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	86.9
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	14.7
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	23.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	9,097	229
of which diabetes mellitus	3,376	82
of which coronary (ischaemic) heart disease	1,837	50
of which stroke	2,459	60
of which cancers (neoplasms)	254	8

Deaths from NCDs due to high BMI in adults 2019

3.5% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

5.5% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	31%	57%
Numbers of children with high BMI	12,647	28,238
of which, children with high blood pressure attributable to high BMI	1,821	4,066
of which, children with hyperglycaemia attributable to high BMI	493	1,101
of which, children with low HDL cholesterol attributable to high BMI	1,543	3,445

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	55.6
823	Annual increase in urbanisation 1995–2020 (%)	1.71
Ă	Plastic waste (latest year) (kg per capita)	51.5
	Proportion of adults taking insufficient physical activity 2016 (%)	40.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	82.5
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	50.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	50.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	50.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

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High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	108,349	2,316
of which diabetes mellitus	29,193	223
of which coronary (ischaemic) heart disease	36,169	1,089
of which stroke	13,518	316
of which cancers (neoplasms)	3,870	148

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

-0.3%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	47%	56%
Numbers of children with high BMI	411,760	395,836
of which, children with high blood pressure attributable to high BMI	40,079	41,303
of which, children with hyperglycaemia attributable to high BMI	14,661	14,296
of which, children with low HDL cholesterol attributable to high BMI	42,200	41,728

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	22.0
	Annual increase in GHG emissions 2000–2015 (%)	-0.5
	Proportion of the population living in urban areas 2020 (%)	100.0
	Annual increase in urbanisation 1995–2020 (%)	0.08
	Plastic waste (latest year) (kg per capita)	116.7
	Proportion of adults taking insufficient physical activity 2016 (%)	67.0
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.3
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	62.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	30.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	139,974	4,479
of which diabetes mellitus	14,930	176
of which coronary (ischaemic) heart disease	52,515	2,225
of which stroke	44,286	1,319
of which cancers (neoplasms)	5,500	202

Deaths from NCDs due to high BMI in adults 2019

3.0% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

4.6% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	18%	30%
Numbers of children with high BMI	349,440	689,225
of which, children with high blood pressure attributable to high BMI	21,033	48,396
of which, children with hyperglycaemia attributable to high BMI	11,498	23,181
of which, children with low HDL cholesterol attributable to high BMI	30,385	62,820

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.6
	Annual increase in GHG emissions 2000–2015 (%)	3.9
	Proportion of the population living in urban areas 2020 (%)	36.9
	Annual increase in urbanisation 1995–2020 (%)	0.07
Ă	Plastic waste (latest year) (kg per capita)	n/a
.	Proportion of adults taking insufficient physical activity 2016 (%)	13.9
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{O}	Consumption of animal proteins 2021 (grams per capita per day)	41.1
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	44.6

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	132,040	3,527
of which diabetes mellitus	29,594	553
of which coronary (ischaemic) heart disease	24,299	776
of which stroke	43,990	1,200
of which cancers (neoplasms)	5,459	178

Deaths from NCDs due to high BMI in adults 2019

5.0% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

6.9%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	19%	50%
Numbers of children with high BMI	432,657	1,175,797
of which, children with high blood pressure attributable to high BMI	32,381	106,728
of which, children with hyperglycaemia attributable to high BMI	14,697	41,304
of which, children with low HDL cholesterol attributable to high BMI	40,271	117,274

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.1
	Annual increase in GHG emissions 2000–2015 (%)	14.0
	Proportion of the population living in urban areas 2020 (%)	36.3
	Annual increase in urbanisation 1995–2020 (%)	2.99
Ă	Plastic waste (latest year) (kg per capita)	3.2
.	Proportion of adults taking insufficient physical activity 2016 (%)	16.3
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.4
•	Consumption of animal proteins 2021 (grams per capita per day)	23.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	41.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	100,727	4,366
of which diabetes mellitus	11,551	181
of which coronary (ischaemic) heart disease	38,346	2,120
of which stroke	21,181	892
of which cancers (neoplasms)	8,668	404

Deaths from NCDs due to high BMI in adults 2019

-0.5% Annual growth rate

numbers of adults

2020-2035

1.0% Annual growth rate

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	23%	32%
Numbers of children with high BMI	67,518	77,822
of which, children with high blood pressure attributable to high BMI	4,814	6,170
of which, children with hyperglycaemia attributable to high BMI	2,276	2,669
of which, children with low HDL cholesterol attributable to high BMI	6,184	7,388

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	3.5
	Annual increase in GHG emissions 2000–2015 (%)	1.2
	Proportion of the population living in urban areas 2020 (%)	68.3
	Annual increase in urbanisation 1995–2020 (%)	-0.03
Ă	Plastic waste (latest year) (kg per capita)	33.8
	Proportion of adults taking insufficient physical activity 2016 (%)	29.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	80.1
\mathbf{I}	Consumption of animal proteins 2021 (grams per capita per day)	68.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	65.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	65.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	181,680	6,165
of which diabetes mellitus	35,262	449
of which coronary (ischaemic) heart disease	79,597	3,316
of which stroke	13,039	348
of which cancers (neoplasms)	9,694	430

Deaths from NCDs due to high BMI in adults 2019

-0.1% Annual growth rate

2020-2035

-0.9% Annual growth rate

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	40%	55%
Numbers of children with high BMI	649,723	565,163
of which, children with high blood pressure attributable to high BMI	55,409	53,797
of which, children with hyperglycaemia attributable to high BMI	22,565	20,035
of which, children with low HDL cholesterol attributable to high BMI	63,312	57,414

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	3.8
	Annual increase in GHG emissions 2000–2015 (%)	1.1
	Proportion of the population living in urban areas 2020 (%)	88.9
	Annual increase in urbanisation 1995–2020 (%)	0.19
	Plastic waste (latest year) (kg per capita)	41.9
	Proportion of adults taking insufficient physical activity 2016 (%)	36.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	82.1
•	Consumption of animal proteins 2021 (grams per capita per day)	29.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	80.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	70,806	2,328
of which diabetes mellitus	22,683	702
of which coronary (ischaemic) heart disease	8,974	316
of which stroke	16,421	530
of which cancers (neoplasms)	3,605	131

Deaths from NCDs due to high BMI in adults 2019

3.1% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

6.4%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	21%	48%
Numbers of children with high BMI	152,368	386,673
of which, children with high blood pressure attributable to high BMI	11,513	36,214
of which, children with hyperglycaemia attributable to high BMI	5,184	13,664
of which, children with low HDL cholesterol attributable to high BMI	14,228	39,033

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	29.0
	Annual increase in urbanisation 1995–2020 (%)	2.16
Ă	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	6.3
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	19.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	26.5
YY	Consumption of sugar and sweeteners 2021 (kg per capita per year)	26.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

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High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	66,431	1,718
of which diabetes mellitus	15,289	291
of which coronary (ischaemic) heart disease	12,837	415
of which stroke	18,783	488
of which cancers (neoplasms)	2,478	84

Deaths from NCDs due to high BMI in adults 2019

6.8% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

7.6% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	2%	6%
Numbers of children with high BMI	47,865	143,208
of which, children with high blood pressure attributable to high BMI	6,893	20,622
of which, children with hyperglycaemia attributable to high BMI	1,867	5,585
of which, children with low HDL cholesterol attributable to high BMI	5,840	17,471

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
- ARa	Proportion of the population living in urban areas 2020 (%)	52.1
823	Annual increase in urbanisation 1995–2020 (%)	0.50
Ă	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	25.1
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	13.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	9.0

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	225,064	6,199
of which diabetes mellitus	47,496	544
of which coronary (ischaemic) heart disease	76,092	2,623
of which stroke	37,336	991
of which cancers (neoplasms)	9,905	367

Deaths from NCDs due to high BMI in adults 2019

2.6%

Annual growth rate in the projected

2020-2035

1.8%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	39%	54%
Numbers of children with high BMI	753,252	979,158
of which, children with high blood pressure attributable to high BMI	64,851	94,163
of which, children with hyperglycaemia attributable to high BMI	26,205	34,781
of which, children with low HDL cholesterol attributable to high BMI	73,657	99,872

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	7.4
	Annual increase in GHG emissions 2000–2015 (%)	0.4
	Proportion of the population living in urban areas 2020 (%)	80.7
	Annual increase in urbanisation 1995–2020 (%)	0.24
	Plastic waste (latest year) (kg per capita)	26.0
_),	Proportion of adults taking insufficient physical activity 2016 (%)	36.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	83.2
•	Consumption of animal proteins 2021 (grams per capita per day)	47.9
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	41.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	129,387	5,807
of which diabetes mellitus	11,204	126
of which coronary (ischaemic) heart disease	56,535	3,323
of which stroke	23,298	917
of which cancers (neoplasms)	12,107	572

Deaths from NCDs due to high BMI in adults 2019

-0.6% Annual growth rate in the projected numbers of adults

2020-2035

1.9%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	24%	35%
Numbers of children with high BMI	98,135	129,347
of which, children with high blood pressure attributable to high BMI	7,123	10,558
of which, children with hyperglycaemia attributable to high BMI	3,318	4,458
of which, children with low HDL cholesterol attributable to high BMI	9,042	12,406

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	3.6
	Annual increase in GHG emissions 2000–2015 (%)	1.5
	Proportion of the population living in urban areas 2020 (%)	68.0
	Annual increase in urbanisation 1995–2020 (%)	0.04
Ă	Plastic waste (latest year) (kg per capita)	47.9
	Proportion of adults taking insufficient physical activity 2016 (%)	26.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	80.2
•	Consumption of animal proteins 2021 (grams per capita per day)	86.7
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	96.0
	Consumption of animal proteins 2021 (grams per capita per day) Consumption of sugar and sweeteners 2021 (kg per capita per year)	86.7 96.0

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	10,837	353
of which diabetes mellitus	2,973	25
of which coronary (ischaemic) heart disease	1,903	103
of which stroke	1,150	43
of which cancers (neoplasms)	1,319	65

Deaths from NCDs due to high BMI in adults 2019

in the projected

2020-2035

1.6%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	30%	36%
Numbers of children with high BMI	30,212	38,537
of which, children with high blood pressure attributable to high BMI	2,133	2,950
of which, children with hyperglycaemia attributable to high BMI	1,017	1,314
of which, children with low HDL cholesterol attributable to high BMI	2,758	3,615

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	15.5
	Annual increase in GHG emissions 2000–2015 (%)	-1.2
	Proportion of the population living in urban areas 2020 (%)	91.5
	Annual increase in urbanisation 1995–2020 (%)	0.40
	Plastic waste (latest year) (kg per capita)	142.4
	Proportion of adults taking insufficient physical activity 2016 (%)	28.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	79.2
•	Consumption of animal proteins 2021 (grams per capita per day)	75.9
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	162.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	310,956	8,518
of which diabetes mellitus	45,638	945
of which coronary (ischaemic) heart disease	44,341	1,375
of which stroke	126,086	3,368
of which cancers (neoplasms)	8,749	298

Deaths from NCDs due to high BMI in adults 2019

5.4% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

7.2%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	14%	30%
Numbers of children with high BMI	1,427,536	4,033,324
of which, children with high blood pressure attributable to high BMI	74,665	249,500
of which, children with hyperglycaemia attributable to high BMI	46,154	133,205
of which, children with low HDL cholesterol attributable to high BMI	119,419	353,522

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.1
	Annual increase in GHG emissions 2000–2015 (%)	1.7
	Proportion of the population living in urban areas 2020 (%)	38.5
	Annual increase in urbanisation 1995–2020 (%)	1.61
	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	17.2
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	5.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	11.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	156,129	4,547
of which diabetes mellitus	37,238	807
of which coronary (ischaemic) heart disease	24,330	811
of which stroke	42,677	1,229
of which cancers (neoplasms)	11,498	413

Deaths from NCDs due to high BMI in adults 2019

5.9% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

7.2%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	14%	31%
Numbers of children with high BMI	1,093,721	3,124,199
of which, children with high blood pressure attributable to high BMI	59,690	199,769
of which, children with hyperglycaemia attributable to high BMI	35,542	103,654
of which, children with low HDL cholesterol attributable to high BMI	92,533	276,558

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	17.4
	Annual increase in urbanisation 1995–2020 (%)	1.08
Ă	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	15.6
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
	Consumption of animal proteins 2021 (grams per capita per day)	16.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	6.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	6.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	710,724	19,104
of which diabetes mellitus	138,352	1,658
of which coronary (ischaemic) heart disease	207,317	7,298
of which stroke	176,359	4,869
of which cancers (neoplasms)	53,733	1,960

Deaths from NCDs due to high BMI in adults 2019

3.7% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

3.8% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	36%	65%
Numbers of children with high BMI	2,849,369	4,994,863
of which, children with high blood pressure attributable to high BMI	264,604	526,068
of which, children with hyperglycaemia attributable to high BMI	100,529	180,749
of which, children with low HDL cholesterol attributable to high BMI	286,692	528,584

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	7.1
	Annual increase in GHG emissions 2000–2015 (%)	2.3
E	Proportion of the population living in urban areas 2020 (%)	77.2
	Annual increase in urbanisation 1995–2020 (%)	1.31
	Plastic waste (latest year) (kg per capita)	64.4
*	Proportion of adults taking insufficient physical activity 2016 (%)	38.8
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	86.2
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	52.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	44.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.






Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	4,797	110
of which diabetes mellitus	1,186	15
of which coronary (ischaemic) heart disease	1,190	38
of which stroke	1,034	23
of which cancers (neoplasms)	256	9

Deaths from NCDs due to high BMI in adults 2019

3.5% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

5.4% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	23%	56%
Numbers of children with high BMI	24,650	54,583
of which, children with high blood pressure attributable to high BMI	2,147	5,668
of which, children with hyperglycaemia attributable to high BMI	859	1,969
of which, children with low HDL cholesterol attributable to high BMI	2,421	5,743

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	40.7
	Annual increase in urbanisation 1995–2020 (%)	1.87
Ă	Plastic waste (latest year) (kg per capita)	15.5
	Proportion of adults taking insufficient physical activity 2016 (%)	30.3
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	81.9
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	51.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	32.4

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	183,073	5,316
of which diabetes mellitus	41,136	957
of which coronary (ischaemic) heart disease	28,236	1,046
of which stroke	53,461	1,492
of which cancers (neoplasms)	8,091	281

Deaths from NCDs due to high BMI in adults 2019

6.2% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

8.6%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	14%	32%
Numbers of children with high BMI	1,214,095	4,190,841
of which, children with high blood pressure attributable to high BMI	75,058	302,276
of which, children with hyperglycaemia attributable to high BMI	40,094	141,537
of which, children with low HDL cholesterol attributable to high BMI	106,397	385,324

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	43.9
	Annual increase in urbanisation 1995–2020 (%)	2.20
	Plastic waste (latest year) (kg per capita)	2.4
	Proportion of adults taking insufficient physical activity 2016 (%)	40.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	10.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	8.7

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

Projected numbers of adults and children with high Body Mass Index (BMI)

Malta



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	10,213	369
of which diabetes mellitus	2,682	44
of which coronary (ischaemic) heart disease	2,655	144
of which stroke	991	39
of which cancers (neoplasms)	979	48

Deaths from NCDs due to high BMI in adults 2019

0.9% Annual growth rate

2020-2035

1.1%



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	39%	44%
Numbers of children with high BMI	26,204	30,708
of which, children with high blood pressure attributable to high BMI	1,996	2,467
of which, children with hyperglycaemia attributable to high BMI	893	1,055
of which, children with low HDL cholesterol attributable to high BMI	2,454	2,929

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	3.7
	Annual increase in GHG emissions 2000–2015 (%)	-2.5
	Proportion of the population living in urban areas 2020 (%)	94.7
	Annual increase in urbanisation 1995–2020 (%)	0.16
Ă	Plastic waste (latest year) (kg per capita)	83.3
	Proportion of adults taking insufficient physical activity 2016 (%)	41.8
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	81.4
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	59.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	86.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI >30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	54,016	1,754
of which diabetes mellitus	11,253	320
of which coronary (ischaemic) heart disease	10,527	429
of which stroke	13,670	399
of which cancers (neoplasms)	2,497	102

Deaths from NCDs due to high BMI in adults 2019

5.7% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

7.1% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	19%	39%
Numbers of children with high BMI	318,147	885,395
of which, children with high blood pressure attributable to high BMI	22,164	72,235
of which, children with hyperglycaemia attributable to high BMI	10,688	30,511
of which, children with low HDL cholesterol attributable to high BMI	28,924	84,909

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	55.3
	Annual increase in urbanisation 1995–2020 (%)	1.44
	Plastic waste (latest year) (kg per capita)	25.9
	Proportion of adults taking insufficient physical activity 2016 (%)	41.3
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	87.3
•	Consumption of animal proteins 2021 (grams per capita per day)	31.6
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	46.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	71,439	2,236
of which diabetes mellitus	32,507	887
of which coronary (ischaemic) heart disease	8,555	326
of which stroke	8,035	229
of which cancers (neoplasms)	2,876	110

Deaths from NCDs due to high BMI in adults 2019

in the projected

2020-2035

2.2%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	18%	32%
Numbers of children with high BMI	44,636	61,636
of which, children with high blood pressure attributable to high BMI	3,145	5,074
of which, children with hyperglycaemia attributable to high BMI	1,502	2,127
of which, children with low HDL cholesterol attributable to high BMI	4,073	5,930

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	3.1
	Annual increase in GHG emissions 2000–2015 (%)	2.9
	Proportion of the population living in urban areas 2020 (%)	40.8
	Annual increase in urbanisation 1995–2020 (%)	-0.24
	Plastic waste (latest year) (kg per capita)	43.0
	Proportion of adults taking insufficient physical activity 2016 (%)	29.8
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	82.2
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	45.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	43.6

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	4,331,796	125,586
of which diabetes mellitus	1,830,570	41,241
of which coronary (ischaemic) heart disease	648,480	25,969
of which stroke	338,944	10,014
of which cancers (neoplasms)	168,702	6,587

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

1.0% Annual growth rate

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	42%	56%
Numbers of children with high BMI	13,583,775	15,675,928
of which, children with high blood pressure attributable to high BMI	1,128,506	1,456,447
of which, children with hyperglycaemia attributable to high BMI	469,581	553,115
of which, children with low HDL cholesterol attributable to high BMI	1,311,151	1,577,547

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	3.7
	Annual increase in GHG emissions 2000–2015 (%)	0.2
	Proportion of the population living in urban areas 2020 (%)	80.7
	Annual increase in urbanisation 1995–2020 (%)	0.38
Ă	Plastic waste (latest year) (kg per capita)	46.0
_]),	Proportion of adults taking insufficient physical activity 2016 (%)	28.9
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	83.2
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	56.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	42.1
	consumption of sugar and sweetchers 2021 (kg per cupita per year)	76.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



Micronesia (Federated States of)

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	8,215	218
of which diabetes mellitus	2,773	68
of which coronary (ischaemic) heart disease	2,008	58
of which stroke	1,707	44
of which cancers (neoplasms)	303	9

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate

in the projected

2020-2035

4.2% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	27%	52%
Numbers of children with high BMI	9,665	17,986
of which, children with high blood pressure attributable to high BMI	1,392	2,590
of which, children with hyperglycaemia attributable to high BMI	377	701
of which, children with low HDL cholesterol attributable to high BMI	1,179	2,194

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	22.9
	Annual increase in urbanisation 1995–2020 (%)	-0.37
Ă	Plastic waste (latest year) (kg per capita)	64.9
	Proportion of adults taking insufficient physical activity 2016 (%)	36.7
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	48.1
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	52.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	177,690	6,769
of which diabetes mellitus	18,766	170
of which coronary (ischaemic) heart disease	72,106	3,495
of which stroke	42,228	1,495
of which cancers (neoplasms)	10,549	406

Deaths from NCDs due to high BMI in adults 2019

0.7%

Annual growth rate

2020-2035

4.0% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	21%	35%
Numbers of children with high BMI	116,717	210,729
of which, children with high blood pressure attributable to high BMI	7,274	15,132
of which, children with hyperglycaemia attributable to high BMI	3,859	7,112
of which, children with low HDL cholesterol attributable to high BMI	10,253	19,347

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	2.7
	Annual increase in GHG emissions 2000–2015 (%)	1.2
	Proportion of the population living in urban areas 2020 (%)	42.8
	Annual increase in urbanisation 1995–2020 (%)	-0.31
Ă	Plastic waste (latest year) (kg per capita)	112.0
	Proportion of adults taking insufficient physical activity 2016 (%)	11.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	75.7
•	Consumption of animal proteins 2021 (grams per capita per day)	48.6
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	37.7

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	123,350	3,587
of which diabetes mellitus	5,760	68
of which coronary (ischaemic) heart disease	34,674	1,152
of which stroke	53,468	1,499
of which cancers (neoplasms)	16,034	564

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

4.1% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	21%	31%
Numbers of children with high BMI	183,271	334,633
of which, children with high blood pressure attributable to high BMI	11,128	23,827
of which, children with hyperglycaemia attributable to high BMI	6,038	11,279
of which, children with low HDL cholesterol attributable to high BMI	15,976	30,638

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	5.8
	Annual increase in GHG emissions 2000–2015 (%)	3.1
	Proportion of the population living in urban areas 2020 (%)	68.7
823	Annual increase in urbanisation 1995–2020 (%)	0.76
Ă	Plastic waste (latest year) (kg per capita)	138.9
_]),	Proportion of adults taking insufficient physical activity 2016 (%)	18.6
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	78.8
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	84.7
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	75.1
	•	

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

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High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	33,531	1,218
of which diabetes mellitus	5,696	79
of which coronary (ischaemic) heart disease	9,133	418
of which stroke	10,904	459
of which cancers (neoplasms)	2,361	101

Deaths from NCDs due to high BMI in adults 2019

0.9% Annual growth rate

2020-2035

2.9%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	33%	56%
Numbers of children with high BMI	38,390	58,616
of which, children with high blood pressure attributable to high BMI	2,807	5,230
of which, children with hyperglycaemia attributable to high BMI	1,299	2,053
of which, children with low HDL cholesterol attributable to high BMI	3,546	5,809

Environmental correlates of obesity⁽²⁾⁽³⁾

Greenhouse gas (GHG) emissions CO ₂ equivalent 2015 (tonnes per capita per year)	3.8 1.5
Annual increase in GHG emissions 2000–2015 (%)	1.5
Proportion of the population living in urban areas 2020 (%)	67.5
Annual increase in urbanisation 1995–2020 (%)	0.94
A Plastic waste (latest year) (kg per capita)	97.6
Proportion of adults taking insufficient physical activity 2016 (%)	n/a
Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
Or Consumption of animal proteins 2021 (grams per capita per day)	78.7
Consumption of sugar and sweeteners 2021 (kg per capita per year)	12.9

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,295,207	41,917
of which diabetes mellitus	218,097	3,561
of which coronary (ischaemic) heart disease	493,710	18,900
of which stroke	238,209	7,415
of which cancers (neoplasms)	31,099	1,271

Deaths from NCDs due to high BMI in adults 2019

in the projected

2020-2035

3.4% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	34%	57%
Numbers of children with high BMI	3,312,635	5,446,917
of which, children with high blood pressure attributable to high BMI	263,945	511,363
of which, children with hyperglycaemia attributable to high BMI	113,696	192,576
of which, children with low HDL cholesterol attributable to high BMI	315,037	550,363

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.6
	Annual increase in GHG emissions 2000–2015 (%)	2.9
	Proportion of the population living in urban areas 2020 (%)	63.5
	Annual increase in urbanisation 1995–2020 (%)	0.83
	Plastic waste (latest year) (kg per capita)	16.0
_]),	Proportion of adults taking insufficient physical activity 2016 (%)	26.2
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	87.3
•	Consumption of animal proteins 2021 (grams per capita per day)	30.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	32.5
	Consumption of sugar and sweeteners 2021 (kg per capita per varia)	32.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	280,353	7,732
of which diabetes mellitus	65,513	1,422
of which coronary (ischaemic) heart disease	35,619	1,133
of which stroke	104,795	2,922
of which cancers (neoplasms)	8,258	300

Deaths from NCDs due to high BMI in adults 2019

5.7% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

7.4%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	17%	35%
Numbers of children with high BMI	2,075,554	6,058,416
of which, children with high blood pressure attributable to high BMI	112,831	379,822
of which, children with hyperglycaemia attributable to high BMI	67,416	200,454
of which, children with low HDL cholesterol attributable to high BMI	175,415	533,135

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.2
	Annual increase in GHG emissions 2000–2015 (%)	6.1
	Proportion of the population living in urban areas 2020 (%)	37.1
	Annual increase in urbanisation 1995–2020 (%)	1.20
	Plastic waste (latest year) (kg per capita)	n/a
_]),	Proportion of adults taking insufficient physical activity 2016 (%)	5.6
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	87.1
•	Consumption of animal proteins 2021 (grams per capita per day)	9.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	11.8

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,112,785	31,183
of which diabetes mellitus	301,144	6,543
of which coronary (ischaemic) heart disease	132,067	4,499
of which stroke	414,397	12,297
of which cancers (neoplasms)	48,063	1,652

Deaths from NCDs due to high BMI in adults 2019

3.8% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

5.9% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	16%	38%
Numbers of children with high BMI	2,124,573	5,018,437
of which, children with high blood pressure attributable to high BMI	155,543	442,072
of which, children with hyperglycaemia attributable to high BMI	71,920	175,313
of which, children with low HDL cholesterol attributable to high BMI	196,305	494,914

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.4
	Annual increase in GHG emissions 2000–2015 (%)	3.9
	Proportion of the population living in urban areas 2020 (%)	31.1
	Annual increase in urbanisation 1995–2020 (%)	0.70
	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	10.7
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	86.8
•	Consumption of animal proteins 2021 (grams per capita per day)	23.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	27.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	46,150	1,558
of which diabetes mellitus	13,877	398
of which coronary (ischaemic) heart disease	7,396	285
of which stroke	10,517	349
of which cancers (neoplasms)	1,443	59

Deaths from NCDs due to high BMI in adults 2019

3.5% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

7.7% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	20%	50%
Numbers of children with high BMI	165,341	499,808
of which, children with high blood pressure attributable to high BMI	12,307	48,086
of which, children with hyperglycaemia attributable to high BMI	5,612	17,755
of which, children with low HDL cholesterol attributable to high BMI	15,362	50,988

Environmental correlates of obesity⁽²⁾⁽³⁾

1.7	
3.0	
52.0	-BA
2.25	
n/a	
33.4	_]),
87.4	
28.7	
65.4	

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

Nepal

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	328,323	9,144
of which diabetes mellitus	67,848	826
of which coronary (ischaemic) heart disease	87,188	2,893
of which stroke	70,208	2,205
of which cancers (neoplasms)	11,735	442

