



# Country Nutrition Profiles

*Methodology*

February 2023

## Contents

Introduction .....	2
Assessing progress against the global nutrition targets .....	3
Maternal, infant and young child nutrition targets .....	3
Diet-related non-communicable disease targets .....	1
Regional and sub-regional estimates .....	3
Appendix .....	5
Endnotes .....	39

## Introduction

The Global Nutrition Report's Country Nutrition Profiles capture the state of nutrition and progress towards the global nutrition targets at the country, regional and global level. They bring together the latest data on child and adult diet and burden of malnutrition, as well as nutrition strategies and financing and social determinants of nutrition. They help key stakeholders inform and implement evidence-based nutrition policies by offering them in-depth insights into the status of malnutrition in countries around the globe and allowing them to make comparisons at the subregional, regional and global level.

Data for the Country Nutrition Profiles comes from both publicly available and private sources. These include the Global Burden of Disease, the Institute for Health Metrics and Evaluation NCD Risk Factor Collaboration, the United Nations Children's Fund (UNICEF) and the World Health Organisation (WHO). Where publicly available, there are links to the source data recorded in Section 1 of the Appendix. Where privately sourced, this is also noted in Section 1 of the Appendix.

## Assessing progress against the global nutrition targets

The Country Nutrition Profiles track global, regional and country progress against the global nutrition targets using the latest data. The methodologies for tracking progress differ across targets. These are split into: 1) maternal, infant and young child nutrition (MIYCN) and 2) diet-related non-communicable disease (NCD) targets.

### Maternal, infant and young child nutrition targets

Prevalence estimates are used alongside information about rates of change to assess whether a country is 'on course' or 'off course' to meet each target on maternal, infant and young child nutrition. This is when the global target is applied at the national level, assuming the same relative reduction in all countries.<sup>1</sup>

Anaemia modelled estimates are produced by WHO;<sup>2</sup> estimates of low birth weight are produced by UNICEF and WHO;<sup>3</sup> and estimates of exclusive breastfeeding are produced by UNICEF.<sup>4</sup> National prevalence estimates on child malnutrition are reported in the annual Joint Child Malnutrition Estimates produced by UNICEF, WHO and the World Bank.<sup>5</sup>

The rules to determine which countries are on or off course are established with extensive technical input from WHO and UNICEF. The Global Nutrition Report employs the monitoring rules and classification of progress towards achieving the six nutrition targets proposed by the WHO/UNICEF Technical Expert Advisory Group on Nutrition Monitoring (TEAM). The methodology and rules to track maternal, infant and young child nutrition targets were revised in 2017 by WHO and UNICEF to improve the quality of nutrition target monitoring.<sup>6</sup>

A metric called the **average annual rate of reduction** (AARR) is used to describe and assess progress against each target. There are two types of AARR: the **required** AARR represents the value needed for a country to achieve the global target from the baseline year to 2025; the **current** AARR reflects a country's actual achievement based on the available data between the baseline year and the most recent year. The current prevalence, required AARR and current AARR are used to determine whether the country under assessment is on or off track for each indicator (Table 1). The AARRs for maternal, infant and young child nutrition targets are computed by WHO and UNICEF and supplied to the GNR.

In addition to those listed in Table 1A and 1B, there are additional criteria for assessment and additional considerations.

- Stunting, wasting, overweight and exclusive breastfeeding: countries require at least two nationally representative survey data points since 2008 to assess recent progress, and one of these must have been since 2012 to reflect post-baseline status.
- If countries do not have any post-baseline status (2012) data, an assessment is reserved until estimates in the post-baseline period become available.
- Availability of nationally representative estimates approximately every three years aids effective progress-monitoring and supports reliable assessment.

**Table 1A and 1B. Methodology for tracking country progress on nutrition targets**

**Table 1A.**

INDICATOR	ON TRACK	OFF TRACK – SOME PROGRESS	OFF TRACK – NO PROGRESS OR WORSENING
Stunting	AARR $\geq$ required AARR* or level $<5\%$	AARR $<$ required AARR* but $\geq 0.5$	AARR $<$ required AARR* and $<0.5$
Anaemia	AARR $\geq 5.2^{**}$ or level $<5\%$	AARR $<5.2$ but $\geq 0.5$	AARR $<0.5$
Low birth weight	AARR $\geq 2.74^{+}$ or level $<5\%$	AARR $<2.74$ but $\geq 0.5$	AARR $<0.5$
Not exclusively breastfed	AARR $\geq 2.74^{++}$ or level $<30\%$	AARR $<2.74$ but $\geq 0.8$	AARR $<0.8$
Wasting	Level $<5\%$	Level $\geq 5\%$ but AARR $\geq 2.0$	Level $\geq 5\%$ and AARR $<2.0$

**Table 1B.**

INDICATOR	ON TRACK	OFF TRACK
Overweight	AARR $\geq$ -1.5	AARR $<$ -1.5

Source: WHO and UNICEF, 2017. Methodology for monitoring progress towards the global nutrition targets for 2025: Technical report. WHO/UNICEF Technical Expert Advisory Group on Nutrition Monitoring. Geneva: WHO, UNICEF: New York.

Notes: AARR = average annual rate of reduction.

\*Required AARR is based on the stunting prevalence change, corresponding to a 40% reduction in the number of stunted children between 2012 and 2025, considering the estimated population growth (based on UN Population Prospects).

\*\*Required AARR is based on a 50% reduction in prevalence of anaemia in women of reproductive age between 2012 and 2025.

+Required AARR is based on a 30% reduction in prevalence of low birth weight between 2012 and 2025.

++Required AARR is based on a 30% reduction in not exclusively breastfed rate between 2012 and 2025.

## **Diet-related non-communicable disease targets**

The WHO Global Monitoring Framework for the Prevention and Control of NCDs was adopted by the World Health Assembly in 2013 to effectively implement the NCD Global Action Plan and monitor progress in NCD prevention and control at the global level.

The framework includes nine voluntary targets tracked by 25 indicators of NCD outcomes and risk factors. The overarching goal is to reduce premature mortality due to NCDs by 25% by 2025. The 2016 Global Nutrition Report tracked target 7, 'halt the rise in diabetes and obesity'. The 2018 Global Nutrition Report tracked additional targets on reducing salt/sodium intake by 30% at the population level (target 4) and reducing the prevalence of high blood pressure/hypertension by 25% (target 6).

