Nutrition country profile

Morocco

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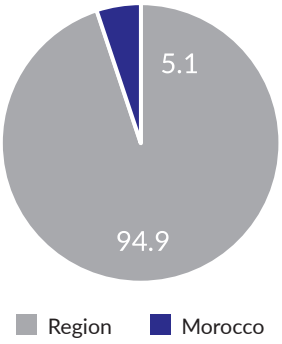
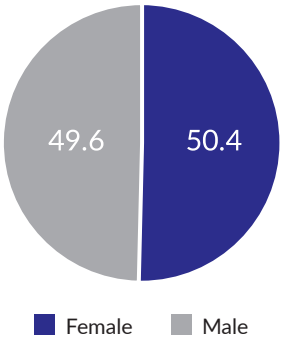
Demographics

Total population (2021)	**36 431 862**
Life expectancy at birth (years) female/male (2019)	**78/75**
Under-5 mortality rate (per 1000 live births) (2019)	**21**
Gross domestic product per capita (current US$) (2020)	**3009.2**

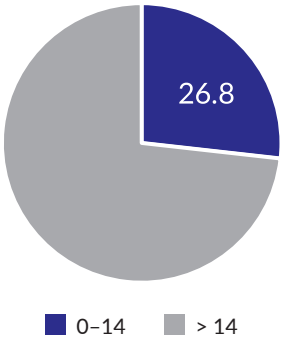
Population as percentage of regional total, 2020



Percentage of female and male population, 2020



Population aged 0–14 of total population, 2020

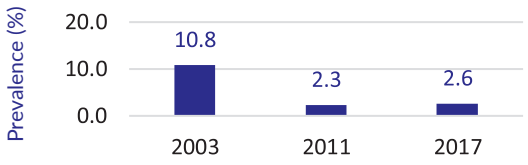


Source: Haut-Commissariat au Plan du Royaume du Maroc, The World Bank.

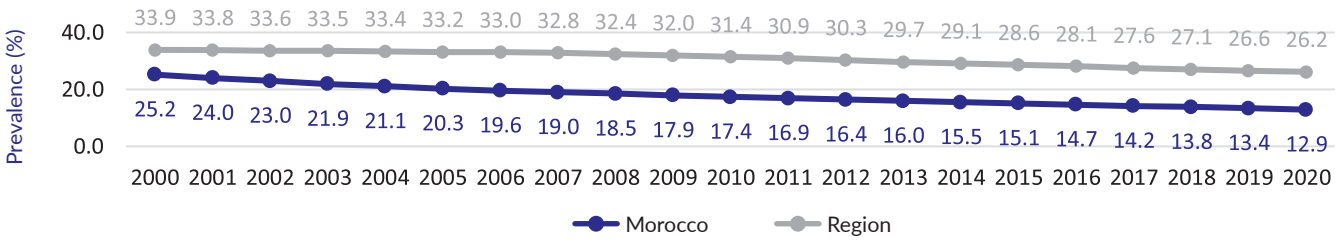
Child malnutrition

According to the WHO Global Health Observatory, the prevalence of wasting in children under five in Morocco decreased from 10.8% in 2003 to 2.6% in 2017, indicating that the country is meeting the regional target to reduce childhood wasting to less than 3% and maintain this level. The prevalence of stunting has decreased from 25.2% to 12.9% over the past two decades. During the same period, the prevalence of overweight in children under five has decreased very slightly from 12.2% to 11.3%.

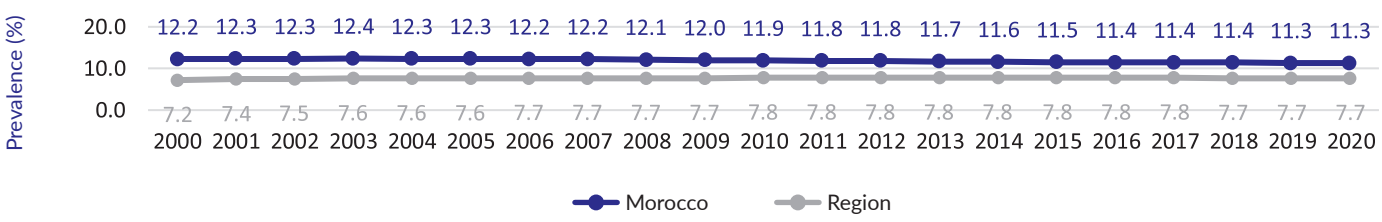
Wasting prevalence among children under 5 years of age



Stunting prevalence among children under 5 years of age



Overweight prevalence among children under 5 years of age



Source: WHO Global Health Observatory.