Deaths from NCDs due to high BMI in adults 2019

4.9% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

6.6% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	10%	28%
Numbers of children with high BMI	935,450	2,444,201
of which, children with high blood pressure attributable to high BMI	53,330	153,422
of which, children with hyperglycaemia attributable to high BMI	30,564	80,884
of which, children with low HDL cholesterol attributable to high BMI	80,096	215,165

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.2
	Annual increase in GHG emissions 2000–2015 (%)	3.3
	Proportion of the population living in urban areas 2020 (%)	20.6
	Annual increase in urbanisation 1995–2020 (%)	2.58
	Plastic waste (latest year) (kg per capita)	9.2
	Proportion of adults taking insufficient physical activity 2016 (%)	13.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	83.5
•	Consumption of animal proteins 2021 (grams per capita per day)	17.1
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	12.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



Netherlands

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	312,572	11,692
of which diabetes mellitus	63,604	1,148
of which coronary (ischaemic) heart disease	53,463	2,842
of which stroke	38,461	1,489
of which cancers (neoplasms)	57,613	2,885

Deaths from NCDs due to high BMI in adults 2019

in the projected

2020-2035

1.8%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	30%	41%
Numbers of children with high BMI	866,898	1,125,154
of which, children with high blood pressure attributable to high BMI	58,404	87,470
of which, children with hyperglycaemia attributable to high BMI	28,978	38,459
of which, children with low HDL cholesterol attributable to high BMI	77,982	106,093

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	9.3
	Annual increase in GHG emissions 2000–2015 (%)	-0.6
	Proportion of the population living in urban areas 2020 (%)	92.2
	Annual increase in urbanisation 1995–2020 (%)	0.95
	Plastic waste (latest year) (kg per capita)	71.1
	Proportion of adults taking insufficient physical activity 2016 (%)	27.2
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	80.2
•	Consumption of animal proteins 2021 (grams per capita per day)	74.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	45.4

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	98,454	3,626
of which diabetes mellitus	16,967	304
of which coronary (ischaemic) heart disease	23,588	1,267
of which stroke	10,788	404
of which cancers (neoplasms)	14,142	666

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

1.3%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	43%	53%
Numbers of children with high BMI	422,495	513,303
of which, children with high blood pressure attributable to high BMI	35,114	47,623
of which, children with hyperglycaemia attributable to high BMI	14,606	18,107
of which, children with low HDL cholesterol attributable to high BMI	40,787	51,628

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	6.8
	Annual increase in GHG emissions 2000–2015 (%)	-0.7
	Proportion of the population living in urban areas 2020 (%)	86.7
	Annual increase in urbanisation 1995–2020 (%)	0.05
	Plastic waste (latest year) (kg per capita)	58.0
	Proportion of adults taking insufficient physical activity 2016 (%)	42.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	88.7
•	Consumption of animal proteins 2021 (grams per capita per day)	54.6
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	61.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	142,611	4,341
of which diabetes mellitus	47,531	972
of which coronary (ischaemic) heart disease	23,594	1,017
of which stroke	13,462	434
of which cancers (neoplasms)	4,839	197

Deaths from NCDs due to high BMI in adults 2019

3.0%

Annual growth rate in the projected numbers of adults with high BMI

2020-2035

2.9%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	34%	51%
Numbers of children with high BMI	688,249	1,053,148
of which, children with high blood pressure attributable to high BMI	53,455	93,417
of which, children with hyperglycaemia attributable to high BMI	23,521	36,837
of which, children with low HDL cholesterol attributable to high BMI	64,875	104,131

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.8
	Annual increase in GHG emissions 2000–2015 (%)	0.9
	Proportion of the population living in urban areas 2020 (%)	59.0
	Annual increase in urbanisation 1995–2020 (%)	0.33
	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	27.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	39.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	127,586	3,659
of which diabetes mellitus	25,508	615
of which coronary (ischaemic) heart disease	22,205	784
of which stroke	42,781	1,194
of which cancers (neoplasms)	2,950	109

Deaths from NCDs due to high BMI in adults 2019

6.5% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

9.7%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	10%	24%
Numbers of children with high BMI	1,007,263	4,051,558
of which, children with high blood pressure attributable to high BMI	51,473	233,439
of which, children with hyperglycaemia attributable to high BMI	32,478	132,557
of which, children with low HDL cholesterol attributable to high BMI	83,756	347,933

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.1
	Annual increase in GHG emissions 2000–2015 (%)	3.9
	Proportion of the population living in urban areas 2020 (%)	16.6
	Annual increase in urbanisation 1995–2020 (%)	0.20
	Plastic waste (latest year) (kg per capita)	4.2
	Proportion of adults taking insufficient physical activity 2016 (%)	22.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	9.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	5.9

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,660,974	47,555
of which diabetes mellitus	364,012	9,055
of which coronary (ischaemic) heart disease	314,765	11,315
of which stroke	456,852	12,870
of which cancers (neoplasms)	47,822	1,920

Deaths from NCDs due to high BMI in adults 2019

5.5% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

8.0% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	11%	26%
Numbers of children with high BMI	8,817,218	27,872,943
of which, children with high blood pressure attributable to high BMI	526,532	1,957,888
of which, children with hyperglycaemia attributable to high BMI	289,824	937,531
of which, children with low HDL cholesterol attributable to high BMI	764,930	2,540,794

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.5
	Annual increase in GHG emissions 2000–2015 (%)	2.1
	Proportion of the population living in urban areas 2020 (%)	52.0
	Annual increase in urbanisation 1995–2020 (%)	1.94
	Plastic waste (latest year) (kg per capita)	8.6
	Proportion of adults taking insufficient physical activity 2016 (%)	27.1
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	7.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	9.8

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	127,307	4,676
of which diabetes mellitus	26,871	569
of which coronary (ischaemic) heart disease	30,575	1,361
of which stroke	38,618	1,578
of which cancers (neoplasms)	8,032	333

Deaths from NCDs due to high BMI in adults 2019

0.4% Annual growth rate in the projected numbers of adults

2020-2035

1.6%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	30%	47%
Numbers of children with high BMI	109,482	139,641
of which, children with high blood pressure attributable to high BMI	8,504	12,677
of which, children with hyperglycaemia attributable to high BMI	3,742	4,906
of which, children with low HDL cholesterol attributable to high BMI	10,320	13,928

Environmental correlates of obesity⁽²⁾⁽³⁾

Greenhouse and (GHG) emissions CO equivalent 2015 (tennes per capita per vear)	3.5
Cheerinouse gas (010) emissions CO ₂ equivalent 2013 (tormes per capita per year)	
Annual increase in GHG emissions 2000–2015 (%)	-1.3
Proportion of the population living in urban areas 2020 (%)	58.5
Annual increase in urbanisation 1995–2020 (%)	-0.07
A Plastic waste (latest year) (kg per capita)	41.8
Proportion of adults taking insufficient physical activity 2016 (%)	n/a
Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	78.4
Or Consumption of animal proteins 2021 (grams per capita per day)	38.6
Consumption of sugar and sweeteners 2021 (kg per capita per year)	54.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	80,661	2,781
of which diabetes mellitus	18,860	207
of which coronary (ischaemic) heart disease	15,441	869
of which stroke	9,555	326
of which cancers (neoplasms)	10,765	541

Deaths from NCDs due to high BMI in adults 2019

in the projected

2020-2035

1.1%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	32%	42%
Numbers of children with high BMI	311,298	366,211
of which, children with high blood pressure attributable to high BMI	22,531	29,392
of which, children with hyperglycaemia attributable to high BMI	10,519	12,585
of which, children with low HDL cholesterol attributable to high BMI	28,655	34,917

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	7.7
	Annual increase in GHG emissions 2000–2015 (%)	0.5
	Proportion of the population living in urban areas 2020 (%)	83.0
	Annual increase in urbanisation 1995–2020 (%)	0.47
	Plastic waste (latest year) (kg per capita)	17.5
	Proportion of adults taking insufficient physical activity 2016 (%)	31.7
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	83.5
•	Consumption of animal proteins 2021 (grams per capita per day)	72.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	60.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	92,786	2,417
of which diabetes mellitus	22,727	427
of which coronary (ischaemic) heart disease	35,426	1,220
of which stroke	14,736	375
of which cancers (neoplasms)	3,158	106

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

4.7% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	43%	65%
Numbers of children with high BMI	412,453	816,980
of which, children with high blood pressure attributable to high BMI	36,498	82,532
of which, children with hyperglycaemia attributable to high BMI	14,421	29,309
of which, children with low HDL cholesterol attributable to high BMI	40,745	84,988

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	15.2
	Annual increase in GHG emissions 2000–2015 (%)	3.8
	Proportion of the population living in urban areas 2020 (%)	86.3
	Annual increase in urbanisation 1995–2020 (%)	0.74
	Plastic waste (latest year) (kg per capita)	92.0
	Proportion of adults taking insufficient physical activity 2016 (%)	33.0
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	83.8
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	53.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	24.0

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	3,614,807	101,123
of which diabetes mellitus	880,741	18,439
of which coronary (ischaemic) heart disease	1,099,084	33,784
of which stroke	799,774	23,147
of which cancers (neoplasms)	134,934	5,078

Deaths from NCDs due to high BMI in adults 2019

5.2% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

7.1% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	13%	30%
Numbers of children with high BMI	10,160,258	28,520,051
of which, children with high blood pressure attributable to high BMI	728,012	2,425,002
of which, children with hyperglycaemia attributable to high BMI	342,791	989,963
of which, children with low HDL cholesterol attributable to high BMI	932,161	2,776,112

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.7
	Annual increase in GHG emissions 2000–2015 (%)	1.0
	Proportion of the population living in urban areas 2020 (%)	37.2
	Annual increase in urbanisation 1995–2020 (%)	0.63
	Plastic waste (latest year) (kg per capita)	14.3
	Proportion of adults taking insufficient physical activity 2016 (%)	33.7
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	87.0
•	Consumption of animal proteins 2021 (grams per capita per day)	29.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	28.1
		20.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	95,098	2,816
of which diabetes mellitus	28,368	646
of which coronary (ischaemic) heart disease	27,504	965
of which stroke	14,718	451
of which cancers (neoplasms)	4,294	157

Deaths from NCDs due to high BMI in adults 2019

3.8% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

4.0% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	38%	55%
Numbers of children with high BMI	684,623	1,231,975
of which, children with high blood pressure attributable to high BMI	57,135	117,976
of which, children with hyperglycaemia attributable to high BMI	23,686	43,725
of which, children with low HDL cholesterol attributable to high BMI	66,190	125,449

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	81.0
	Annual increase in urbanisation 1995–2020 (%)	0.51
	Plastic waste (latest year) (kg per capita)	140.3
	Proportion of adults taking insufficient physical activity 2016 (%)	40.9
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	79.0
•	Consumption of animal proteins 2021 (grams per capita per day)	n/a
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	n/a

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).

For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to $BMI \ge 30 \text{kg/m}^2$). (2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



World Obesity Atlas 2024

REFERENCES:

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(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI >25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI >30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

Annual increase in GHG emissions 2000-2015 (%)

Annual increase in urbanisation 1995-2020 (%)

Plastic waste (latest year) (kg per capita)

Proportion of the population living in urban areas 2020 (%)

Proportion of adults taking insufficient physical activity 2016 (%)

Consumption of animal proteins 2021 (grams per capita per day)

Consumption of sugar and sweeteners 2021 (kg per capita per year)

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Proportion of youth (age 11-19y) taking insufficient physical activity 2016 (%)

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

Environmental correlates of obesity⁽²⁾⁽³⁾

Deaths from

NCDs due to

Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	35%	53%
Numbers of children with high BMI	394,305	615,410
of which, children with high blood pressure attributable to high BMI	30,248	54,394
of which, children with hyperglycaemia attributable to high BMI	13,448	21,512
of which, children with low HDL cholesterol attributable to high BMI	37,010	60,768

due to high BMI high BMI in in 2019 2019 All non-communicable diseases 81,831 2,264 of which diabetes mellitus 31,877 556 of which coronary (ischaemic) heart disease 11,096 471 of which stroke 10,610 340 182 of which cancers (neoplasms) 4,404

Deaths from NCDs due to high BMI in adults 2019



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

Panama

★

★

3,000,000		- Adults	- Children		
2,250,000					
1,500,000					
750,000					
20	20	2025		2030	2035

Person-years lost (DALYs) to NCDs

Projected numbers of adults and children with high Body Mass Index (BMI)

Annual growth rate 2020-2035

3.0% Annual growth rate in the projected numbers of children with high BMI 2020-2035(1)



Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)

2.9

68.4

0.65

44.5

n/a

n/a

57.2

49.6

Papua New Guinea

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	212,197	5,004
of which diabetes mellitus	81,570	1,667
of which coronary (ischaemic) heart disease	41,001	1,156
of which stroke	49,771	1,191
of which cancers (neoplasms)	6,609	204

Deaths from NCDs due to high BMI in adults 2019

5.2% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

6.3% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	12%	27%
Numbers of children with high BMI	398,213	995,954
of which, children with high blood pressure attributable to high BMI	57,343	143,417
of which, children with hyperglycaemia attributable to high BMI	15,530	38,842
of which, children with low HDL cholesterol attributable to high BMI	48,582	121,506

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	13.3
	Annual increase in urbanisation 1995–2020 (%)	-0.23
	Plastic waste (latest year) (kg per capita)	12.9
	Proportion of adults taking insufficient physical activity 2016 (%)	14.8
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	33.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	12.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.