Country progress towards the targets on reducing salt/sodium, raised blood pressure, diabetes and obesity is derived from modelled estimates computed by the GNR as follows:

### **Required AARR**

For raised blood pressure, the required AARR is calculated using the formula:

$$100 \times (1 - [0.75]^{1/x})$$

where  $x = 1/(y - 2010)$

and  $y$  is the target year (2025). The value 0.75 corresponds to a 25% reduction in prevalence of raised blood pressure.

For diabetes, overweight and obesity, the required AARR is zero for any target year.

### **Actual AARR**

The actual AARR is calculated using estimates provided by NCD Risk Factor Collaboration, comprising the periods 2010–2016 for obesity and overweight, 2010–2015 for raised blood pressure, and 2010–2014 for diabetes.

The methodology is the same as that used for some of the MIYCN targets: a linear regression is fitted to the logarithm of the prevalence and the years, giving a formula:

$$y = \alpha + \beta x$$

where  $x$  is the year,  $y$  is the logarithm of the prevalence, and  $\alpha$  is the  $y$  intercept. The actual AARR is then estimated as  $100 * (1 - \exp(\beta))$

Progress is characterised as ‘on course’ if the actual AARR is equal to or larger than the required AARR, and ‘off course’ if the actual AARR is smaller than the required AARR; ‘some’ progress is not assessed for NCD targets. Global progress is evaluated in the same manner, and the probability of the target being reached is specified

## Regional and sub-regional estimates

The process of deriving regional and sub-regional estimates from country-level data involves a method called **population-weighted means**. This method allows us to create a reasonable estimate for the region and sub-region without a pre-calculated figure.

Prevalence estimates for countries consist of a numerator (estimated number of a group of people to have a characteristic in a given country) and denominator (estimated number in that group of people in a given country). The numerators and denominators are considered separately and only aggregated in the final stages in order to provide reasonable regional and sub-regional estimates. For each country, the population-weighted means method sums the numerators and divides by the sum of the denominators (i.e., populations). This is illustrated in Table 2 with a mock example.

**Table 2. Mock example of population-weighted means method**

COUNTRY	OBESITY PREVALENCE (%) [A]	POPULATION (M) [B]	POPULATION-WEIGHTED [C] = [A] X [B]
X	50	20	1000
Y	25	8	200
Z	10	4	40
<b>Total</b>	<b>85</b>	<b>32</b>	<b>1240</b>

In the mock example, the population weighted mean is **38.8% [1240/32]**, whereas the unweighted mean is **28.3% [85/3]**. It is intuitive that Country X would have a larger effect on the prevalence we calculate for a region consisting of countries X, Y and Z, since it contains more of the people being measured. Therefore, the population-weighted mean is more representative of the prevalence of obesity in the region than the unweighted mean. Notable examples where this is particularly important are South Asia, where India is a disproportionately large country, and East Asia, where China where is disproportionately large.

The country population data used for this methodology are sourced from the [United Nations Department of Economic and Social Affairs, Population Division](#). The indicators are population-weighted by the population of the age bracket that corresponds to the indicator (i.e., ages 5–19 for adolescent indicators). To ensure



reasonable estimates, we only produce these for indicators with full coverage at the country level (i.e., population weighted means are not produced if there are some countries with missing data for that indicator). This method for producing regional and sub-regional estimates is specified in the data type section for the relevant indicators.

# Appendix

## SECTION 1. The burden of malnutrition at a glance

### FIGURE 1.1. Progress towards the global nutrition targets

#### *Section or indicator*

Progress against global nutrition targets

#### *Indicator definition*

Assessment of country progress against 10 of the global nutrition targets, using projected data and average annual rates of reduction (AARR)

#### *Data type*

Various – data types, methods and sources for assessing progress differ between the targets. Data types include Multiple Indicator Cluster Surveys (MICS), Demographic and Health Surveys (DHS) and other nationally representative surveys.

#### *Source*

- World Health Organization (WHO). Global Health Observatory Data Repository/World Health Statistics.  
<https://www.who.int/data/gho/data/indicators>. Accessed 2 September 2021.
- United Nations Children's Fund (UNICEF)/WHO. Low birthweight estimates. Published online June 2019.  
<https://data.unicef.org/topic/nutrition/low-birthweight>. Accessed 24 August 2021.
- UNICEF. Global databases: Infant and young child feeding. Published online September 2021. <http://data.unicef.org/nutrition/iycf>. Accessed 1 October 2021.
- UNICEF/WHO/World Bank. Joint child malnutrition estimates expanded database: Stunting, wasting and overweight.  
<https://data.unicef.org/resources/dataset/malnutrition-data>. Accessed 31 August 2021.
- NCD Risk Factor Collaboration. Values for 2000 to 2016 are published online. <http://ncdrisc.org/data-downloads.html>. Accessed 24 August 2021.

Projected values for 2019 were provided directly to the Global Nutrition Report by NCD Risk Factor Collaboration.

- Tufts University. Global Dietary Database. Published online 2019. <https://www.globaldietarydatabase.org/data-download>. Accessed 6 September 2021.

#### *Additional information*

Data is unavailable for many countries across the targets. Where adequate data exists, country progress is expressed as 'on course', 'some progress' or 'no progress or worsening' for maternal, infant and young child nutrition targets; and 'on course' or 'off course' for nutrition-related non-communicable disease (NCD) targets. Regional progress is expressed as the total number of constituent countries that are 'on course'.

## **SECTION 2. Diet**

### **SUBSECTION 2.1. Infant and young child feeding**

#### **FIGURE 2.1.1 Prevalence of infant and young child feeding indicators**

##### *Section or indicator*

Early initiation of breastfeeding

##### *Indicator definition*

Proportion of children born in the last 24 months who were put to the breast within one hour of birth.

##### *Data type*

Multiple Indicator Cluster Surveys (MICS), Demographic and Health Surveys (DHS) and other nationally representative surveys

##### *Source*

UNICEF. Infant and young child feeding: Early initiation of breastfeeding (birth). Published online September 2021. <http://data.unicef.org/nutrition/iycf>. Accessed 16 November 2022.

##### *Section or indicator*

Exclusive breastfeeding

***Indicator definition***

Proportion of children born in the last 24 months who were put to the breast within one hour of birth.

***Data type***

MICS, DHS and other nationally representative surveys

***Source***

UNICEF. Infant and young child feeding: Exclusive breastfeeding (< 6 months). Published online September 2021. <http://data.unicef.org/nutrition/iycf>. Accessed 16 November 2022.