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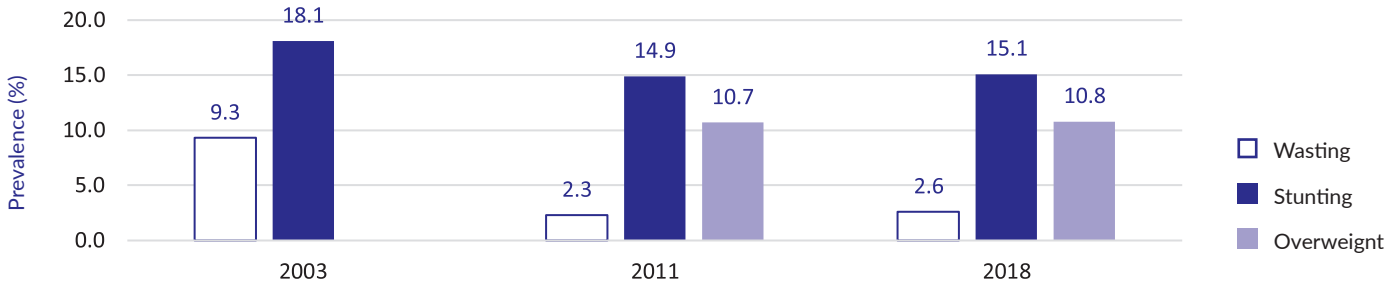
Note: The UNICEF/WHO/WB joint child malnutrition estimates for stunting and overweight are modelled at logit (log-odds) scale using a penalized longitudinal mixed-model with a heterogeneous error term. The country modelled estimates are generated using the JME country dataset, which uses the collection of national data sources. Due to this method, estimates may differ from official estimates of Member States (i.e., the stunting prevalence from a household survey for a given country in a given year is not reported as the prevalence for that country in that year; rather, it feeds into the modelled estimates). The methodology is described here: https://www.who.int/publications/i/item/9789240025257. Wasting is defined as a percent weight-for-height that is two or more standard deviations below the median. Stunting is defined as a percent height-for-age that is two or more standard deviations below the median. Overweight is defined as a percent weight-for-height that is two or more standard deviations above the median.

Wasting, stunting and **overweight** prevalence according to the Ministry of Health of Morocco

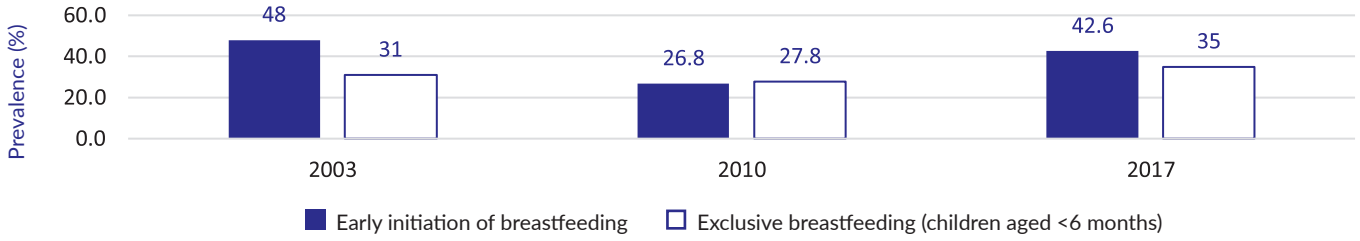


According to the Ministry of Health in Morocco[1,2], the prevalence rates for wasting, stunting and overweight are mostly slightly lower that the estimates of the WHO Global Health Observatory.