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Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	153,537	4,820
of which diabetes mellitus	47,730	1,219
of which coronary (ischaemic) heart disease	28,704	1,089
of which stroke	26,956	833
of which cancers (neoplasms)	7,673	308

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

3.8% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	35%	55%
Numbers of children with high BMI	641,611	1,122,982
of which, children with high blood pressure attributable to high BMI	50,962	104,449
of which, children with hyperglycaemia attributable to high BMI	22,010	39,632
of which, children with low HDL cholesterol attributable to high BMI	60,951	113,059

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.0
	Annual increase in GHG emissions 2000–2015 (%)	2.8
	Proportion of the population living in urban areas 2020 (%)	62.2
	Annual increase in urbanisation 1995–2020 (%)	0.71
Ă	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	37.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	83.5
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	30.6
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	18.0
	consumption of sugar and sweeteners 2021 (kg per capita per year)	10.0

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	471,505	14,354
of which diabetes mellitus	121,161	2,345
of which coronary (ischaemic) heart disease	77,378	3,238
of which stroke	78,462	2,141
of which cancers (neoplasms)	41,450	1,709

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

2.1%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	31%	42%
Numbers of children with high BMI	2,721,524	3,710,602
of which, children with high blood pressure attributable to high BMI	184,490	283,139
of which, children with hyperglycaemia attributable to high BMI	91,055	126,445
of which, children with low HDL cholesterol attributable to high BMI	245,291	347,651

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.6
	Annual increase in GHG emissions 2000–2015 (%)	3.3
	Proportion of the population living in urban areas 2020 (%)	78.3
	Annual increase in urbanisation 1995–2020 (%)	0.39
	Plastic waste (latest year) (kg per capita)	28.4
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.7
•	Consumption of animal proteins 2021 (grams per capita per day)	43.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	20.8

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	2,326,306	65,173
of which diabetes mellitus	473,362	10,713
of which coronary (ischaemic) heart disease	508,023	15,828
of which stroke	593,318	15,822
of which cancers (neoplasms)	108,568	3,614

Deaths from NCDs due to high BMI in adults 2019

4.3% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

5.6% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	17%	35%
Numbers of children with high BMI	5,760,657	13,107,475
of which, children with high blood pressure attributable to high BMI	430,541	1,150,488
of which, children with hyperglycaemia attributable to high BMI	195,648	457,592
of which, children with low HDL cholesterol attributable to high BMI	535,948	1,290,917

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.0
	Annual increase in GHG emissions 2000–2015 (%)	1.0
	Proportion of the population living in urban areas 2020 (%)	47.4
	Annual increase in urbanisation 1995–2020 (%)	0.07
	Plastic waste (latest year) (kg per capita)	14.9
	Proportion of adults taking insufficient physical activity 2016 (%)	39.7
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	93.4
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	28.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	23.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,560,738	57,514
of which diabetes mellitus	314,231	4,191
of which coronary (ischaemic) heart disease	436,036	23,019
of which stroke	266,655	9,643
of which cancers (neoplasms)	181,932	8,411

Deaths from NCDs due to high BMI in adults 2019

0.5% Annual growth rate

2020-2035

2.6%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	29%	45%
Numbers of children with high BMI	1,700,307	2,480,907
of which, children with high blood pressure attributable to high BMI	130,200	223,107
of which, children with hyperglycaemia attributable to high BMI	57,974	86,999
of which, children with low HDL cholesterol attributable to high BMI	159,495	246,574

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	7.4
	Annual increase in GHG emissions 2000–2015 (%)	-0.2
	Proportion of the population living in urban areas 2020 (%)	60.0
	Annual increase in urbanisation 1995–2020 (%)	-0.10
	Plastic waste (latest year) (kg per capita)	40.8
	Proportion of adults taking insufficient physical activity 2016 (%)	32.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	78.8
•	Consumption of animal proteins 2021 (grams per capita per day)	73.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	44.7

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	263,579	10,091
of which diabetes mellitus	73,456	1,471
of which coronary (ischaemic) heart disease	36,707	2,029
of which stroke	40,668	1,814
of which cancers (neoplasms)	30,950	1,543

Deaths from NCDs due to high BMI in adults 2019

0.9% Annual growth rate

2020-2035

0.9% Annual growth rate

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	41%	57%
Numbers of children with high BMI	609,369	699,221
of which, children with high blood pressure attributable to high BMI	45,465	58,144
of which, children with hyperglycaemia attributable to high BMI	20,690	24,176
of which, children with low HDL cholesterol attributable to high BMI	56,660	67,514

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	4.5
	Annual increase in GHG emissions 2000–2015 (%)	-1.4
	Proportion of the population living in urban areas 2020 (%)	66.3
	Annual increase in urbanisation 1995–2020 (%)	1.05
	Plastic waste (latest year) (kg per capita)	55.0
	Proportion of adults taking insufficient physical activity 2016 (%)	43.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.3
•	Consumption of animal proteins 2021 (grams per capita per day)	78.6
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	23.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	175,889	5,829
of which diabetes mellitus	74,294	1,729
of which coronary (ischaemic) heart disease	26,243	1,232
of which stroke	11,295	398
of which cancers (neoplasms)	11,806	539

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

1.0% Annual growth rate

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	25%	39%
Numbers of children with high BMI	131,049	151,406
of which, children with high blood pressure attributable to high BMI	18,871	21,802
of which, children with hyperglycaemia attributable to high BMI	5,111	5,905
of which, children with low HDL cholesterol attributable to high BMI	15,988	18,472

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
-BA	Proportion of the population living in urban areas 2020 (%)	n/a
	Annual increase in urbanisation 1995–2020 (%)	n/a
*		
	Plastic waste (latest year) (kg per capita)	124.9
	Plastic waste (latest year) (kg per capita) Proportion of adults taking insufficient physical activity 2016 (%)	124.9 n/a
	Plastic waste (latest year) (kg per capita) Proportion of adults taking insufficient physical activity 2016 (%) Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	124.9 n/a n/a
• *** •	Plastic waste (latest year) (kg per capita) Proportion of adults taking insufficient physical activity 2016 (%) Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) Consumption of animal proteins 2021 (grams per capita per day)	124.9 n/a n/a n/a
	Plastic waste (latest year) (kg per capita) Proportion of adults taking insufficient physical activity 2016 (%) Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) Consumption of animal proteins 2021 (grams per capita per day) Consumption of sugar and sweeteners 2021 (kg per capita per year)	124.9 n/a n/a n/a n/a

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	57,270	963
of which diabetes mellitus	24,591	253
of which coronary (ischaemic) heart disease	12,899	398
of which stroke	6,206	107
of which cancers (neoplasms)	2,699	90

Deaths from NCDs due to high BMI in adults 2019

in the projected

2020-2035

2.1%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	42%	52%
Numbers of children with high BMI	151,030	206,968
of which, children with high blood pressure attributable to high BMI	13,812	20,607
of which, children with hyperglycaemia attributable to high BMI	5,313	7,403
of which, children with low HDL cholesterol attributable to high BMI	15,107	21,404

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	33.3
	Annual increase in GHG emissions 2000–2015 (%)	0.1
	Proportion of the population living in urban areas 2020 (%)	99.2
	Annual increase in urbanisation 1995–2020 (%)	0.17
	Plastic waste (latest year) (kg per capita)	66.4
	Proportion of adults taking insufficient physical activity 2016 (%)	36.8
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	88.2
	Consumption of animal proteins 2021 (grams per capita per day)	57.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	38.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,029,543	42,107
of which diabetes mellitus	113,583	1,360
of which coronary (ischaemic) heart disease	316,648	16,324
of which stroke	263,596	10,614
of which cancers (neoplasms)	74,613	3,193

Deaths from NCDs due to high BMI in adults 2019

0.2% Annual growth rate

2020-2035

3.1% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	29%	48%
Numbers of children with high BMI	905,834	1,438,472
of which, children with high blood pressure attributable to high BMI	67,166	128,224
of which, children with hyperglycaemia attributable to high BMI	30,726	50,361
of which, children with low HDL cholesterol attributable to high BMI	84,052	142,493

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	3.5
	Annual increase in GHG emissions 2000–2015 (%)	-0.6
-BA	Proportion of the population living in urban areas 2020 (%)	54.2
	Annual increase in urbanisation 1995–2020 (%)	0.03
Ă	Plastic waste (latest year) (kg per capita)	34.5
	Proportion of adults taking insufficient physical activity 2016 (%)	35.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	79.5
\mathbf{O}	Consumption of animal proteins 2021 (grams per capita per day)	59.7
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	31.6

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



Russian Federation

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	7,343,614	283,792
of which diabetes mellitus	606,735	10,573
of which coronary (ischaemic) heart disease	3,118,940	146,435
of which stroke	1,996,042	73,969
of which cancers (neoplasms)	527,034	21,876

Deaths from NCDs due to high BMI in adults 2019

0.1% Annual growth rate

2020-2035

1.2%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	23%	31%
Numbers of children with high BMI	5,582,761	6,660,647
of which, children with high blood pressure attributable to high BMI	400,469	536,300
of which, children with hyperglycaemia attributable to high BMI	188,386	229,014
of which, children with low HDL cholesterol attributable to high BMI	512,382	635,778

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	10.6
	Annual increase in GHG emissions 2000–2015 (%)	0.4
	Proportion of the population living in urban areas 2020 (%)	74.8
	Annual increase in urbanisation 1995–2020 (%)	0.08
	Plastic waste (latest year) (kg per capita)	59.5
	Proportion of adults taking insufficient physical activity 2016 (%)	17.1
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.5
•	Consumption of animal proteins 2021 (grams per capita per day)	63.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	60.7

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.






Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	103,659	3,077
of which diabetes mellitus	23,402	559
of which coronary (ischaemic) heart disease	12,877	468
of which stroke	31,064	934
of which cancers (neoplasms)	5,896	217

Deaths from NCDs due to high BMI in adults 2019

5.6% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

7.2%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	15%	34%
Numbers of children with high BMI	721,284	2,039,571
of which, children with high blood pressure attributable to high BMI	36,510	120,259
of which, children with hyperglycaemia attributable to high BMI	23,232	66,930
of which, children with low HDL cholesterol attributable to high BMI	59,830	176,299

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.1
	Annual increase in GHG emissions 2000–2015 (%)	0.7
-BA	Proportion of the population living in urban areas 2020 (%)	17.4
	Annual increase in urbanisation 1995–2020 (%)	2.32
Ă	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	14.6
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{O}	Consumption of animal proteins 2021 (grams per capita per day)	6.9
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	14.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	14.4

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	7,111	199
of which diabetes mellitus	3,077	61
of which coronary (ischaemic) heart disease	694	28
of which stroke	1,145	38
of which cancers (neoplasms)	361	14

Deaths from NCDs due to high BMI in adults 2019

3.4% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

4.1% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	12%	26%
Numbers of children with high BMI	4,269	7,807
of which, children with high blood pressure attributable to high BMI	615	1,124
of which, children with hyperglycaemia attributable to high BMI	167	304
of which, children with low HDL cholesterol attributable to high BMI	521	952

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	18.8
823	Annual increase in urbanisation 1995–2020 (%)	-1.69
Ă	Plastic waste (latest year) (kg per capita)	96.4
	Proportion of adults taking insufficient physical activity 2016 (%)	39.8
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.3
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	65.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	47.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



Saint Vincent and the Grenadines

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	5,251	162
of which diabetes mellitus	2,169	52
of which coronary (ischaemic) heart disease	782	32
of which stroke	763	25
of which cancers (neoplasms)	245	10

Deaths from NCDs due to high BMI in adults 2019

3.1% Annual growth rate

in the projected numbers of adults with high BMI

2020-2035

3.7% Annual growth rate

in the projected numbers of children

> with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	17%	35%
Numbers of children with high BMI	4,008	6,917
of which, children with high blood pressure attributable to high BMI	577	996
of which, children with hyperglycaemia attributable to high BMI	156	270
of which, children with low HDL cholesterol attributable to high BMI	489	844

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	53.0
	Annual increase in urbanisation 1995–2020 (%)	0.80
	Plastic waste (latest year) (kg per capita)	24.2
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	85.8
•	Consumption of animal proteins 2021 (grams per capita per day)	65.7
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	69.4

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	10,325	282
of which diabetes mellitus	3,150	71
of which coronary (ischaemic) heart disease	2,596	83
of which stroke	2,282	61
of which cancers (neoplasms)	357	12

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

3.4% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	62%	84%
Numbers of children with high BMI	44,768	74,211
of which, children with high blood pressure attributable to high BMI	3,897	8,096
of which, children with hyperglycaemia attributable to high BMI	1,561	2,706
of which, children with low HDL cholesterol attributable to high BMI	4,396	7,970

Environmental correlates of obesity⁽²⁾⁽³⁾

n/a n/a
n/a
17.9
-0.73
19.0
12.6
87.1
66.0
46.0

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	3,440	98
of which diabetes mellitus	466	7
of which coronary (ischaemic) heart disease	714	27
of which stroke	1,126	30
of which cancers (neoplasms)	157	6

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	5%	15%
Numbers of children with high BMI	4,263	14,862
of which, children with high blood pressure attributable to high BMI	614	2,140
of which, children with hyperglycaemia attributable to high BMI	166	580
of which, children with low HDL cholesterol attributable to high BMI	520	1,813

