



Country Nutrition Profiles

Methodology

November 2021

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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 Global Burden of Disease, the Institute for Health Metrics and Evaluation NCD Risk Factor Collaboration, United Nations Children's Fund (UNICEF) and the World Health Organisation (WHO). Where publicly available, there are links to the source data recorded in Table 1 of the Appendix. Where privately sourced, this is also noted in Table 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.¹

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

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.⁶

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).

In addition to those listed in Table A2, 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 1. 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.

There are additional criteria for assessment and additional considerations which are not listed in Table 1. Countries require:

- at least two nationally representative survey data points since 2008, and one of these must have been since 2012 to reflect post-baseline status (to assess recent progress for stunting, not exclusive breastfeeding, wasting and overweight)
- post-baseline (2012) data (and if this is not available, assessment is reserved until estimates in the post-baseline period become available)
- available nationally representative estimates approximately every three years (because this aids effective progress-monitoring and supports reliable assessment).

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 as follow:

Required AARR

For raised blood pressure, the required AARR is calculated using the formula:
 $100 \times (1 - [0.75]^x)$

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 prevalences and the years, giving a formula:

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

where x is the year, y is the logarithm of the prevalence, and α 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
Total	85	32	1240

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 populations 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. not where some countries do not have data). The indicators with regional and sub-regional estimates produced in this way are specified in Table A1 of the Appendix.

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

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. Published online September 2021. <http://data.unicef.org/nutrition/iycf>. Accessed 1 October 2021.

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. Published online September 2021.
<http://data.unicef.org/nutrition/iycf>. Accessed 1 October 2021.

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. Published online September 2021.
<http://data.unicef.org/nutrition/iycf>. Accessed 1 October 2021.

Section or indicator

Continued breastfeeding at 1 year

Indicator definition

Proportion of children aged 12–15 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 24 August 2021.

Section or indicator

Continued breastfeeding at 2 years

Indicator definition

Proportion of children aged 20–23 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 24 August 2021.

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. Infant and young child feeding. Published online September 2021.
<http://data.unicef.org/nutrition/iycf>. Accessed 1 October 2021.

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. Infant and young child feeding. Published September 2021.
<http://data.unicef.org/nutrition/iycf>. Accessed 1 October 2021.

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. Infant and young child feeding. Published September 2021.
<http://data.unicef.org/nutrition/iycf>. Accessed 1 October 2021.

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 6 September 2021.

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, wasting and overweight.

<https://data.unicef.org/resources/dataset/malnutrition-data>. Accessed 31 August 2021.

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: Stunting, wasting and overweight.

<https://data.unicef.org/resources/dataset/malnutrition-data>. Accessed 31 August 2021.

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: Stunting, wasting and overweight.

<https://data.unicef.org/resources/dataset/malnutrition-data>. Accessed 31 August 2021.

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.

<https://data.unicef.org/topic/nutrition/malnutrition>. Accessed 24 August 2021.

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.

<https://data.unicef.org/topic/nutrition/low-birthweight>. Accessed 24 August 2021.

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 24 August 2021. 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 24 August 2021. 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 24 August 2021. 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/m²

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 24 August 2021. 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/m² 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 24 August 2021. 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/m² 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 24 August 2021. 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 2 September 2021.

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 24 August 2021. 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 24 August 2021. 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 24 August 2021.

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 24 August 2021.

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 2 September 2021.

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 24 August 2021.

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 24 August 2021.

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 24 August 2021.

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 24 August 2021.

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 24 August 2021.

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 24 August 2021.

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 24 August 2021.

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. <https://data.unicef.org/topic/child-health/diarrhoeal-disease>. Accessed 24 August 2021.

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. Global Databases: Child Health.

<https://data.unicef.org/resources/dataset/vitamin-supplementation>. Accessed 31 August 2021.

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 2005–2018

Source

STATcompiler. The DHS Program. www.statcompiler.com. Accessed 31 August 2021.

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 2005–2018

Source

STATcompiler. The DHS Program. www.statcompiler.com. Accessed 31 August 2021.

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. <https://data.unicef.org/topic/nutrition/iodine>. Accessed 24 August 2021.

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 2019 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 31 August 2021.

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 31 August 2021.

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 31 August 2021.

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 31 August 2021.

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 31 August 2021.

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. <http://data.unicef.org/child-mortality/under-five>. Accessed 31 August 2021.

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 31 August 2021.

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 2 September 2021.

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 September 2021.

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/2020/October>. Accessed 2 September 2021.

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 31 August 2021.

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 31 August 2021.

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 24 August 2021.

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. <http://data.unicef.org/maternal-health/delivery-care>. Accessed 2 September 2021.

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. <http://hdr.undp.org/en/indicators/68606#>. Accessed 24 August 2021.

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 24 August 2021.

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 A2. Countries included within the Country Nutrition Profiles regions and sub-regions

AFRICA
<p>Eastern Africa</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>Middle Africa</p> <p>Angola, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Sao Tome and Principe</p>
<p>Northern Africa</p> <p>Algeria, Egypt, Libya, Morocco, Sudan, Tunisia</p>
<p>Southern Africa</p> <p>Botswana, Eswatini, Lesotho, Namibia, South Africa</p>
<p>Western Africa</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>Central Asia</p> <p>Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan</p>
<p>Eastern Asia</p> <p>China, Democratic People's Republic of Korea, Japan, Mongolia, Republic of Korea</p>
<p>South-eastern Asia</p> <p>Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, Viet Nam</p>
<p>Southern Asia</p> <p>Afghanistan, Bangladesh, Bhutan, India, Iran (Islamic Republic of), Maldives, Nepal, Pakistan, Sri Lanka</p>
<p>Western Asia</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

¹ 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.

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

³ UNICEF and WHO. Low Birthweight Estimates, 2019 edition. www.who.int/nutrition/publications/UNICEFWHO-lowbirthweight-estimates-2019/en/.

⁴ 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.

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

⁶ 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.