Infant and young child feeding

The latest estimates from 2017 show that the prevalence of early initiation of breastfeeding (within one hour of birth) and the prevalence of exclusive breastfeeding in Morocco were 42.6% and 35%, respectively.

Breastfeeding practices

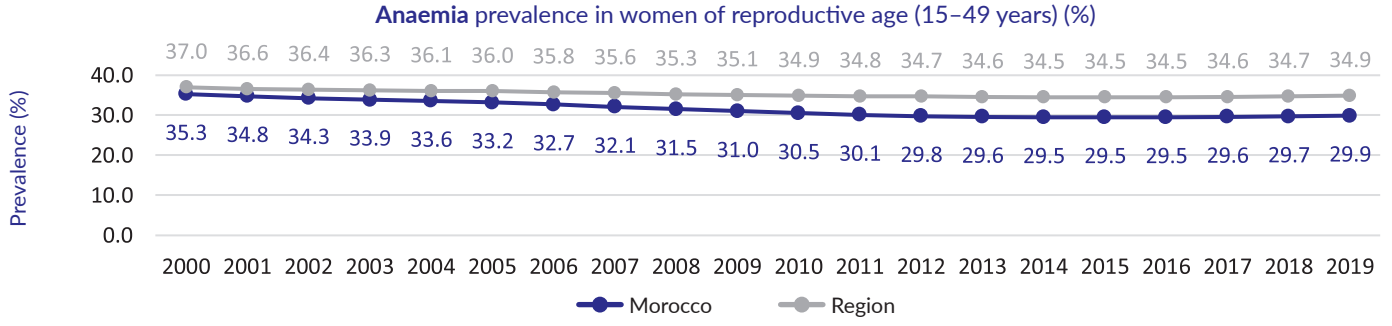


Source: UNICEF.

Anaemia in women of reproductive age

The prevalence of anaemia in women of reproductive age in Morocco decreased slightly between the years 2000 and 2019 from 35.3% to 29.9%.

Anaemia prevalence in women of reproductive age (15–49 years) (%)



Source: WHO Global Health Observatory.

[1] Enquête sur la population et la santé familiale (EPSF) 2003–2004. Rabat: Ministère de la Santé du Marco; 2005 (in French) (https://dhsprogram.com/pubs/pdf/FR155/FR155.pdf, accessed on 14 July 2022).

[2] Enquête sur la population et la santé familiale (EPSF - 2018). Rabat: Ministère de la Santé du Maroc; 2020 (in French) (https://www.sante.gov.ma/Documents/2020/03/Rapport%20ENPSF%202018%202ième%20édition.pdf, accessed on 14 July 2022).

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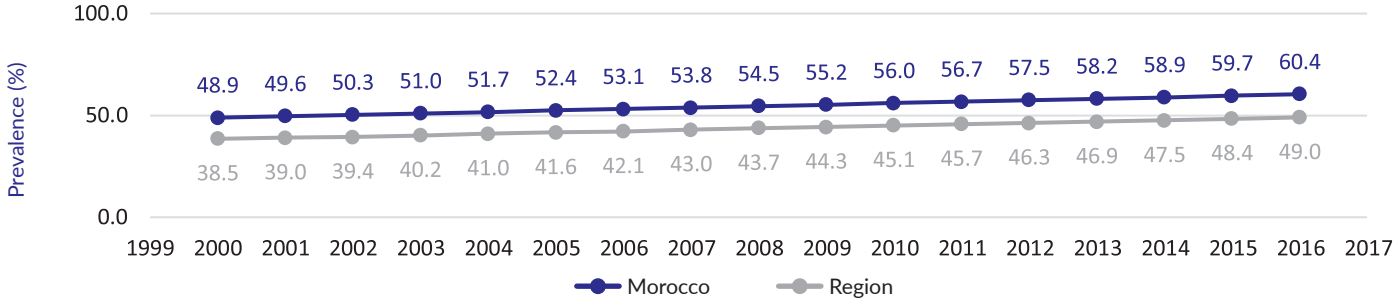
Note: The WHO global anaemia estimates are derived from a hierarchical Bayesian mixture model that uses all available data to make estimates for each country and year. In the model, estimates for each country are informed by data from that country itself, if available, and by data from other countries, especially those in the same region. Due to this method, the estimates may differ from official estimates of Member States. The methodology is described here: https://cdn.who.int/media/docs/default-source/anaemia-in-women-and-children/hb-methods-for-gather.pdf?sfvrsn=da0fbb5f_11 and here: https://pubmed.ncbi.nlm.nih.gov/25103581/.