***Section or indicator***

Introduction of solid, semi-solid or soft foods

***Indicator definition***

Percentage of infants aged 6–8 months who received solid, semi-solid or soft foods during the previous day.

***Data type***

MICS, DHS and other nationally representative surveys

***Source***

UNICEF. Infant and young child feeding: Introduction of solid, semi solid or soft foods (6-8 months). Published online September 2021. <http://data.unicef.org/nutrition/iycf>. Accessed 16 November 2022.

***Section or indicator***

Continued breastfeeding 12–23 months

***Indicator definition***

Proportion of children aged 12–23 months who received breast milk during the previous day.

***Data type***

MICS, DHS and other nationally representative surveys

***Source***

UNICEF. Infant and young child feeding. Published online July 2021. <http://data.unicef.org/nutrition/iycf>. Accessed 16 November 2022.

***Section or indicator***

Minimum dietary diversity

***Indicator definition***

Proportion of children aged 6–23 months who received foods from five or more food groups during the previous day.

***Data type***

MICS, DHS and other nationally representative surveys

***Source***

UNICEF Global Databases: Infant and young child feeding. Published online September 2021. <https://data.unicef.org/topic/nutrition/diets/>. Accessed 16 November 2022.

***Section or indicator***

Minimum meal frequency

***Indicator definition***

Proportion of children aged 6–23 months who received solid, semi-solid, soft foods, or (for breastfed children) milk feeds, the minimum number of times or more during the previous day.

***Data type***

MICS, DHS and other nationally representative surveys

***Source***

UNICEF Global Databases: Infant and young child feeding. Published September 2021. <https://data.unicef.org/topic/nutrition/diets/>. Accessed 16 November 2022.

***Section or indicator***

Minimum acceptable diet

***Indicator definition***

Composite indicator: Proportion of breastfed children aged 6–23 months who had at least the minimum dietary diversity and the minimum meal frequency during the previous day, and the proportion of non-breastfed children aged 6–23 months who received at least two milk feedings and had at least the minimum dietary diversity, not including milk feeds, and the minimum meal frequency during the previous day.

**Data type**

MICS, DHS and other nationally representative surveys

**Source**

UNICEF Global Databases: Infant and young child feeding. Published September 2021. <https://data.unicef.org/topic/nutrition/diets/> . Accessed 16 November 2022.

## **SUBSECTION 2.2. Dietary intakes**

### **FIGURE 2.2.1 Dietary intakes of key foods and nutrients in adults aged 25 and over**

**Section or indicator**

Fruit; Vegetables; Nuts; Legumes; Whole grains; Fish; Dairy; Red meat

**Indicator definition**

Intake of select foods and nutrients by adults aged 25 and older, compared against the recommended intake from the EAT–Lancet Commission on healthy diets from sustainable food systems.

**Data type**

Modelled estimates

**Source**

Tufts University. Global Dietary Database. Published online 2019. <https://www.globaldietarydatabase.org/data-download>. Accessed 16 November 2022.

**Additional information**

The dietary factors have been selected as those diet components that have a statistically significant relationship with at least one disease endpoint that can be generalisable to all populations. Recommended intake targets were determined by the EAT-Lancet Commission on healthy diets from sustainable food systems. This includes minimum recommended intakes of health promoting foods (fruits, vegetables, legumes, nuts and wholegrains) and maximum recommended intakes of foods with detrimental health and/or environmental impacts (red meat, dairy, and fish).

## SECTION 3. Burden of malnutrition

### SUBSECTION 3.1. Infant and young child nutrition status

#### FIGURE 3.1.1 Prevalence of stunting, wasting and overweight in children under 5 years of age

##### *Section or indicator*

Stunting

##### *Indicator definition*

Percentage of children aged 0–59 months who are more than two standard deviations below median height for age of the WHO Child Growth Standards.

##### *Data type*

Population surveys

##### *Source*

UNICEF/WHO/World Bank. Joint child malnutrition estimates expanded database: Stunting (Survey Estimates). Published May 2022.

<https://data.unicef.org/resources/dataset/malnutrition-data>. Accessed 16 November 2022.

##### *Section or indicator*

Wasting

##### *Indicator definition*

Percentage of children aged 0–59 months who are more than two (moderate and severe) standard deviations below median weight for height of the WHO Child Growth Standards.

##### *Data type*

Population surveys

##### *Source*

UNICEF/WHO/World Bank. Joint child malnutrition estimates expanded database: Wasting (Survey Estimates). Published May 2022.

<https://data.unicef.org/resources/dataset/malnutrition-data>. Accessed 16 November 2022.

***Section or indicator***

Overweight

***Indicator definition***

Percentage of children under 5 years who are more than two standard deviations above the median weight-for-height of the WHO Child Growth Standards.

***Data type***

Population surveys

***Source***

UNICEF/WHO/World Bank. Joint child malnutrition estimates expanded database: Overweight (Survey Estimates). Published May 2022.

<https://data.unicef.org/resources/dataset/malnutrition-data>. Accessed 16 November 2022.

**FIGURE 3.1.2 Prevalence of coexisting stunting, wasting and overweight in children under 5 years of age**

***Section or indicator***

Coexistence of wasting, stunting and overweight

***Indicator definition***

Coexistence of wasting, stunting and overweight among children under 5 years of age

***Data type***

Population surveys

***Source***

UNICEF Global databases: Overlapping stunting, wasting and overweight. Published May 2022. <https://data.unicef.org/topic/nutrition/malnutrition>. Accessed 16 November 2022.

**FIGURE 3.1.3 Prevalence of infants with low birth weight**

***Section or indicator***

Low birth weight

***Indicator definition***

Infants born weighing less than 2,500 grams (5.51 pounds)



**Data type**

Modelled estimates

**Source**

UNICEF/WHO. Low birthweight estimates. Published June 2022.  
<https://data.unicef.org/topic/nutrition/low-birthweight>. Accessed 16 November 2022.

## **SUBSECTION 3.2. Child and adolescent nutrition status**

### **FIGURE 3.2.1 Prevalence of thinness, overweight and obesity in children and adolescents aged 5-19 years**

**Section or indicator**

Child and adolescent thinness

**Indicator definition**

Percentage of children and adolescents aged 5–19 years who are more than two standard deviations below the median BMI-for-age of the WHO growth reference for school-aged children and adolescents.

