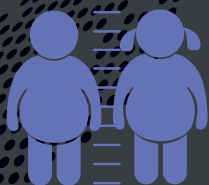


# Levels and trends in child malnutrition

UNICEF / WHO / World Bank Group  
Joint Child Malnutrition Estimates

Key findings of the 2021 edition

These new estimates supersede former analyses and results published by UNICEF, WHO and the World Bank Group



**OVERWEIGHT**  
**38.9 million**

An estimated 5.7 per cent or 38.9 million children under 5 around the world were affected by overweight in 2020\*



**WASTING**  
**45.4 million**

In 2020,\* wasting continued to threaten the lives of an estimated 6.7 per cent or 45.4 million children under 5 globally



**STUNTING**  
**149.2 million**

Stunting affected an estimated 22.0 per cent or 149.2 million children under 5 globally in 2020\*

\* Household survey data on child height and weight were not collected in 2020 due to physical distancing policies, with the exception of four surveys. These estimates are therefore based almost entirely on data collected before 2020 and do not take into account the impact of the COVID-19 pandemic.

# TOWARDS A FUTURE WITHOUT MALNUTRITION FOR EVERY CHILD

**Good nutrition sets children on the path to survive and thrive. Well-nourished children grow, develop, learn, play, participate and contribute – while malnutrition robs children of their full potential, with consequences for children, nations and the world.**

Stunting is the devastating result of poor nutrition in-utero and early childhood. Children suffering from stunting may never attain their full possible height and their brains may never develop to their full cognitive potential. These children begin their lives at a marked disadvantage: they face learning difficulties in school, earn less as adults, and face barriers to participation in their communities. Globally, 149.2 million children under 5 suffered from stunting in 2020.\* These numbers may increase substantially due to constraints in accessing nutritious diets and essential nutrition services during the COVID-19 pandemic, with the full impact on stunting possibly taking years to manifest.

Wasting in children is the life-threatening result of poor nutrient intake and/or disease. Children suffering from wasting have weakened immunity, are susceptible to long-term developmental delays and face an increased risk of death, particularly when wasting is severe. These children require urgent treatment and care to survive. In 2020,\* 45.4 million children under 5 were affected by wasting, of which 13.6 million were severely wasted.

The impact of COVID-19 has likely exacerbated these figures, and could mean that 15 per cent or 1.15 times more children were affected by wasting in 2020 than estimated<sup>1</sup> due to deteriorations in household wealth and disruptions to the availability and affordability of nutritious

food and essential nutrition services. Childhood overweight occurs when children's caloric intake from food and beverages exceeds their energy requirements. It is shaped by industry marketing and greater access to processed foods, along with inadequate levels of physical activity, which can increase children's risk of obesity and diet-related noncommunicable diseases later in life. There are now 38.9 million\* children under 5 with overweight globally, an increase of nearly 6 million since 2000. Childhood overweight may also be negatively impacted by COVID-19, especially where fresh, nutritious food has been replaced by processed, unhealthy food, and where movement restrictions have constrained opportunities for physical activity for extended periods of time.

The Joint Malnutrition Estimates (JME) published in April 2021 reveal insufficient progress to reach the World Health Assembly (WHA) targets set for 2025 and the Sustainable Development Goals (SDGs) set for 2030 (see page 25).<sup>2</sup> The latest analysis indicates that only one quarter of all countries are 'on track' to halve the number of children affected by stunting by 2030, with an assessment of progress to date not being possible for another quarter of countries. Even fewer countries are expected to achieve the 2030 target of 3 per cent prevalence for overweight, with just 1 in 6 countries considered 'on track'. Further, an assessment of progress towards the wasting target is not possible for nearly half of countries.

More intensive efforts will be required if the world is to achieve global targets of reducing the number of children with stunting to 104 million by 2025 and to 87

million by 2030. Meanwhile, achieving the overweight goal would require a reversal of the current trajectory.

Although malnutrition can manifest in multiple ways, the path to prevention is virtually identical: adequate maternal nutrition before and during pregnancy and while breastfeeding; optimal breastfeeding in the first two years of life; nutritious, diverse and safe foods in early childhood; and a healthy environment, including access to basic health, water, hygiene and sanitation services and opportunities for safe physical activity. Many of these vital pathways to good nutrition are under threat – including due to the COVID-19 pandemic – and have the potential to undermine progress towards ending malnutrition in all its forms. As the world responds to and recovers from the pandemic, urgent action is critical to protect maternal and child nutrition – especially in the most affected regions – and secure a future where the right to nutrition is a reality for every child.

## **NEW – JME country estimates**

**This key findings report for the 2021 edition of the JME presents country level data for the first time. This is because a new country-level model has been developed to generate the country, regional and global estimates for stunting and overweight (see page 26). Additional work is ongoing to update methods for wasting and severe wasting; as such, the estimates presented for these two conditions are based on methods applied for previous editions of the JME.**

\* Household survey data on child height and weight were not collected in 2020 due to physical distancing policies, with the exception of four surveys. These estimates are therefore based almost entirely on data collected before 2020 and do not take into account the impact of the COVID-19 pandemic. However, one of the covariates used in the country stunting and overweight models takes the impact of COVID-19 partially into account (see page 3).

# COVID-19 and the Joint Child Malnutrition Estimates



The Joint Malnutrition Estimates for the year 2020 do not fully account for the impact of the COVID-19 pandemic. Household survey data

on child height, weight and age – used to report on the JME indicators of stunting, wasting, severe wasting and overweight among children under 5 years of age – were not collected in 2020 due to physical distancing measures, with the exception of four surveys. This means that the estimates are based almost entirely on data collected before 2020. One of the covariates used in the country models for stunting and overweight takes the impact of COVID-19 partially into account, but is not expected to capture the full extent of the pandemic’s influence on malnutrition in 2020.

The pandemic is expected to exacerbate all forms of malnutrition due to deteriorations in household wealth; constraints in the availability and affordability of nutritious food; disruptions in essential nutrition services; and limited opportunities for physical activity.

The impact of the pandemic on **stunting** will likely unfold gradually, and may persist for years after COVID-19 is eradicated and

economies recover. Given that stunting is the result of chronic or recurrent malnutrition, it will be influenced by how long these pandemic-related shocks to the economy, food systems and health systems persist. Maternal malnutrition experienced during the pandemic can also affect stunting by increasing the risk of low birthweight, a key predictor of impaired linear growth.<sup>3</sup> Therefore, increased stunting prevalence may be apparent among children born during the first year of the pandemic before it is noticed in the entire under-five population that is used to monitor this indicator.

**Wasting** and severe wasting, characterized by a loss of muscle and fat mass, can develop rapidly in the face of poor nutrient intake and/or disease. These conditions are expected to be most impacted by COVID-19 in the short-term and the prevalence-based estimates presented in this report for 2020 may in fact be **around 15 per cent or 1.15 times higher than what is reported**.<sup>1</sup> Without representative data on wasting from countries during the pandemic, only modelled predictions are possible. Because losses in muscle and fat mass can be reversed rapidly once the pandemic subsides and large-scale data collection on child weight and height

resumes, there may be no evidence remaining of how wasting prevalence was affected over the course of the pandemic. Among children who survive episodes of wasting during the pandemic, linear growth is likely to be affected; this means that some of the pandemic’s enduring impact on stunting may be attributable to prolonged and recurrent episodes of wasting.

The pandemic may also lead to increases in childhood **overweight**, especially in settings where food choices and physical activity have been negatively influenced by COVID-19 mitigation strategies. The impact on overweight may persist through the lifetime of those affected, with poor dietary and physical activity habits (shaped by restrictions during COVID-19) that continue through adolescence and adulthood. While data are limited, deteriorations in children’s diet quality during the pandemic have been observed. In one country, decreases in physical activity during the pandemic were reported for 28 per cent of children aged 3 to 5 years, while increases in sweet snack food consumption were reported for 19 per cent of children.<sup>4</sup>

## Forms of malnutrition\*\* highlighted in this key findings report



**Stunting** refers to a child who is too short for his or her age. Children affected by stunting can suffer severe irreversible physical and cognitive damage that accompanies stunted growth. The devastating consequences of stunting can last a lifetime and even affect the next generation.



**Wasting** refers to a child who is too thin for his or her height. Wasting is the result of recent rapid weight loss or the failure to gain weight. A child who is moderately or severely wasted has an increased risk of death, but treatment is possible.



**Overweight** refers to a child who is too heavy for his or her height. This form of malnutrition results when energy intakes from food and beverages exceed children’s energy requirements. Overweight increases the risk of diet-related noncommunicable diseases later in life.



**Stunting and overweight**



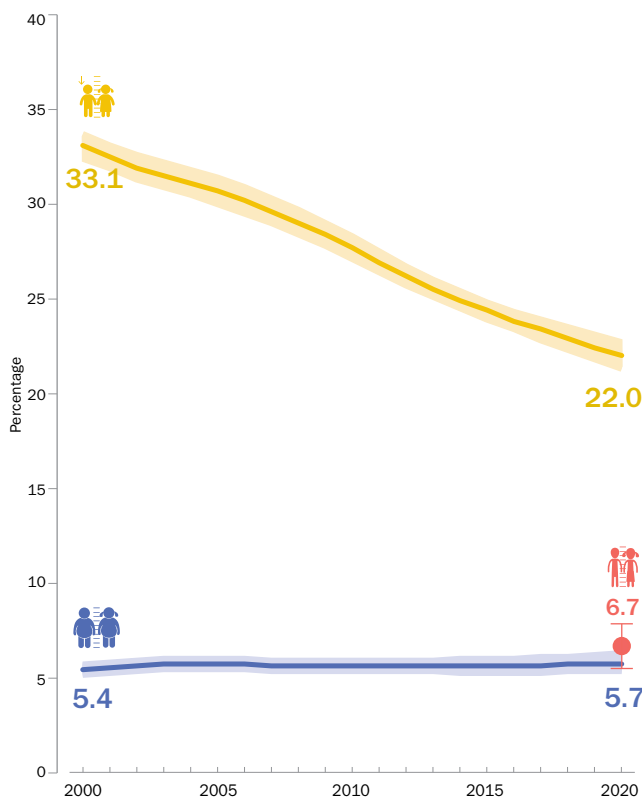
**Stunting and wasting**

\*\* Some children suffer from more than one form of malnutrition – such as **stunting and overweight** or **stunting and wasting**. There are currently no joint global or regional estimates for these combined conditions.

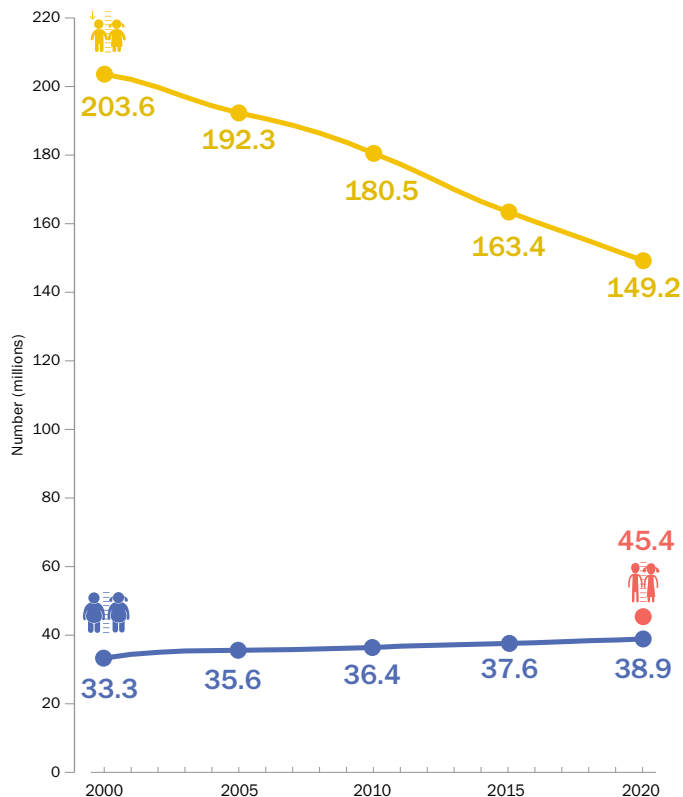
# GLOBAL OVERVIEW

**Stunting has declined steadily since 2000 – but faster progress is needed to reach the 2030 target. Wasting persists at alarming rates and overweight will require a reversal in trajectory if the 2030 target is to be achieved.**

 stunting
  wasting
  overweight
  95% confidence interval



Percentage of children under 5 affected by stunting, wasting and overweight, global, 2000–2020\*



Number (millions) of children under 5 affected by stunting, wasting and overweight, global, 2000–2020\*

Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, 2021 edition. See section about regional and global estimates on page 27 for an explanation of why only one time point is presented for wasting on the graphs above.

## Most children with malnutrition live in Africa and Asia

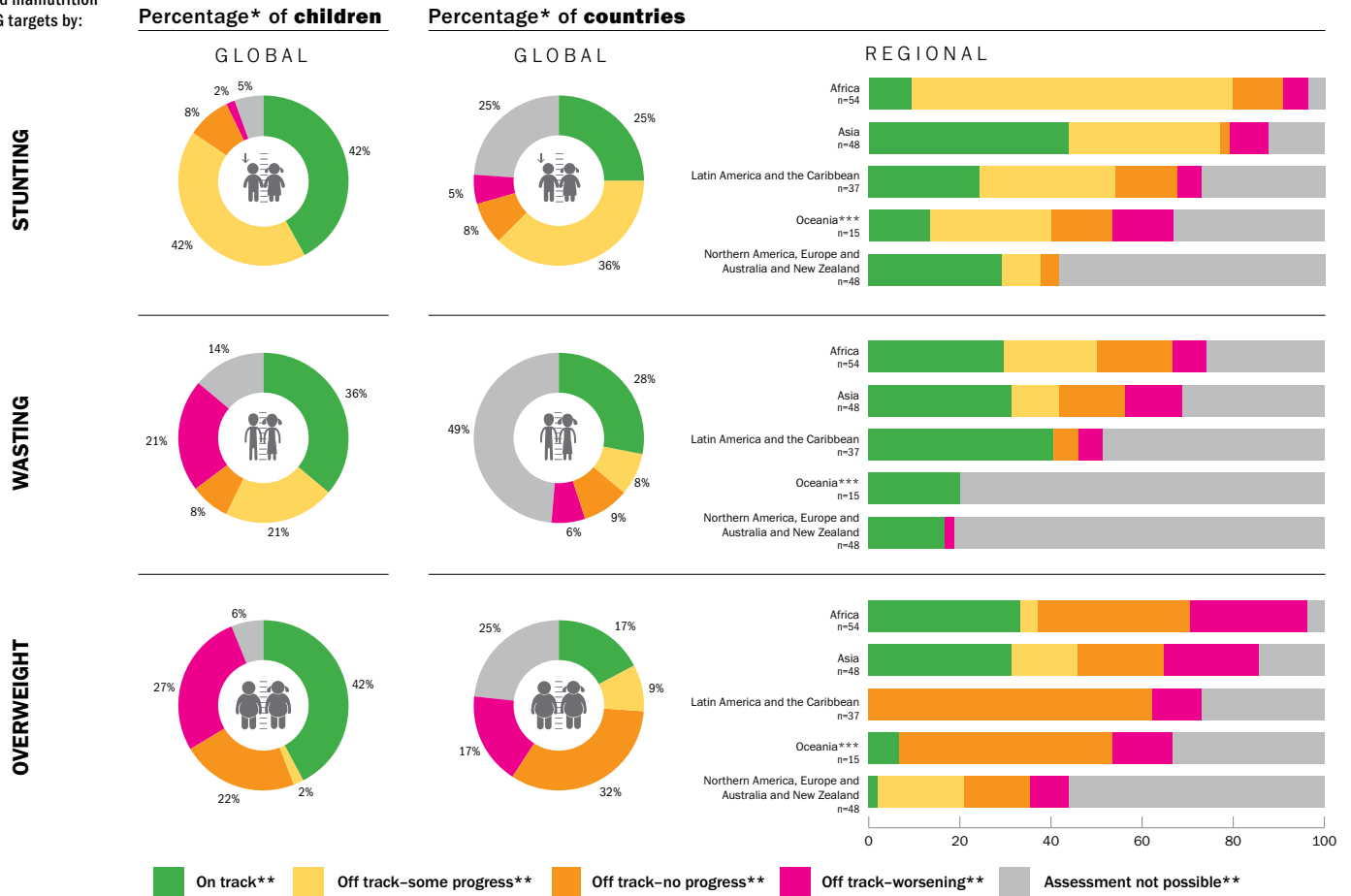


\*Household survey data on child height and weight were not collected in 2020 due to physical distancing policies, with the exception of four surveys. These estimates are therefore based almost entirely on data collected before 2020 and do not take into account the impact of the COVID-19 pandemic. However, one of the covariates used in the country stunting and overweight models takes the impact of COVID-19 partially into account (see page 3).

# PROGRESS TOWARDS THE SDGs

## Only about one quarter of countries are on track to reach the 2030 SDG targets on stunting, wasting and overweight

Progress towards the child malnutrition SDG targets by:



Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, 2021 edition. Note: \*Percentages may not add up to 100 per cent due to rounding. \*\*See notes on progress assessment categories on pages 16-17. \*\*\*Oceania excluding Australia and New Zealand

The graphics above show progress towards the SDG 2.2 targets on stunting, wasting and overweight. The graphics in the left-hand column show progress by percentage of the global under-five population and the graphics in the two right-hand columns show progress by percentage of countries (globally and regionally).

For the graphics by percentage of the under-five population (left column), each country was weighted by the under-five population, meaning that more populous countries contributed more to the percentages in each progress category than less populous ones. In contrast, for the graphs in the two columns on the right side, each country contributes equally towards the percentages, regardless of its population size.

Availability of data to measure progress varies between the assessment by percentage of the population and the assessment by percentage of countries; it also varies by indicator and region. Almost all children live in countries where progress assessment is possible for all three indicators. Meanwhile, progress by country can only be assessed for about three quarters of countries for the stunting and overweight targets, and for about half of countries for the wasting target.

When considering progress by under-five population, nearly 85 per cent of children live in countries showing at least some progress towards the stunting reduction target, with only 10 per cent living in countries that show no progress or a worsening situation. The situation is more concerning for overweight: half of children live in countries with no progress or a worsening situation. For wasting, nearly one third of children live in countries with no progress or a worsening situation.

When considering progress by individual countries (at the global level), progress on stunting and overweight can be assessed for three quarters of all countries, while progress on wasting is only possible for about half of countries (see notes on JME methodology on pages 26-27). Overall, the greatest progress is being made towards the stunting target, with nearly two thirds of countries seeing at least some progress. In contrast, for overweight, about half of all countries have experienced no progress or are worsening.

At the regional level, Northern America, Europe and Australia and New Zealand have the highest proportion of countries for which progress cannot be assessed

across the three indicators. Conversely, Africa has the highest proportion of countries for which progress can be assessed for all three indicators. Asia is contributing most to the global percentage of countries that are 'on track' to meet the stunting target, with 21 out of 48 countries (or 44 per cent) on track; followed by Northern America, Europe and Australia and New Zealand with 14 out of 48 countries on track; and Latin America and the Caribbean, with 9 of 37 countries on track. While all regions have at least some countries on track to meet the stunting and wasting targets, in Latin America and the Caribbean, all countries for which progress for overweight could be assessed show no progress or a worsening situation, and in Northern America, Europe and Australia and New Zealand, almost all countries for which progress could be assessed (20 out of 21 countries) are not on track.

Gaps in the available data in some regions make it challenging to accurately assess progress towards global targets. Regular data collection (every three to five years) is therefore critical to monitor and analyse country, regional and global progress on child malnutrition going forward.



