Nutrition country profile

Tunisia

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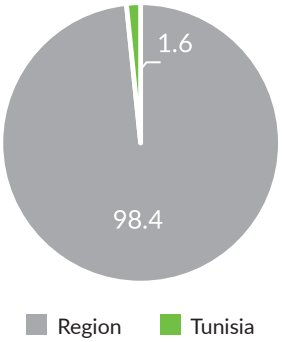
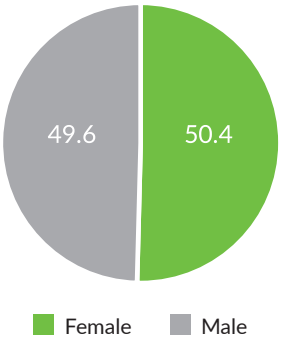
Demographics

Total population (2020)	11 818 618
Life expectancy at birth (years) female/male (2019)	79/75
Under-5 mortality rate (per 1000 live births) (2019)	17
Gross domestic product per capita (current US$) (2020)	3319.8

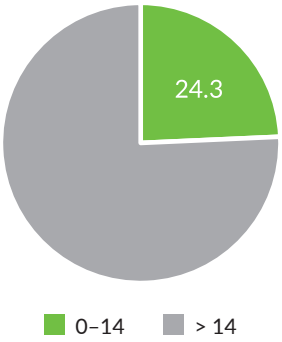
Population as percentage of regional total, 2020



Percentage of female and male population, 2020



Population aged 0–14 of total population, 2020

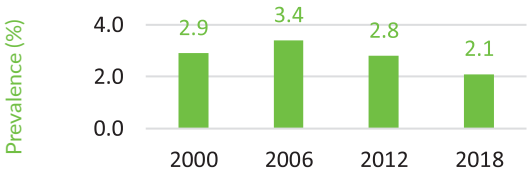


Source: The World Bank

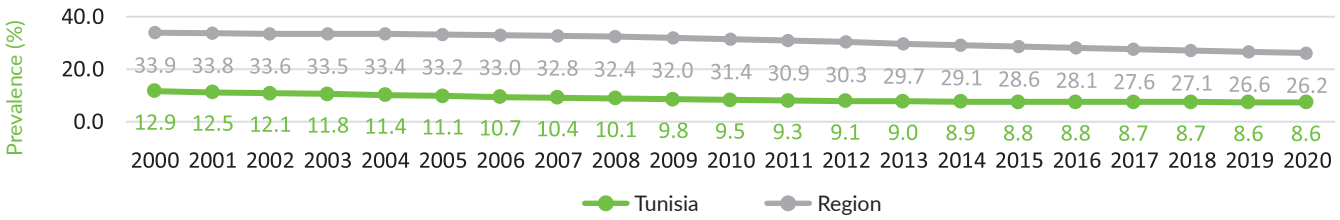
Child malnutrition

The prevalence of wasting increased from 2.9% in 2000 to 3.4% in 2006, after which it decreased to 2.1% by 2018, indicating that Tunisia is on track to meet the regional target to reduce childhood wasting to less than 3% and maintain this level. The prevalence of stunting decreased from 12.9% to 8.6% and has remained significantly lower than the regional average over the past two decades. During the same period, the prevalence of overweight in children under five has increased sharply from 4.6% to 16.5%, which is among the highest prevalence rates in the Region.

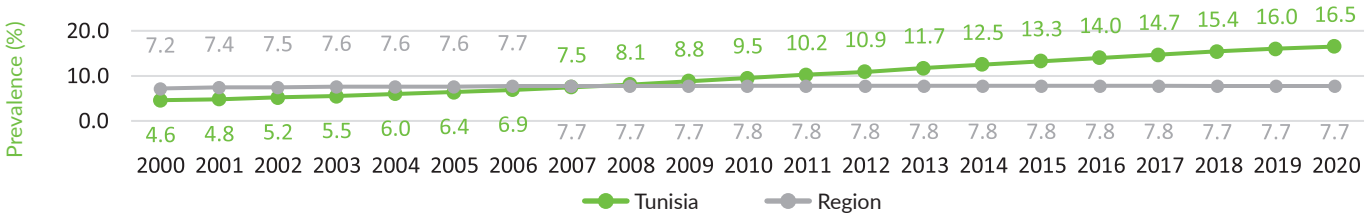
Wasting prevalence among children under 5 years of age