**Data type**

Modelled estimates and projected estimates

**Source**

NCD Risk Factor Collaboration. Values for 2000 to 2016 are published online.  
<http://ncdrisc.org/data-downloads.html>. Accessed 16 November 2022. Projected values for 2019 were provided directly to the Global Nutrition Report by NCD Risk Factor Collaboration.

**Additional information**

Regional data is based on the population-weighted means of all constituent countries with available data.

**Section or indicator**

Child and adolescent overweight

**Indicator definition**

Percentage of children and adolescents aged 5–19 years who are more than one standard deviation above the median BMI-for-age of the WHO growth reference for school-aged children and adolescents.

#### *Data type*

Modelled estimates and projected estimates

#### *Source*

NCD Risk Factor Collaboration. Values for 2000 to 2016 are published online. <http://ncdrisc.org/data-downloads.html>. Accessed 16 November 2022. Projected values for 2019 were provided directly to the Global Nutrition Report by NCD Risk Factor Collaboration.

#### *Additional information*

Regional data is based on the population-weighted means of all constituent countries with available data.

#### *Section or indicator*

Child and adolescent obesity

#### *Indicator definition*

Percentage of children and adolescents aged 5–19 years who are more than two standard deviations above the median BMI-for-age of the WHO growth reference for school-aged children and adolescents.

#### *Data type*

Modelled estimates and projected estimates

#### *Source*

NCD Risk Factor Collaboration. Values for 2000 to 2016 are published online. <http://ncdrisc.org/data-downloads.html>. Accessed 16 November 2022. Projected values for 2019 were provided directly to the Global Nutrition Report by NCD Risk Factor Collaboration.

#### *Additional information*

Regional data is based on the population-weighted means of all constituent countries with available data.

### **SUBSECTION 3.3. Adult nutrition status and disease**

#### **FIGURE 3.3.1 Prevalence of underweight, overweight and obesity in adults aged 18 years and over**

#### *Section or indicator*

Adult underweight

***Indicator definition***

Percentage of adults aged 18 years and older with a BMI lower than 18.5 kg/m<sup>2</sup>

***Data type***

Modelled estimates and projected estimates

***Source***

NCD Risk Factor Collaboration. Values for 2000 to 2016 are published online. <http://ncdrisc.org/data-downloads.html>. Accessed 16 November 2022. Projected values for 2019 were provided directly to the Global Nutrition Report by NCD Risk Factor Collaboration.

***Additional information***

Regional data is based on the population-weighted means of all constituent countries with available data.

***Section or indicator***

Adult overweight

***Indicator definition***

Percentage of adults aged 18 years and older with a BMI of 25 kg/m<sup>2</sup> or higher

***Data type***

Modelled estimates

***Source***

NCD Risk Factor Collaboration. Values for 2000 to 2016 are published online. <http://ncdrisc.org/data-downloads.html>. Accessed 16 November 2022. Projected values for 2019 were provided directly to the Global Nutrition Report by NCD Risk Factor Collaboration.

***Additional information***

Regional data is based on the population-weighted means of all constituent countries with available data.

***Section or indicator***

Adult obesity

***Indicator definition***

Percentage of adults aged 18 years and older with a BMI of 30 kg/m<sup>2</sup> or higher

**Data type**

Modelled estimates and projected estimates

**Source**

NCD Risk Factor Collaboration. Values for 2000 to 2016 are published online. <http://ncdrisc.org/data-downloads.html>. Accessed 16 November 2022. Projected values for 2019 were provided directly to the Global Nutrition Report by NCD Risk Factor Collaboration.

**Additional information**

Regional data is based on the population-weighted means of all constituent countries with available data.

**FIGURE 3.3.2 Prevalence of anaemia among women of reproductive age**

**Section or indicator**

Anaemia in women of reproductive age

**Indicator definition**

Prevalence of anaemia among women of reproductive age (15–49 years), both pregnant and non- pregnant, with haemoglobin levels below 12 g/dL for non-pregnant women and below 11 g/dL for pregnant women

**Data type**

Modelled estimates

**Source**

WHO. Global Health Observatory Data Repository/World Health Statistics. <https://www.who.int/data/gho/data/indicators>. Accessed 16 November 2022.

**Additional information**

Where estimates are not provided, regional data is based on the population-weighted means of all constituent countries with available data.

**FIGURE 3.3.3 Prevalence of raised blood pressure and diabetes in adults aged 18 years and over**

**Section or indicator**

Raised blood pressure

***Indicator definition***

Percentage of adults aged 18 years and older with raised blood pressure – defined as blood pressure, systolic and/or diastolic blood pressure  $\geq 140/90$  mmHg

***Data type***

Modelled estimates and projected estimates

***Source***

NCD Risk Factor Collaboration. Values for 2000 to 2016 are published online. <http://ncdrisc.org/data-downloads.html>. Accessed 16 November 2022. Projected values for 2019 were provided directly to the Global Nutrition Report by NCD Risk Factor Collaboration.

***Additional information***

Regional data is based on the population-weighted means of all constituent countries with available data.

***Section or indicator***

Diabetes

***Indicator definition***

Percentage of adults aged 18 years and older with diabetes – fasting glucose 7.0 mmol/L, on medication for raised blood glucose, or with history of diagnosis of diabetes

***Data type***

Modelled estimates and projected estimates

***Source***

NCD Risk Factor Collaboration. Values for 2000 to 2016 are published online. <http://ncdrisc.org/data-downloads.html>. Accessed 16 November 2022. Projected values for 2019 were provided directly to the Global Nutrition Report by NCD Risk Factor Collaboration.

***Additional information***

Regional data is based on the population-weighted means of all constituent countries with available data.