STUNTING

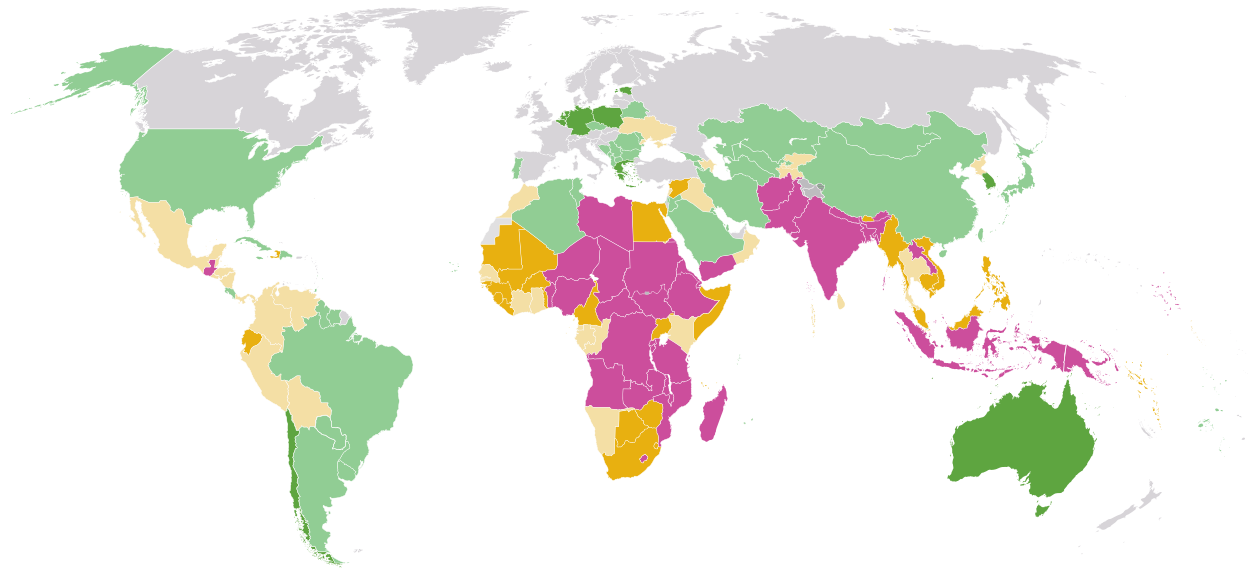
# COUNTRY TRENDS

## The number of countries with very high stunting prevalence has declined by half since 2000 – from 67 to 33 countries

Percentage of children under 5 affected by stunting, by country, 2020<sup>1</sup>



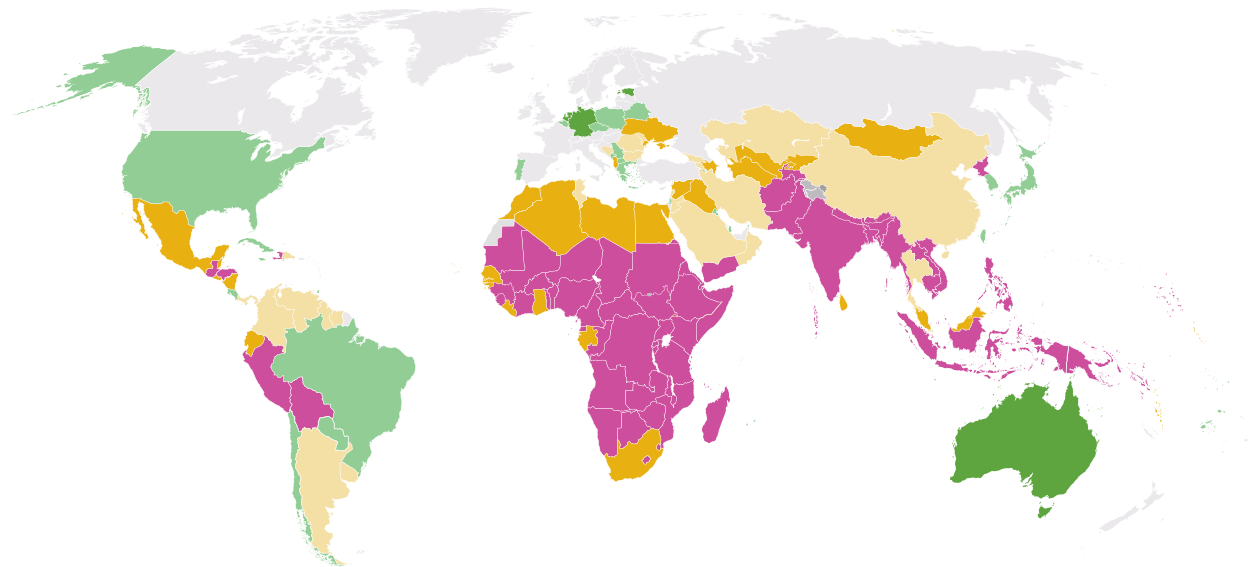
Distribution of stunting prevalence for each country with a modelled estimate presented for 2020.<sup>1</sup>



Percentage of children under 5 affected by stunting, by country, 2000



Distribution of stunting prevalence for each country with a modelled estimate presented for 2000.



<2.5% (very low)



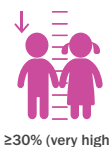
2.5 - <10% (low)



10 - <20% (medium)



20 - <30% (high)



≥30% (very high)



modelled estimate not presented

Source: UNICEF, WHO, World Bank Group, Joint Child Malnutrition Estimates, 2021 edition. Note: 1. Household survey data on child height were not collected in 2020 due to physical distancing policies, with the exception of four surveys. These estimates are therefore based almost entirely on data collected before 2020 and do not take into account the impact of the COVID-19 pandemic. However, one of the covariates used in the country stunting model takes the impact of COVID-19 partially into account (see page 3). These maps are stylized and not to scale; they do not reflect a position by UNICEF, WHO or World Bank Group on the legal status of any country or territory or the delimitation of any frontiers.



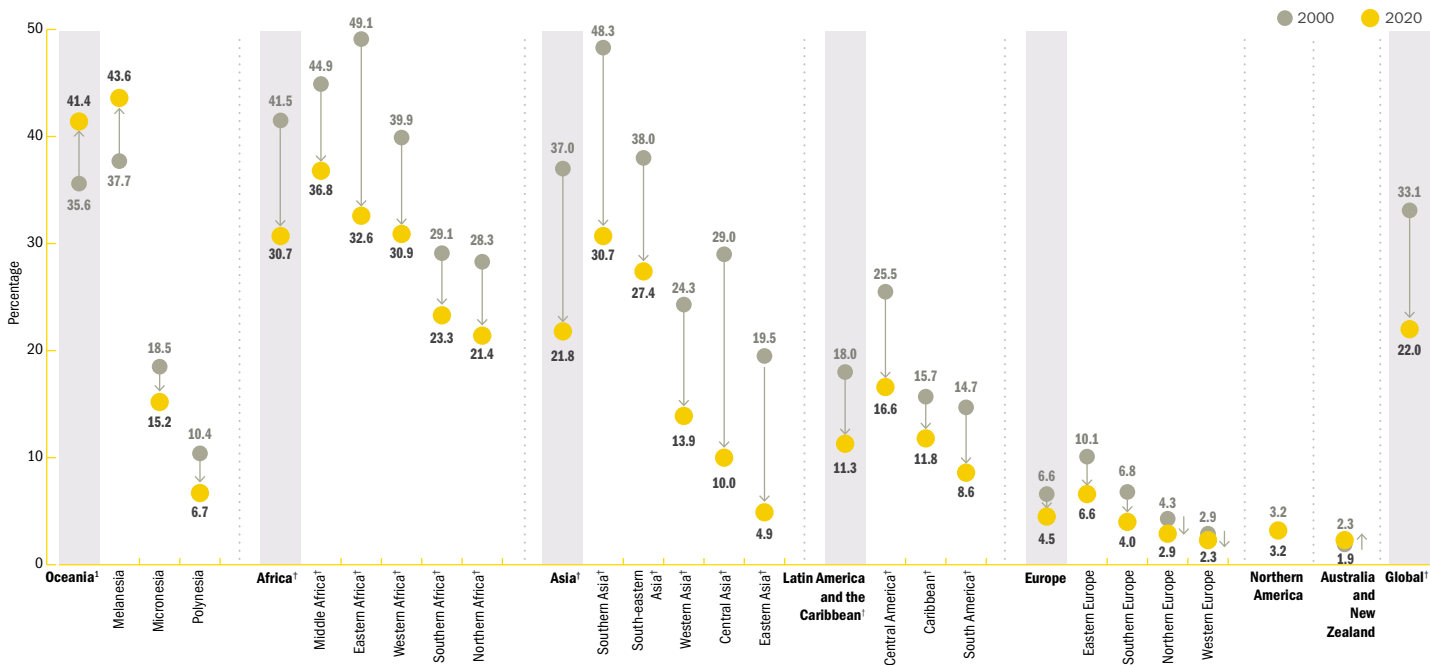
# STUNTING

# REGIONAL TRENDS

Global prevalence 2020: **22.0%**  
 Global prevalence 2000: **33.1%**  
 Global number affected 2020: **149.2 M**  
 Global number affected 2000: **203.6 M**

## Progress to reduce stunting has not been equal across regions and sub-regions

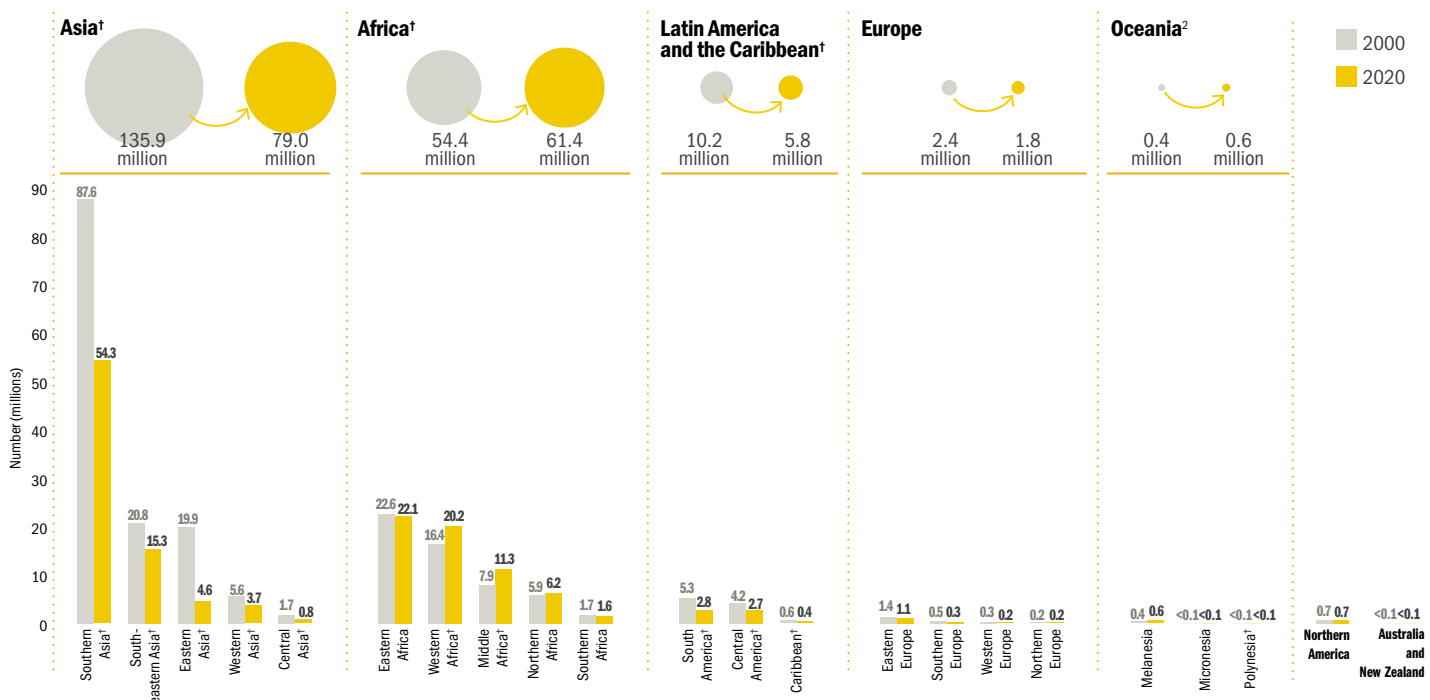
Trends in the percentage of children under 5 affected by stunting, by United Nations region/sub-region, 2000 and 2020<sup>1</sup>



Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, 2021 edition. Note: 1. Household survey data on child height were not collected in 2020 due to physical distancing policies, with the exception of four surveys. These estimates are therefore based almost entirely on data collected before 2020 and do not take into account the impact of the COVID-19 pandemic. However, one of the covariates used in the country stunting model takes the impact of COVID-19 partially into account (see page 3). 2. Oceania excluding Australia and New Zealand. †Represents regions/sub-regions where the change has been statistically significant. See page 14 for the 95% confidence intervals for graphed estimates.

## The number of children with stunting is declining in all regions except Africa

Trends in the number (millions) of children under 5 affected by stunting, by United Nations region/sub-region, 2000 and 2020<sup>1</sup>



Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, 2021 edition. Note: 1. Household survey data on child height were not collected in 2020 due to physical distancing policies, with the exception of four surveys. These estimates are therefore based almost entirely on data collected before 2020 and do not take into account the impact of the COVID-19 pandemic. However, one of the covariates used in the country stunting model takes the impact of COVID-19 partially into account (see page 3). 2. Oceania excluding Australia and New Zealand; †Represents regions/sub-regions where the change has been statistically significant. See page 15 for the 95% confidence intervals for graphed estimates.

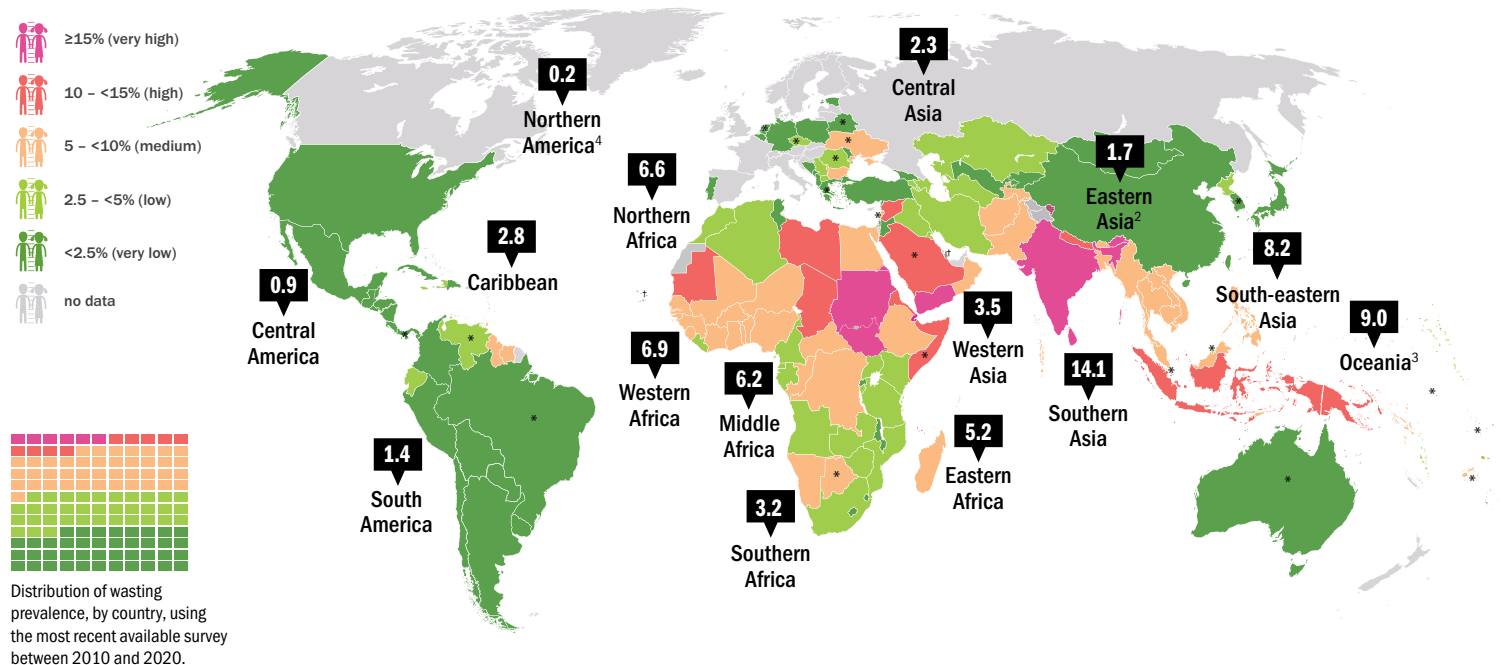


WASTING

# PREVALENCE

## Southern Asia has the highest stunting prevalence of any sub-region in the world

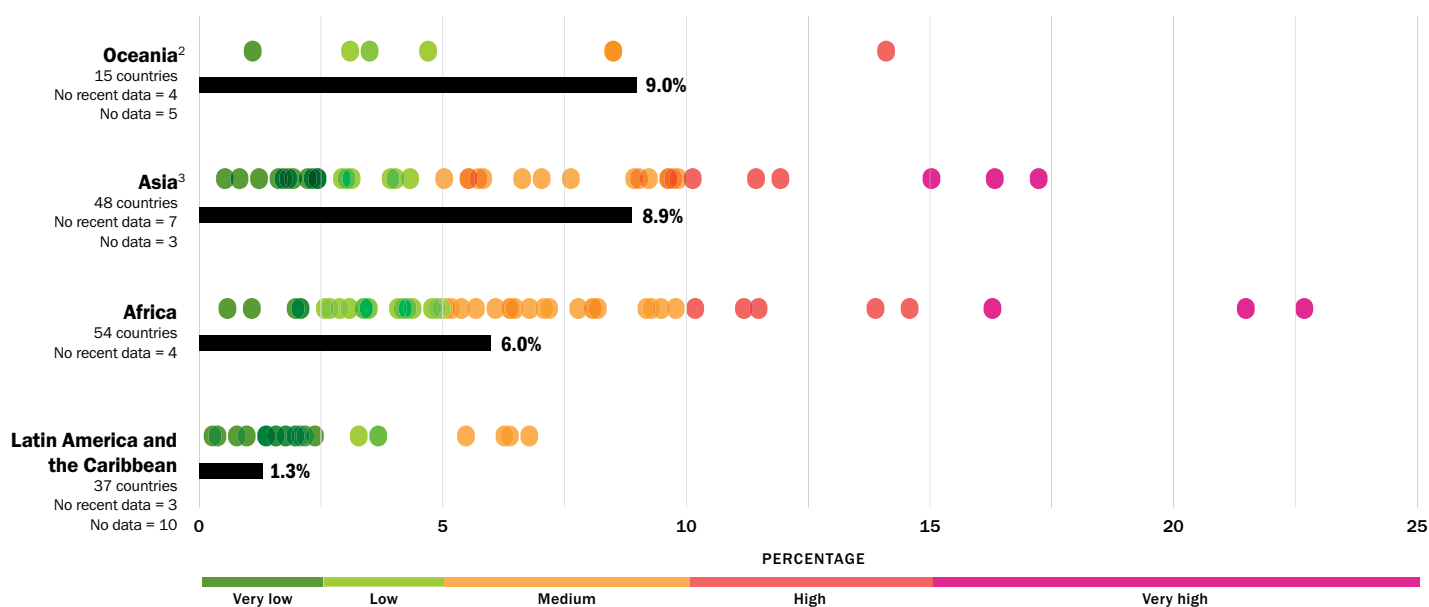
Percentage of children under 5 affected by wasting, by country and United Nations sub-region, 2020<sup>1</sup>



Source: UNICEF, WHO, World Bank Group, Joint Child Malnutrition Estimates, 2021 edition. Note: 1. Country data are the most recent available survey estimates between 2010 and 2020; exceptions where older data are shown (2000–2009) are denoted with an asterisk (\*) and where only data prior to 2000 are available the † footnote is used, denoting no recent data. The sub-regional estimates do not account for the impact of COVID-19, as household survey data on child height and weight were not collected in 2020 due to physical distancing policies, with the exception of four surveys (see page 3). 2. Eastern Asia excluding Japan. 3. Oceania excluding Australia and New Zealand. 4. The Northern America sub-regional estimate is based on data from only the United States. There is no estimate available for the sub-regions of Europe or Australia and New Zealand due to insufficient population coverage. See section about regional and global estimates on page 27 for an explanation of why trend data are not available for wasting. These maps are stylized and not to scale; they do not reflect a position by UNICEF, WHO or World Bank Group on the legal status of any country or territory or the delimitation of any frontiers.

## Regional averages can mask wide variations in country prevalence

Percentage of children under 5 affected by wasting, by country (dots) and United Nations region (bars), 2020<sup>1</sup>



Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, 2021 edition. Notes: 1. Each marker refers to the most recent country estimate between 2010 and 2020; "no recent data" refers to the number of countries for which the most recent estimate is before 2010 and "no data" refers to the number of countries without an estimate. The regional estimates do not account for the impact of COVID-19, as household survey data on child height and weight were not collected in 2020 due to physical distancing policies, with the exception of four surveys (see page 3). 2. Oceania excluding Australia and New Zealand. 3. Asia excluding Japan. There is no estimate available for Europe or Australia and New Zealand due to insufficient population coverage. North America is not shown as it only includes two countries, of which only one has data. See section about regional and global estimates on page 27 for an explanation of why trend data are not available for wasting.