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	74.4
823	Annual increase in urbanisation 1995–2020 (%)	1.72
Ă	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	15.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	22.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	41.8

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



Saudi Arabia

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,182,054	28,037
of which diabetes mellitus	206,878	2,133
of which coronary (ischaemic) heart disease	450,564	13,472
of which stroke	255,056	6,192
of which cancers (neoplasms)	36,554	1,177

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

2.7%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	43%	61%
Numbers of children with high BMI	3,832,830	5,719,803
of which, children with high blood pressure attributable to high BMI	349,430	587,196
of which, children with hyperglycaemia attributable to high BMI	134,753	205,876
of which, children with low HDL cholesterol attributable to high BMI	382,924	598,935

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	16.2
	Annual increase in GHG emissions 2000–2015 (%)	2.7
	Proportion of the population living in urban areas 2020 (%)	84.3
	Annual increase in urbanisation 1995–2020 (%)	0.28
	Plastic waste (latest year) (kg per capita)	56.2
	Proportion of adults taking insufficient physical activity 2016 (%)	53.1
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	40.6
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	30.6

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	179,902	5,263
of which diabetes mellitus	48,076	1,018
of which coronary (ischaemic) heart disease	31,483	1,188
of which stroke	47,097	1,334
of which cancers (neoplasms)	6,042	239

Deaths from NCDs due to high BMI in adults 2019

5.2%

Annual growth rate in the projected numbers of adults with high BMI

2020-2035

6.5% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	12%	22%
Numbers of children with high BMI	722,292	1,849,020
of which, children with high blood pressure attributable to high BMI	40,337	118,259
of which, children with hyperglycaemia attributable to high BMI	23,539	61,348
of which, children with low HDL cholesterol attributable to high BMI	61,493	163,690

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.5
	Annual increase in GHG emissions 2000–2015 (%)	2.5
	Proportion of the population living in urban areas 2020 (%)	48.1
	Annual increase in urbanisation 1995–2020 (%)	0.78
	Plastic waste (latest year) (kg per capita)	14.3
	Proportion of adults taking insufficient physical activity 2016 (%)	23.1
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	88.5
•	Consumption of animal proteins 2021 (grams per capita per day)	17.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	17.6

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



Serbia

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	488,569	19,161
of which diabetes mellitus	98,436	1,922
of which coronary (ischaemic) heart disease	132,371	6,748
of which stroke	118,794	4,968
of which cancers (neoplasms)	42,736	1,897

Deaths from NCDs due to high BMI in adults 2019

-0.3% Annual growth rate

2020-2035

2.4%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	33%	53%
Numbers of children with high BMI	357,943	508,897
of which, children with high blood pressure attributable to high BMI	28,111	47,332
of which, children with hyperglycaemia attributable to high BMI	12,256	17,960
of which, children with low HDL cholesterol attributable to high BMI	33,870	51,234

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	6.3
	Annual increase in GHG emissions 2000–2015 (%)	1.2
	Proportion of the population living in urban areas 2020 (%)	56.4
	Annual increase in urbanisation 1995–2020 (%)	0.35
Ă	Plastic waste (latest year) (kg per capita)	43.0
.	Proportion of adults taking insufficient physical activity 2016 (%)	39.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{O}	Consumption of animal proteins 2021 (grams per capita per day)	58.7
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	16.7

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	3,414	88
of which diabetes mellitus	866	10
of which coronary (ischaemic) heart disease	616	20
of which stroke	633	16
of which cancers (neoplasms)	288	10

Deaths from NCDs due to high BMI in adults 2019

3.7% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

5.2% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	14%	28%
Numbers of children with high BMI	3,186	6,816
of which, children with high blood pressure attributable to high BMI	459	981
of which, children with hyperglycaemia attributable to high BMI	124	266
of which, children with low HDL cholesterol attributable to high BMI	389	832

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	57.5
823	Annual increase in urbanisation 1995–2020 (%)	0.59
Ă	Plastic waste (latest year) (kg per capita)	53.8
	Proportion of adults taking insufficient physical activity 2016 (%)	18.8
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	82.6
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	58.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	45.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



Sierra Leone

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	72,035	2,061
of which diabetes mellitus	13,369	336
of which coronary (ischaemic) heart disease	14,693	508
of which stroke	24,324	650
of which cancers (neoplasms)	2,260	82

Deaths from NCDs due to high BMI in adults 2019

5.1% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

6.2% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	14%	27%
Numbers of children with high BMI	410,224	1,005,604
of which, children with high blood pressure attributable to high BMI	25,198	71,316
of which, children with hyperglycaemia attributable to high BMI	13,535	33,874
of which, children with low HDL cholesterol attributable to high BMI	35,882	91,951

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	42.9
	Annual increase in urbanisation 1995–2020 (%)	0.89
	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	14.3
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	14.1
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	5.8

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	76,382	1,777
of which diabetes mellitus	20,156	60
of which coronary (ischaemic) heart disease	14,127	569
of which stroke	9,934	227
of which cancers (neoplasms)	7,091	295

Deaths from NCDs due to high BMI in adults 2019

in the projected

2020-2035

0.0% Annual growth rate

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	23%	24%
Numbers of children with high BMI	170,169	170,616
of which, children with high blood pressure attributable to high BMI	11,682	12,093
of which, children with hyperglycaemia attributable to high BMI	5,704	5,747
of which, children with low HDL cholesterol attributable to high BMI	15,399	15,598

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	8.2
	Annual increase in GHG emissions 2000–2015 (%)	-1.6
	Proportion of the population living in urban areas 2020 (%)	100.0
	Annual increase in urbanisation 1995–2020 (%)	0.00
	Plastic waste (latest year) (kg per capita)	34.7
	Proportion of adults taking insufficient physical activity 2016 (%)	36.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	76.3
•	Consumption of animal proteins 2021 (grams per capita per day)	n/a
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	n/a

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	229,896	8,779
of which diabetes mellitus	34,245	444
of which coronary (ischaemic) heart disease	81,333	4,275
of which stroke	37,961	1,346
of which cancers (neoplasms)	25,862	1,136

Deaths from NCDs due to high BMI in adults 2019

0.5% Annual growth rate

2020-2035

3.4% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	27%	46%
Numbers of children with high BMI	230,226	382,803
of which, children with high blood pressure attributable to high BMI	17,585	35,416
of which, children with hyperglycaemia attributable to high BMI	7,847	13,496
of which, children with low HDL cholesterol attributable to high BMI	21,578	38,460

Environmental correlates of obesity⁽²⁾⁽³⁾

Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	5.4
Annual increase in GHG emissions 2000–2015 (%)	-1.5
Proportion of the population living in urban areas 2020 (%)	53.8
Annual increase in urbanisation 1995–2020 (%)	-0.20
Plastic waste (latest year) (kg per capita)	46.3
Proportion of adults taking insufficient physical activity 2016 (%)	34.9
Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	71.5
Or Consumption of animal proteins 2021 (grams per capita per day)	45.2
Consumption of sugar and sweeteners 2021 (kg per capita per year)	64.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	65,550	2,605
of which diabetes mellitus	13,561	175
of which coronary (ischaemic) heart disease	12,620	681
of which stroke	8,662	342
of which cancers (neoplasms)	9,245	463

Deaths from NCDs due to high BMI in adults 2019

0.7% Annual growth rate

2020-2035

2.5%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	32%	51%
Numbers of children with high BMI	100,324	144,759
of which, children with high blood pressure attributable to high BMI	7,520	12,754
of which, children with hyperglycaemia attributable to high BMI	3,409	5,057
of which, children with low HDL cholesterol attributable to high BMI	9,343	14,277

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	6.2
	Annual increase in GHG emissions 2000–2015 (%)	-0.9
	Proportion of the population living in urban areas 2020 (%)	55.1
	Annual increase in urbanisation 1995–2020 (%)	0.34
Ă	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	32.2
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	80.0
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	55.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	48.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	39,467	970
of which diabetes mellitus	10,912	239
of which coronary (ischaemic) heart disease	12,544	332
of which stroke	10,749	274
of which cancers (neoplasms)	1,228	35

Deaths from NCDs due to high BMI in adults 2019

5.7% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

9.2%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	6%	17%
Numbers of children with high BMI	14,214	53,347
of which, children with high blood pressure attributable to high BMI	2,047	7,682
of which, children with hyperglycaemia attributable to high BMI	554	2,081
of which, children with low HDL cholesterol attributable to high BMI	1,734	6,508

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
- ARia	Proportion of the population living in urban areas 2020 (%)	24.7
	Annual increase in urbanisation 1995–2020 (%)	2.10
	Plastic waste (latest year) (kg per capita)	71.4
	Proportion of adults taking insufficient physical activity 2016 (%)	18.2
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	83.7
•	Consumption of animal proteins 2021 (grams per capita per day)	20.9
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	19.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	75,766	2,011
of which diabetes mellitus	15,722	332
of which coronary (ischaemic) heart disease	11,734	355
of which stroke	25,182	667
of which cancers (neoplasms)	2,513	83

Deaths from NCDs due to high BMI in adults 2019

7.6% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

11.1% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	4%	13%
Numbers of children with high BMI	274,590	1,334,771
of which, children with high blood pressure attributable to high BMI	39,541	192,207
of which, children with hyperglycaemia attributable to high BMI	10,709	52,056
of which, children with low HDL cholesterol attributable to high BMI	33,500	162,842

Environmental correlates of obesity⁽²⁾⁽³⁾

Greenhouse gas (GHG) emissions CO2 equivalent 2015 (tonnes per capita per year) Annual increase in GHG emissions 2000–2015 (%)	n/a
Annual increase in GHG emissions 2000–2015 (%)	
	n/a
Proportion of the population living in urban areas 2020 (%)	46.1
Annual increase in urbanisation 1995–2020 (%)	1.55
Plastic waste (latest year) (kg per capita)	n/a
Proportion of adults taking insufficient physical activity 2016 (%)	n/a
Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
Or Consumption of animal proteins 2021 (grams per capita per day)	n/a
Consumption of sugar and sweeteners 2021 (kg per capita per year)	n/a

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,681,895	55,358
of which diabetes mellitus	589,315	16,879
of which coronary (ischaemic) heart disease	231,532	8,987
of which stroke	286,014	9,030
of which cancers (neoplasms)	105,257	4,194

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

6.2%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	31%	71%
Numbers of children with high BMI	4,877,371	12,008,292
of which, children with high blood pressure attributable to high BMI	464,734	1,463,899
of which, children with hyperglycaemia attributable to high BMI	172,937	449,029
of which, children with low HDL cholesterol attributable to high BMI	495,676	1,354,070

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	7.5
	Annual increase in GHG emissions 2000–2015 (%)	1.5
	Proportion of the population living in urban areas 2020 (%)	67.4
	Annual increase in urbanisation 1995–2020 (%)	0.85
	Plastic waste (latest year) (kg per capita)	25.3
	Proportion of adults taking insufficient physical activity 2016 (%)	38.2
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	43.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	39.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	644,522	19,333
of which diabetes mellitus	189,776	3,316
of which coronary (ischaemic) heart disease	60,160	2,943
of which stroke	118,934	3,557
of which cancers (neoplasms)	92,304	4,003

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

-0.3%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	34%	49%
Numbers of children with high BMI	2,407,996	2,301,675
of which, children with high blood pressure attributable to high BMI	175,620	186,552
of which, children with hyperglycaemia attributable to high BMI	81,466	79,228
of which, children with low HDL cholesterol attributable to high BMI	222,211	220,214

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	11.4
	Annual increase in GHG emissions 2000–2015 (%)	1.6
-RIA	Proportion of the population living in urban areas 2020 (%)	81.4
	Annual increase in urbanisation 1995–2020 (%)	0.16
	Plastic waste (latest year) (kg per capita)	96.3
	Proportion of adults taking insufficient physical activity 2016 (%)	35.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	94.2
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	61.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	49.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

Spain

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,048,439	42,038
of which diabetes mellitus	273,573	3,811
of which coronary (ischaemic) heart disease	175,692	9,815
of which stroke	110,496	4,508
of which cancers (neoplasms)	144,686	7,420

Deaths from NCDs due to high BMI in adults 2019

0.9%

Annual growth rate

2020-2035

-0.6%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	38%	46%
Numbers of children with high BMI	2,756,153	2,535,866
of which, children with high blood pressure attributable to high BMI	194,754	195,326
of which, children with hyperglycaemia attributable to high BMI	92,789	86,547
of which, children with low HDL cholesterol attributable to high BMI	251,723	238,352

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	5.3
	Annual increase in GHG emissions 2000–2015 (%)	-1.7
	Proportion of the population living in urban areas 2020 (%)	80.8
	Annual increase in urbanisation 1995–2020 (%)	0.25
	Plastic waste (latest year) (kg per capita)	42.8
	Proportion of adults taking insufficient physical activity 2016 (%)	26.8
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	76.6
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	76.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	31.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	533,585	15,935
of which diabetes mellitus	220,969	4,723
of which coronary (ischaemic) heart disease	85,975	3,435
of which stroke	68,821	2,020
of which cancers (neoplasms)	24,778	990

Deaths from NCDs due to high BMI in adults 2019

3.2% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

5.3% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	17%	44%
Numbers of children with high BMI	911,187	1,968,126
of which, children with high blood pressure attributable to high BMI	72,025	188,398
of which, children with hyperglycaemia attributable to high BMI	31,232	69,847
of which, children with low HDL cholesterol attributable to high BMI	86,414	200,379

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.9
	Annual increase in GHG emissions 2000–2015 (%)	3.0
	Proportion of the population living in urban areas 2020 (%)	18.7
	Annual increase in urbanisation 1995–2020 (%)	0.04
Ă	Plastic waste (latest year) (kg per capita)	8.7
	Proportion of adults taking insufficient physical activity 2016 (%)	29.0
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	85.2
\mathbf{O}	Consumption of animal proteins 2021 (grams per capita per day)	20.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	26.9
	Consumption of sugar and sweetchies 2021 (kg per capital per year)	2017

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	836,877	24,435
of which diabetes mellitus	112,356	1,376
of which coronary (ischaemic) heart disease	321,374	10,928
of which stroke	187,056	5,115
of which cancers (neoplasms)	21,968	806

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	4%	13%
Numbers of children with high BMI	665,309	2,941,679
of which, children with high blood pressure attributable to high BMI	95,805	423,602
of which, children with hyperglycaemia attributable to high BMI	25,947	114,725
of which, children with low HDL cholesterol attributable to high BMI	81,168	358,885

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.4
	Annual increase in GHG emissions 2000–2015 (%)	6.6
	Proportion of the population living in urban areas 2020 (%)	35.3
	Annual increase in urbanisation 1995–2020 (%)	0.37
Ă	Plastic waste (latest year) (kg per capita)	9.3
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	90.3
•	Consumption of animal proteins 2021 (grams per capita per day)	20.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	34.9

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).