## **SUBSECTION 3.4. Deaths attributed to dietary risk factors**

### **FIGURE 3.4.1 Deaths attributed to dietary risk factors**

#### *Section or indicator*

Deaths

#### *Indicator definition*

Deaths (in millions) attributable to dietary risk factors by cause of death for risks related to dietary composition and weight levels

#### *Data type*

Modelled estimates

#### *Source*

New analysis based on estimates of: food intake from the Global Dietary Database, <https://www.globaldietarydatabase.org/data-download>; weight measurements from the NCD Risk Factor Collaboration, <http://ncdrisc.org/data-downloads.html>; risk-disease relationships from the epidemiological literature (Bechthold et al. Critical Reviews in Food Science and Nutrition 2019; **59**: 1071–90; Schwingshackl et al. European Journal of Epidemiology 2017; **32**: 363–75; Schwingshackl et al. International Journal of Cancer 2018; **142**: 1748–58; Afshin et al. The American Journal of Clinical Nutrition 2014 (ajcn.076901); Aune et al. BMC Medicine 2016; **14**: 207; Aune et al. International Journal of Epidemiology 2016; published online 18 March; Di Angelantonio et al. Lancet 2016; **388**: 776–86; Aune et al. British Medical Journal 2016; **353**: i2716; Imamura et al. British Medical Journal 2015; **351**: h3576; Xi et al. British Journal of Nutrition 2015; **113**: 709–17); and mortality and population estimates from the Global Burden of Disease project, <http://www.healthdata.org/gbd/gbd-2019-resources>.

#### *Additional information*

The combined risk is less than the sum of individual risks because individuals can be exposed to multiple risks, but mortality is ascribed to one risk and cause.

## SECTION 4. Nutrition strategies and financing

### SUBSECTION 4.1. National nutrition policies

#### FIGURE 4.1.1. Implemented national food and NCD policies

##### *Section or indicator*

Food-based dietary guidelines

##### *Indicator definition*

Typically, a set of recommendations in terms of foods, food groups and dietary patterns to provide the required nutrients to promote overall health and prevent chronic diseases.

##### *Source*

Food and Agricultural Organization (FAO). Food-based dietary guidelines. <http://www.fao.org/nutrition/education/food-based-dietary-guidelines/en>. Accessed 16 November 2022.

##### *Additional information*

Regional data is expressed as the total number of constituent countries with guidelines.

##### *Section or indicator*

Mandatory legislation for salt iodisation

##### *Indicator definition*

Legal documentation that has the effect of mandating the iodisation of salt.

##### *Source*

Global Fortification Data Exchange. <https://fortificationdata.org/interactive-map-fortification-legislation>. Accessed 16 November 2022.

##### *Additional information*

Regional data is expressed as the total number of constituent countries that have mandatory legislation.

##### *Section or indicator*

Sugar-sweetened beverage tax

***Indicator definition***

Jurisdictions with implemented sugar-sweetened beverage taxes.

***Source***

WHO. Global Health Observatory Data Repository.

<https://www.who.int/data/gho/data/indicators>. Accessed 16 November 2022.

***Additional information***

Regional data is expressed as the total number of constituent countries with implemented sugar-sweetened beverage taxes.

***Section or indicator***

Policy to reduce salt consumption

***Indicator definition***

Policy (or policies) to reduce population salt consumption such as product reformulation by industry, regulation of salt content of food or public awareness programmes

***Data type***

Method of estimation: official country response to the NCD Country Capacity Survey

***Source***

WHO. Global Health Observatory Data Repository.

<https://www.who.int/data/gho/data/indicators>. Accessed 16 November 2022.

***Additional information***

This indicator is based on those of countries who have responded “Yes” to the question “Is your country implementing any policies to reduce population salt consumption?”.

***Section or indicator***

Policy to limit saturated fatty acids

***Indicator definition***

Policy (or policies) to reduce population saturated fatty acid intake

***Data type***

Method of estimation: official country response to the NCD Country Capacity Survey



**Source**

WHO. Global Health Observatory Data Repository.  
<https://www.who.int/data/gho/data/indicators>. Accessed 16 November 2022.

**Additional information**

This indicator is based on those countries who have responded “Yes” to the question “Is your country implementing any national policies to reduce population saturated fatty acid intake?”.

**Section or indicator**

Policy to eliminate industrially produced trans fatty acids

**Indicator definition**

Policy (or policies) to eliminate industrially produced trans-fatty acids in the food supply

**Data type**

Method of estimation: official country response to the NCD Country Capacity Survey

**Source**

WHO. Global Health Observatory Data Repository.  
<https://www.who.int/data/gho/data/indicators>. Accessed 16 November 2022.

**Additional information**

This indicator is based on those countries who have responded “Yes” to the question “Is your country implementing any national policies to eliminate industrially produced trans-fatty acids (i.e. partially hydrogenated oils) in the food supply?”.

**Section or indicator**

Policy to reduce the impact of marketing of foods and beverages high in saturated fats, trans fatty acids, free sugars, or salt on children

**Indicator definition**

Policy (or policies) to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars or salt

**Data type**

Method of estimation: official country response to the NCD Country Capacity Survey

**Source**

WHO. Global Health Observatory Data Repository.

<https://www.who.int/data/gho/data/indicators>. Accessed 16 November 2022.

**Additional information**

This indicator is based on those countries who responded “Yes” to the question “Is your country implementing any policies to reduce the impact on children of marketing of foods and non-alcoholic beverages high in saturated fats, trans-fatty acids, free sugars, or salt?”.

**Section or indicator**

Operational, multisectoral national NCD policy, strategy or action plan

**Indicator definition**

Operational, multisectoral national NCD policy, strategy or action plan that integrates several NCDs and their risk factors: 'multisectoral' refers to engagement with one or more government sectors outside health; 'operational' refers to a policy, strategy or action plan which is being used and implemented in the country, and has resources and funding available to implement it

**Data type**

Method of estimation: official country response to the NCD Country Capacity Survey

**Source**

WHO. Global Health Observatory Data Repository.

<https://www.who.int/data/gho/data/indicators>. Accessed 16 November 2022.

**Additional information**

Countries who have a "Yes" for this indicator have responded “Yes” to the question “Does your country have a national NCD policy, strategy or action plan which integrates several NCDs and their risk factors?” and the sub-question “Is it multisectoral?”. Countries also had to respond “operational” for the sub-question “Indicate its stage”. They also had to indicate that the policy/strategy/action plan addresses the four main risk factors for NCDs (harmful alcohol use, unhealthy diet, physical inactivity and tobacco) and the four main NCDs (cancer,

cardiovascular diseases, chronic respiratory diseases and diabetes). An exception is made for alcohol according to national context.

***Section or indicator***

Operational policy, strategy or action plan to reduce unhealthy diet related to NCDs

***Indicator definition***

Operational policy, strategy or action plan for unhealthy diet

***Data type***

Method of estimation: official country response to WHO NCD Country Capacity Survey

***Source***

WHO. Global Health Observatory Data Repository.  
<https://www.who.int/data/gho/data/indicators>. Accessed 16 November 2022.