WASTING

# NUMBERS AFFECTED

Global wasting prevalence 2020: **6.7%**

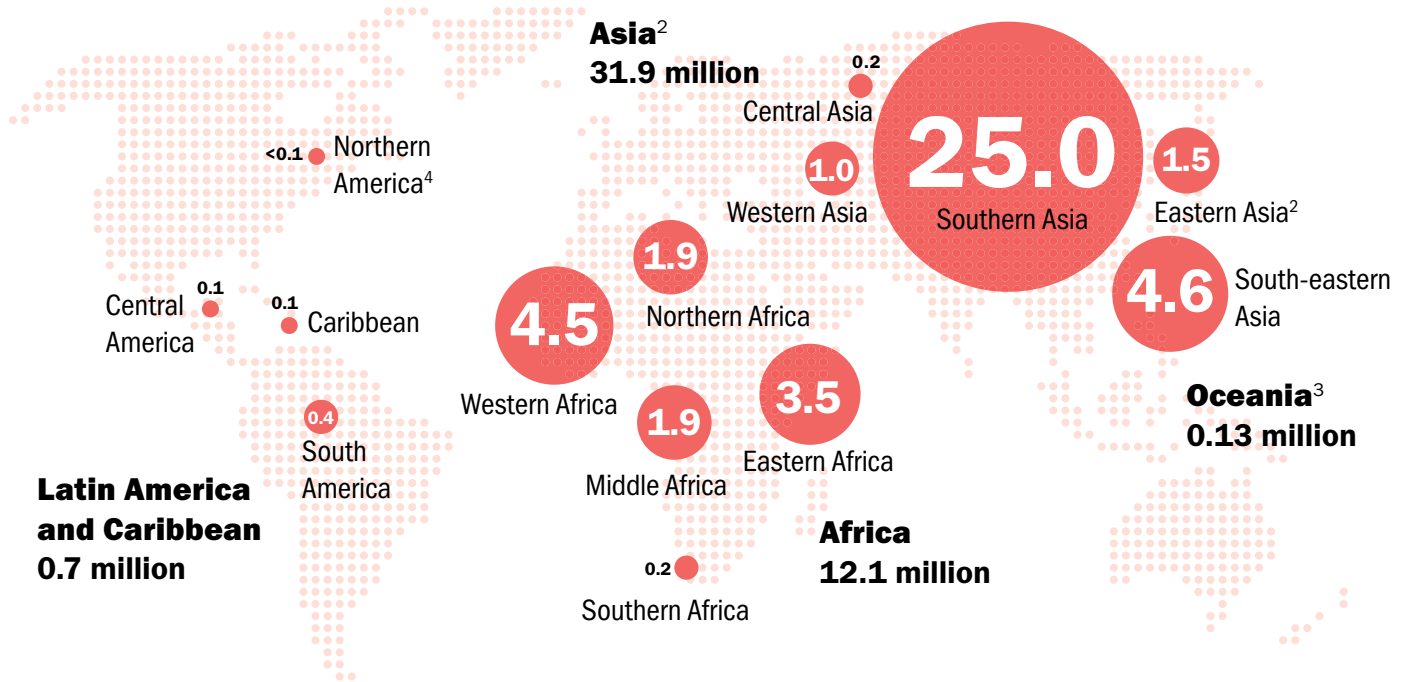
Global severe wasting prevalence 2020: **2.0%**

Global number affected by wasting 2020: **45.4 M**

Global number affected by severe wasting 2020: **13.6 M**

## More than half of all children affected by wasting live in Southern Asia

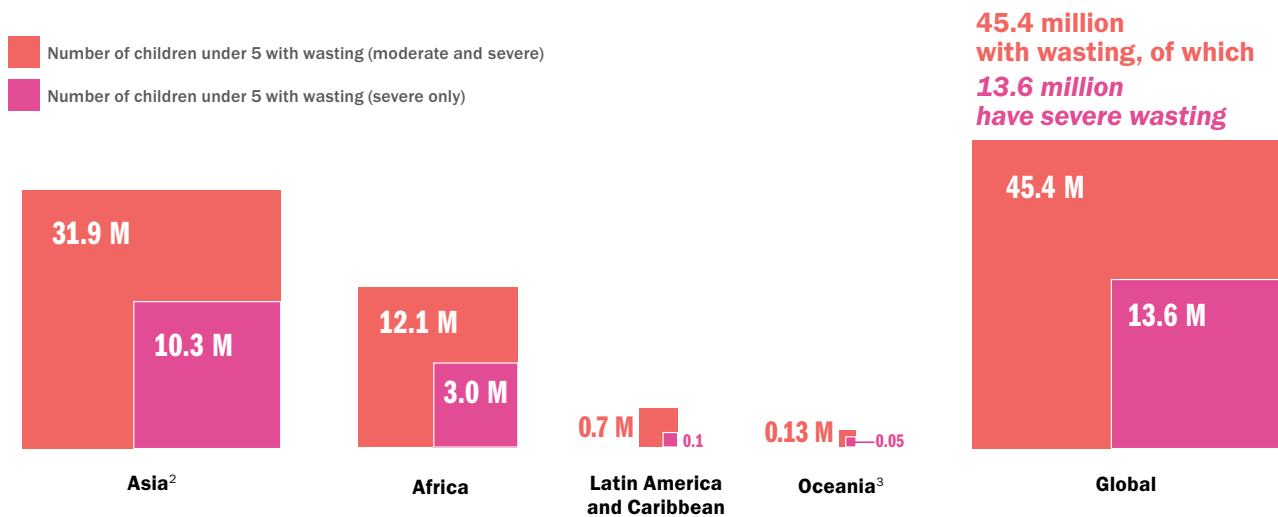
Number (millions) of children under 5 affected by wasting, by United Nations sub-region, 2020<sup>1</sup>



Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, 2021 edition. Note: 1. The estimates for the year 2020 do not account for the impact of COVID-19, as household survey data on child height and weight were not collected in 2020 due to physical distancing policies, with the exception of four surveys (see page 3). 2. Asia and Eastern Asia excluding Japan. 3. Oceania excluding Australia and New Zealand. 4. The Northern America sub-regional estimate is based on data from only the United States. There is no estimate available for Europe or Australia and New Zealand due to insufficient population coverage. Aggregates may not add up due to rounding and/or lack of estimates for some regions. See section about regional and global estimates on page 27 for an explanation of why trend data are not available for wasting.

## Asia is home to more than three quarters of all children suffering from severe wasting

Number of children under 5 affected by wasting and severe wasting, by United Nations region, 2020<sup>1</sup>



Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, 2021 edition. Note: 1. The estimates for the year 2020 do not account for the impact of COVID-19, as household survey data on child height and weight were not collected in 2020 due to physical distancing policies, with the exception of four surveys (see page 3). 2. Asia excluding Japan. 3. Oceania excluding Australia and New Zealand. There is no estimate available for Europe or Australia and New Zealand due to insufficient population coverage. North America is not shown because wasting affects <0.1 million children. Aggregates may not add up due to rounding and/or lack of estimates for some regions. See section about regional and global estimates on page 27 for an explanation of why trend data are not available for wasting or severe wasting.

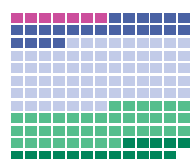


OVERWEIGHT

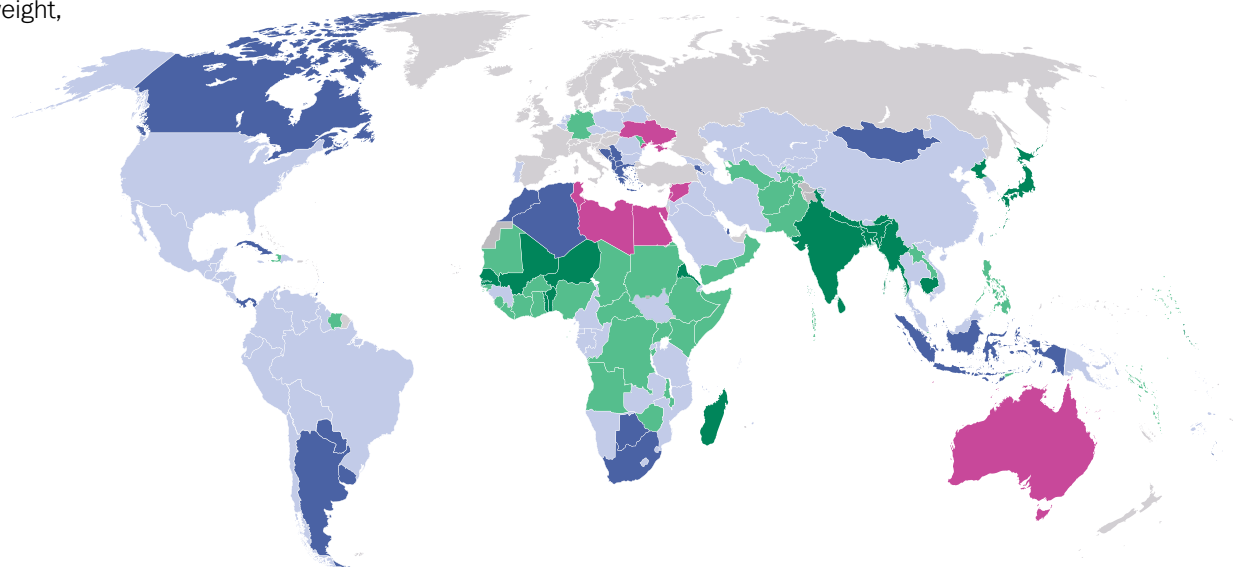
# COUNTRY TRENDS

## The number of countries with low and very low levels of overweight decreased from 64 countries in 2000 to 56 countries by 2020

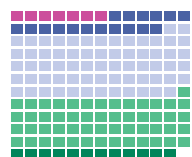
Percentage of children under 5 affected by overweight, by country, 2020<sup>1</sup>



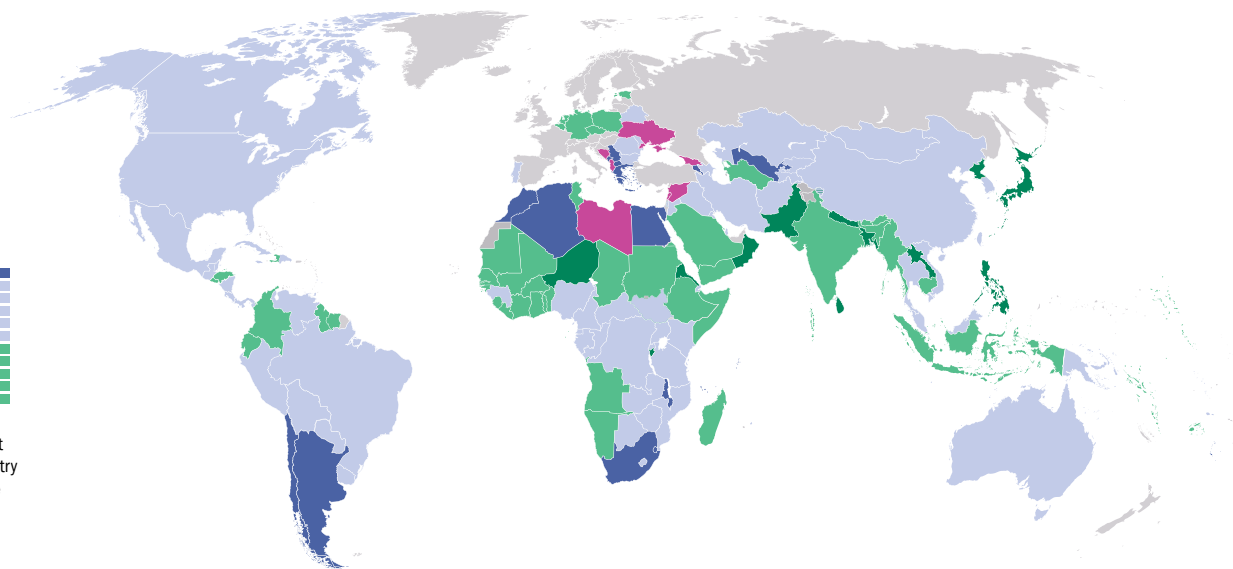
Distribution of overweight prevalence for each country with a modelled estimate presented for 2020.<sup>1</sup>



Percentage of children under 5 affected by overweight, by country, 2000



Distribution of overweight prevalence for each country with a modelled estimate presented for 2000.



<2.5% (very low)



2.5 - <5% (low)



5 - <10% (medium)



10 - <15% (high)



≥15% (very high)



modelled estimate not presented

Source: UNICEF, WHO, World Bank Group, Joint Child Malnutrition Estimates, 2021 edition. Note: 1. Household survey data on child height and weight were not collected in 2020 due to physical distancing policies, with the exception of four surveys. These estimates are therefore based almost entirely on data collected before 2020 and do not take into account the impact of the COVID-19 pandemic. However, one of the covariates used in the country overweight model takes the impact of COVID-19 partially into account (see page 3). These maps are stylized and not to scale and do not reflect a position by UNICEF, WHO or World Bank Group on the legal status of any country or territory or the delimitation of any frontiers.

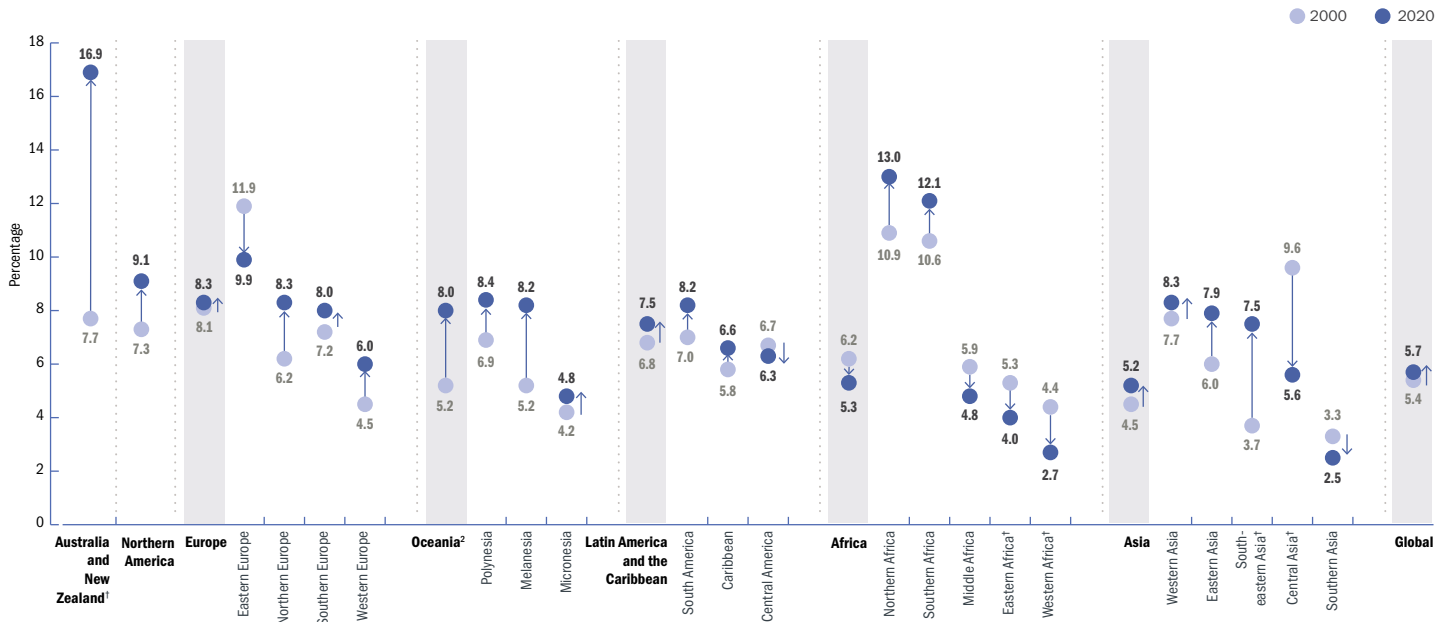


# OVERWEIGHT REGIONAL TRENDS

Global prevalence 2020: **5.7%**  
 Global prevalence 2000: **5.4%**  
 Global number affected 2020: **38.9 M**  
 Global number affected 2000: **33.3 M**

## Current levels of overweight have persisted for the last two decades in almost every region

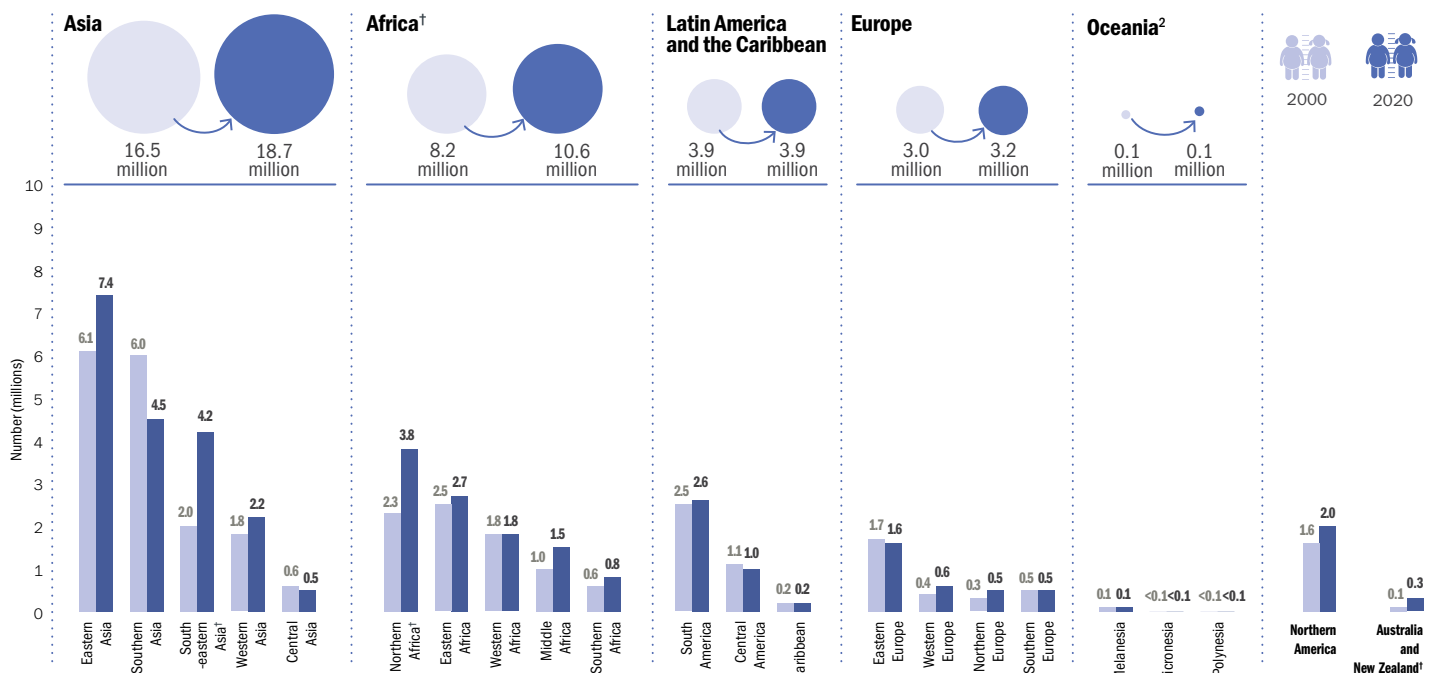
Trends in the percentage of children under 5 affected by overweight, by United Nations region/sub-region and global, 2000–2020<sup>1</sup>



Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, 2021 edition. Note: 1. Household survey data on child height and weight were not collected in 2020 due to physical distancing policies, with the exception of four surveys. These estimates are therefore based almost entirely on data collected before 2020 and do not take into account the impact of the COVID-19 pandemic. However, one of the covariates used in the country overweight model takes the impact of COVID-19 partially into account (see page 3). 2. Oceania excluding Australia and New Zealand. † Represents regions/sub-regions where the change has been statistically significant. See page 14 for the 95% confidence intervals for graphed estimates.

## South-eastern Asia and Northern Africa are the only sub-regions with a significant increase in the number of children with overweight since 2000

Number (millions) of children under 5 affected by overweight, by United Nations region/sub-region, 2000 and 2020<sup>1</sup>

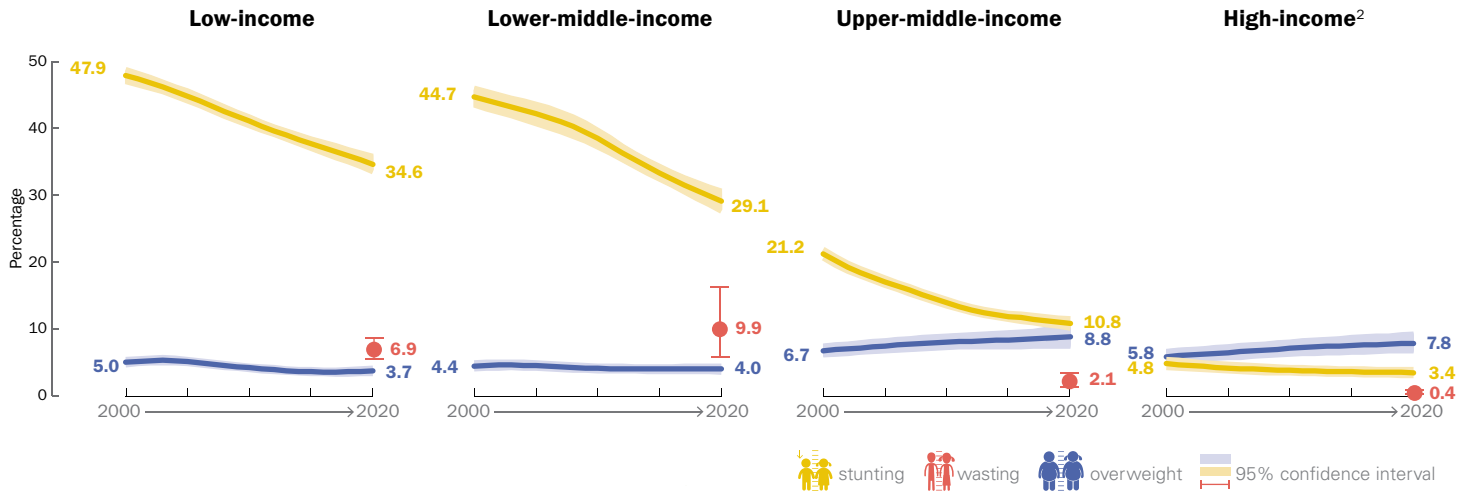


Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, 2021 edition. Note: 1. Household survey data on child height and weight were not collected in 2020 due to physical distancing policies, with the exception of four surveys. These estimates are therefore based almost entirely on data collected before 2020 and do not take into account the impact of the COVID-19 pandemic. However, one of the covariates used in the country overweight model takes the impact of COVID-19 partially into account (see page 3). 2. Oceania excluding Australia and New Zealand. † Represents regions/sub-regions where the change has been statistically significant. See page 15 for the 95% confidence intervals for graphed estimates.



## Stunting has declined by half in upper-middle income countries – but overweight is rising steadily, moving further away from the global target

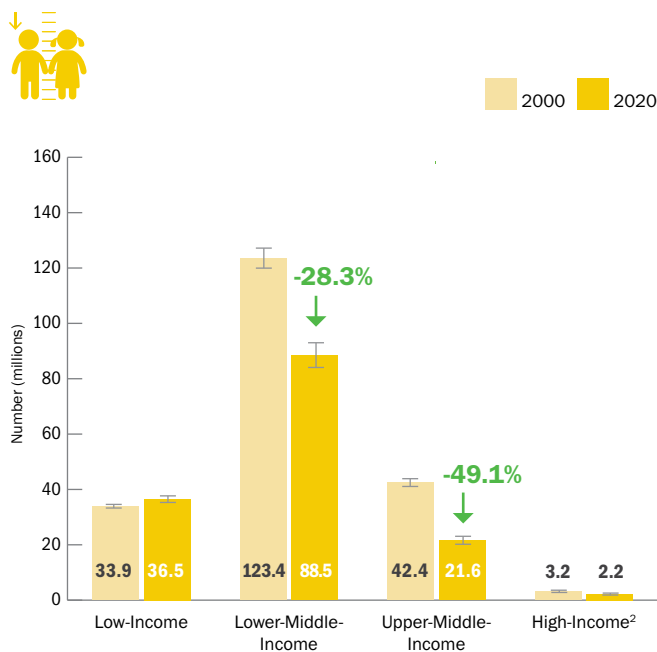
Percentage of children under 5 affected by stunting, wasting and overweight, by country income classification, 2000–2020<sup>1</sup>



Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, 2021 edition. Note: 1. Household survey data on child height and weight were not collected in 2020 due to physical distancing policies, with the exception of four surveys. These estimates are therefore based almost entirely on data collected before 2020 and do not take into account the impact of the COVID-19 pandemic. However, one of the covariates used in the country stunting and overweight models takes the impact of COVID-19 partially into account (see page 3). 2. High-income countries: consecutive low (<50 per cent) population coverage for country data (e.g., from household surveys) in all time periods after 2010 for all indicators; interpret with caution.