7.2% Annual growth rate in the projected numbers of adults with high BMI 2020–2035

10.4% Annual growth rate in the projected numbers of children with high BMI 2020–2035⁽¹⁾





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	23,447	657
of which diabetes mellitus	7,805	138
of which coronary (ischaemic) heart disease	4,054	146
of which stroke	4,990	160
of which cancers (neoplasms)	855	33

Deaths from NCDs due to high BMI in adults 2019

3.4% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

3.6% Annual growth <u>rate</u>

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	18%	29%
Numbers of children with high BMI	28,538	48,305
of which, children with high blood pressure attributable to high BMI	4,110	6,956
of which, children with hyperglycaemia attributable to high BMI	1,113	1,884
of which, children with low HDL cholesterol attributable to high BMI	3,482	5,893

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	4.7
	Annual increase in GHG emissions 2000–2015 (%)	2.9
	Proportion of the population living in urban areas 2020 (%)	66.1
	Annual increase in urbanisation 1995–2020 (%)	0.00
Ă	Plastic waste (latest year) (kg per capita)	16.4
	Proportion of adults taking insufficient physical activity 2016 (%)	44.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	81.4
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	38.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	101.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	101.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	208,738	8,795
of which diabetes mellitus	39,810	730
of which coronary (ischaemic) heart disease	49,227	2,962
of which stroke	23,729	912
of which cancers (neoplasms)	27,353	1,450

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

1.0%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	26%	31%
Numbers of children with high BMI	474,513	552,647
of which, children with high blood pressure attributable to high BMI	31,163	39,080
of which, children with hyperglycaemia attributable to high BMI	15,803	18,608
of which, children with low HDL cholesterol attributable to high BMI	42,348	50,486

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	3.8
	Annual increase in GHG emissions 2000–2015 (%)	-2.8
	Proportion of the population living in urban areas 2020 (%)	88.0
	Annual increase in urbanisation 1995–2020 (%)	0.20
	Plastic waste (latest year) (kg per capita)	29.5
	Proportion of adults taking insufficient physical activity 2016 (%)	23.1
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	84.7
•	Consumption of animal proteins 2021 (grams per capita per day)	71.7
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	39.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	145,350	6,129
of which diabetes mellitus	32,468	470
of which coronary (ischaemic) heart disease	27,288	1,771
of which stroke	12,150	477
of which cancers (neoplasms)	19,039	989

Deaths from NCDs due to high BMI in adults 2019

1.6% Annual growth rate in the projected

2020-2035

2.3%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	28%	38%
Numbers of children with high BMI	358,782	508,216
of which, children with high blood pressure attributable to high BMI	23,427	37,473
of which, children with hyperglycaemia attributable to high BMI	11,939	17,223
of which, children with low HDL cholesterol attributable to high BMI	31,963	47,069

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	4.5
	Annual increase in GHG emissions 2000–2015 (%)	-1.6
	Proportion of the population living in urban areas 2020 (%)	73.9
	Annual increase in urbanisation 1995–2020 (%)	0.01
	Plastic waste (latest year) (kg per capita)	106.4
	Proportion of adults taking insufficient physical activity 2016 (%)	23.8
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	85.7
•	Consumption of animal proteins 2021 (grams per capita per day)	66.9
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	46.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	524,188	16,048
of which diabetes mellitus	75,043	938
of which coronary (ischaemic) heart disease	259,204	9,539
of which stroke	92,878	2,749
of which cancers (neoplasms)	14,842	549

Deaths from NCDs due to high BMI in adults 2019

7.1%

Annual growth rate in the projected numbers of adults with high BMI

2020-2035

4.9% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	15%	31%
Numbers of children with high BMI	1,199,403	2,459,963
of which, children with high blood pressure attributable to high BMI	172,714	354,235
of which, children with hyperglycaemia attributable to high BMI	46,777	95,939
of which, children with low HDL cholesterol attributable to high BMI	146,327	300,115

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.2
	Annual increase in GHG emissions 2000–2015 (%)	-4.0
	Proportion of the population living in urban areas 2020 (%)	55.5
	Annual increase in urbanisation 1995–2020 (%)	0.41
	Plastic waste (latest year) (kg per capita)	15.1
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	87.5
•	Consumption of animal proteins 2021 (grams per capita per day)	20.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	26.6

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.





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Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	506,515	14,957
of which diabetes mellitus	152,825	3,355
of which coronary (ischaemic) heart disease	53,583	2,165
of which stroke	82,744	2,250
of which cancers (neoplasms)	69,910	2,685

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	16%	33%
Numbers of children with high BMI	509,758	913,550
of which, children with high blood pressure attributable to high BMI	73,405	131,551
of which, children with hyperglycaemia attributable to high BMI	19,881	35,628
of which, children with low HDL cholesterol attributable to high BMI	62,191	111,453

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	11.6
	Annual increase in GHG emissions 2000–2015 (%)	0.9
	Proportion of the population living in urban areas 2020 (%)	n/a
	Annual increase in urbanisation 1995–2020 (%)	n/a
Ă	Plastic waste (latest year) (kg per capita)	63.3
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{O}	Consumption of animal proteins 2021 (grams per capita per day)	56.9
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	27.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI >30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

WORLD BESITY

Annual growth rate in the projected numbers of adults with high BMI 2020-2035

4.0% Annual growth rate in the projected numbers of children with high BMI 2020-2035(1)

Taiwan





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	154,444	4,665
of which diabetes mellitus	34,337	649
of which coronary (ischaemic) heart disease	52,119	1,919
of which stroke	38,582	1,224
of which cancers (neoplasms)	5,207	175

Deaths from NCDs due to high BMI in adults 2019

3.6% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

4.8% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	16%	27%
Numbers of children with high BMI	505,352	1,020,298
of which, children with high blood pressure attributable to high BMI	28,470	66,767
of which, children with hyperglycaemia attributable to high BMI	16,487	33,962
of which, children with low HDL cholesterol attributable to high BMI	43,127	90,957

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.5
	Annual increase in GHG emissions 2000–2015 (%)	2.4
	Proportion of the population living in urban areas 2020 (%)	27.5
	Annual increase in urbanisation 1995–2020 (%)	-0.20
	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	29.3
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	27.1
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	21.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	586,350	17,584
of which diabetes mellitus	132,190	3,197
of which coronary (ischaemic) heart disease	80,999	2,897
of which stroke	171,147	4,995
of which cancers (neoplasms)	32,768	1,193

Deaths from NCDs due to high BMI in adults 2019

5.9% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

8.2%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	16%	35%
Numbers of children with high BMI	3,707,844	12,072,312
of which, children with high blood pressure attributable to high BMI	214,539	847,679
of which, children with hyperglycaemia attributable to high BMI	121,378	406,040
of which, children with low HDL cholesterol attributable to high BMI	318,794	1,100,333

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.2
	Annual increase in GHG emissions 2000–2015 (%)	7.4
	Proportion of the population living in urban areas 2020 (%)	35.2
	Annual increase in urbanisation 1995–2020 (%)	2.19
	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	6.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	82.1
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	13.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	11.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,619,286	43,870
of which diabetes mellitus	421,730	7,618
of which coronary (ischaemic) heart disease	210,397	7,588
of which stroke	387,286	10,046
of which cancers (neoplasms)	191,848	6,956

Deaths from NCDs due to high BMI in adults 2019

3.1% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

3.1% Annual growth <u>rate</u>

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	30%	61%
Numbers of children with high BMI	3,703,203	5,831,580
of which, children with high blood pressure attributable to high BMI	353,618	634,830
of which, children with hyperglycaemia attributable to high BMI	131,360	212,529
of which, children with low HDL cholesterol attributable to high BMI	376,667	625,760

Environmental correlates of obesity⁽²⁾⁽³⁾

Greenhouse gas (GHG) emissions CO2 equivalent 2015 (tonnes per capita per year) 3. Annual increase in GHG emissions 2000–2015 (%) 2. Proportion of the population living in urban areas 2020 (%) 51. Annual increase in urbanisation 1995–2020 (%) 2.1 Dentine acts (https://www.communic.communit.communit.communic.communit.communic.communic.communi			
Annual increase in GHG emissions 2000–2015 (%) 2. Proportion of the population living in urban areas 2020 (%) 51. Annual increase in urbanisation 1995–2020 (%) 2.1 Review of the level of the population living in urban areas 2020 (%) 2.1		Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	3.5
Proportion of the population living in urban areas 2020 (%) 51. Annual increase in urbanisation 1995–2020 (%) 2.1		Annual increase in GHG emissions 2000–2015 (%)	2.5
Annual increase in urbanisation 1995–2020 (%) 2.1 Image: State of the state of th		Proportion of the population living in urban areas 2020 (%)	51.4
Example a statistic statistic statistical statisticae statisticae statistic		Annual increase in urbanisation 1995–2020 (%)	2.14
Plastic waste (latest year) (kg per capita)	Å	Plastic waste (latest year) (kg per capita)	68.8
Proportion of adults taking insufficient physical activity 2016 (%) 24.		Proportion of adults taking insufficient physical activity 2016 (%)	24.6
Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) 77.		Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	77.5
Or Consumption of animal proteins 2021 (grams per capita per day) 27.	•	Consumption of animal proteins 2021 (grams per capita per day)	27.9
Consumption of sugar and sweeteners 2021 (kg per capita per year)62.		Consumption of sugar and sweeteners 2021 (kg per capita per year)	62.0

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

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High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	9,037	258
of which diabetes mellitus	1,671	30
of which coronary (ischaemic) heart disease	1,713	60
of which stroke	3,180	92
of which cancers (neoplasms)	364	13

Deaths from NCDs due to high BMI in adults 2019

5.4% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

6.7%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	17%	43%
Numbers of children with high BMI	80,582	212,973
of which, children with high blood pressure attributable to high BMI	5,970	18,851
of which, children with hyperglycaemia attributable to high BMI	2,733	7,447
of which, children with low HDL cholesterol attributable to high BMI	7,475	21,041

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	31.3
	Annual increase in urbanisation 1995–2020 (%)	1.33
Ă	Plastic waste (latest year) (kg per capita)	8.3
	Proportion of adults taking insufficient physical activity 2016 (%)	17.8
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	89.4
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	11.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	29.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	29.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

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High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	92,459	2,618
of which diabetes mellitus	17,131	413
of which coronary (ischaemic) heart disease	18,573	634
of which stroke	29,397	793
of which cancers (neoplasms)	3,168	114

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	13%	28%
Numbers of children with high BMI	403,379	1,116,094
of which, children with high blood pressure attributable to high BMI	22,732	73,878
of which, children with hyperglycaemia attributable to high BMI	13,161	37,212
of which, children with low HDL cholesterol attributable to high BMI	34,428	99,849

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.1
	Annual increase in GHG emissions 2000–2015 (%)	-2.2
	Proportion of the population living in urban areas 2020 (%)	42.8
	Annual increase in urbanisation 1995–2020 (%)	1.34
	Plastic waste (latest year) (kg per capita)	15.3
	Proportion of adults taking insufficient physical activity 2016 (%)	9.8
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
•	Consumption of animal proteins 2021 (grams per capita per day)	8.1
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	22.6
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	22.6

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

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High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).



5.1% Annual growth rate in the projected numbers of adults with high BMI 2020–2035

7.0% Annual growth rate in the projected numbers of children with high BMI 2020–2035⁽¹⁾





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	4,131	116
of which diabetes mellitus	1,705	44
of which coronary (ischaemic) heart disease	799	26
of which stroke	552	15
of which cancers (neoplasms)	313	11

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

1.8%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	67%	87%
Numbers of children with high BMI	23,985	31,233
of which, children with high blood pressure attributable to high BMI	2,187	3,420
of which, children with hyperglycaemia attributable to high BMI	843	1,140
of which, children with low HDL cholesterol attributable to high BMI	2,396	3,360

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	23.1
	Annual increase in urbanisation 1995–2020 (%)	0.03
Ă	Plastic waste (latest year) (kg per capita)	22.0
	Proportion of adults taking insufficient physical activity 2016 (%)	17.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	85.8
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	n/a
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	n/a

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).