***Section or indicator***

Operational policy, strategy or action plan for diabetes

***Indicator definition***

Operational policy, strategy or action plan for diabetes

***Data type***

Method of estimation: official country response to WHO NCD Country Capacity Survey

***Source***

WHO. Global Health Observatory Data Repository.  
<https://www.who.int/data/gho/data/indicators>. Accessed 16 November 2022.

## **SUBSECTION 4.2. National policy targets**

### **FIGURE 4. 2.1. Inclusion of targets related to the global nutrition targets in national policies**

***Section or indicator***

Various targets included in national policies

#### ***Indicator definition***

Targets included in any national government-implemented policy, strategy or plan relevant to improving nutrition and promoting healthy diet. Legislation, codes, regulations, protocols and guidelines, as well as non-governmental policies, were not considered.

#### ***Source***

WHO GINA, 2nd Global Nutrition Policy Review

#### ***Additional information***

Regional data is expressed as the total number of constituent countries with each target in their national policies.

### **SUBSECTION 4.3. Nutrition intervention coverage**

#### **FIGURE 4.3.1. Population coverage of key supplementation and fortification interventions**

##### ***Section or indicator***

Children 0–59 months with diarrhoea in the past two weeks preceding the survey who received zinc treatment

##### ***Indicator definition***

Percentage of children under 5 years of age with diarrhoea in the past two weeks preceding the survey who received zinc treatment.

##### ***Data type***

Survey

##### ***Source***

UNICEF. Global Databases: Child Health Coverage. Published May 2022.  
<https://data.unicef.org/topic/child-health/diarrhoeal-disease>. Accessed 16 November 2022.

##### ***Section or indicator***

Children 6–59 months who received two high-dose vitamin A supplements in a calendar year

##### ***Indicator definition***

Percentage of children aged 6–59 months who received two high-dose vitamin A supplements in a calendar year.

***Data type***

Survey

***Source***

UNICEF. Vitamin A data. <https://data.unicef.org/resources/dataset/vitamin-supplementation>. Accessed 16 November 2022

***Section or indicator***

Children 6–59 months given iron supplements in the seven days preceding the survey

***Indicator definition***

Percentage of children aged 6–59 months who were given iron supplements in the seven days preceding the survey.

***Data type***

Data is compiled using STATcompiler and taken from country DHS for 2005–2021

***Source***

STATcompiler. The DHS Program. [www.statcompiler.com](http://www.statcompiler.com). Accessed 16 November 2022.

***Section or indicator***

Women with a live birth in the five years preceding the survey who received iron tablets or syrup during antenatal care

***Indicator definition***

Percentage of women with a birth in the five years preceding the survey who received iron tablets and syrup during antenatal care.

***Data type***

Data is compiled using STATcompiler and taken from country DHS for 2005–2021

***Source***

STATcompiler. The DHS Program. [www.statcompiler.com](http://www.statcompiler.com). Accessed 16 November 2022.

***Section or indicator***

Households consuming any iodised salt

**Indicator definition**

Percentage of households with any iodised salt.

**Data type**

Survey

**Source**

UNICEF. Global databases on iodized salt. Published October 2021.

<https://data.unicef.org/topic/nutrition/iodine>. Accessed 16 November 2022.

## **SUBSECTION 4.4. Official development assistance (ODA)**

### **FIGURE 4.4.1. Allocation of official development assistance (ODA) for nutrition**

**Section or indicator**

Development assistance

**Indicator definition**

Official development assistance (ODA) received/disbursed (US\$ millions/% of total); disbursements of ODA from/to countries, reported to the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) under the basic nutrition purpose code (number 12240).

**Data type**

Disbursements

**Source**

Development Initiatives based on OECD DAC CRS

**Additional information**

Amounts based on gross ODA disbursements, constant 2020 prices; includes ODA grants and loans, but excludes other official flows and private grants reported to the OECD DAC Creditor Reporting System (CRS). Regional data is the sum of disbursements received or made by constituent countries.

## SECTION 5. Social determinants of nutrition

### FIGURE 5.1. Population composition

#### *Section or indicator*

Total population, thousands

#### *Indicator definition*

Total population

#### *Data type*

Modelled estimates

#### *Source*

UN Department of Economic and Social Affairs, Population Division. World Population Prospects.

<https://population.un.org/wpp/Download/Standard/Population>. Accessed 16 November 2022.

#### *Section or indicator*

Under 5 population, thousands

#### *Indicator definition*

Total population of children aged 0-59 months

#### *Data type*

Modelled estimates

#### *Source*

UN Department of Economic and Social Affairs, Population Division. World Population Prospects.

<https://population.un.org/wpp/Download/Standard/Population>. Accessed 16 November 2022

#### *Section or indicator*

65 and over population, thousands

#### *Indicator definition*

Total population aged 65 years or older

**Data type**

Modelled estimates

**Source**

UN Department of Economic and Social Affairs, Population Division. World Population Prospects.

<https://population.un.org/wpp/Download/Standard/Population>. Accessed 16 November 2022.

**Section or indicator**

Rural population, %

**Indicator definition**

Percentage of population living in rural areas

**Data type**

Modelled estimates

**Source**

UN Department of Economic and Social Affairs, Population Division. World Population Prospects.

<https://population.un.org/wpp/Download/Standard/Population>. Accessed 16 November 2022.

**FIGURE 5.2. Population composition**

**Section or indicator**

Undernourishment

**Indicator definition**

The percentage of the population whose habitual food consumption is insufficient to provide the dietary energy levels required to maintain a normal active and healthy life

**Data type**

Food security indicator

**Source**

FAO Statistics Division. Food Security/Suite of Food Security Indicators.

<http://www.fao.org/sustainable-development-goals/indicators/211/en>. Accessed 16 November 2022.



#### ***Additional information***

Calculated from three-year averages of modelled estimates, with the associated year being the middle year of those three (e.g., 2018 estimate is the average of 2017–2019)

### **FIGURE 5.3. Under-5 mortality rate per 1,000 live births**

#### ***Section or indicator***

Under-5 mortality rate (per 1,000 live births)

#### ***Indicator definition***

Probability of dying between birth and 5 years of age, expressed per 1,000 live births

#### ***Data type***

Modelled estimates

#### ***Source***

UNICEF. Global Databases: Under-five mortality. Published December 2021 <http://data.unicef.org/child-mortality/under-five>. Accessed 16 November 2022.