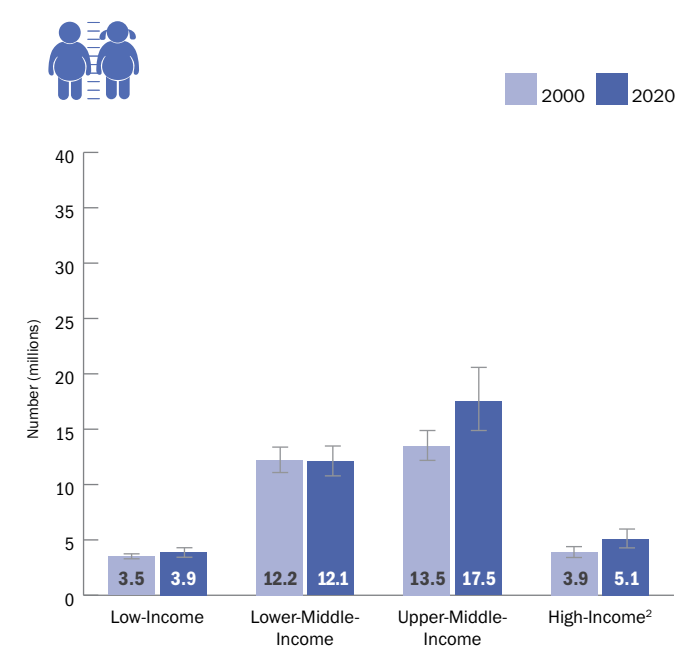
## Upper-middle-income countries have halved the number of children affected by stunting in the last 20 years

Number of children under 5 affected by stunting, by country income classification, 2000 and 2020<sup>1</sup>



## The number of children with overweight has remained unchanged for two decades

Number of children under 5 affected by overweight, by country income classification, 2000 and 2020<sup>1</sup>

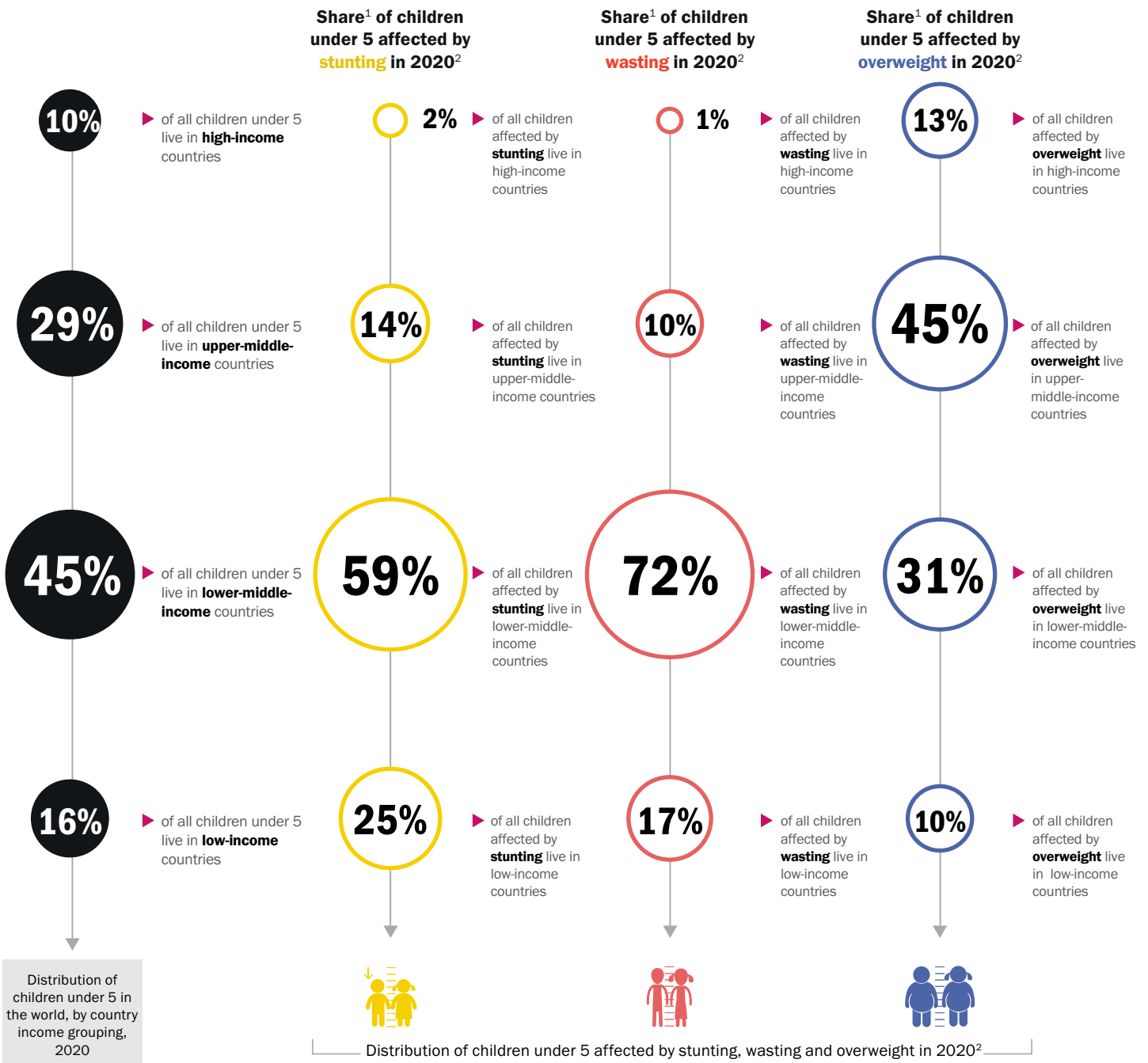


Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, 2021 edition. Note: 1. Household survey data on child height and weight were not collected in 2020 due to physical distancing policies, with the exception of four surveys. These estimates are therefore based almost entirely on data collected before 2020 and do not take into account the impact of the COVID-19 pandemic. However, one of the covariates used in the country stunting and overweight models takes the impact of COVID-19 partially into account (see page 3). 2. High-income countries: consecutive low (<50 per cent) population coverage for stunting and overweight in 2020; interpret with caution. Based on FY2021 World Bank income classification. The values for "percentage change since 2000" are based on calculations using unrounded estimates and therefore might not match values calculated using the rounded estimates presented in this brochure.



# SHARE BY INCOME GROUP

**Less than half of all children under 5 live in lower-middle income countries, but nearly two thirds of all children with stunting and three quarters of all children with wasting live there**



Source: UNICEF, WHO, World Bank Group Joint Malnutrition Estimates, 2021 edition. Note: 1. Share is relative to the total number affected across the four country-income groups; this varies from the global totals reported elsewhere in this brochure because the populations are based on the FY2021 World Bank income classification. The differences are as follows: Stunting official global estimate of 149.2 million; sum of four country-income groups = 148.8 million. Wasting official global estimate of 45.4 million; sum of country-income groups = 41.9 million. Overweight official global estimate of 38.9 million; sum of 4 country-income groups = 38.7 million. The percentages for overweight do not add up to 100 per cent due to rounding. 2. Household survey data on child height and weight were not collected in 2020 due to physical distancing policies, with the exception of four surveys. These estimates are therefore based almost entirely on data collected before 2020 and do not take into account the impact of the COVID-19 pandemic. However, one of the covariates used in the country stunting and overweight models takes the impact of COVID-19 partially into account (see page 3).

# PREVALENCE TABLE\*

	Stunting		Overweight		Wasting and severe wasting	
	2000	2020 <sup>1</sup>	2000	2020 <sup>1</sup>	2020 <sup>1</sup>	2020 <sup>1</sup>
	% stunted (moderate and severe)	% stunted (moderate and severe)	% overweight (moderate and severe)	% overweight (moderate and severe)	% wasted (moderate and severe)	% wasted (severe)
	footnote	footnote	footnote	footnote	footnote	footnote
<b>Global</b>	33.1 [32.4-33.7]	22.0 [21.3-22.7]	5.4 [5.1-5.7]	5.7 [5.3-6.3]	6.7 [5.5-7.9]	2.0 [1.6-2.5]
<b>United Nations Regions</b>						
<b>Africa</b>	41.5 [40.7-42.3]	30.7 [29.9-31.6]	6.2 [5.8-6.6]	5.3 [4.8-5.9]	6.0 [5.0-7.1]	1.5 [1.2-1.9]
<i>Eastern Africa</i>	49.1 [48.1-50.1]	32.6 [31.3-33.9]	5.3 [4.9-5.8]	4.0 [3.6-4.6]	5.2 [3.6-7.5]	1.0 [0.7-1.6]
<i>Middle Africa</i>	44.9 [43.3-46.6]	36.8 [34.1-39.5]	5.9 [4.9-7.0]	4.8 [3.9-5.9]	6.2 [4.6-8.2]	1.9 [1.4-2.6]
<i>Northern Africa</i>	28.3 [26.4-30.3]	21.4 [19.0-24.1]	10.9 [9.7-12.3]	13.0 [10.2-16.5]	6.6 [3.2-13.1]	2.7 [1.3-5.4]
<i>Southern Africa</i>	29.1 [27.1-31.3]	23.3 [21.0-25.7]	10.6 [8.5-13.1]	12.1 [9.4-15.5]	3.2 [2.1-5.1]	0.7 [0.6-1.0]
<i>Western Africa</i>	39.9 [38.1-41.8]	30.9 [29.7-32.1]	4.4 [3.6-5.3]	2.7 [2.4-3.1]	6.9 [5.9-8.1]	1.4 [1.2-1.7]
<b>Asia<sup>2</sup></b>	37.0 [36.1-38.0]	21.8 [20.6-23.1]	4.5 [4.1-4.9]	5.2 [4.5-6.0]	8.9 [6.7-11.2]	2.9 [2.1-3.7]
<i>Central Asia</i>	29.0 [27.8-30.2]	10.0 [9.1-11.0]	9.6 [8.1-11.2]	5.6 [4.5-7.1]	2.3 [1.5-3.6]	0.6 [0.2-1.6]
<i>Eastern Asia</i>	19.5 [18.4-20.7]	4.9 [4.2-5.7]	6.0 [5.1-7.0]	7.9 [5.7-10.7]	1.7 [1.6-1.7]	0.4 [0.3-0.4]
<i>Southern Asia</i>	48.3 [46.5-50.2]	30.7 [28.3-33.1]	3.3 [2.8-4.0]	2.5 [2.0-3.2]	14.1 [10.2-19.3]	4.4 [3.2-6.1]
<i>South-eastern Asia</i>	38.0 [37.1-39.0]	27.4 [25.7-29.2]	3.7 [3.3-4.1]	7.5 [6.1-9.2]	8.2 [5.9-11.2]	3.4 [1.5-7.4]
<i>Western Asia</i>	24.3 [23.5-25.0]	13.9 [12.6-15.3]	7.7 [6.9-8.5]	8.3 [7.0-9.8]	3.5 [1.4-8.4]	1.1 [0.5-2.4]
<b>Europe</b>	6.6 [5.2-8.4]	4.5 [3.3-6.1]	8.1 [6.2-10.6]	8.3 [5.8-11.8]	-	-
<i>Eastern Europe</i>	10.1 [7.0-14.3]	6.6 [4.1-10.4]	11.9 [7.6-18.3]	9.9 [5.3-17.8]	-	-
<i>Northern Europe</i>	4.3 [2.3-7.7]	3.9 [1.6-5.3]	6.2 [3.5-10.7]	8.3 [4.2-15.9]	-	-
<i>Southern Europe</i>	6.8 [4.7-9.7]	4.0 [2.6-6.0]	7.2 [5.2-10.0]	8.0 [4.9-12.7]	-	-
<i>Western Europe</i>	2.9 [1.7-5.1]	2.3 [1.4-3.7]	4.5 [2.8-7.1]	6.0 [3.5-9.9]	-	-
<b>Latin American and Caribbean</b>	18.0 [17.4-18.5]	11.3 [10.3-12.4]	6.8 [6.1-7.6]	7.5 [6.2-9.0]	1.3 [0.8-1.8]	0.3 [0.2-0.4]
<i>Caribbean</i>	15.7 [14.8-16.6]	11.8 [10.5-13.1]	5.8 [4.7-7.1]	6.6 [5.3-8.1]	2.8 [2.0-3.9]	0.8 [0.6-0.9]
<i>Central America</i>	25.5 [24.3-26.7]	16.6 [15.3-18.0]	6.7 [5.3-8.2]	6.3 [5.2-7.7]	0.9 [0.7-1.0]	0.2 [0.1-0.3]
<i>South America</i>	14.7 [14.1-15.4]	8.6 [7.2-10.2]	7.0 [6.1-8.0]	8.2 [6.3-10.6]	1.4 [0.8-2.4]	0.3 [0.1-0.6]
<b>Oceania excl. Australia &amp; New Zealand</b>	35.6 [30.3-41.2]	41.4 [33.4-49.8]	5.2 [3.9-7.0]	8.0 [5.1-12.4]	9.0 [5.4-14.6]	3.5 [2.6-4.8]
<b>Australia and New Zealand</b>	1.9 [1.2-3.0]	2.3 [1.4-3.7]	7.7 [5.7-10.3]	16.9 [12.4-22.5]	-	-
<i>Northern America</i>	3.2 [2.8-3.7]	3.2 [2.7-3.8]	7.3 [6.0-8.9]	9.1 [6.9-11.8]	0.2	<0.1
<b>SDG Regions</b>						
Australia and New Zealand	1.9 [1.2-3.0]	2.3 [1.4-3.7]	7.7 [5.7-10.3]	16.9 [12.4-22.5]	-	-
Central Asia and Southern Asia	47.7 [45.9-49.5]	29.8 [27.5-32.1]	3.5 [3.0-4.1]	2.7 [2.1-3.3]	13.6 [9.3-17.9]	4.2 [2.9-5.6]
Eastern Asia and South-eastern Asia	26.1 [25.3-26.8]	13.4 [12.6-14.2]	5.2 [4.6-5.9]	7.7 [6.2-9.5]	4.1 [3.1-5.1]	1.5 [0.5-2.5]
Latin America and the Caribbean	18.0 [17.4-18.5]	11.3 [10.3-12.4]	6.8 [6.1-7.6]	7.5 [6.2-9.0]	1.3 [0.8-1.8]	0.3 [0.2-0.4]
Northern America and Europe	5.4 [4.4-6.5]	4.0 [3.2-5.1]	7.8 [6.4-9.5]	8.6 [6.7-11.0]	-	-
Oceania excl. Australia & New Zealand	35.6 [30.3-41.2]	41.4 [33.4-49.8]	5.2 [3.9-7.0]	8.0 [5.1-12.4]	9.0 [5.4-14.6]	3.5 [2.6-4.8]
Sub-Saharan Africa	44.0 [43.1-44.8]	32.3 [31.5-33.2]	5.3 [4.9-5.8]	4.0 [3.7-4.3]	5.9 [5.0-6.9]	1.3 [1.1-1.5]
Western Asia and Northern Africa	26.2 [25.2-27.2]	17.8 [16.4-19.3]	9.2 [8.5-10.0]	10.8 [9.2-12.6]	5.1 [2.3-8.0]	1.9 [0.9-3.0]
<b>UNICEF</b>						
East Asia and Pacific	25.9 [25.1-26.7]	13.5 [12.7-14.3]	5.2 [4.6-5.9]	7.8 [6.4-9.6]	3.7 [2.3-5.1]	1.4 [0.4-2.5]
Europe and Central Asia	11.1 [9.9-12.4]	5.7 [4.8-6.8]	8.2 [6.6-10.0]	7.9 [6.0-10.4]	-	-
<i>Eastern Europe and Central Asia</i>	17.9 [15.9-20.1]	8.1 [6.5-10.0]	10.9 [8.3-14.2]	8.7 [5.8-12.7]	1.9 [1.3-2.7]	0.6 [0.4-0.9]
<i>Western Europe</i>	3.9 [2.9-5.3]	2.8 [2.1-3.7]	5.3 [4.1-6.9]	7.0 [5.1-9.6]	-	-
Latin America and Caribbean	18.0 [17.4-18.5]	11.3 [10.3-12.4]	6.8 [6.1-7.6]	7.5 [6.2-9.0]	1.3 [0.8-1.8]	0.3 [0.2-0.4]
Middle East and North Africa	24.1 [23.5-24.7]	15.6 [14.2-17.2]	9.9 [9.1-10.8]	12.0 [9.9-14.5]	6.3 [3.7-10.6]	2.5 [1.3-4.9]
North America	3.2 [2.8-3.7]	3.2 [2.7-3.8]	7.3 [6.0-8.9]	9.1 [6.9-11.8]	0.2	<0.1
South Asia	49.4 [47.5-51.3]	31.8 [29.3-34.4]	3.2 [2.7-3.9]	2.2 [1.8-2.8]	14.7 [11.1-19.2]	4.5 [3.3-6.2]
Sub-Saharan Africa	43.8 [43.0-44.7]	32.4 [31.5-33.2]	5.3 [4.9-5.7]	3.9 [3.6-4.3]	6.2 [5.3-7.2]	1.4 [1.2-1.7]
<i>East and Southern Africa</i>	46.4 [45.4-47.5]	32.3 [31.1-33.5]	5.6 [5.2-6.0]	4.5 [4.1-5.0]	5.3 [3.7-7.4]	1.1 [0.8-1.7]
<i>West and Central Africa</i>	41.1 [39.6-42.5]	32.5 [31.2-33.7]	4.9 [4.3-5.7]	3.4 [3.0-3.8]	7.2 [6.5-7.9]	1.7 [1.5-1.9]
<b>WHO</b>						
African Region	43.6 [42.8-44.5]	31.7 [30.9-32.6]	5.5 [5.1-6.0]	4.2 [3.9-4.6]	5.8 [4.9-6.8]	1.4 [1.1-1.6]
Region of the Americas	13.9 [13.5-14.4]	8.9 [8.2-9.7]	7.0 [6.3-7.7]	8.0 [6.8-9.3]	0.7 [0.3-1.5]	0.1 [0.0-0.3]
South-East Asia Region	48.4 [46.6-50.2]	30.1 [27.7-32.7]	3.2 [2.6-3.8]	3.3 [2.7-4.1]	14.5 [11.0-18.9]	4.5 [3.3-6.2]
Eastern Mediterranean Region	33.9 [32.6-35.3]	26.2 [24.5-27.9]	7.2 [6.6-7.9]	7.7 [6.4-9.1]	7.4 [5.7-9.5]	3.0 [2.2-4.1]
Europe Region	11.0 [9.9-12.3]	5.7 [4.7-6.8]	8.1 [6.6-10.0]	7.9 [6.0-10.3]	-	-
Western Pacific Region	22.2 [21.3-23.1]	9.3 [8.6-10.0]	5.5 [4.8-6.3]	7.5 [5.8-9.7]	2.1 [1.4-3.1]	0.5 [0.3-0.8]
<b>World Bank Income</b>						
Low income	47.9 [47.0-48.8]	34.6 [33.5-35.8]	5.0 [4.6-5.4]	3.7 [3.3-4.1]	6.9 [5.6-8.6]	1.6 [1.2-2.1]
Middle Income	34.8 [34.0-35.6]	21.8 [20.8-22.7]	5.4 [5.1-5.8]	5.9 [5.3-6.6]	6.8 [3.7-9.9]	2.0 [0.9-3.0]
<i>Lower-middle income</i>	44.7 [43.5-46.0]	29.1 [27.6-30.6]	4.4 [4.0-4.9]	4.0 [3.5-4.4]	9.9 [5.8-16.2]	2.8 [1.6-5.1]
<i>Upper middle income</i>	21.2 [20.6-21.9]	10.8 [10.1-11.5]	6.7 [6.1-7.4]	8.8 [7.4-10.3]	2.1 [1.3-3.4]	0.6 [0.3-1.3]
High income	4.8 [4.2-5.4]	3.4 [3.0-3.9]	5.8 [5.1-6.6]	7.8 [6.7-9.2]	0.4 [0.2-0.8]	0.0 [0.0-0.1]

**Notes:** 1. Household survey data on child height and weight were not collected in 2020 due to physical distancing policies, with the exception of four surveys. These estimates are therefore based almost entirely on data collected before 2020 and do not take into account the impact of the COVID-19 pandemic. However, one of the covariates used in the country stunting and overweight models takes the impact of COVID-19 partially into account (see page 3). 2. For wasting and severe wasting: Asia excluding Japan, Eastern Asia excluding Japan, and Eastern Europe and Central Asia excluding Russia. 3. Consecutive low (<50 per cent) population coverage; interpret with caution. Population coverage is based on an assessment of available data within distinct five-year periods and was calculated as the sum of country five-year average populations for which surveys are available in the dataset, divided by the total of country five-year average population for all countries in the region. Estimates are flagged as having consecutive low population coverage when two five-year periods in a row are below 50 per cent. The population coverage for the most recent five-year period for the United Nations regions is available on page 28. 4. For wasting and severe wasting, the Northern America estimates were derived applying mixed-effect models with sub-regions as fixed effects<sup>3</sup> data were available only for the United States, preventing the estimation of confidence intervals. Model selection is based on best fit.