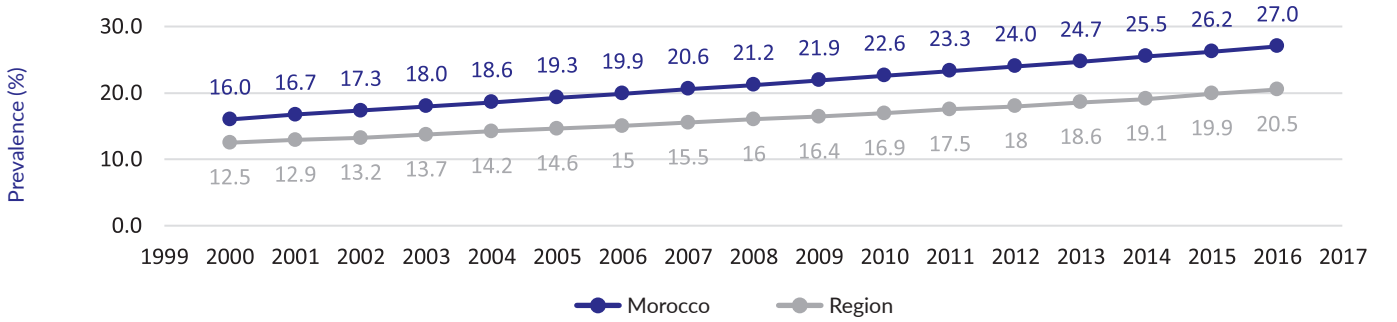
Overweight and obesity

A significant increase in the prevalence of overweight among adults in Morocco was recorded between the years 2000 and 2016 (from 48.9% to 60.4%). Also, the prevalence of overweight among children and adolescents aged 5–19 has risen from 16% in 2000 to 27% in 2016.

Overweight prevalence among adults (age-standardized estimate)



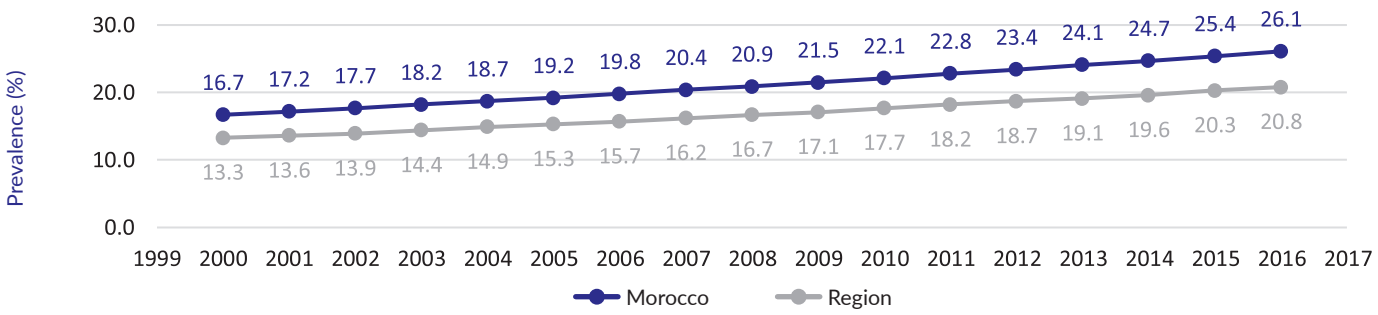
Overweight prevalence among children and adolescents (5-19) (crude estimate)



BMI = body mass index. (Overweight in adults is defined as a BMI of 25 or greater, and in children and adolescents as a BMI one or more standard deviations above the median. Obesity in adults is defined as a BMI of 30 or greater, and in children and adolescents as a BMI two or more standard deviations above the median.)