### **FIGURE 5.4. Population density of health workers per 1,000 people**

#### ***Section or indicator***

Population density of health workers (per 1,000 population)

#### ***Indicator definition***

Population density of health workers (per 1,000 population): medical doctors include generalist and specialist medical practitioners; nurses and midwives include professional nurses, professional midwives, auxiliary nurses, auxiliary midwives, enrolled nurses, enrolled midwives and other associated personnel such as dental nurses and primary care nurses; community health workers include various types of community health aides, many with country-specific occupational titles such as community health officers, community health-education workers, family health workers, lady health visitors and health extension package workers

#### ***Data type***

Population surveys and modelled estimates

### **Source**

WHO. Global Health Workforce Statistics. <https://data.worldbank.org/indicator>. Accessed 16 November 2022.

## **FIGURE 5.5. Source of drinking water**

### **Section or indicator**

Drinking water coverage

### **Indicator definition**

Percentage of the population using improved drinking-water sources – based on the following categories: ‘safely managed’, drinking water from an improved water source that is located on premises, available when needed and free from faecal and priority chemical contamination; ‘basic’, drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing; ‘limited’, drinking water from an improved source for which collection time exceeds 30 minutes for a roundtrip including queuing; ‘unimproved’, drinking water from an unprotected dug well or unprotected spring; ‘surface water’, drinking water directly from a river, dam, lake, pond, stream, canal or irrigation canal

### **Data type**

Modelled estimates

### **Source**

WHO/UNICEF. Joint Monitoring Programme for Water Supply and Sanitation. <https://washdata.org/data>. Accessed 16 November 2022.

## **FIGURE 5.6. Type of sanitation facility**

### **Section or indicator**

Sanitation coverage

### **Indicator definition**

Percentage of the population using improved sanitation facilities – based on the following categories: ‘safely managed’, use of improved facilities that are not shared with other households and where excreta are safely disposed in situ or transported and treated off-site; ‘basic’, use of improved facilities that are not shared with other households; ‘limited’, use of improved facilities shared between

two or more households; 'unimproved', use of pit latrines without a slab or platform, hanging latrines or bucket latrines; 'open defecation', disposal of human faeces in fields, forests, bushes, open bodies of water, beaches and other open spaces or with solid waste

**Data type**

Modelled estimates

**Source**

WHO/UNICEF. Joint Monitoring Programme for Water Supply and Sanitation. <https://washdata.org/data>. Accessed 2 16 November 2022.

**FIGURE 5.7. Annual gross domestic product (GDP) per capita**

**Section or indicator**

GDP (PPP\$)

**Indicator definition**

Gross domestic product per person based on purchasing power parity, with data in constant 2017 international dollars

**Source**

International Monetary Fund. World Economic Outlook Databases. <https://www.imf.org/en/Publications/WEO/weo-database/2022/April> . Accessed 16 November 2022.

**Additional information**

Regional data is based on the population-weighted means of all constituent countries with available data

**FIGURE 5.8. Population living below the poverty line**

**Section or indicator**

Poverty rates

**Indicator definition**

Percentage of the population living on less than \$1.90 a day at 2011 international prices

**Data type**

Household surveys

**Source**

World Bank. PovcalNet: an online analysis tool for global poverty monitoring. <http://iresearch.worldbank.org/PovcalNet/home.aspx>. Accessed 16 November 2022.

**Additional information**

Regional data is based on the population-weighted means of all constituent countries with available data

**Section or indicator**

Poverty rates

**Indicator definition**

Percentage of the population living on less than \$3.20 a day at 2011 international prices

**Data type**

Household surveys

**Source**

World Bank. PovcalNet: an online analysis tool for global poverty monitoring. <http://iresearch.worldbank.org/PovcalNet/home.aspx>. Accessed 16 November 2022.

**Additional information**

Regional data is based on the population-weighted means of all constituent countries with available data

**FIGURE 5.9. Country income inequality index**

**Section or indicator**

Income inequality

**Indicator definition**

Country income inequality, based on the Gini index, which measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households in an economy deviates from a perfectly equal

distribution. The Gini index ranges from 0 (perfect equality) to 100 (perfect inequality).

**Data type**

Index, based on primary household survey data obtained from government statistical agencies and World Bank country departments

**Source**

World Bank. Gini index. <https://data.worldbank.org/indicator/SI.POV.GINI>. Accessed 16 November 2022.

**FIGURE 5.10. Gender-related determinants**

**Section or indicator**

Early childbearing – births by 18 years of age

**Indicator definition**

Percentage of women aged 20–24 years who gave birth before 18 years of age

**Data type**

Based on MICS, DHS and other nationally representative surveys

**Source**

UNICEF. Global Databases: Maternal and Newborn Health Coverage. Published May 2022. <http://data.unicef.org/maternal-health/delivery-care>. Accessed 16 November 2022.

**Section or indicator**

Gender inequality index

**Indicator definition**

Measurement of gender inequalities in terms of three important aspects of human development: reproductive health – measured by maternal mortality ratio and adolescent birth rates; empowerment – measured by proportion of parliamentary seats occupied by women and proportion of women and men aged 25 years and older with at least some secondary education; and economic status – expressed as labour market participation and measured by labour force participation rate of female and male populations aged 15 years and older

**Data type**

Composite index

**Source**

UN Development Programme, Human Development Reports. Gender Inequality Index. <https://hdr.undp.org/data-center/thematic-composite-indices/gender-inequality-index#/indicies/GII> . Accessed 16 November 2022.

**FIGURE 5.11. Prevalence of female secondary school enrolment**

**Section or indicator**

Female secondary education enrolment

**Indicator definition**

The total number of female students in the official school age range for upper secondary education who are enrolled in any level of education out of the overall population of the same age group

**Data type**

Population surveys

**Source**

UNESCO Institute for Statistics. <http://data.uis.unesco.org/>. Accessed 16 November 2022.

## **SECTION 6. Environmental impacts**

**FIGURE 6.1. Environmental impacts of the food system**

**Section or indicator**

Environmental domain

**Indicator definition**

Food-related environmental impacts expressed by environmental domain and food group. Environmental domains consist of 'greenhouse gas emissions', 'land use', 'freshwater use', 'nitrogen application' and 'phosphorus application'.