## NUMBERS (MILLIONS) AFFECTED TABLE\*

	Stunting		Overweight				Wasting and severe wasting	
	2000	2020 <sup>1</sup>	2000	2020 <sup>1</sup>	2020 <sup>2</sup>	2020 <sup>1</sup>	footnote	footnote
	number (millions) stunted (moderate and severe)	number (millions) stunted (moderate and severe)	number (millions) overweight (moderate and severe)	number (millions) overweight (moderate and severe)	number (millions) wasted (moderate and severe)	number (millions) wasted (severe)	footnote	footnote
<b>Global</b>	203.6 [199.8-207.4]	149.2 [144.4-154.2]	33.3 [31.5-35.1]	38.9 [35.6-42.4]	45.4 [37.0-53.7]	13.6 [10.6-16.7]		
<b>United Nations</b>								
<b>Africa</b>	54.4 [53.4-55.4]	61.4 [59.8-63.1]	8.2 [7.6-8.7]	10.6 [9.6-11.7]	12.1 [10.0-14.1]	3.0 [2.4-3.7]		
<i>Eastern Africa</i>	22.6 [22.1-23.0]	22.1 [21.3-23.1]	2.5 [2.3-2.7]	2.7 [2.4-3.1]	3.5 [2.4-5.1]	0.7 [0.5-1.1]		
<i>Middle Africa</i>	7.9 [7.6-8.2]	11.3 [10.5-12.2]	1.0 [0.9-1.2]	1.5 [1.2-1.8]	1.9 [1.4-2.5]	0.6 [0.4-0.8]		
<i>Northern Africa</i>	5.9 [5.5-6.3]	6.2 [5.5-7.0]	2.3 [2.0-2.6]	3.8 [3.0-4.8]	1.9 [0.9-3.8]	0.8 [0.4-1.6]		
<i>Southern Africa</i>	1.7 [1.6-1.8]	1.6 [1.4-1.7]	0.6 [0.5-0.8]	0.8 [0.6-1.1]	0.2 [0.1-0.3]	0.1 [0.0-0.1]		
<i>Western Africa</i>	16.4 [15.6-17.1]	20.2 [19.4-21.0]	1.8 [1.5-2.2]	1.8 [1.5-2.0]	4.5 [3.8-5.3]	0.9 [0.8-1.1]		
<b>Asia<sup>2</sup></b>	135.9 [132.3-139.5]	79.0 [74.7-83.6]	16.5 [15.1-18.0]	18.7 [16.2-21.6]	31.9 [23.9-39.9]	10.3 [7.3-13.2]		
<i>Central Asia</i>	1.7 [1.6-1.8]	0.8 [0.7-0.9]	0.6 [0.5-0.7]	0.5 [0.4-0.6]	0.2 [0.1-0.3]	0.0 [0.0-0.1]		
<i>Eastern Asia</i>	19.9 [18.8-21.0]	4.6 [4.0-5.4]	6.1 [5.2-7.2]	7.4 [5.4-10.1]	1.5 [1.4-1.6]	0.3 [0.3-0.4]		
<i>Southern Asia</i>	87.6 [84.3-91.0]	54.3 [50.1-58.6]	6.0 [5.1-7.2]	4.5 [3.5-5.6]	25.0 [18.0-34.1]	7.8 [5.6-10.8]		
<i>South-eastern Asia</i>	20.8 [20.2-21.3]	15.3 [14.4-16.3]	2.0 [1.8-2.3]	4.2 [3.4-5.1]	4.6 [3.3-6.3]	1.9 [0.9-4.2]		
<i>Western Asia</i>	5.6 [5.5-5.8]	3.7 [3.4-4.1]	1.8 [1.6-2.0]	2.2 [1.9-2.7]	1.0 [0.4-2.3]	0.3 [0.1-0.7]		
<b>Europe</b>	2.4 [1.9-3.1]	1.8 [1.3-2.4]	3.0 [2.3-3.9]	3.2 [2.3-4.6]	-	-		
<i>Eastern Europe</i>	1.4 [1.0-2.0]	1.1 [0.7-1.7]	1.7 [1.1-2.6]	1.6 [0.9-2.9]	-	-		
<i>Northern Europe</i>	0.2 [0.1-0.4]	0.2 [0.1-0.3]	0.3 [0.2-0.6]	0.5 [0.3-1.0]	-	-		
<i>Southern Europe</i>	0.5 [0.3-0.7]	0.3 [0.2-0.4]	0.5 [0.4-0.7]	0.5 [0.3-0.8]	-	-		
<i>Western Europe</i>	0.3 [0.2-0.5]	0.2 [0.1-0.4]	0.4 [0.3-0.7]	0.6 [0.4-1.0]	-	-		
<b>Latin American and Caribbean</b>	10.2 [9.9-10.5]	5.8 [5.3-6.4]	3.9 [3.5-4.3]	3.9 [3.2-4.7]	0.7 [0.4-0.9]	0.1 [0.1-0.2]		
<i>Caribbean</i>	0.6 [0.6-0.6]	0.4 [0.4-0.4]	0.2 [0.2-0.3]	0.2 [0.2-0.3]	0.1 [0.1-0.1]	<0.1		
<i>Central America</i>	4.2 [4.0-4.4]	2.7 [2.5-2.9]	1.1 [0.9-1.4]	1.0 [0.8-1.2]	0.1 [0.1-0.2]	<0.1		
<i>South America</i>	5.3 [5.1-5.6]	2.8 [2.3-3.3]	2.5 [2.2-2.9]	2.6 [2.0-3.4]	0.4 [0.3-0.8]	0.1 [0.0-0.2]		
<b>Oceania excl. Australia &amp; New Zealand</b>	0.4 [0.4-0.5]	0.6 [0.5-0.7]	0.1 [0.0-0.1]	0.1 [0.1-0.2]	0.1 [0.1-0.2]	0.1 [0.0-0.1]		
<b>Australia and New Zealand</b>	0.0 [0.0-0.0]	0.0 [0.0-0.1]	0.1 [0.1-0.2]	0.3 [0.2-0.4]	-	-		
<i>Northern America</i>	0.7 [0.6-0.8]	0.7 [0.6-0.8]	1.6 [1.3-1.9]	2.0 [1.5-2.6]	<0.1	<0.1		
<b>SDG Regions</b>								
Australia and New Zealand	0.0 [0.0-0.0]	0.0 [0.0-0.1]	0.1 [0.1-0.2]	0.3 [0.2-0.4]	-	-		
Central Asia and Southern Asia	89.3 [86.0-92.7]	55.1 [50.9-59.5]	6.6 [5.6-7.8]	4.9 [4.0-6.1]	25.2 [17.3-33.1]	7.9 [5.3-10.4]		
Eastern Asia and South-eastern Asia	40.8 [39.6-42.0]	20.1 [18.9-21.4]	8.1 [7.2-9.2]	11.6 [9.3-14.3]	6.0 [4.5-7.4]	2.2 [0.7-3.7]		
Latin America and the Caribbean	10.2 [9.9-10.5]	5.8 [5.3-6.4]	3.9 [3.5-4.3]	3.9 [3.2-4.7]	0.7 [0.4-0.9]	0.1 [0.1-0.2]		
Northern America and Europe	3.1 [2.6-3.8]	2.4 [1.9-3.1]	4.5 [3.7-5.5]	5.2 [4.1-6.7]	-	-		
Oceania excl. Australia & New Zealand	0.4 [0.4-0.5]	0.6 [0.5-0.7]	0.1 [0.0-0.1]	0.1 [0.1-0.2]	0.1 [0.1-0.2]	0.1 [0.0-0.1]		
Sub-Saharan Africa	48.5 [47.5-49.4]	55.2 [53.7-56.7]	5.9 [5.5-6.4]	6.8 [6.3-7.4]	10.1 [8.6-11.7]	2.2 [1.9-2.6]		
Western Asia and Northern Africa	11.5 [11.1-12.0]	10.0 [9.2-10.8]	4.1 [3.7-4.4]	6.0 [5.1-7.1]	2.9 [1.3-4.5]	1.1 [0.5-1.7]		
<b>UNICEF</b>								
East Asia and Pacific	41.2 [40.0-42.5]	20.7 [19.5-22.0]	8.3 [7.4-9.4]	12.0 [9.8-14.8]	5.7 [3.5-7.9]	2.2 [0.5-3.8]		
Europe and Central Asia	5.6 [5.0-6.3]	3.2 [2.6-3.8]	4.1 [3.4-5.1]	4.4 [3.3-5.7]	-	-		
<i>Eastern Europe and Central Asia</i>	4.7 [4.1-5.2]	2.5 [2.0-3.1]	2.8 [2.1-3.7]	2.6 [1.8-3.9]	0.4 [0.3-0.6]	0.1 [0.1-0.2]		
<i>Western Europe</i>	1.0 [0.7-1.3]	0.7 [0.5-0.9]	1.3 [1.0-1.7]	1.7 [1.3-2.4]	-	-		
Latin America and Caribbean	10.2 [9.9-10.5]	5.8 [5.3-6.4]	3.9 [3.5-4.3]	3.9 [3.2-4.7]	0.7 [0.4-0.9]	0.1 [0.1-0.2]		
Middle East and North Africa	9.0 [8.8-9.2]	7.7 [7.0-8.5]	3.7 [3.4-4.0]	5.9 [4.9-7.2]	3.1 [1.8-5.2]	1.2 [0.6-2.4]		
North America	0.7 [0.6-0.8]	0.7 [0.6-0.8]	1.6 [1.3-1.9]	2.0 [1.5-2.6]	<0.1	<0.1		
South Asia	86.8 [83.4-90.1]	53.8 [49.6-58.2]	5.6 [4.7-6.8]	3.7 [3.0-4.7]	24.8 [18.8-32.4]	7.6 [5.6-10.4]		
Sub-Saharan Africa	50.4 [49.4-51.4]	57.3 [55.8-58.9]	6.1 [5.6-6.5]	7.0 [6.4-7.6]	11.1 [9.3-12.8]	2.5 [2.1-3.0]		
<i>East and Southern Africa</i>	27.6 [27.0-28.3]	28.0 [27.0-29.1]	3.3 [3.1-3.6]	3.9 [3.5-4.4]	4.6 [3.2-6.5]	1.0 [0.7-1.5]		
<i>West and Central Africa</i>	22.8 [22.0-23.6]	29.3 [28.2-30.4]	2.7 [2.4-3.1]	3.0 [2.7-3.4]	6.5 [5.9-7.1]	1.6 [1.4-1.7]		
<b>WHO</b>								
African Region	48.6 [47.6-49.5]	54.9 [53.4-56.3]	6.2 [5.7-6.7]	7.3 [6.7-8.0]	9.9 [8.4-11.7]	2.3 [1.9-2.8]		
Region of the Americas	10.8 [10.5-11.2]	6.5 [6.0-7.1]	5.4 [4.9-6.0]	5.8 [5.0-6.8]	0.5 [0.2-1.1]	0.1 [0.0-0.3]		
South-East Asia Region	88.5 [85.2-91.8]	51.1 [46.9-55.4]	5.8 [4.8-6.9]	5.6 [4.6-6.9]	24.6 [18.7-31.9]	7.7 [5.6-10.4]		
Eastern Mediterranean Region	22.3 [21.4-23.2]	22.4 [21.0-23.9]	4.8 [4.3-5.2]	6.6 [5.5-7.8]	6.3 [4.9-8.1]	2.6 [1.9-3.6]		
Europe Region	5.6 [5.0-6.3]	3.2 [2.7-3.8]	4.2 [3.4-5.1]	4.4 [3.4-5.8]	-	-		
Western Pacific Region	27.5 [26.4-28.7]	11.0 [10.2-11.9]	6.8 [5.9-7.8]	8.8 [6.8-11.4]	2.4 [1.6-3.6]	0.6 [0.4-1.0]		
<b>World Bank Income</b>								
Low income	33.9 [33.3-34.6]	36.5 [35.3-37.7]	3.5 [3.3-3.8]	3.9 [3.5-4.3]	7.3 [5.9-9.1]	1.7 [1.3-2.2]		
Middle Income	165.5 [161.8-169.2]	109.8 [105.1-114.5]	25.7 [24.1-27.5]	29.7 [26.7-33.1]	34.3 [18.8-49.8]	9.8 [4.7-15.0]		
<i>Lower-middle income</i>	123.4 [119.9-126.9]	88.5 [84.0-93.0]	12.2 [11.1-13.4]	12.1 [10.8-13.5]	30.1 [17.8-49.3]	8.6 [4.8-15.5]		
<i>Upper middle income</i>	42.4 [41.1-43.8]	21.6 [20.2-23.0]	13.5 [12.2-14.9]	17.5 [14.9-20.6]	4.3 [2.7-6.8]	1.2 [0.6-2.7]		
High income	3.2 [2.8-3.6]	2.2 [2.0-2.5]	3.9 [3.4-4.4]	5.1 [4.3-6.0]	0.2 [0.1-0.5]	<0.1		

\*Complete data series for stunting and overweight (2000, 2005, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019 and 2020) and the latest year for wasting (2020) estimates of prevalence and numbers affected can be found at the websites below for global as well as for the following groupings: (i) United Nations regions and sub-regions; (ii) UNICEF regions; (iii) WHO regions; (iv) World Bank country income classifications; (v) World Bank regions; (vi) SDG regions; and (vii) the Food and Agriculture Organization's (FAO) low-income food deficient countries classification. These websites also contain a file with the country compositions for each grouping:

UNICEF <<https://data.unicef.org/topic/nutrition/malnutrition/>> WHO <[www.who.int/teams/nutrition-and-food-safety/databases/nutgrowthdb](http://www.who.int/teams/nutrition-and-food-safety/databases/nutgrowthdb)> World Bank Group <[data.worldbank.org/child-malnutrition](http://data.worldbank.org/child-malnutrition)>

## COUNTRY

## PREVALENCE TABLE

Country Name	MODELLED ESTIMATES								Year	Wasting <sup>1</sup> (PERCENT)		
	Stunting (PERCENT)				Overweight (PERCENT)					Value	Threshold <sup>3</sup>	Progress assessment <sup>4</sup>
	2012 value	2020 <sup>2</sup> value	2020 threshold <sup>3</sup>	Progress assessment <sup>4</sup>	2012 value	2020 <sup>2</sup> value	2020 threshold <sup>3</sup>	Progress assessment <sup>4</sup>				
Afghanistan	44.7	35.1	Very high	●	5.3	3.9	Low	●	2018	5.1	Medium	●
Albania	17.6	9.6	Low	●	21.7	14.6	High	●	2017	1.6	Very low	●
Algeria	12.6	9.3	Low	●	13.5	12.9	High	●	2019	2.7	Low	●
Andorra	-	-	No data	●	-	-	No data	●	-	-	No data	●
Angola	32.4	37.7	Very high	●	2.9	3.5	Low	●	2015	4.9	Low	●
Anguilla	-	-	No data	●	-	-	No data	●	-	-	No data	●
Antigua and Barbuda	-	-	No data	●	-	-	No data	●	-	-	No data	●
Argentina	7.8	7.8	Low	●	12.4	12.9	High	●	2019	1.6	Very low	●
Armenia	14.0	9.1	Low	●	14.8	10.8	High	●	2016	4.4	Low	●
Australia	2.1	2.1	Very low	●	14.2	18.5	Very high	●	2007	<0.1	Very low	●
Austria	-	-	No data	●	-	-	No data	●	-	-	No data	●
Azerbaijan	17.2	16.3	Medium	●	11.1	9.4	Medium	●	2013	3.2	Low	●
Bahamas	-	-	No data	●	-	-	No data	●	-	-	No data	●
Bahrain	6.3	5.1	Low	●	5.6	6.4	Medium	●	1995	-	No recent data	●
Bangladesh	38.1	30.2	Very high	●	1.7	2.1	Very low	●	2019	9.8	Medium	●
Barbados	7.6	6.6	Low	●	10.8	11.4	High	●	2012	6.8	Medium	●
Belarus	4.0	3.9	Low	●	9.2	6.8	Medium	●	2005	2.2	Very low	●
Belgium	2.7	2.3	Very low	●	4.5	5.1	Medium	●	2014	0.4	Very low	●
Belize	17.5	13.3	Medium	●	9.0	8.0	Medium	●	2015	1.8	Very low	●
Benin	33.8	31.3	Very high	●	1.6	2.2	Very low	●	2018	5.0	Medium	●
Bhutan	30.2	22.4	High	●	6.1	5.2	Medium	●	2010	5.9	Medium	●
Bolivia (Plurinational State of)	20.3	12.7	Medium	●	9.0	8.8	Medium	●	2016	2.0	Very low	●
Bosnia and Herzegovina	9.3	9.1	Low	●	18.9	12.8	High	●	2012	2.3	Very low	●
Botswana	24.4	22.8	High	●	10.6	11.0	High	●	2007	7.3	Medium	●
Brazil	6.3	6.1	Low	●	6.9	7.3	Medium	●	2007	1.8	Very low	●
British Virgin Islands	-	-	No data	●	-	-	No data	●	-	-	No data	●
Brunei Darussalam	17.5	12.7	Medium	●	8.4	9.3	Medium	●	2009	2.9	Low	●
Bulgaria	7.5	6.4	Low	●	8.2	5.7	Medium	●	2014	6.3	Medium	●
Burkina Faso	33.9	25.5	High	●	1.7	2.6	Low	●	2019	8.1	Medium	●
Burundi	56.8	57.6	Very high	●	2.3	3.1	Low	●	2019	4.8	Low	●
Cabo Verde	12.2	9.7	Low	●	-	-	No data	●	1994	-	No recent data	●

## Notes

1. The most recent estimate between 2000 and 2020 in the JME country dataset is reported for wasting. See page 29 for link to full country time series.
2. Household survey data on child height and weight were not collected in 2020 due to physical distancing policies, with the exception of four surveys. These estimates are therefore based almost entirely on data collected before 2020 and do not take into account the impact of the COVID-19 pandemic. However, one of the covariates used in the country stunting and overweight models takes the impact of COVID-19 partially into account (see page 3).
3. See page 24 for prevalence thresholds. For stunting and overweight, 'no data' is used for countries without any input data (e.g., household survey data) for use in the country-level models or where the modelled estimates remain pending final review. For wasting, 'no recent data' is used when the most recent data point is from before 2000 and 'no data' is used for countries without any data.
4. Notes on progress assessment: Progress was assessed against SDG target 2.2 for 2030<sup>6</sup> using an adapted version of rules from the WHO-UNICEF Technical Expert Advisory Group on Nutrition Monitoring.<sup>7</sup> For stunting and overweight, the JME country modelled estimates from 2012 to 2020 were used to calculate the annual average rate of reduction (AARR) for countries with at least one input data point (e.g., from household surveys) more recent than 1999. For wasting, all available country data (e.g., from household surveys) between 2005 and 2020 in the 2021 JME country dataset were used to calculate the AARR for countries with at least two input data points, of which at least one was more recent than 2012. See Table 1 (page 17) for progress assessment rules by indicator.
5. The most recent country data point (e.g., from household surveys) used to generate the modelled stunting and overweight estimates is from before the year 2000; interpret with caution.
6. Modelled estimate pending final review.








## COUNTRY

## NUMBERS AFFECTED (THOUSANDS) TABLE

Country Name	MODELLED ESTIMATES											
	Stunting (NUMBERS)					Overweight (NUMBERS)					Wasting <sup>1</sup> (NUMBERS)	
	2012 value	Share of 2012 global	2020 <sup>2</sup> value	Share of 2020 <sup>2</sup> global	Year	2012 value	Share of 2012 global	2020 <sup>2</sup> value	Share of 2020 <sup>2</sup> global	Year	Value	
Afghanistan	2417.6	1.4	1991.1	1.3		286.6	0.8	221.2	0.6	2018	287.4	
Albania	29.9	<0.1	16.0	<0.1		36.8	0.1	24.3	0.1	2017	2.8	
Algeria	541.6	0.3	468.9	0.3		580.3	1.6	650.4	1.7	2019	135.8	
Andorra	-	-	-	-		-	-	-	-	-	-	
Angola	1554.8	0.9	2184.7	1.5		139.2	0.4	202.8	0.5	2015	255.5	
Anguilla	-	-	-	-		-	-	-	-	-	-	
Antigua and Barbuda	-	-	-	-		-	-	-	-	-	-	
Argentina	283.6	0.2	291.5	0.2		450.9	1.2	482.0	1.2	2019	59.9	
Armenia	29.3	<0.1	18.7	<0.1		30.9	0.1	22.1	0.1	2016	9.5	
Australia	32.2	<0.1	35.1	<0.1		217.8	0.6	308.9	0.8	2007	<0.1	
Austria	-	-	-	-		-	-	-	-	-	-	
Azerbaijan	132.6	0.1	134.5	0.1		85.6	0.2	77.6	0.2	2013	25.6	
Bahamas	-	-	-	-		-	-	-	-	-	-	
Bahrain	6.2	<0.1	5.5	<0.1	5	5.5	<0.1	6.9	<0.1	5	1995	-
Bangladesh	5690.2	3.3	4327.1	2.9		253.9	0.7	300.9	0.8	2019	1417.4	
Barbados	1.3	<0.1	1.0	<0.1		1.8	<0.1	1.7	<0.1	2012	1.1	
Belarus	21.9	<0.1	21.4	<0.1		50.4	0.1	37.3	0.1	2005	9.8	
Belgium	17.5	<0.1	14.6	<0.1		29.2	0.1	32.3	0.1	2014	2.5	
Belize	6.6	<0.1	5.2	<0.1		3.4	<0.1	3.2	<0.1	2015	0.7	
Benin	553.3	0.3	597.3	0.4		26.2	0.1	42.0	0.1	2018	91.4	
Bhutan	19.6	<0.1	14.3	<0.1		4.0	<0.1	3.3	<0.1	2010	3.9	
Bolivia (Plurinational State of)	241.8	0.1	150.6	0.1		107.2	0.3	104.3	0.3	2016	23.5	
Bosnia and Herzegovina	17.0	<0.1	12.1	<0.1		34.6	0.1	17.1	<0.1	2012	4.3	
Botswana	63.3	<0.1	62.0	<0.1		27.5	0.1	29.9	0.1	2007	17.9	
Brazil	927.5	0.5	883.0	0.6		1015.8	2.7	1056.7	2.7	2007	285.9	
British Virgin Islands	-	-	-	-		-	-	-	-	-	-	
Brunei Darussalam	5.6	<0.1	4.0	<0.1		2.7	<0.1	2.9	<0.1	2009	0.9	
Bulgaria	27.9	<0.1	20.0	<0.1		30.5	0.1	17.8	<0.1	2014	21.9	
Burkina Faso	1012.4	0.6	885.5	0.6		50.8	0.1	90.3	0.2	2019	274.6	
Burundi	967.5	0.6	1183.0	0.8		39.2	0.1	63.7	0.2	2019	95.9	
Cabo Verde	6.4	<0.1	5.0	<0.1	5	-	-	-	-	5	1994	-

Table 1: Rules for progress assessment against child malnutrition indicators for SDG target 2.2

Progress assessment label	Stunting (2030 target: reduce the number of children under 5 with stunting by 50 per cent)	Overweight (2030 target: reduce the number of children under 5 with overweight to less than 3 per cent)	Wasting (2030 target: reduce the number of children under 5 with wasting to less than 3 per cent)
<b>On track</b> 	AARR > required <sup>i</sup> or prevalence < 3% <sup>ii</sup>	AARR > required <sup>iii</sup> or prevalence < 3% <sup>iv</sup>	AARR > required <sup>iii</sup> or prevalence < 3% <sup>iv</sup>
<b>Off track (some progress)</b> 	AARR < required, but > 0.5	AARR < required, but > 1.5	AARR < required, but > 2.0
<b>Off track (no progress)</b> 	-0.5 ≤ AARR < 0.5	-1.5 ≤ AARR < 1.5	-2.0 ≤ AARR < 2.0
<b>Off track (worsening)</b> 	AARR < -0.5	AARR < -1.5	AARR < -2.0
<b>Assessment not possible</b> 	Assessment not possible <sup>v</sup>	Assessment not possible <sup>v</sup>	Assessment not possible <sup>vi</sup>

i. Required AARR is based on the change in stunting prevalence corresponding to a 50 per cent reduction in the number of children affected by stunting between 2012 and 2030, considering the population growth estimated by the United Nations World Population Prospects.

ii. Countries where the point estimate or lower 95 per cent confidence interval for the year 2020 is < 3 per cent are considered on track.

iii. Required AARR is based on the required change in overweight or wasting prevalence to reduce from the baseline (2012) prevalence to 3 per cent by 2030.

iv. Countries where the point estimate for the year 2020 is < 3 per cent are considered on track.

v. Assessment is not possible for stunting and overweight where countries did not have any input data (e.g., household survey data) for the model that were more recent than 2000, and where modelled estimates remain pending final review.

vi. Assessment is not possible for wasting where countries do not have at least two data points between 2005 and 2020, with at least one point being more recent than 2012.