Obesity is the reported risk factor responsible for the second highest total number of DALYs in Morocco in 2019.[3] The prevalence of obesity in Morocco has increased from 16.7% to 26.1% between 2000 and 2016. Similarly, the prevalence of obesity among children and adolescents aged 5–19 has significantly increased between 2000 and 2016 from 4.3% to 10.2%.

Obesity prevalence among adults, (age-standardized estimate)



[3] Country profiles [website]. Seattle, WA: Institute for Health Metrics and Evaluation, University of Washington; 2021 (https://www.healthdata.org/results/country-profiles, accessed 11 July 2022).

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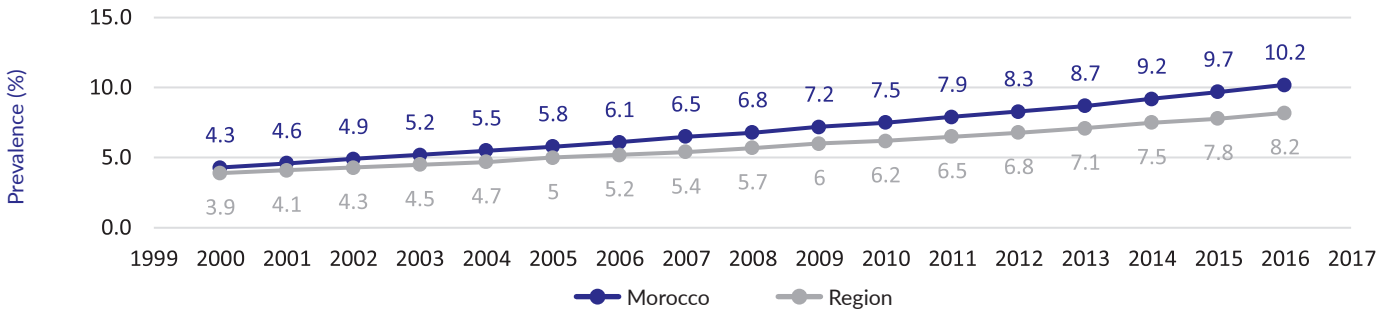
Obesity prevalence among children and adolescents 5–19 years (crude estimate)



Source: WHO Global Health Observatory, Institute for Health Metrics and Evaluation.

Note: The WHO estimates for overweight and obesity are derived from a Bayesian hierarchical model, which uses NCD-RisC database of population-based data. The model has a hierarchical structure in which estimates for each country and year are informed by its own data, if available, and by data from other years in the same country and from other countries, especially those in the same region with data for similar time periods. Due to this method, the estimates may differ from official estimates of Member States. The methodology is described here: https://pubmed.ncbi.nlm.nih.gov/29029897/.

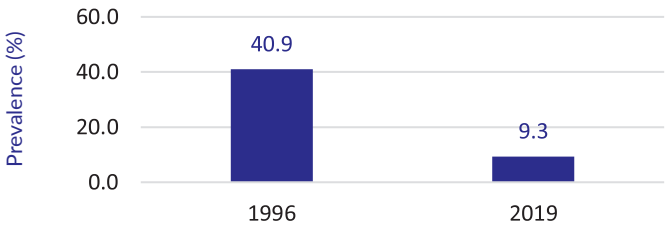
Overweight and obesity according to the STEPwise survey (2017)

Data from the STEPS survey of 2017[4] revealed the prevalence of overweight (defined as a BMI above 25) among Moroccans adults (age-standardized estimate) to be 53%, while the prevalence of obesity (defined as a BMI above 30) (age-standardized estimate) was 20%.

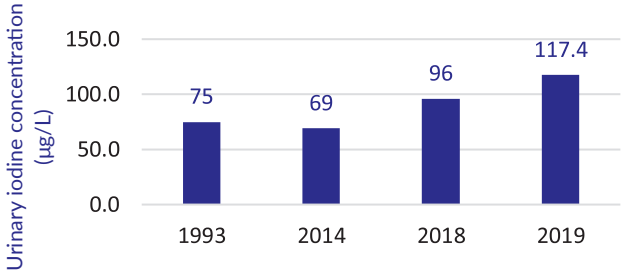
Micronutrient status

The prevalence of vitamin A deficiency among children aged 6 months to 12 years in Morocco was 40.9% in 1996[5] and 9.3% among children aged between six months and 12 years in 2019[6]. Also, the iodine intake has previously been determined to be insufficient (defined as < 100 µg/L) despite an estimated rise in median urinary iodine concentration (UIC) among school children between 1993 and 2018 (from 75 µg/L to 96 µg/L)[7,8]. According to the national survey on nutrition 2019[9], the median UIC was adequate (defined as 100–299 µg/L) at 117.4 µg/L.