For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to $BMI \ge 30 \text{kg/m}^2$). (2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



Trinidad and Tobago

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	83,274	2,611
of which diabetes mellitus	39,473	1,047
of which coronary (ischaemic) heart disease	14,747	585
of which stroke	9,212	316
of which cancers (neoplasms)	3,426	139

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

3.3% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	32%	60%
Numbers of children with high BMI	95,016	154,590
of which, children with high blood pressure attributable to high BMI	8,332	15,916
of which, children with hyperglycaemia attributable to high BMI	3,317	5,568
of which, children with low HDL cholesterol attributable to high BMI	9,355	16,207

Environmental correlates of obesity⁽²⁾⁽³⁾

Greenhouse gas (GHG) emissions CO2 equivalent 2015 (tonnes per capita per year) 14.1 Annual increase in GHG emissions 2000–2015 (%) 4.5 Proportion of the population living in urban areas 2020 (%) 53.2 Annual increase in urbanisation 1995–2020 (%) -0.13 Plastic waste (latest year) (kg per capita) 105.1
Annual increase in GHG emissions 2000–2015 (%) 4.5 Proportion of the population living in urban areas 2020 (%) 53.2 Annual increase in urbanisation 1995–2020 (%) -0.13 Plastic waste (latest year) (kg per capita) 105.1
Proportion of the population living in urban areas 2020 (%) 53.2 Annual increase in urbanisation 1995–2020 (%) -0.13 Plastic waste (latest year) (kg per capita) 100.13
Annual increase in urbanisation 1995–2020 (%) -0.13 Image: Annual increase in urbanisation 1995–2020 (%) 105.1
Image: Plastic waste (latest year) (kg per capita) 105.1
Proportion of adults taking insufficient physical activity 2016 (%) 38.2
Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) 82.2
Or Consumption of animal proteins 2021 (grams per capita per day) 41.8
Consumption of sugar and sweeteners 2021 (kg per capita per year) 52.4

REFERENCES:

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(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



World Obesity Atlas 2024

Person-vears lost Deaths from

to high BMI, 2019

Non-communicable diseases (NCDs) in adults attributed

	(DALYs) to NCDs due to high BMI in 2019	NCDs due to high BMI in 2019
All non-communicable diseases	373,715	12,000
of which diabetes mellitus	80,351	936
of which coronary (ischaemic) heart disease	127,192	5,319
of which stroke	58,737	1,929
of which cancers (neoplasms)	11,848	504

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	31%	52%
Numbers of children with high BMI	877,569	1,488,388
of which, children with high blood pressure attributable to high BMI	66,952	137,667
of which, children with hyperglycaemia attributable to high BMI	29,904	52,472
of which, children with low HDL cholesterol attributable to high BMI	82,216	149,525

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	2.2
	Annual increase in GHG emissions 2000–2015 (%)	1.5
-101A	Proportion of the population living in urban areas 2020 (%)	69.6
823	Annual increase in urbanisation 1995–2020 (%)	0.50
Ă	Plastic waste (latest year) (kg per capita)	26.7
	Proportion of adults taking insufficient physical activity 2016 (%)	30.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	81.5
•	Consumption of animal proteins 2021 (grams per capita per day)	30.9
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	35.6

REFERENCES:

WORLD BESITY

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI > 30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).



Projected numbers of adults and children with high Body Mass Index (BMI)



Annual growth rate in the projected 2020-2035

3.6% Annual growth rate in the projected numbers of children with high BMI 2020-2035(1)





Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	2,377,451	80,116
of which diabetes mellitus	534,463	10,875
of which coronary (ischaemic) heart disease	642,605	27,726
of which stroke	376,198	12,279
of which cancers (neoplasms)	146,406	6,020

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

2.7%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	38%	61%
Numbers of children with high BMI	7,486,301	11,154,858
of which, children with high blood pressure attributable to high BMI	611,002	1,072,020
of which, children with hyperglycaemia attributable to high BMI	258,000	396,183
of which, children with low HDL cholesterol attributable to high BMI	718,027	1,137,466

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	4.1
	Annual increase in GHG emissions 2000–2015 (%)	1.8
	Proportion of the population living in urban areas 2020 (%)	76.1
	Annual increase in urbanisation 1995–2020 (%)	0.82
	Plastic waste (latest year) (kg per capita)	12.7
	Proportion of adults taking insufficient physical activity 2016 (%)	30.6
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	81.3
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	46.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	26.1

REFERENCES:

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DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	221,643	6,872
of which diabetes mellitus	27,771	469
of which coronary (ischaemic) heart disease	86,047	3,283
of which stroke	69,264	2,046
of which cancers (neoplasms)	8,888	308

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

3.7% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	20%	31%
Numbers of children with high BMI	348,878	598,400
of which, children with high blood pressure attributable to high BMI	21,962	43,203
of which, children with hyperglycaemia attributable to high BMI	11,550	20,213
of which, children with low HDL cholesterol attributable to high BMI	30,738	55,037

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	10.2
	Annual increase in GHG emissions 2000–2015 (%)	1.6
	Proportion of the population living in urban areas 2020 (%)	52.5
	Annual increase in urbanisation 1995–2020 (%)	0.64
Ă	Plastic waste (latest year) (kg per capita)	2.0
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{O}	Consumption of animal proteins 2021 (grams per capita per day)	45.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	20.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	20.0

REFERENCES:

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DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	301,046	8,378
of which diabetes mellitus	79,811	1,665
of which coronary (ischaemic) heart disease	39,784	1,341
of which stroke	84,064	2,370
of which cancers (neoplasms)	20,936	743

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	14%	29%
Numbers of children with high BMI	2,440,301	7,367,555
of which, children with high blood pressure attributable to high BMI	127,131	457,013
of which, children with hyperglycaemia attributable to high BMI	78,861	243,414
of which, children with low HDL cholesterol attributable to high BMI	203,930	646,295

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.1
	Annual increase in GHG emissions 2000–2015 (%)	5.8
	Proportion of the population living in urban areas 2020 (%)	25.0
	Annual increase in urbanisation 1995–2020 (%)	2.71
Ă	Plastic waste (latest year) (kg per capita)	15.3
	Proportion of adults taking insufficient physical activity 2016 (%)	5.5
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	85.7
•	Consumption of animal proteins 2021 (grams per capita per day)	11.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	13.3
	•	

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

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DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).



6.2% Annual growth rate in the projected numbers of adults with high BMI 2020–2035

7.6% Annual growth rate in the projected numbers of children with high BMI 2020–2035⁽¹⁾




Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	2,899,977	116,655
of which diabetes mellitus	171,799	1,506
of which coronary (ischaemic) heart disease	1,635,214	79,271
of which stroke	648,173	22,792
of which cancers (neoplasms)	169,440	6,649

Deaths from NCDs due to high BMI in adults 2019

-0.9% Annual growth rate

2020-2035

-0.6%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and 2035⁽¹⁾⁽²⁾

	2020	2035
Prevalence of children with high BMI	24%	35%
Numbers of children with high BMI	1,652,367	1,502,755
of which, children with high blood pressure attributable to high BMI	118,553	121,672
of which, children with hyperglycaemia attributable to high BMI	55,760	51,718
of which, children with low HDL cholesterol attributable to high BMI	151,663	143,724

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	4.2
	Annual increase in GHG emissions 2000–2015 (%)	-2.4
-BA	Proportion of the population living in urban areas 2020 (%)	69.6
	Annual increase in urbanisation 1995–2020 (%)	0.15
Ă	Plastic waste (latest year) (kg per capita)	23.7
	Proportion of adults taking insufficient physical activity 2016 (%)	19.6
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	76.7
•	Consumption of animal proteins 2021 (grams per capita per day)	45.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	57.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	57.8

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

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DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	372,742	7,622
of which diabetes mellitus	77,451	1,026
of which coronary (ischaemic) heart disease	100,788	2,667
of which stroke	66,717	1,396
of which cancers (neoplasms)	22,934	627

Deaths from NCDs due to high BMI in adults 2019

Annual growth rate in the projected

2020-2035

2.5%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	38%	49%
Numbers of children with high BMI	468,271	678,987
of which, children with high blood pressure attributable to high BMI	41,561	66,217
of which, children with hyperglycaemia attributable to high BMI	16,381	24,185
of which, children with low HDL cholesterol attributable to high BMI	46,311	69,640

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	20.8
	Annual increase in GHG emissions 2000–2015 (%)	-1.1
	Proportion of the population living in urban areas 2020 (%)	87.0
	Annual increase in urbanisation 1995–2020 (%)	0.42
	Plastic waste (latest year) (kg per capita)	109.2
	Proportion of adults taking insufficient physical activity 2016 (%)	41.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	82.0
•	Consumption of animal proteins 2021 (grams per capita per day)	57.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	15.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,717,291	56,213
of which diabetes mellitus	388,827	2,583
of which coronary (ischaemic) heart disease	375,082	19,445
of which stroke	178,877	7,159
of which cancers (neoplasms)	247,054	12,726

Deaths from NCDs due to high BMI in adults 2019

in the projected

2020-2035

0.8%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	36%	45%
Numbers of children with high BMI	4,310,639	4,829,483
of which, children with high blood pressure attributable to high BMI	325,802	408,515
of which, children with hyperglycaemia attributable to high BMI	146,665	167,482
of which, children with low HDL cholesterol attributable to high BMI	402,564	469,208

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	6.0
	Annual increase in GHG emissions 2000–2015 (%)	-2.5
	Proportion of the population living in urban areas 2020 (%)	83.9
	Annual increase in urbanisation 1995–2020 (%)	0.27
	Plastic waste (latest year) (kg per capita)	93.5
	Proportion of adults taking insufficient physical activity 2016 (%)	35.9
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	79.9
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	64.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	39.8

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	12,495,273	393,839
of which diabetes mellitus	2,861,821	41,992
of which coronary (ischaemic) heart disease	2,934,452	140,255
of which stroke	1,336,271	40,347
of which cancers (neoplasms)	1,239,333	55,100

Deaths from NCDs due to high BMI in adults 2019

1.4% Annual growth rate

in the projected

2020-2035

0.8%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	48%	60%
Numbers of children with high BMI	31,288,494	35,253,054
of which, children with high blood pressure attributable to high BMI	2,977,256	3,660,815
of which, children with hyperglycaemia attributable to high BMI	1,109,103	1,271,915
of which, children with low HDL cholesterol attributable to high BMI	3,178,095	3,708,884

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	15.4
	Annual increase in GHG emissions 2000–2015 (%)	-1.8
	Proportion of the population living in urban areas 2020 (%)	82.7
	Annual increase in urbanisation 1995–2020 (%)	0.27
Ă	Plastic waste (latest year) (kg per capita)	104.7
	Proportion of adults taking insufficient physical activity 2016 (%)	40.0
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	72.1
\mathbf{I}	Consumption of animal proteins 2021 (grams per capita per day)	85.4
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	66.3
	Consumption of sugar and sweeteners 2021 (kg per capita per varia)	66.3

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	81,240	3,222
of which diabetes mellitus	14,802	373
of which coronary (ischaemic) heart disease	15,674	769
of which stroke	15,252	556
of which cancers (neoplasms)	11,860	576

Deaths from NCDs due to high BMI in adults 2019

in the projected

2020-2035

-0.2%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	36%	45%
Numbers of children with high BMI	260,626	253,068
of which, children with high blood pressure attributable to high BMI	21,410	22,848
of which, children with hyperglycaemia attributable to high BMI	8,992	8,881
of which, children with low HDL cholesterol attributable to high BMI	25,055	25,189

Environmental correlates of obesity⁽²⁾⁽³⁾

CO 2	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.9
	Annual increase in GHG emissions 2000–2015 (%)	1.1
	Proportion of the population living in urban areas 2020 (%)	95.5
	Annual increase in urbanisation 1995–2020 (%)	0.22
	Plastic waste (latest year) (kg per capita)	40.4
.	Proportion of adults taking insufficient physical activity 2016 (%)	22.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	82.2
•	Consumption of animal proteins 2021 (grams per capita per day)	56.0
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	49.6

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.