Country prevalence table (cont.)

Country Name	MODELLED ESTIMATES										Wasting <sup>1</sup> (PERCENT)			
	Stunting (PERCENT)					Overweight (PERCENT)					Year	Value	Threshold <sup>2</sup>	Progress assessment <sup>4</sup>
	2012 value	2020 <sup>2</sup> value	2020 threshold <sup>3</sup>	Progress assessment <sup>4</sup>	Location	2012 value	2020 <sup>2</sup> value	2020 threshold <sup>3</sup>	Progress assessment <sup>4</sup>	Location				
Cambodia	34.4	29.9	High	●		2.1	2.1	Very low	●		2014	9.7	Medium	●
Cameroon	32.5	27.2	High	●		6.9	9.6	Medium	●		2018	4.3	Low	●
Canada	-	-	No data	●		11.2	11.8	High	●		-	-	No data	●
Central African Republic	41.4	40.1	Very high	●		3.5	2.6	Low	●		2019	5.2	Medium	●
Chad	38.7	35.0	Very high	●		2.4	3.4	Low	●		2019	13.9	High	●
Chile	1.9	1.6	Very low	●		10.4	9.8	Medium	●		2014	0.3	Very low	●
China	7.4	4.7	Low	●		7.2	8.3	Medium	●		2017	1.9	Very low	●
Colombia	12.9	11.5	Medium	●		5.2	5.8	Medium	●		2016	1.6	Very low	●
Comoros	32.3	22.6	High	●		10.9	9.6	Medium	●		2012	11.2	High	●
Congo	23.4	18.0	Medium	●		5.1	5.1	Medium	●		2014	8.2	Medium	●
Cook Islands	-	-	No data	●		-	-	No data	●		-	-	No data	●
Costa Rica	7.0	8.6	Low	●		8.3	8.1	Medium	●		2018	1.8	Very low	●
Côte d'Ivoire	29.3	17.8	Medium	●		2.5	2.8	Low	●		2016	6.1	Medium	●
Croatia	-	-	No data	●		-	-	No data	●		-	-	No data	●
Cuba	7.1	7.0	Low	●		9.2	10.0	High	●		2019	2.0	Very low	●
Cyprus	-	-	No data	●		-	-	No data	●		-	-	No data	●
Czechia	2.4	2.5	Low	●		5.9	6.6	Medium	●		2001	4.6	Low	●
Democratic People's Republic of Korea	26.1	18.2	Medium	●		1.3	1.9	Very low	●		2017	2.5	Low	●
Democratic Republic of the Congo	42.8	40.8	Very high	●		4.6	4.2	Low	●		2017	6.4	Medium	●
Denmark	-	-	No data	●		-	-	No data	●		-	-	No data	●
Djibouti	31.7	34.0	Very high	●		7.2	7.2	Medium	●		2012	21.5	Very high	●
Dominica	-	-	No data	●		-	-	No data	●		-	-	No data	●
Dominican Republic	8.0	5.9	Low	●		7.8	7.6	Medium	●		2013	2.4	Very low	●
Ecuador	24.1	23.1	High	●		7.3	9.8	Medium	●		2019	3.7	Low	●
Egypt	22.5	22.3	High	●		15.8	17.8	Very high	●		2014	9.5	Medium	●
El Salvador	16.0	11.2	Medium	●		6.0	6.6	Medium	●		2014	2.1	Very low	●
Equatorial Guinea	25.5	19.7	Medium	●		8.8	9.3	Medium	●		2011	3.1	Low	●
Eritrea	50.1	49.1	Very high	●		1.7	2.1	Very low	●		2010	14.6	High	●
Estonia	1.3	1.2	Very low	●		5.1	5.7	Medium	●		2014	1.5	Very low	●
Eswatini	29.2	22.6	High	●		10.6	9.7	Medium	●		2014	2.0	Very low	●
Ethiopia	42.8	35.3	Very high	●		2.5	2.6	Low	●		2019	7.2	Medium	●
Fiji	8.5	7.5	Low	●		4.8	5.2	Medium	●		2004	6.3	Medium	●
Finland	-	-	No data	●		-	-	No data	●		-	-	No data	●
France	-	-	No data	●		-	-	No data	●		-	-	No data	●
Gabon	17.2	14.4	Medium	●		6.5	7.4	Medium	●		2012	3.4	Low	●
Gambia	22.4	16.1	Medium	●		1.9	2.3	Very low	●		2020	5.1	Medium	●
Georgia	9.2	5.7	Low	●		13.7	7.6	Medium	●		2018	0.6	Very low	●
Germany	1.5	1.6	Very low	●		3.7	4.1	Low	●		2016	0.3	Very low	●
Ghana	22.2	14.2	Medium	●		2.2	2.9	Low	●		2017	6.8	Medium	●
Greece	2.1	2.2	Very low	●		14.2	13.9	High	●		2003	0.6	Very low	●
Grenada	-	-	No data	●		-	-	No data	●		-	-	No data	●
Guatemala	47.5	42.8	Very high	●		5.4	5.1	Medium	●		2015	0.8	Very low	●
Guinea	33.8	29.4	High	●		4.1	5.7	Medium	●		2018	9.2	Medium	●
Guinea-Bissau	29.7	28.0	High	●		2.7	3.4	Low	●		2019	7.8	Medium	●
Guyana	14.4	9.0	Low	●		5.9	6.6	Medium	●		2014	6.4	Medium	●
Haiti	23.9	20.4	High	●		3.6	3.7	Low	●		2017	3.7	Low	●
Holy See	-	-	No data	●		-	-	No data	●		-	-	No data	●
Honduras	22.7	19.9	Medium	●		5.0	5.7	Medium	●		2012	1.4	Very low	●

Country numbers affected (thousands) table (cont.)

Country Name	MODELLED ESTIMATES									Wasting <sup>1</sup> (NUMBERS)		
	Stunting (NUMBERS)				Incapable	Overweight (NUMBERS)				Incapable	Year	Value
	2012 value	Share of 2012 global	2020 <sup>2</sup> value	Share of 2020 <sup>2</sup> global		2012 value	Share of 2012 global	2020 <sup>2</sup> value	Share of 2020 <sup>2</sup> global			
Cambodia	602.2	0.3	531.9	0.4		36.8	0.1	37.4	0.1		2014	171.0
Cameroon	1176.5	0.7	1119.5	0.8		249.8	0.7	395.1	1.0		2018	172.3
Canada	-	-	-	-		217.8	0.6	235.2	0.6		-	-
Central African Republic	306.1	0.2	296.0	0.2		25.9	0.1	19.2	<0.1		2019	37.9
Chad	949.2	0.5	1025.7	0.7		58.9	0.2	99.6	0.3		2019	400.4
Chile	23.7	<0.1	18.6	<0.1		129.7	0.4	113.9	0.3		2014	3.7
China	6390.9	3.7	3944.8	2.6		6218.2	16.8	6966.4	17.9		2017	1644.2
Colombia	476.3	0.3	426.7	0.3		192.0	0.5	215.2	0.6		2016	60.9
Comoros	36.0	<0.1	27.9	<0.1		12.1	<0.1	11.9	<0.1		2012	12.5
Congo	173.9	0.1	148.0	0.1		37.9	0.1	41.9	0.1		2014	62.8
Cook Islands	-	-	-	-		-	-	-	-		-	-
Costa Rica	25.2	<0.1	29.9	<0.1		29.8	0.1	28.2	0.1		2018	6.3
Côte d'Ivoire	1013.3	0.6	735.4	0.5		86.5	0.2	115.7	0.3		2016	230.3
Croatia	-	-	-	-		-	-	-	-		-	-
Cuba	43.6	<0.1	40.0	<0.1		56.5	0.2	57.1	0.1		2019	12.0
Cyprus	-	-	-	-		-	-	-	-		-	-
Czechia	13.8	<0.1	14.0	<0.1		34.0	0.1	36.9	0.1		2001	19.4
Democratic People's Republic of Korea	429.8	0.2	317.8	0.2		21.4	0.1	33.2	0.1		2017	43.5
Democratic Republic of the Congo	5551.3	3.2	6457.6	4.3		596.6	1.6	664.8	1.7		2017	956.5
Denmark	-	-	-	-		-	-	-	-		-	-
Djibouti	29.3	<0.1	33.7	<0.1		6.7	<0.1	7.1	<0.1		2012	19.9
Dominica	-	-	-	-		-	-	-	-		-	-
Dominican Republic	79.7	<0.1	59.2	<0.1		77.7	0.2	76.2	0.2		2013	23.8
Ecuador	380.0	0.2	385.1	0.3		115.1	0.3	163.4	0.4		2019	62.1
Egypt	2411.9	1.4	2831.5	1.9		1693.7	4.6	2260.1	5.8		2014	1132.6
El Salvador	96.7	0.1	64.5	<0.1		36.3	0.1	38.0	0.1		2014	12.6
Equatorial Guinea	40.9	<0.1	39.3	<0.1		14.1	<0.1	18.6	<0.1		2011	4.8
Eritrea	267.3	0.2	243.1	0.2		9.1	<0.1	10.4	<0.1		2010	76.6
Estonia	1.0	<0.1	0.8	<0.1		3.9	<0.1	3.9	<0.1		2014	1.1
Eswatini	44.6	<0.1	32.5	<0.1		16.2	<0.1	13.9	<0.1		2014	2.9
Ethiopia	6274.8	3.6	5927.4	4.0		366.5	1.0	436.6	1.1		2019	1192.4
Fiji	7.9	<0.1	6.7	<0.1		4.4	<0.1	4.6	<0.1		2004	5.7
Finland	-	-	-	-		-	-	-	-		-	-
France	-	-	-	-		-	-	-	-		-	-
Gabon	43.7	<0.1	46.1	<0.1		16.5	<0.1	23.7	0.1		2012	8.8
Gambia	75.6	<0.1	65.9	<0.1		6.4	<0.1	9.4	<0.1		2020	20.9
Georgia	25.8	<0.1	15.3	<0.1		38.4	0.1	20.4	0.1		2018	1.8
Germany	50.9	<0.1	64.9	<0.1		125.7	0.3	166.4	0.4		2016	10.8
Ghana	832.5	0.5	592.1	0.4		82.5	0.2	120.9	0.3		2017	277.4
Greece	11.3	<0.1	9.0	<0.1		76.2	0.2	56.9	0.1		2003	3.1
Grenada	-	-	-	-		-	-	-	-		-	-
Guatemala	919.4	0.5	884.0	0.6		104.5	0.3	105.3	0.3		2015	15.0
Guinea	617.8	0.4	617.4	0.4		74.9	0.2	119.7	0.3		2018	185.8
Guinea-Bissau	79.7	<0.1	85.4	0.1		7.2	<0.1	10.4	<0.1		2019	23.6
Guyana	10.5	<0.1	6.6	<0.1		4.3	<0.1	4.9	<0.1		2014	4.8
Haiti	303.6	0.2	257.6	0.2		45.7	0.1	46.7	0.1		2017	47.3
Holy See	-	-	-	-		-	-	-	-		-	-
Honduras	231.8	0.1	202.4	0.1		51.0	0.1	58.0	0.1		2012	14.0

Country prevalence table (cont.)

Country Name	MODELLED ESTIMATES										Wasting <sup>1</sup> (PERCENT)			
	Stunting (PERCENT)					Overweight (PERCENT)					Year	Value	Threshold <sup>2</sup>	Progress assessment <sup>4</sup>
	2012 value	2020 <sup>2</sup> value	2020 threshold <sup>3</sup>	Progress assessment <sup>4</sup>	Footnote	2012 value	2020 <sup>2</sup> value	2020 threshold <sup>3</sup>	Progress assessment <sup>4</sup>	Footnote				
Hungary	-	-	No data	●		-	-	No data	●		-	-	No data	●
Iceland	-	-	No data	●		-	-	No data	●		-	-	No data	●
India	41.7	30.9	Very high	●		2.4	1.9	Very low	●		2017	17.3	Very high	●
Indonesia	34.5	31.8	Very high	●		8.2	11.1	High	●		2018	10.2	High	●
Iran (Islamic Republic of)	6.1	6.3	Low	●		8.4	9.4	Medium	●		2010	4.0	Low	●
Iraq	19.2	11.6	Medium	●		9.2	9.0	Medium	●		2018	3.0	Low	●
Ireland	-	-	No data	●		-	-	No data	●		-	-	No data	●
Israel	-	-	No data	●		-	-	No data	●		-	-	No data	●
Italy	-	-	No data	●		-	-	No data	●		-	-	No data	●
Jamaica	6.8	8.5	Low	●		7.2	6.8	Medium	●		2016	3.3	Low	●
Japan	6.6	5.5	Low	●		2.0	2.4	Very low	●		2010	2.3	Very low	●
Jordan	7.9	7.3	Low	●		5.7	7.1	Medium	●		2012	2.4	Very low	●
Kazakhstan	11.1	6.7	Low	●		11.5	8.8	Medium	●		2015	3.1	Low	●
Kenya	27.8	19.4	Medium	●		4.6	4.5	Low	●		2014	4.2	Low	●
Kiribati	15.8	14.9	Medium	●		2.4	2.4	Very low	●		2018	3.5	Low	●
Kuwait	4.8	6.0	Low	●		7.9	7.1	Medium	●		2017	2.5	Low	●
Kyrgyzstan	16.0	11.4	Medium	●		7.6	5.8	Medium	●		2018	2.0	Very low	●
Lao People's Democratic Republic	40.7	30.2	Very high	●		2.3	3.0	Low	●		2017	9.0	Medium	●
Latvia	-	-	No data	●		-	-	No data	●		-	-	No data	●
Lebanon	12.9	10.4	Medium	●		19.8	19.7	Very high	●		2004	6.6	Medium	●
Lesotho	37.7	32.1	Very high	●		7.0	7.2	Medium	●		2018	2.1	Very low	●
Liberia	35.6	28.0	High	●		3.2	4.7	Low	●		2019	3.4	Low	●
Libya	29.3	43.5	Very high	●		25.6	25.4	Very high	●		2014	10.2	High	●
Liechtenstein	-	-	No data	●		-	-	No data	●		-	-	No data	●
Lithuania	-	-	No data	●		-	-	No data	●		-	-	No data	●
Luxembourg	-	-	No data	●		-	-	No data	●		-	-	No data	●
Madagascar	47.9	40.2	Very high	●		1.8	1.5	Very low	●		2018	6.4	Medium	●
Malawi	43.8	37.0	Very high	●		5.7	4.7	Low	●		2019	0.6	Very low	●
Malaysia	18.3	20.9	High	●		6.0	6.1	Medium	●		2019	9.7	Medium	●
Maldives	17.2	14.2	Medium	●		5.8	4.6	Low	●		2017	9.1	Medium	●
Mali	30.9	25.7	High	●		1.6	2.1	Very low	●		2019	9.3	Medium	●
Malta	-	-	No data	●		-	-	No data	●		-	-	No data	●
Marshall Islands	36.2	32.2	Very high	●		4.1	4.2	Low	●		2017	3.5	Low	●
Mauritania	27.0	24.2	High	●		1.9	2.7	Low	●		2018	11.5	High	●
Mauritius	9.0	8.7	Low	●	<sup>5</sup>	7.4	7.6	Medium	●	<sup>5</sup>	1995	-	No recent data	●
Mexico	12.7	12.1	Medium	●		6.7	6.3	Medium	●		2019	1.4	Very low	●
Micronesia (Federated States of)	-	-	No data	●		-	-	No data	●		-	-	No data	●
Monaco	-	-	No data	●		-	-	No data	●		-	-	No data	●
Mongolia	12.6	7.1	Low	●		10.2	10.1	High	●		2018	0.9	Very low	●
Montenegro	8.2	8.1	Low	●		15.3	10.2	High	●		2018	2.2	Very low	●
Montserrat	-	-	No data	●		-	-	No data	●		-	-	No data	●
Morocco	16.4	12.9	Medium	●		11.8	11.3	High	●		2017	2.6	Low	●
Mozambique	42.9	37.8	Very high	●		5.7	6.0	Medium	●		2015	4.4	Low	●
Myanmar	31.9	25.2	High	●		2.2	1.5	Very low	●		2018	6.7	Medium	●
Namibia	24.1	18.4	Medium	●		4.3	5.0	Medium	●		2013	7.1	Medium	●
Nauru	20.3	15.0	Medium	●		3.1	3.7	Low	●		2007	1.0	Very low	●
Nepal	40.3	30.4	Very high	●		1.4	1.8	Very low	●		2019	12.0	High	●
Netherlands	1.5	1.6	Very low	●		4.1	5.0	Medium	●		2009	1.0	Very low	●

Country numbers affected (thousands) table (cont.)

Country Name	MODELLED ESTIMATES											
	Stunting (NUMBERS)					Overweight (NUMBERS)				Wasting <sup>1</sup> (NUMBERS)		
	2012 value	Share of 2012 global	2020 <sup>2</sup> value	Share of 2020 <sup>2</sup> global	Year	2012 value	Share of 2012 global	2020 <sup>2</sup> value	Share of 2020 <sup>2</sup> global	Year	Value	
Hungary	-	-	-	-	-	-	-	-	-	-	-	
Iceland	-	-	-	-	-	-	-	-	-	-	-	
India	52257.6	30.1	36115.8	24.2	-	3007.6	8.1	2220.7	5.7	2017	20097.8	
Indonesia	8103.8	4.7	7523.3	5.0	-	1926.1	5.2	2626.1	6.8	2018	2483.7	
Iran (Islamic Republic of)	397.2	0.2	481.2	0.3	-	547.0	1.5	717.9	1.8	2010	250.1	
Iraq	919.2	0.5	624.1	0.4	-	440.5	1.2	484.2	1.2	2018	163.7	
Ireland	-	-	-	-	-	-	-	-	-	-	-	
Israel	-	-	-	-	-	-	-	-	-	-	-	
Italy	-	-	-	-	-	-	-	-	-	-	-	
Jamaica	15.8	<0.1	19.6	<0.1	-	16.8	<0.1	15.7	<0.1	2016	8.0	
Japan	366.6	0.2	262.8	0.2	-	111.1	0.3	114.7	0.3	2010	127.7	
Jordan	86.1	<0.1	77.2	0.1	-	62.1	0.2	75.1	0.2	2012	26.4	
Kazakhstan	197.7	0.1	128.7	0.1	-	204.9	0.6	169.0	0.4	2015	60.6	
Kenya	1951.0	1.1	1366.6	0.9	-	322.8	0.9	317.0	0.8	2014	293.9	
Kiribati	2.4	<0.1	2.3	<0.1	-	0.4	<0.1	0.4	<0.1	2018	0.5	
Kuwait	14.5	<0.1	17.4	<0.1	-	23.8	0.1	20.6	0.1	2017	7.6	
Kyrgyzstan	109.5	0.1	86.7	0.1	-	52.0	0.1	44.1	0.1	2018	16.0	
Lao People's Democratic Republic	323.9	0.2	240.7	0.2	-	18.3	<0.1	23.9	0.1	2017	70.4	
Latvia	-	-	-	-	-	-	-	-	-	-	-	
Lebanon	59.0	<0.1	58.9	<0.1	-	90.6	0.2	111.5	0.3	2004	28.6	
Lesotho	92.7	0.1	81.4	0.1	-	17.2	<0.1	18.3	<0.1	2018	5.2	
Liberia	237.6	0.1	207.3	0.1	-	21.4	0.1	34.8	0.1	2019	24.8	
Libya	194.0	0.1	271.4	0.2	-	169.5	0.5	158.5	0.4	2014	67.7	
Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	
Lithuania	-	-	-	-	-	-	-	-	-	-	-	
Luxembourg	-	-	-	-	-	-	-	-	-	-	-	
Madagascar	1689.9	1.0	1652.0	1.1	-	63.5	0.2	61.6	0.2	2018	253.4	
Malawi	1195.7	0.7	1081.9	0.7	-	155.6	0.4	137.4	0.4	2019	17.8	
Malaysia	444.8	0.3	550.7	0.4	-	145.8	0.4	160.7	0.4	2019	254.2	
Maldives	6.2	<0.1	5.1	<0.1	-	2.1	<0.1	1.6	<0.1	2017	3.4	
Mali	955.7	0.6	926.6	0.6	-	49.5	0.1	75.7	0.2	2019	329.0	
Malta	-	-	-	-	-	-	-	-	-	-	-	
Marshall Islands	2.8	<0.1	2.2	<0.1	-	0.3	<0.1	0.3	<0.1	2017	0.3	
Mauritania	157.4	0.1	166.9	0.1	-	11.1	<0.1	18.6	<0.1	2018	76.8	
Mauritius	6.6	<0.1	5.6	<0.1	5	5.4	<0.1	4.9	<0.1	5	1995	-
Mexico	1418.7	0.8	1326.0	0.9	-	748.4	2.0	690.4	1.8	2019	157.4	
Micronesia (Federated States of)	-	-	-	-	-	-	-	-	-	-	-	
Monaco	-	-	-	-	-	-	-	-	-	-	-	
Mongolia	40.7	<0.1	26.7	<0.1	-	33.0	0.1	37.9	0.1	2018	3.5	
Montenegro	3.2	<0.1	3.0	<0.1	-	6.0	<0.1	3.8	<0.1	2018	0.8	
Montserrat	-	-	-	-	-	-	-	-	-	-	-	
Morocco	537.3	0.3	428.9	0.3	-	386.6	1.0	375.7	1.0	2017	90.3	
Mozambique	1862.9	1.1	1949.2	1.3	-	247.5	0.7	309.4	0.8	2015	204.9	
Myanmar	1508.2	0.9	1136.2	0.8	-	104.0	0.3	67.6	0.2	2018	302.7	
Namibia	74.4	<0.1	61.8	<0.1	-	13.3	<0.1	16.8	<0.1	2013	22.4	
Nauru	0.3	<0.1	0.2	<0.1	-	<0.1	<0.1	<0.1	<0.1	2007	<0.1	
Nepal	1181.1	0.7	822.9	0.6	-	41.0	0.1	48.7	0.1	2019	324.8	
Netherlands	13.4	<0.1	13.7	<0.1	-	36.6	0.1	42.9	0.1	2009	9.9	

Country prevalence table (cont.)