Vitamin A deficiency in pre-school children (6–71 months) (serum retinol < 0.70 µmol/L)



Median urinary iodine concentration among school children (µg/L)



Source: WHO Micronutrients Database. Vitamin and Mineral Nutrition Information System.

[4] STEPS 2017 Morocco, 2017. Rabat: Ministry of Health; 2019 (https://extranet.who.int/ncdsmicrodata/index.php/catalog/544, accessed on 14 July 2022).

[5] Programme national de nutrition. Rabat: Ministère de la Santé du Maroc; 2019 (in French) (https://www.sante.gov.ma/Documents/2019/06/Programme%20National%20de%20Nutrition.pdf).

[6] Saad F, Rogers L, Doggui R, Al-Jawaldeh A. Assessment of vitamin A supplementation practices in countries of the Eastern Mediterranean Region: Evidence to Implementation. J Nutr Sci Vitaminol (Tokyo); 2021;67(1):1-12. doi:10.3177/jnsv.67.1.

[7] Doggui R, Al-Jawaldeh H, Al-Jawaldeh A. Trend of iodine status in the Eastern Mediterranean Region and impact of the universal salt iodization programs: a narrative review. Biol Trace Elem Res. 2020; 198, 390–402. doi:10.1007/s12011-020-02083-1.

[8] Global Scorecard of Iodine Nutrition 2014–2015, Ottawa: Iodine Global Network; 2015 (https://www.ign.org/cm_data/Scorecard_2015_August_26_new_intake.pdf, accessed 6 July 2022).

[9] El Ammari L et al. A household-based survey of iodine nutrition in Moroccan children shows iodine sufficiency at the national level but risk of deficient intakes in mountainous areas. Children (Basel); 2021;8(3):240. doi:10.3390/children8030240.

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Nutrition policies and strategies

Key national programmes		Date
Development of national nutrition strategy or action plan [a]	✓	For 2011–2019
Plan of action for obesity prevention [b, c]	✓	For 2018–2025
Strategy or plan of action on infant and young child feeding [a, b]	✓	For 2016–2020
Code of marketing of breast milk substitutes	✗	
Child growth monitoring [a, b]	✓	Since 1956
School feeding programme [a, b, d]	✓	Since 2013

Policies	Policy to reduce salt/sodium consumption [a, d, e]	Tax on sugar sweetened beverages [d, e]	Policy to limit trans-fatty acid intake [c, d, e, f]	Policy to reduce the impact of marketing of food to children [b, c, d, e]	Policy on salt iodization [a, b, g]	Front-of-pack nutrition labelling for food [a, d, h]	Wheat flour fortification [c, b, i]
	☑	☑	☑	☑	☑	☑	☑
	2019/2020	2019	2019	2019	2003	2013	2006-2013

✓=Policy/programme implemented ✗=Policy/programme not implemented

[a] Policies in Morocco: In: Global database on the Implementation of Nutrition Action [website]. Geneva: World Health Organization; 2022 (https://extranet.who.int/nutrition/gina/en/policies/1494, accessed 6 July 2022).

[b] Programmes in Morocco: In: Global database on the Implementation of Nutrition Action [website]. Geneva: World Health Organization; 2022 (https://extranet.who.int/nutrition/gina/en/programmes/1494, accessed 6 July 2022).

[c] WHO Eastern Mediterranean Regional Office database.

[d] Al-Jawaldeh A, Hammerich A, Doggui R, Engesveen K, Lang K, McColl K. Implementation of WHO recommended policies and interventions on healthy diet in the countries of the Eastern Mediterranean Region: From policy to action. Nutrients; 2020;12(12):3700. doi:10.3390/nu12123700.