**Data type**

Modelled estimates

### **Source**

New analysis based on estimates of food demand from FAO (FAO. Food Balance Sheets: A Handbook. Rome, Italy: FAO, 2001) and a database of country and food group-specific environmental footprints (Springmann et al. Options for keeping the food system within environmental limits. Nature 2018; **562**: 519–25; Poore & Nemecek. Reducing food’s environmental impacts through producers and consumers. Science 2018; **360**: 987–92).

### **Additional information**

Data on food demand for each country from the FAO was paired with a comprehensive database of environmental footprints, differentiated by country, food group, and environmental impact. The footprints take into account all food production, including inputs such as fertilisers and feed, transport, and processing e.g. of oil seeds to oils and sugar crops to sugars.

## **FIGURE 6.2. Global impact of the food system**

### **Section or indicator**

Planetary boundary

### **Indicator definition**

Planetary boundary value expressed by component of the food system and food group. Components consist of ‘cropland’, ‘freshwater’, ‘greenhouse gases’, ‘nitrogen’ and ‘phosphorus’.

### **Data type**

Modelled estimates

### **Source**

New analysis based on estimates of food demand from FAO (FAO. Food Balance Sheets: A Handbook. Rome, Italy: FAO, 2001) and a database of country and food group-specific environmental footprints (Springmann et al. Options for keeping the food system within environmental limits. Nature 2018; **562**: 519–25; Poore & Nemecek. Reducing food’s environmental impacts through producers and consumers. Science 2018; **360**: 987–92). The target values for sustainable food production are in line with the Sustainable Development Goals specified by and adapted from the EAT-Lancet Commission (Willett et al. The Lancet 2019; **393**: 447–92; Springmann et al. The British Medical Journal 2020; **370**: 2322).

### ***Additional information***

Planetary boundaries define the threshold related to global environmental processes beyond which humanity should not go. Planetary boundaries align with the targets for sustainable food production as set out by the Sustainable Development Goals. If impacts exceed 100% of the planetary boundary, the dietary pattern can be considered unsustainable in light of global environmental targets, and disproportionate in the context of an equitable distribution of environmental resources and mitigation efforts.



**Table 2. Countries included within the Country Nutrition Profiles regions and sub-regions**

AFRICA
<p><b>Eastern Africa</b></p> <p>Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Rwanda, Seychelles, Somalia, South Sudan, Uganda, United Republic of Tanzania, Zambia, Zimbabwe</p> <p><b>Middle Africa</b></p> <p>Angola, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Sao Tome and Principe</p> <p><b>Northern Africa</b></p> <p>Algeria, Egypt, Libya, Morocco, Sudan, Tunisia</p> <p><b>Southern Africa</b></p> <p>Botswana, Eswatini, Lesotho, Namibia, South Africa</p> <p><b>Western Africa</b></p> <p>Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo</p>
ASIA
<p><b>Central Asia</b></p> <p>Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan</p> <p><b>Eastern Asia</b></p> <p>China, Democratic People's Republic of Korea, Japan, Mongolia, Republic of Korea</p> <p><b>South-eastern Asia</b></p> <p>Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, Viet Nam</p> <p><b>Southern Asia</b></p> <p>Afghanistan, Bangladesh, Bhutan, India, Iran (Islamic Republic of), Maldives, Nepal, Pakistan, Sri Lanka</p> <p><b>Western Asia</b></p>

Armenia, Azerbaijan, Bahrain, Cyprus, Georgia, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, State of Palestine, Syrian Arab Republic, Turkey, United Arab Emirates, Yemen

## EUROPE

### Eastern Europe

Belarus, Bulgaria, Czechia, Hungary, Poland, Republic of Moldova, Romania, Russian Federation, Slovakia, Ukraine

### Northern Europe

Denmark, Estonia, Finland, Iceland, Ireland, Latvia, Lithuania, Norway, Sweden, United Kingdom of Great Britain and Northern Ireland

### Southern Europe

Albania, Andorra, Bosnia and Herzegovina, Croatia, Greece, Italy, Malta, Montenegro, North Macedonia, Portugal, San Marino, Serbia, Slovenia, Spain

### Western Europe

Austria, Belgium, France, Germany, Liechtenstein, Luxembourg, Monaco, Netherlands, Switzerland

## LATIN AMERICA AND THE CARIBBEAN

### Caribbean

Antigua and Barbuda, Bahamas, Barbados, Cuba, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago

### Central America

Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama

### South America

Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay, Venezuela (Bolivarian Republic of)

## NORTH AMERICA

### Northern America

Canada, United States of America

## OCEANIA

### Australia and New Zealand

Australia, New Zealand

**Melanesia**

Fiji, Papua New Guinea, Solomon Islands, Vanuatu

**Micronesia**

Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, Palau

**Polynesia**

Samoa, Tonga, Tuvalu

## Endnotes

<sup>1</sup> For a detailed and thorough discussion of the methodology for monitoring progress towards the global maternal, infant and young child nutrition targets for 2025 see: WHO and UNICEF for the WHO/UNICEF Technical Expert Advisory Group on Nutrition Monitoring. Methodology for Monitoring Progress Towards the Global Nutrition Targets for 2025. Technical report. Geneva: WHO, New York: UNICEF, 2017.

<sup>2</sup> WHO. World Health Statistics 2019. Global Health Observatory Data Repository. Geneva: WHO, 2019. <https://apps.who.int/gho/data/node.imr.ANEMIAPW?lang=en>.

<sup>3</sup> UNICEF and WHO. Low Birthweight Estimates, 2019 edition. [www.who.int/nutrition/publications/UNICEFWHO-lowbirthweight-estimates-2019/en/](http://www.who.int/nutrition/publications/UNICEFWHO-lowbirthweight-estimates-2019/en/).

<sup>4</sup> UNICEF. UNICEF Global Databases: Infant and Young Child Feeding. New York: UNICEF Division of Data Analytics, Planning and Monitoring, 2019. <http://data.unicef.org/nutrition/iycf>. Accessed 3 February 2020.

<sup>5</sup> UNICEF/WHO/World Bank. Joint Child Malnutrition, 2019 edition. UNICEF: New York <https://data.unicef.org/resources/dataset/malnutrition-data>. Accessed 3 February 2020.

<sup>6</sup> WHO and UNICEF for the WHO/UNICEF Technical Expert Advisory Group on Nutrition Monitoring. Methodology for Monitoring Progress Towards the Global Nutrition Targets for 2025. Technical report. Geneva: WHO, New York: UNICEF, 2017.