C.::::

Uzbekistan

Projected numbers of adults and children with high Body Mass Index (BMI)



Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,293,557	39,316
of which diabetes mellitus	220,831	4,697
of which coronary (ischaemic) heart disease	568,868	20,489
of which stroke	298,216	8,925
of which cancers (neoplasms)	41,050	1,348

Deaths from NCDs due to high BMI in adults 2019

2.6% Annual growth rate in the projected

2020-2035

4.9% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	19%	30%
Numbers of children with high BMI	1,656,028	3,398,883
of which, children with high blood pressure attributable to high BMI	100,649	241,819
of which, children with hyperglycaemia attributable to high BMI	54,562	114,548
of which, children with low HDL cholesterol attributable to high BMI	144,402	311,113

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	3.0
	Annual increase in GHG emissions 2000–2015 (%)	-3.2
	Proportion of the population living in urban areas 2020 (%)	50.4
823	Annual increase in urbanisation 1995–2020 (%)	0.57
Ă	Plastic waste (latest year) (kg per capita)	3.4
_]),	Proportion of adults taking insufficient physical activity 2016 (%)	19.1
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	n/a
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	47.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	21.0
••••	Consumption of animal proteins 2021 (grams per capita per day) Consumption of sugar and sweeteners 2021 (kg per capita per year)	47.2 21.0

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	12,869	333
of which diabetes mellitus	3,009	63
of which coronary (ischaemic) heart disease	3,729	110
of which stroke	3,660	93
of which cancers (neoplasms)	365	12

Deaths from NCDs due to high BMI in adults 2019

4.1% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

5.0% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	37%	59%
Numbers of children with high BMI	40,326	83,677
of which, children with high blood pressure attributable to high BMI	2,673	6,806
of which, children with hyperglycaemia attributable to high BMI	1,345	2,882
of which, children with low HDL cholesterol attributable to high BMI	3,609	8,016

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	n/a
	Annual increase in GHG emissions 2000–2015 (%)	n/a
	Proportion of the population living in urban areas 2020 (%)	25.5
	Annual increase in urbanisation 1995–2020 (%)	0.94
Ă	Plastic waste (latest year) (kg per capita)	16.8
	Proportion of adults taking insufficient physical activity 2016 (%)	8.0
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	87.5
	Consumption of animal proteins 2021 (grams per capita per day)	31.3
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	16.2
	Annual increase in urbanisation 1995–2020 (%) Plastic waste (latest year) (kg per capita) Proportion of adults taking insufficient physical activity 2016 (%) Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) Consumption of animal proteins 2021 (grams per capita per day) Consumption of sugar and sweeteners 2021 (kg per capita per year)	0 1 8 3 1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	873,507	26,817
of which diabetes mellitus	264,026	5,431
of which coronary (ischaemic) heart disease	210,444	8,179
of which stroke	126,193	3,986
of which cancers (neoplasms)	37,065	1,472

Deaths from NCDs due to high BMI in adults 2019

3.8% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

2.0%

2020-2035(1)



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	17%	25%
Numbers of children with high BMI	1,370,749	1,850,910
of which, children with high blood pressure attributable to high BMI	197,388	266,531
of which, children with hyperglycaemia attributable to high BMI	53,459	72,185
of which, children with low HDL cholesterol attributable to high BMI	167,231	225,811

Environmental correlates of obesity⁽²⁾⁽³⁾

4.6
-0.5
88.3
0.11
n/a
31.4
88.8
29.6
28.8

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	1,246,106	37,978
of which diabetes mellitus	285,272	6,462
of which coronary (ischaemic) heart disease	157,436	6,022
of which stroke	466,066	14,173
of which cancers (neoplasms)	69,391	2,543

Deaths from NCDs due to high BMI in adults 2019

4.0% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

7.0% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	13%	36%
Numbers of children with high BMI	2,743,050	7,572,869
of which, children with high blood pressure attributable to high BMI	173,255	573,770
of which, children with hyperglycaemia attributable to high BMI	90,852	257,762
of which, children with low HDL cholesterol attributable to high BMI	241,923	707,806

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	1.8
	Annual increase in GHG emissions 2000–2015 (%)	8.1
	Proportion of the population living in urban areas 2020 (%)	37.3
	Annual increase in urbanisation 1995–2020 (%)	2.10
	Plastic waste (latest year) (kg per capita)	13.4
	Proportion of adults taking insufficient physical activity 2016 (%)	25.4
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	86.3
•	Consumption of animal proteins 2021 (grams per capita per day)	39.8
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	29.1

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	410,165	11,778
of which diabetes mellitus	48,416	673
of which coronary (ischaemic) heart disease	155,671	5,074
of which stroke	97,244	2,664
of which cancers (neoplasms)	8,451	302

Deaths from NCDs due to high BMI in adults 2019



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	11%	31%
Numbers of children with high BMI	1,269,359	4,579,772
of which, children with high blood pressure attributable to high BMI	182,788	659,487
of which, children with hyperglycaemia attributable to high BMI	49,505	178,611
of which, children with low HDL cholesterol attributable to high BMI	154,862	558,732

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.4
	Annual increase in GHG emissions 2000–2015 (%)	-3.8
	Proportion of the population living in urban areas 2020 (%)	37.9
	Annual increase in urbanisation 1995–2020 (%)	1.88
	Plastic waste (latest year) (kg per capita)	17.5
	Proportion of adults taking insufficient physical activity 2016 (%)	n/a
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	86.4
\mathbf{r}	Consumption of animal proteins 2021 (grams per capita per day)	13.2
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	25.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).



6.8% Annual growth rate in the projected numbers of adults with high BMI 2020–2035







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	213,329	6,065
of which diabetes mellitus	45,738	1,009
of which coronary (ischaemic) heart disease	28,391	875
of which stroke	71,025	2,048
of which cancers (neoplasms)	10,937	371

Deaths from NCDs due to high BMI in adults 2019

5.2% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

6.4%

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	15%	28%
Numbers of children with high BMI	1,107,653	2,794,911
of which, children with high blood pressure attributable to high BMI	66,492	202,258
of which, children with hyperglycaemia attributable to high BMI	36,434	94,441
of which, children with low HDL cholesterol attributable to high BMI	96,239	257,255

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.3
	Annual increase in GHG emissions 2000–2015 (%)	3.0
	Proportion of the population living in urban areas 2020 (%)	44.6
	Annual increase in urbanisation 1995–2020 (%)	0.74
	Plastic waste (latest year) (kg per capita)	n/a
	Proportion of adults taking insufficient physical activity 2016 (%)	22.1
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	89.3
•	Consumption of animal proteins 2021 (grams per capita per day)	13.5
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	15.4

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.







Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

	Person-years lost (DALYs) to NCDs due to high BMI in 2019	Deaths from NCDs due to high BMI in 2019
All non-communicable diseases	220,887	6,474
of which diabetes mellitus	67,026	1,588
of which coronary (ischaemic) heart disease	44,724	1,620
of which stroke	40,443	1,154
of which cancers (neoplasms)	15,498	549

Deaths from NCDs due to high BMI in adults 2019

4.4% Annual growth rate in the projected numbers of adults with high BMI

2020-2035

6.5% Annual growth rate

in the projected numbers of children

with high BMI 2020–2035⁽¹⁾



Early signs of NCDs in children aged 5–19 years, 2020 and $2035^{(1)(2)}$

	2020	2035
Prevalence of children with high BMI	19%	41%
Numbers of children with high BMI	1,155,173	2,960,933
of which, children with high blood pressure attributable to high BMI	79,393	253,886
of which, children with hyperglycaemia attributable to high BMI	38,728	102,932
of which, children with low HDL cholesterol attributable to high BMI	104,569	289,102

Environmental correlates of obesity⁽²⁾⁽³⁾

	Greenhouse gas (GHG) emissions CO_2 equivalent 2015 (tonnes per capita per year)	0.8
	Annual increase in GHG emissions 2000–2015 (%)	-2.0
	Proportion of the population living in urban areas 2020 (%)	32.2
	Annual increase in urbanisation 1995–2020 (%)	0.06
	Plastic waste (latest year) (kg per capita)	26.7
	Proportion of adults taking insufficient physical activity 2016 (%)	26.8
	Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)	86.6
•	Consumption of animal proteins 2021 (grams per capita per day)	30.6
	Consumption of sugar and sweeteners 2021 (kg per capita per year)	29.2

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.





Annex 1: Sources of data

Prevalence of high BMI

Projections of the prevalence of overweight and obesity for adults and children were produced by RTI International as part of their costing of the consequences of obesity (Okunogbe et al, 2022) with BMI projections based on the NCD-RisC estimates for overweight and obesity (NCD-RisC, 2024). To estimate actual numbers of people we have used the prevalence data in conjunction with the projected estimates of national populations published by the United Nations (United Nations Population Division, 2018). Projections for overweight and obesity prevalence in war zones such as Ukraine may be unreliable, and projections for Palestine (West Bank and Gaza) have been excluded as likely to be misleading.

Non-communicable disease attributable to high BMI

Estimates of the numbers and percentages of people affected by NCDs attributable to high BMI have been extracted from the Institute for Health Metrics and Evaluation database for the Global Burden of Disease study 2019 (IHME, 2024). This is due to be updated and extended to 2021 shortly after the present Atlas is published. The 2021 data may show an impact from the Covid-19 epidemic.

Estimates of the early signs of NCDs in children

Estimates and projections for the numbers of children likely to be affected by conditions indicating the early signs of NCDs are based on systematic reviews of prevalence data across a wide range of populations (Lobstein and Jackson-Leach, 2006; Sharma et al, 2019) and recent estimates in middle- and lower-income countries (Africa: Noubiap et al, 2017; China: Wang et al, 2019; India: Meena et al, 2021).

The prevalence estimates used for the present analysis are shown here.

Prevalence of early signs of non-communicable diseases in children according to BMI status

	Not with overweight	With overweight not with obesity	With obesity
Hypertension	3.1%	6.5%	17.5%
Hyperglycaemia (fasting plasma glucose)	6.6%	9.7%	10.5%
Low HDL cholesterol	8.1%	15.7%	20.3%

Gross Domestic Product

Gross Domestic Product is an indicator of economic output. Data in this Atlas used GDP per capita, PPP at constant 2017 international \$. Downloadable spreadsheet API_NY.GDP.PCAP.PP.KD_DS2_en_csv_v2_6542521 from the World Bank (2024a).

Environmental correlates of obesity

	Source
Greenhouse gas emissions (GHG) (CO2 equivalent) 2015 (tonnes	International Energy Authority, 2023
per capita per year)	
Annual increase in GHG emissions 2000-2015 (%)	International Energy Authority, 2023
Proportion of the population living in urban areas 2020 (%)	United Nations Population Division, 2018
Annual increase in urbanisation 1995-2020 (%)	United Nations Population Division, 2018
Plastic waste (kg per capita)	World Bank, 2024b
Proportion of adults taking insufficient physical activity 2016 (%)	World Health Organization, 2024 (a)
Proportion of youth (age 11-19y) taking insufficient physical	World Health Organization, 2024 (b)
activity 2016 (%)	
Consumption of animal proteins 2021 (grams per capita per day)	Food and Agriculture Organization of the
	United Nations, 2024
Consumption of sugar 2021 (kg per capita per year)	Food and Agriculture Organization of the
	United Nations, 2024

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Annex 2: Comparison of LMICs with High income countries

Further analysis of World Obesity Atlas 2024 data comparing Low & Middle Income Countries (LMICs) with High income countries.

Adult overweight and obesity 2020-2035. Proportion of those living in World Bank LMICs and High Income Countries

	2020	2025	2030	2035
% of adults with high BMI globally, living in LMICs	73%	75%	77%	79%
% of adults with high BMI globally, living in high income countries	27%	25%	23%	21%
% of adults with obesity globally, living in LMICs	66%	69%	71%	74%
% of adults with obesity globally, living in high income countries	34%	31%	29%	26%

Adapted from Table 2.4

Adult overweight and obesity 2020-2035. Number of adults living in World Bank LMICs and High Income Countries

		2020	2025	2030	2035
Global	Adults with high BMI (millions)	2,194	2,524	2,891	3,290
	Adults with obesity (millions)	808	1,001	1,239	1,522
LMICs	Adults with high BMI (millions)	1,608	1,895	2,222	2,584
	Adults with obesity (millions)	536	688	882	1,121
High income countries	Adults with high BMI (millions)	586	629	670	706
	Adults with obesity (millions)	272	313	357	401

Adapted from Table 2.4

Deaths of adults attributable to high BMI living in World Bank LMICs and High Income Countries

		Total deaths 2019 (millions)	Of which, attributable to high BMI
Global	All causes	50.3	5.0m (10%)
	Of which non-communicable diseases	41	5.0m (12%)
LMICs	All causes	39.5	3.9m (10%)
	Of which non-communicable diseases	31.5	3.9m (12%)
High income countries	All causes	10.7	1.1m (11%)
	Of which non-communicable diseases	9.6	1.1m (12%)

Adapted from Table 2.5

• Of the global deaths from non-communicable diseases that are attributable to high BMI, 78% are from adults living in LMICs compared to 22% in high income countries

Adult person-years lost to disease (DALYs) attributable to high BMI in World Bank LMICs and High Income Countries

		Total (in Millions)	Of which, attributable to high BMI
Global	All causes	1871	160m (9%)
	Of which non-communicable diseases	1454	160m (11%)
LMICs	All causes	1535	127.3m (8%)
	Of which non-communicable diseases	1162	127.3m (11%)
High income countries	All causes	336	32.4m (10%)
	Of which non-communicable diseases	293	32.4m (11%)

Adapted from Table 2.6

• Of the global DALYs from non-communicable diseases that are attributable to high BMI, 80% are from adults living in LMICs compared to 20% in high income countries

Child overweight and obesity 2020-2035. Proportion of those living in World Bank LMICs and High Income Countries

	2020	2025	2030	2035
% of children with high BMI globally, living in LMICs	82%	85%	87%	88%
% of children with high BMI globally, living in high income countries	18%	15%	13%	12%
% of children with obesity globally, living in LMICs	82%	84%	84%	85%
% of children with obesity globally, living in high income countries	18%	16%	16%	15%

Adapted from Table 3.2

Child overweight and obesity 2020-2035. Numbers of children living in World Bank LMICs and High Income Countries

		2020	2025	2030	2035
Global	Children with high BMI (millions)	433	550	660	773
	Children with obesity (millions)	197	244	285	329
LMICs	Children with high BMI (millions)	355	467	573	683
	Children with obesity (millions)	162	204	240	281
High income countries	Children with high BMI (millions)	78	83	87	90
	Children with obesity (millions)	35	40	44	48

Adapted from Table 3.2



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