Country Name	MODELLED ESTIMATES										Wasting <sup>1</sup> (PERCENT)			
	Stunting (PERCENT)					Overweight (PERCENT)					Year	Value	Threshold <sup>2</sup>	Progress assessment <sup>4</sup>
	2012 value	2020 <sup>2</sup> value	2020 threshold <sup>3</sup>	Progress assessment <sup>4</sup>	Footnote	2012 value	2020 <sup>2</sup> value	2020 threshold <sup>3</sup>	Progress assessment <sup>4</sup>	Footnote				
New Zealand	-	-	No data	●		-	-	No data	●		-	-	No data	●
Nicaragua	17.4	14.1	Medium	●		7.2	7.5	Medium	●		2012	2.2	Very low	●
Niger	48.3	46.7	Very high	●		0.9	1.9	Very low	●		2019	9.8	Medium	●
Nigeria	38.0	35.3	Very high	●		2.5	2.7	Low	●		2020	6.5	Medium	●
Niue	-	-	No data	●		-	-	No data	●		-	-	No data	●
North Macedonia	5.8	4.1	Low	●		13.4	10.0	High	●		2019	3.4	Low	●
Norway	-	-	No data	●		-	-	No data	●		-	-	No data	●
Oman	11.3	12.2	Medium	●		3.0	4.8	Low	●		2017	9.3	Medium	●
Pakistan	43.4	36.7	Very high	●		4.6	3.4	Low	●		2018	7.1	Medium	●
Palau	-	-	No data	●		-	-	No data	●		-	-	No data	●
Panama	20.0	14.7	Medium	●		10.1	10.8	High	●		2008	1.2	Very low	●
Papua New Guinea	47.2	48.4	Very high	●		8.1	8.9	Medium	●		2010	14.1	High	●
Paraguay	9.6	4.6	Low	●		10.1	12.0	High	●		2016	1.0	Very low	●
Peru	18.8	10.8	Medium	●		8.7	8.0	Medium	●		2019	0.4	Very low	●
Philippines	32.2	28.7	High	●		3.4	4.2	Low	●		2018	5.6	Medium	●
Poland	2.3	2.3	Very low	●		5.9	6.7	Medium	●		2011	0.7	Very low	●
Portugal	3.8	3.3	Low	●		7.6	8.5	Medium	●		2016	0.6	Very low	●
Qatar	6.0	4.6	Low	●	5	13.1	13.9	High	●	5	1995	-	No recent data	●
Republic of Korea	2.2	2.2	Very low	●		7.7	8.8	Medium	●		2009	1.2	Very low	●
Republic of Moldova	7.1	4.9	Low	●		6.2	4.3	Low	●		2012	1.9	Very low	●
Romania	10.6	9.7	Low	●		9.5	6.7	Medium	●		2002	3.5	Low	●
Russian Federation	-	-	No data	●		-	-	No data	●		-	-	No data	●
Rwanda	40.5	32.6	Very high	●		5.7	5.2	Medium	●		2020	1.1	Very low	●
Saint Kitts and Nevis	-	-	No data	●		-	-	No data	●		-	-	No data	●
Saint Lucia	2.7	2.8	Low	●		6.5	6.9	Medium	●		2012	3.7	Low	●
Saint Vincent and the Grenadines	-	-	No data	●		-	-	No data	●		-	-	No data	●
Samoa	5.7	6.8	Low	●		6.7	7.1	Medium	●		2019	3.1	Low	●
San Marino	-	-	No data	●		-	-	No data	●		-	-	No data	●
Sao Tome and Principe	18.3	11.8	Medium	●		2.7	4.0	Low	●		2019	4.1	Low	●
Saudi Arabia	5.5	3.9	Low	●		6.2	7.6	Medium	●		2004	11.8	High	●
Senegal	19.8	17.2	Medium	●		1.5	2.1	Very low	●		2019	8.1	Medium	●
Serbia	6.2	5.3	Low	●		15.5	10.8	High	●		2019	2.6	Low	●
Seychelles	8.0	7.4	Low	●		9.6	9.8	Medium	●		2012	4.3	Low	●
Sierra Leone	35.4	26.8	High	●		3.4	4.7	Low	●		2019	5.4	Medium	●
Singapore	3.2	2.8	Low	●		4.0	4.8	Low	●		2000	3.6	Low	●
Slovakia	-	-	No data	●		-	-	No data	●		-	-	No data	●
Slovenia	-	-	No data	●		-	-	No data	●		-	-	No data	●
Solomon Islands	31.9	29.3	High	●		3.5	4.0	Low	●		2015	8.5	Medium	●
Somalia	31.1	27.4	High	●		3.1	2.9	Low	●		2009	14.3	High	●
South Africa	23.6	23.2	High	●		12.8	12.9	High	●		2017	3.4	Low	●
South Sudan	32.1	30.6	Very high	●		6.4	5.7	Medium	●		2010	22.7	Very high	●
Spain	-	-	No data	●		-	-	No data	●		-	-	No data	●
Sri Lanka	16.8	16.0	Medium	●		1.2	1.3	Very low	●		2016	15.1	Very high	●
State of Palestine	10.3	7.8	Low	●		8.1	8.5	Medium	●		2020	1.3	Very low	●
Sudan	36.0	33.7	Very high	●		2.5	2.7	Low	●		2014	16.3	Very High	●
Suriname	8.7	8.0	Low	●		3.8	4.0	Low	●		2018	5.5	Medium	●
Sweden	-	-	No data	●		-	-	No data	●		-	-	No data	●
Switzerland	-	-	No data	●		-	-	No data	●		-	-	No data	●

Country numbers affected (thousands) table (cont.)

Country Name	MODELLED ESTIMATES									Wasting <sup>1</sup> (NUMBERS)		
	Stunting (NUMBERS)				Age in months	Overweight (NUMBERS)				Year	Value	
	2012 value	Share of 2012 global	2020 <sup>2</sup> value	Share of 2020 <sup>2</sup> global		2012 value	Share of 2012 global	2020 <sup>2</sup> value	Share of 2020 <sup>2</sup> global			
New Zealand	-	-	-	-		-	-	-	-	-	-	
Nicaragua	116.6	0.1	92.6	0.1		48.3	0.1	49.3	0.1	2012	14.4	
Niger	1782.3	1.0	2235.8	1.5		33.2	0.1	91.0	0.2	2019	453.2	
Nigeria	11060.9	6.4	11980.4	8.0		727.7	2.0	916.3	2.4	2020	2191.1	
Niue	-	-	-	-		-	-	-	-	-	-	
North Macedonia	6.5	<0.1	4.6	<0.1		14.9	<0.1	11.2	<0.1	2019	3.8	
Norway	-	-	-	-		-	-	-	-	-	-	
Oman	37.1	<0.1	55.3	<0.1		9.9	<0.1	21.8	0.1	2017	39.4	
Pakistan	10749.9	6.2	10262.4	6.9		1139.4	3.1	950.7	2.4	2018	1935.3	
Palau	-	-	-	-		-	-	-	-	-	-	
Panama	75.4	<0.1	57.2	<0.1		38.1	0.1	42.0	0.1	2008	4.5	
Papua New Guinea	488.0	0.3	535.9	0.4		83.7	0.2	98.5	0.3	2010	142.3	
Paraguay	66.8	<0.1	32.3	<0.1		70.2	0.2	84.1	0.2	2016	6.6	
Peru	557.7	0.3	306.0	0.2		258.1	0.7	226.7	0.6	2019	11.6	
Philippines	3621.8	2.1	3046.9	2.0		382.4	1.0	445.9	1.1	2018	618.0	
Poland	47.2	<0.1	43.4	<0.1		121.1	0.3	126.3	0.3	2011	15.5	
Portugal	18.0	<0.1	13.2	<0.1		35.9	0.1	34.1	0.1	2016	2.5	
Qatar	6.6	<0.1	6.2	<0.1	5	14.5	<0.1	18.8	<0.1	5	1995	-
Republic of Korea	51.2	<0.1	41.7	<0.1		179.3	0.5	166.9	0.4	2009	27.6	
Republic of Moldova	16.0	<0.1	9.9	<0.1		14.0	<0.1	8.7	<0.1	2012	4.3	
Romania	116.7	0.1	91.1	0.1		104.6	0.3	63.0	0.2	2002	40.2	
Russian Federation	-	-	-	-		-	-	-	-	-	-	
Rwanda	661.7	0.4	614.5	0.4		93.1	0.3	98.0	0.3	2020	20.7	
Saint Kitts and Nevis	-	-	-	-		-	-	-	-	-	-	
Saint Lucia	0.3	<0.1	0.3	<0.1		0.7	<0.1	0.7	<0.1	2012	0.4	
Saint Vincent and the Grenadines	-	-	-	-		-	-	-	-	-	-	
Samoa	1.6	<0.1	1.8	<0.1		1.8	<0.1	1.9	<0.1	2019	0.9	
San Marino	-	-	-	-		-	-	-	-	-	-	
Sao Tome and Principe	5.5	<0.1	3.7	<0.1		0.8	<0.1	1.3	<0.1	2019	1.3	
Saudi Arabia	163.2	0.1	116.2	0.1		183.9	0.5	226.4	0.6	2004	318.9	
Senegal	452.6	0.3	449.8	0.3		34.3	0.1	54.9	0.1	2019	210.2	
Serbia	28.8	<0.1	22.2	<0.1		72.1	0.2	45.3	0.1	2019	11.0	
Seychelles	0.6	<0.1	0.6	<0.1		0.8	<0.1	0.8	<0.1	2012	0.3	
Sierra Leone	382.9	0.2	310.5	0.2		36.8	0.1	54.5	0.1	2019	61.5	
Singapore	6.7	<0.1	7.2	<0.1		8.4	<0.1	12.4	<0.1	2000	8.5	
Slovakia	-	-	-	-		-	-	-	-	-	-	
Slovenia	-	-	-	-		-	-	-	-	-	-	
Solomon Islands	26.9	<0.1	30.2	<0.1		3.0	<0.1	4.1	<0.1	2015	7.9	
Somalia	737.0	0.4	774.5	0.5		73.5	0.2	82.0	0.2	2009	317.4	
South Africa	1357.7	0.8	1337.5	0.9		736.4	2.0	743.7	1.9	2017	197.1	
South Sudan	539.2	0.3	522.5	0.4		107.5	0.3	97.3	0.3	2010	360.0	
Spain	-	-	-	-		-	-	-	-	-	-	
Sri Lanka	296.4	0.2	265.7	0.2		21.2	0.1	21.6	0.1	2016	258.1	
State of Palestine	67.3	<0.1	54.0	<0.1		52.9	0.1	58.9	0.2	2020	9.2	
Sudan	2049.0	1.2	2136.3	1.4		142.3	0.4	171.2	0.4	2014	950.7	
Suriname	4.6	<0.1	4.2	<0.1		2.0	<0.1	2.1	<0.1	2018	2.9	
Sweden	-	-	-	-		-	-	-	-	-	-	
Switzerland	-	-	-	-		-	-	-	-	-	-	

## Country prevalence table (cont.)

Country Name	MODELLED ESTIMATES										Wasting <sup>1</sup> (PERCENT)			
	Stunting (PERCENT)					Overweight (PERCENT)					Year	Value	Threshold <sup>2</sup>	Progress assessment <sup>4</sup>
	2012 value	2020 <sup>2</sup> value	2020 threshold <sup>3</sup>	Progress assessment <sup>4</sup>	Footnote	2012 value	2020 <sup>2</sup> value	2020 threshold <sup>3</sup>	Progress assessment <sup>4</sup>	Footnote				
Syrian Arab Republic	27.6	29.6	High	●		19.2	18.2	Very high	●		2010	11.5	High	●
Tajikistan	26.5	15.3	Medium	●		5.6	3.5	Low	●		2017	5.6	Medium	●
Thailand	13.9	12.3	Medium	●		8.7	9.2	Medium	●		2019	7.7	Medium	●
Timor-Leste	52.8	48.8	Very high	●		3.0	2.6	Low	●		2013	9.9	Medium	●
Togo	27.4	23.8	High	●		1.7	2.4	Very low	●		2017	5.7	Medium	●
Tokelau	-	-	No data	●		-	-	No data	●		-	-	No data	●
Tonga	6.7	2.6	Low	●		13.2	12.6	High	●		2019	1.1	Very low	●
Trinidad and Tobago	8.5	8.7	Low	●		9.5	11.0	High	●		2011	6.4	Medium	●
Tunisia	9.1	8.6	Low	●		10.9	16.5	Very high	●		2018	2.1	Very low	●
Turkey	-	-	No data	●	<sup>6</sup>	-	-	No data	●	<sup>6</sup>	2018	1.7	Very low	●
Turkmenistan	13.0	7.6	Low	●		5.0	3.8	Low	●		2019	4.1	Low	●
Turks and Caicos Islands	-	-	No data	●		-	-	No data	●		-	-	No data	●
Tuvalu	10.0	9.7	Low	●		6.2	6.4	Medium	●		2007	3.3	Low	●
Uganda	34.1	27.9	High	●		3.9	4.0	Low	●		2016	3.5	Low	●
Ukraine	19.1	15.9	Medium	●		25.7	17.0	Very high	●		2000	8.2	Medium	●
United Arab Emirates	-	-	No data	●		-	-	No data	●		-	-	No data	●
United Kingdom	-	-	No data	●		-	-	No data	●		-	-	No data	●
United Republic of Tanzania	38.3	32.0	Very high	●		4.7	5.5	Medium	●		2018	3.5	Low	●
United States	2.7	3.2	Low	●		8.6	8.8	Medium	●		2018	0.1	Very low	●
Uruguay	8.9	6.5	Low	●		9.8	10.3	High	●		2018	1.4	Very low	●
Uzbekistan	14.2	9.9	Low	●		8.6	5.0	Medium	●		2017	1.8	Very low	●
Vanuatu	27.3	28.7	High	●		4.8	4.9	Low	●		2013	4.7	Low	●
Venezuela (Bolivarian Republic of)	12.5	10.6	Medium	●		6.4	6.7	Medium	●		2009	4.1	Low	●
Viet Nam	25.9	22.3	High	●		4.2	6.0	Medium	●		2017	5.8	Medium	●
Yemen	47.4	37.2	Very high	●		2.9	2.7	Low	●		2013	16.4	Very High	●
Zambia	41.3	32.3	Very high	●		6.2	5.7	Medium	●		2018	4.2	Low	●
Zimbabwe	31.4	23.0	High	●		4.7	3.6	Low	●		2019	2.9	Low	●

## Additional information

### Prevalence thresholds for wasting, overweight and stunting in children under 5 years

New thresholds, presented in Table 2, were established through the WHO-UNICEF Technical Advisory Group on Nutrition Monitoring (TEAM)<sup>8</sup> and released in 2018. These new thresholds have been used for development of prevalence-based assessments in maps and tables in this brochure. The thresholds were developed in relation to standard deviations (SD) of the normative WHO Child Growth Standards. The international definition of 'normal' (two SD from the WHO standards median) defines the first threshold, which includes 2.3 per cent of the area under the normalized distribution. Multipliers of this 'very low' level (rounded to 2.5 per cent) set the basis for establishing subsequent thresholds.

Table 2. Prevalence thresholds and corresponding labels for stunting, wasting and overweight

Labels	Prevalence thresholds (%)	
	Stunting	Wasting and Overweight
Very low	< 2.5	< 2.5
Low	2.5 – < 10	2.5 – < 5
Medium	10 – < 20	5 – < 10
High	20 – < 30	10 – < 15
Very high	≥ 30	≥ 15






Country numbers affected (thousands) table (cont.)

Country Name	MODELLED ESTIMATES											
	Stunting (NUMBERS)					Overweight (NUMBERS)				Wasting <sup>1</sup> (NUMBERS)		
	2012 value	Share of 2012 global	2020 <sup>2</sup> value	Share of 2020 <sup>2</sup> global	baseline	2012 value	Share of 2012 global	2020 <sup>2</sup> value	Share of 2020 <sup>2</sup> global	baseline	Year	Value
Syrian Arab Republic	748.5	0.4	568.1	0.4		520.7	1.4	349.3	0.9		2010	339.8
Tajikistan	291.4	0.2	207.6	0.1		61.6	0.2	47.5	0.1		2017	72.5
Thailand	557.0	0.3	442.3	0.3		348.7	0.9	330.8	0.9		2019	280.5
Timor-Leste	82.0	<0.1	86.9	0.1		4.7	<0.1	4.6	<0.1		2013	15.3
Togo	302.1	0.2	290.4	0.2		18.7	0.1	29.3	0.1		2017	67.1
Tokelau	-	-	-	-		-	-	-	-		-	-
Tonga	0.9	<0.1	0.3	<0.1		1.8	<0.1	1.5	<0.1		2019	0.1
Trinidad and Tobago	8.3	<0.1	7.7	<0.1		9.3	<0.1	9.7	<0.1		2011	6.2
Tunisia	84.0	<0.1	86.4	0.1		100.7	0.3	165.7	0.4		2018	21.5
Turkey	-	-	-	-	6	-	-	-	-	6	2018	114.7
Turkmenistan	75.1	<0.1	50.2	<0.1		28.9	0.1	25.1	0.1		2019	27.7
Turks and Caicos Islands	-	-	-	-		-	-	-	-		-	-
Tuvalu	0.1	<0.1	0.1	<0.1		0.1	<0.1	0.1	<0.1		2007	<0.1
Uganda	2239.9	1.3	2175.1	1.5		256.2	0.7	311.8	0.8		2016	249.9
Ukraine	486.6	0.3	336.1	0.2		654.8	1.8	359.4	0.9		2000	177.3
United Arab Emirates	-	-	-	-		-	-	-	-		-	-
United Kingdom	-	-	-	-		-	-	-	-		-	-
United Republic of Tanzania	3164.5	1.8	3116.4	2.1		388.3	1.0	535.6	1.4		2018	326.1
United States	558.3	0.3	629.6	0.4		1778.4	4.8	1731.5	4.5		2018	19.5
Uruguay	20.9	<0.1	15.4	<0.1		23.0	0.1	24.4	0.1		2018	3.4
Uzbekistan	450.3	0.3	339.7	0.2		272.7	0.7	171.6	0.4		2017	61.4
Vanuatu	10.1	<0.1	12.1	<0.1		1.8	<0.1	2.1	<0.1		2013	1.8
Venezuela (Bolivarian Republic of)	367.0	0.2	250.5	0.2		187.9	0.5	158.3	0.4		2009	118.6
Viet Nam	1925.3	1.1	1760.0	1.2		312.2	0.8	473.5	1.2		2017	449.1
Yemen	1782.3	1.0	1530.9	1.0		109.0	0.3	111.1	0.3		2013	629.1
Zambia	1068.3	0.6	951.7	0.6		160.4	0.4	167.9	0.4		2018	121.3
Zimbabwe	670.0	0.4	482.4	0.3		100.3	0.3	75.5	0.2		2019	61.4

**2025 and 2030 global targets on stunting, wasting and overweight among children under 5 years of age**

Progress towards the 2030 SDG targets (presented on page 5 and in the country tables on pages 16 to 25) was assessed using the 2030 targets proposed as an extension of the 2025 global nutrition targets (Table 3).<sup>9</sup>

Table 3. The global nutrition targets endorsed by the World Health Assembly and their extension to 2030\* for child malnutrition indicators

Indicator	2025 target	2030 target
 <b>Stunting</b>	Reduce the number of children under 5 who are stunted by 40%	Reduce the number of children under 5 who are stunted by 50%
 <b>Wasting</b>	Reduce and maintain childhood wasting to less than 5%	Reduce and maintain childhood wasting to less than 3%
 <b>Overweight</b>	No increase in childhood overweight prevalence	Reduce and maintain childhood overweight to less than 3%

NOTE: \*Targets were set considering the baseline year 2012.