[e] The Global Health Observatory. Geneva: World Health Organization; 2022 (https://www.who.int/data/gho/data, accessed 6 July 2022).

[f] Al-Jawaldeh A et al. A systematic review of trans fat reduction initiatives in the Eastern Mediterranean Region. Front Nutr. 2021;8:771492. doi:10.3389/fnut.2021.771492.

[g] Doggui R, Al-Jawaldeh H, Al-Jawaldeh A. Trend of iodine status in the Eastern Mediterranean Region and impact of the universal salt iodization programs: a narrative review. Biol Trace Elem Res. 2020; 198, 390–402. Doi:10.1007/s12011-020-02083-1.

[h] Al-Jawaldeh A, Rayner M, Julia C, Elmadfa I, Hammerich A, McColl K. Improving nutrition information in the Eastern Mediterranean Region: Implementation of front-of-pack nutrition labelling. Nutrients; 2020;12(2):330. doi:10.3390/nu12020330.

[i] Al-Jawaldeh A. E. The regional assessment of the implementation of wheat flour fortification in the Eastern Mediterranean Region. Int J Sci Res Manag. 2019; 7(03), 28–37. doi:10.18535/ijsrm/v6i3.ft01.

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Success stories

Promoting and supporting breastfeeding in Morocco

Between 2011 and 2018, exclusive breastfeeding rates in Morocco rose from 27.8% to 35%, reversing a downward trend that had been recorded since 1992. Over the same period, the median duration of breastfeeding increased from 14.3 to 17.4 months.[10] The country's efforts to promote and support breastfeeding included the revitalization of UNICEF's Baby-friendly Hospital Initiative, which was launched in 1992; the institutionalization of a national breastfeeding promotion week; the implementation of a social mobilization plan involving multiple sectors; training health professionals to provide infant and young child feeding counselling; and organizing awareness-raising sessions for mothers in health facilities. The free distribution of infant food for infants less than 6 months old is prohibited, and a 2012 Ministerial Circular requires all public health structures to comply with the code of the marketing of breast milk substitutes. In addition, the country provides 14 weeks of maternity leave at 100% pay. Unusually, and in line with the ILO Convention, this is payable from a national social security fund, rather than payable by employers. A pregnant woman is also entitled to an additional year of unpaid leave. In rural areas, however, many women work in informal sectors, such as agriculture, and it is not clear how well these maternity protections cover such women.

Reducing micronutrient deficiencies among children in Morocco

The strategy to combat micronutrient deficiency disorders in Morocco was restructured in 2000 to comprise supplementation for young children and women of childbearing age and fortification of salt, flour, oil and pasteurized milk. These measures were accompanied by nutrition education, promoting exclusive breastfeeding and dietary diversity. By 2018, 90% of children under five were receiving at least one dose of vitamin A and coverage with at least one dose of vitamin D was equivalent to 97%. Following the introduction of salt iodization in 1996, 42% of households were using iodized salt by 2000. In addition, more than 80% of table oil is fortified with vitamins A and D and by 2008 more than 75% of industrial soft wheat flour was fortified with iron and B vitamins. In 2019, a new decree on flour fortification was published to replace electrolytic iron with sodium EDTA iron. In addition, the Ministry of Health has promoted exclusive breastfeeding up to 6 months, dietary diversification and the consumption of nutrient-rich and fortified foods by the population. Following these efforts, the most recent data showed some improvements in certain nutritional indicators. In particular, vitamin A deficiency rates among children aged between six and 72 months declined from 41% in 1996[11] to 22.7% in 2008 among children aged less than five years.[12]

[10] Programme national de nutrition. Rabat: Ministère de la Santé du Maroc; 2019 (in French)

[11] Enquête régionale sur la carence en vitamine A. Rabat: Ministère de la Santé du Maroc; 1999 (in French).

[12] Systéme de surveillance sentinelle. Rabat: Ministère de la Santé du Maroc; 2008 (in French).

Ministry of Health website: https://www.sante.gov.ma/Pages/Accueil.aspx

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