# JME METHODOLOGY

The UNICEF-WHO-World Bank JME Working Group was established in 2011 to address the call for harmonized child malnutrition estimates that would be instrumental in benchmarking progress on child malnutrition. The first edition of the JME was released in 2012 and provided estimates for stunting, wasting, severe wasting, underweight and overweight, as well as a detailed description of the methodology.<sup>10,11</sup> Since its inception, the JME outputs have comprised a harmonized country-level dataset of primary data (e.g., *national estimates based on household surveys*), as well as regional and global model-based estimates.

For the first time in 2021, the JME also includes country-level modelled estimates for stunting and overweight based on updated methodology<sup>12</sup> developed by the JME Working Group in partnership with the University of South Carolina. The regional and global figures for stunting and overweight are now also based on these country model outputs, while they remain based on the previously applied sub-regional model for wasting and severe wasting.<sup>10,11</sup> Additional work is ongoing to update methods for wasting and severe wasting for which available data are not as stable as for stunting and overweight (see *section about regional and global estimates on page 27*). The JME process for the 2021 edition involved the following steps: (i) updating of the country dataset of primary sources (e.g., *national household surveys*); (ii) application of a country level model for stunting and overweight to generate annual estimates; (iii) generation of regional and global aggregates for stunting, wasting, severe wasting and overweight; and (iv) consultation with countries before finalizing and disseminating the 2021 estimates. Key parts of the JME are described in more detail below.

## Country-level estimates

### The JME country dataset

The JME dataset of country estimates requires the collection of national data sources that contain information on child malnutrition – specifically, data on the height, weight and age of children under 5, which can be used to generate national-level prevalence estimates for stunting, wasting, severe wasting and overweight. These national-level data sources are mainly comprised of household surveys – e.g., Multiple Indicator Cluster Surveys (MICS), Demographic and Health Surveys (DHS), Standardized Monitoring and Assessment of Relief and Transition (SMART) surveys, and Living Standards Measurement Study (LSMS). Some administrative data sources (e.g., *from surveillance systems*) are also included where population coverage is high. As of the latest review closure on 31 January 2021, the primary source dataset contained 997 data sources from 157 countries and territories, with nearly 80 per cent of children living in countries with at least one data point on stunting, wasting and overweight that is less than five years old (see *figure on page 28*). This suggests that the global estimates are highly representative of the majority of children across the

globe for the most recent period, although recentness of data varies greatly by region.

The dataset contains the point estimate, and where available, the standard error, the 95 per cent confidence bounds and the unweighted sample size. Where microdata are available, the JME uses estimates that have been recalculated to adhere to the global standard definition.<sup>13</sup> Where microdata are not available, reported estimates are used, except in cases where adjustments are required to standardize for: (i) use of an alternate growth reference from the 2006 WHO Growth Standards; (ii) age ranges that do not include the full 0–59-month age group; and (iii) data sources that were only nationally representative for populations residing in rural areas. Further details related to data source compilation, re-analysis of microdata, and data source review are provided elsewhere.<sup>14</sup>

The JME country dataset serves different purposes for different indicators. For wasting and severe wasting, the JME country dataset serves as the country estimates themselves (i.e., *the wasting prevalence in the JME country dataset from a household survey for a country in a given year is the wasting prevalence reported for that country in that year*). For stunting and overweight, the JME country dataset is used to generate country-modelled estimates which serve as the official JME estimates (i.e., *the stunting prevalence from a household survey for a given country in given year is not reported as the prevalence for that country in that year; rather, it feeds into the modelled estimates described in the next section below*).

### Country-level model for stunting and overweight estimates

#### Rationale

National surveys are administered sporadically, resulting in sparse data for many countries. This hampers efforts to monitor these countries' progress towards targets, such as the SDGs. The use of statistical models at country level is important to enable comparisons across countries during the same year, filling in the gaps. In addition, statistical models are an efficient way to adjust for unwarranted variability.

#### Model description

The technical details of the statistical models are provided elsewhere.<sup>14</sup> Briefly, for both stunting and overweight, prevalence was modelled at logit (log-odds) scale using a penalized longitudinal mixed-model with a heterogeneous error term. The quality of the models was quantified with model-fit criteria that balance the complexity of the model with the closeness of the fit to the observed data. The proposed method has important characteristics, including non-linear time trends, regional trends, country-specific trends, covariate data and a heterogeneous error term. All countries with data contribute to estimates of the overall time trend and the impact of covariate data on prevalence. For overweight, the covariate data consisted of linear and quadratic socio-demographic index (SDI),\* and data source type. The same

\* SDI is a summary measure that identifies where countries or other geographic areas sit on the spectrum of development. Expressed on a scale of 0 to 1, SDI is a composite average of the rankings of the incomes per capita, average educational attainment, and fertility rates of all areas in the Global Burden of Disease study.<sup>15</sup>

covariates were used for stunting, plus an additional covariate of the average health system access over the previous five years.<sup>16</sup>

### **Model outcomes**

Annual country-level modelled estimates from 2000 to 2020 on stunting and overweight were disseminated by the JME in 2021 for 155 countries with at least one data point (e.g., from a household survey) included in the JME country dataset described above. Modelled country estimates were also produced for an additional 49 countries, used solely for generation of regional and global aggregates. Modelled estimates for these 49 countries are not shown because they did not have any household surveys in the JME country dataset or because the modelled estimates remained pending final review at the time of publication. The results for the 204 countries can be used to calculate estimates and uncertainty intervals for any groups of countries aggregated.

The uncertainty intervals are important in monitoring trends, especially for countries with sparse data and where primary data sources present large primary data source sampling errors. When only sparse data are available in the most recent period, the inclusion of a survey can affect a substantial change in the predicted trajectory. For this reason, uncertainty intervals are needed to enhance trend interpretability in terms of the caution level employed. The uncertainty intervals for the new JME method have been tested and validated with various data types.

### **Regional and global estimates**

Regional and global wasting and severe wasting estimates are only presented for the most recent year, 2020, unlike stunting and overweight estimates for which an annual time series is available from 2000 to 2020. This is because the JME are based on national-level country prevalence data, which come from cross-sectional surveys (i.e., a snapshot at one point in time) that are collected infrequently (every three to five years) in most countries. Since stunting and overweight are relatively stable over the course of a calendar year, it is reasonable to track changes in these two conditions over time with these data, whereas wasting is an acute condition that can change frequently and rapidly. An individual child can be affected by wasting more than once in a calendar year (i.e., can recover but then become wasted again in the same year), and the risk of wasting in many contexts can be driven by seasonal variations, which can result in seasonal spikes in prevalence. For example, wasting prevalence, in some contexts, may double between the post-harvest season (often associated with higher food availability and weather patterns that are less likely to cause disease) and the pre-harvest season (often associated with food shortages, heavy rains and related diseases that can affect nutrition status). Given that country surveys can be collected during any season, the prevalence estimate from any survey may be at a high or low; or it may fall somewhere in between if data collection spanned across several seasons. Thus, the prevalence of wasting captures the situation of wasting at a specific point in time and not over an entire year. Variations in seasons across surveys make it difficult to draw inferences on trends. The lack of methods to account for

seasonality and incident cases of wasting and severe wasting are the main reasons why the JME does not present annual trends for these forms of malnutrition.

### **Generation of regional and global estimates**

Different methods were applied to generate regional and global estimates for stunting and overweight compared to wasting and severe wasting as described below. In short, results from the new country-level model were used to generate the regional and global estimates for stunting and overweight, while the JME sub-regional multi-level model<sup>12,13</sup> was used to generate the global and regional estimates for wasting and severe wasting.

#### **Stunting and overweight**

Global and regional estimates for all years from 2000 to 2020 were derived as the respective country averages weighted by the countries' under-five population from The United Nations World Population Prospects, 2019 Revision, using model-based estimates for 204 countries. This includes 155 countries with national data sources (e.g. household surveys) included in the JME country dataset described above. It also includes 49 countries with modelled estimates generated for development of regional and global aggregates but for which country modelled estimates are not shown because they did not have any household surveys in the JME country dataset or because the modelled estimates remained pending final review at the time of publication. Confidence intervals were generated based on bootstrapping methodology.

#### **Wasting and severe wasting**

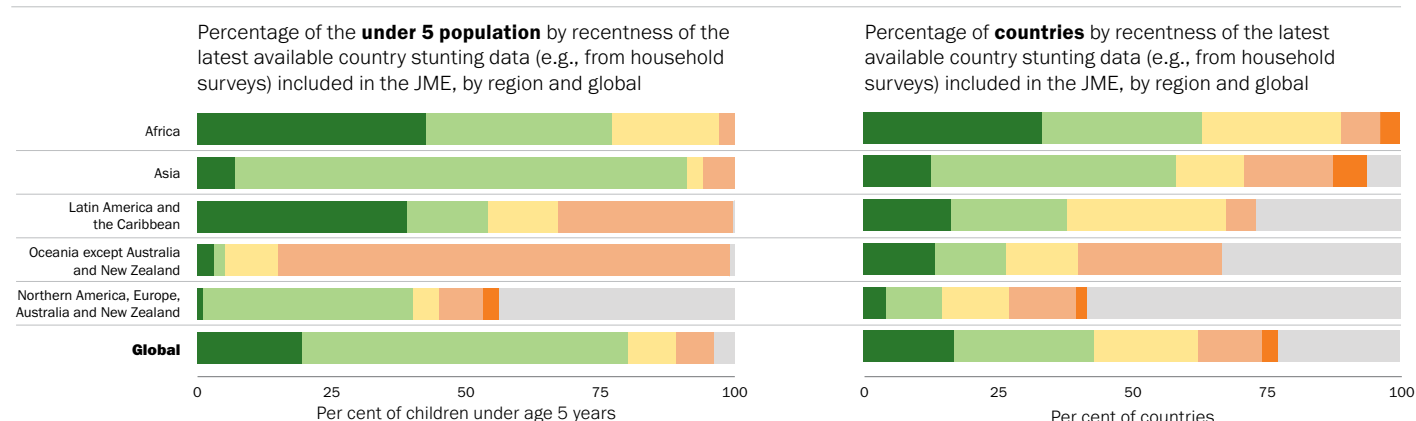
The wasting and severe wasting prevalence data from national data sources described in the above section about the JME country dataset were used to generate the regional and global estimates for the year 2020 using the JME sub-regional multi-level model,<sup>10,11</sup> applying population weights for children under 5 years of age from the United Nations World Population Prospects, 2019 Revision.

### **Country consultations**

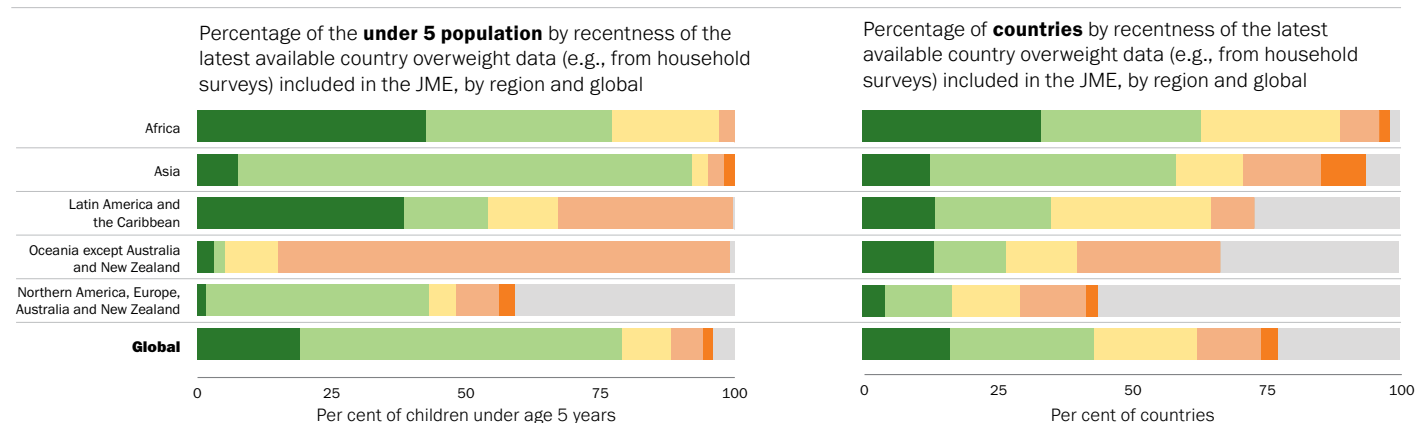
Joint UNICEF-WHO-World Bank Group country consultations were conducted from November 2020 to January 2021. The purpose of these consultations was to explain the updated methodology for stunting and overweight estimates to national governments; to ensure the estimates included all recent and relevant country data for stunting, wasting and overweight; and to engage with and receive feedback from national governments on the estimates. Following review of input received from national governments during the country consultations, eight additional sources were included in the JME country dataset before the estimates were finalized and disseminated through the 2021 edition of the JME.

# Globally, nearly 80 per cent of children live in countries where at least one data point on stunting, wasting and overweight is less than 5 years old

## STUNTING



## OVERWEIGHT



These graphics show the recency of the latest available country data points on malnutrition (e.g., from a household survey) among children under 5 years in the JME. The graphics in the left-hand column are by **percentage of the under-five population** and the graphics in the right-hand column are by the **percentage of countries**. Only stunting and overweight are shown because the data for wasting mirror those for stunting.

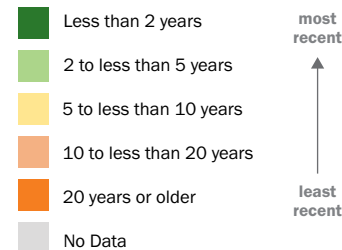
For the graphics by **percentage of the under-five population** (left column), the availability of data for each country was weighted by the under-five population, meaning that more populous countries contributed more to the percentages in each category than less populous ones. The more green there is for a region, the higher the percentage of children under 5 living in countries with very recent data (i.e., at least one data point in the last 5 years); the more orange there is, the higher the percentage of children living in countries with very old data (i.e., the latest data point is 10–20+ years old). Globally, about 80 per cent of children live in countries where the malnutrition prevalence data are less than five years old, while less than 5 per cent of children live in countries with no data at all. This suggests that the modelled regional and global estimates are highly representative of the situation of the majority of children across the globe for the most recent period.

The situation by percentage of countries (right-hand column) looks vastly different, with less than half of all countries having at least one data point in the last five years and one quarter of countries with no data at all. This indicates that the governments of many countries will not be able to adequately assess and plan programmes to combat malnutrition.

The recency of data varies greatly by region. For example, 91 per cent of children under 5 in Asia live in countries with recent data on stunting, wasting and overweight, while only 5 per cent of children in Oceania (excluding Australia and New Zealand) live in countries with recent data. While almost all children under 5 in Latin America and the Caribbean live in countries with some available data, about one third live in countries with very old data (i.e., where the latest estimates for stunting, wasting and overweight are more than 10 years old). Further, 10 countries in Latin America and the Caribbean (27 per cent of countries in that region) with very small populations do not have any data on child malnutrition at all.

Gaps in the available data make it challenging to accurately estimate the prevalence of malnutrition. Regular data collection (every three to five years) is critical to properly plan and monitor programmes to combat child malnutrition at country, regional and global levels going forward.

**Recency of the latest available country data point (e.g., from household surveys) on malnutrition among children aged under 5 years included in the JME**



Note: Figures for wasting are the same as for stunting and are therefore not presented. The population coverage for the most recent five-year period is the value of the two green colours added together (i.e., the population coverage for stunting for the most recent five-year period in Africa is 78 per cent).

# ONLINE MATERIALS

## Summary of available materials

This key findings report of the 2021 edition of the JME summarizes the new country, regional and global numbers and main messages for official United Nations data on child malnutrition. Additional information is available and the following materials can be downloaded from the links on the bottom right:

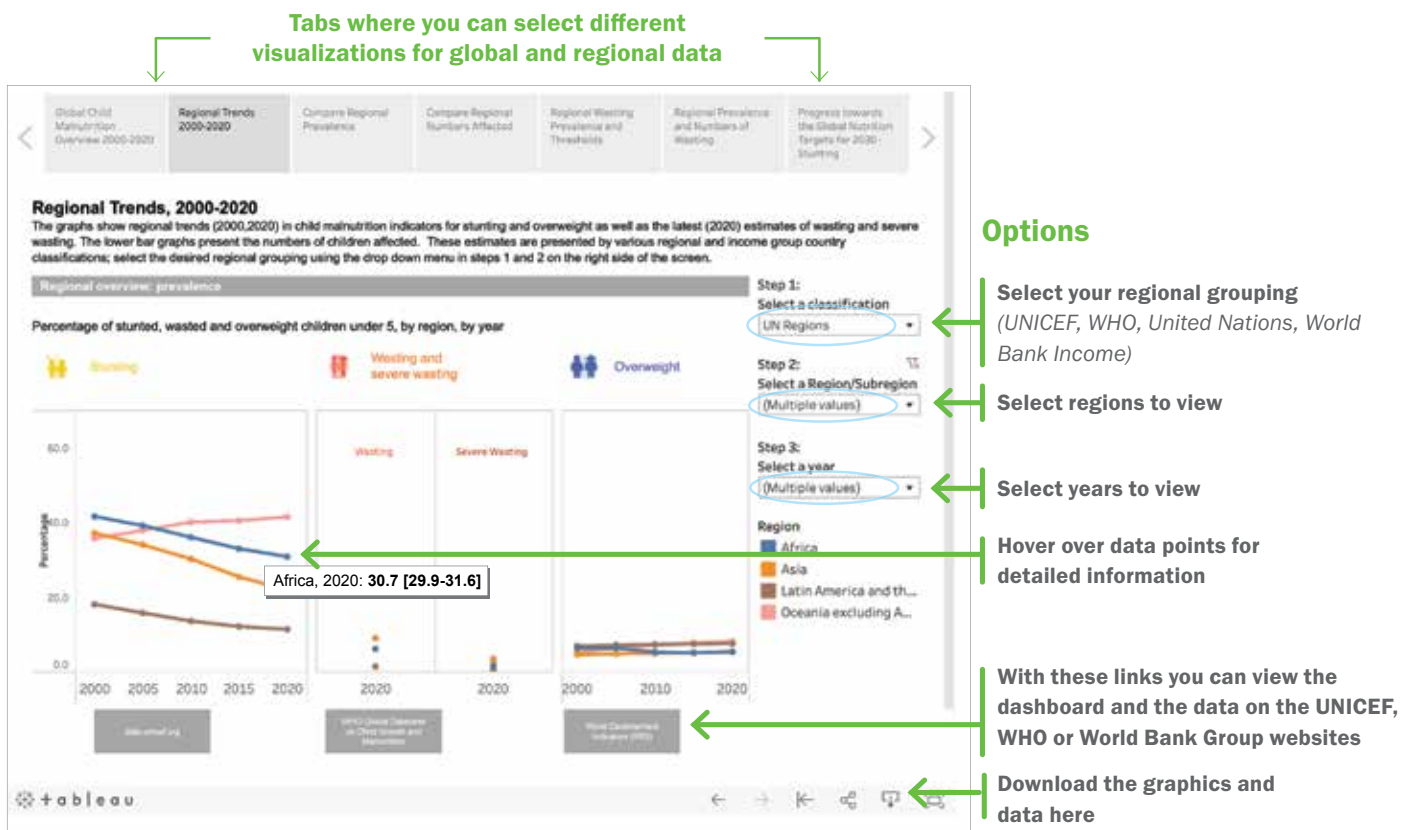
- The latest country-level joint malnutrition dataset, a time series of country estimates from sources such as household surveys that were used to generate the joint child malnutrition country, regional and global modelled estimates for stunting and overweight and the regional and global modelled estimates for wasting and severe wasting
- The country modelled estimates for stunting and overweight
- The joint malnutrition global and regional estimates database by various regional groupings (e.g., *United Nations, UNICEF, WHO, etc., regional groupings*) and for more years than presented in this brochure
- A reference document outlining the composition of the various regional groupings for which the joint estimates have been produced
- Interactive dashboards, which allow users to visualize and export the global and regional estimates for a number of regional groupings

UNICEF: <<https://data.unicef.org/resources/jme>>

WHO: < [www.who.int/teams/nutrition-and-food-safety/databases/nutgrowthdb](http://www.who.int/teams/nutrition-and-food-safety/databases/nutgrowthdb)>;

World Bank Group: <[data.worldbank.org/child-malnutrition](http://data.worldbank.org/child-malnutrition)>

## Interactive dashboard overview



## Additional online materials

Global targets tracking tool: <https://www.who.int/tools/global-targets-tracking-tool>

This tool allows users to explore scenarios, taking into account different rates of progress for the six Global Nutrition Targets and the time left to 2025 using the latest global databases such as the UNICEF-WHO-World Bank Joint Malnutrition Estimates for stunting, wasting and overweight.

# ENDNOTES

## Introduction (pages 2–3)

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## Global and regional tables (page 15)

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## Country assessment tables (page 16–17)

- 6 World Health Organization and United Nations Children's Fund. 'WHO/UNICEF discussion paper: The extension of the 2025 maternal, infant and young child nutrition targets to 2030', WHO and UNICEF, Geneva and New York, 2017, <<https://www.who.int/nutrition/global-target-2025/discussion-paper-extension-targets-2030.pdf>>, accessed April 2021.
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## JME methodology (page 26–28)

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- 11 de Onis, Mercedes et al., 'Methodology for estimating regional and global trends of child malnutrition', *International Journal of Epidemiology*, vol., 33, no. 6, December 2004, pps. 1260–1270, <<https://doi.org/10.1093/ije/dyh202>>, accessed April 2021.
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[data.unicef.org/nutrition](https://data.unicef.org/nutrition); [www.who.int/teams/nutrition-and-food-safety/databases/nutgrowthdb](https://www.who.int/teams/nutrition-and-food-safety/databases/nutgrowthdb); [data.worldbank.org](https://data.worldbank.org).



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