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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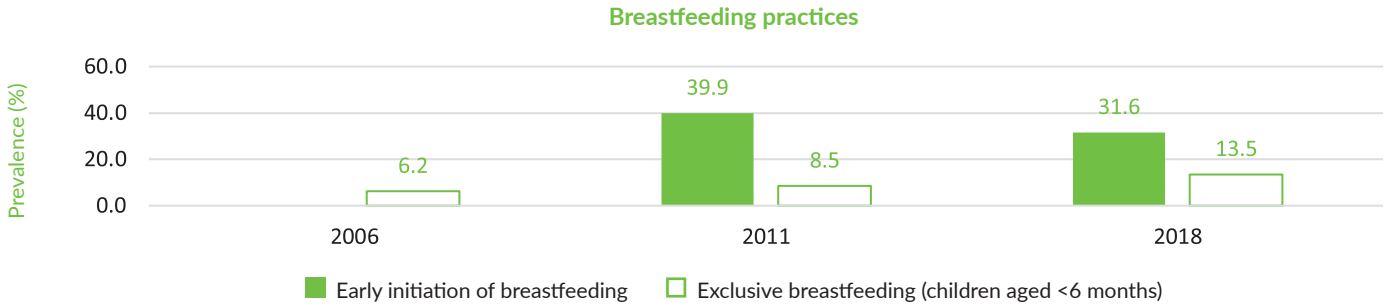
Note: The UNICEF/WHO/WB joint child malnutrition estimates for stunting and overweight are modelled at logit (log-odds) scale using a penalized longitudinal mixed-model with a heterogeneous error term. The country modelled estimates are generated using the JME country dataset, which uses the collection 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.

Infant and young child feeding

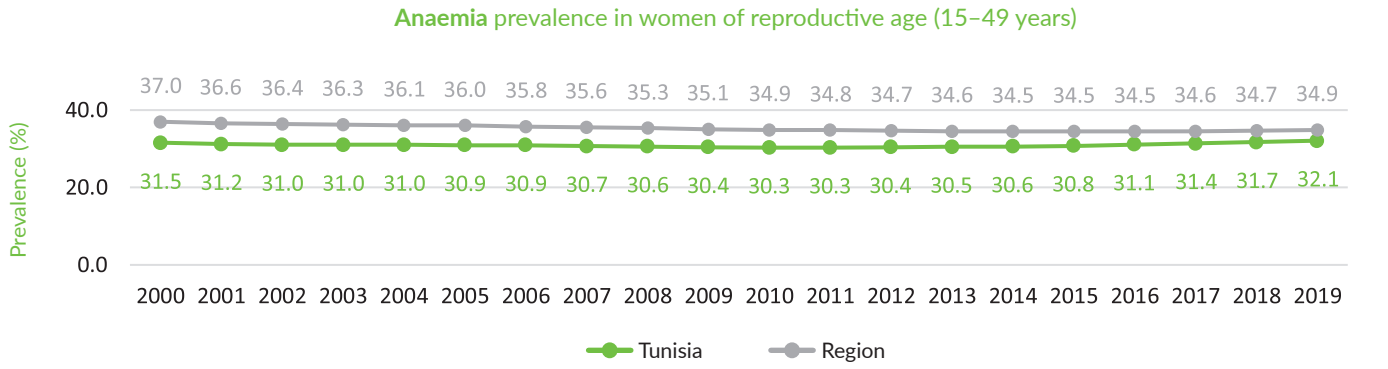
The prevalence of the early initiation of breastfeeding (within one hour of birth) in Tunisia decreased from 39.9% in 2011 to 31.6% in 2018. The prevalence of exclusive breastfeeding has remained at a very low level throughout the monitored period, though it slightly increased to 13.5% in 2018.



Sources: UNICEF.

Anaemia in women of reproductive age

The prevalence of anaemia in women of reproductive age (pregnant and non-pregnant women combined) has remained relatively stable throughout the past two decades, with the latest estimate from 2019 being 32.1%.



Source: WHO Global Health Observatory.

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/.

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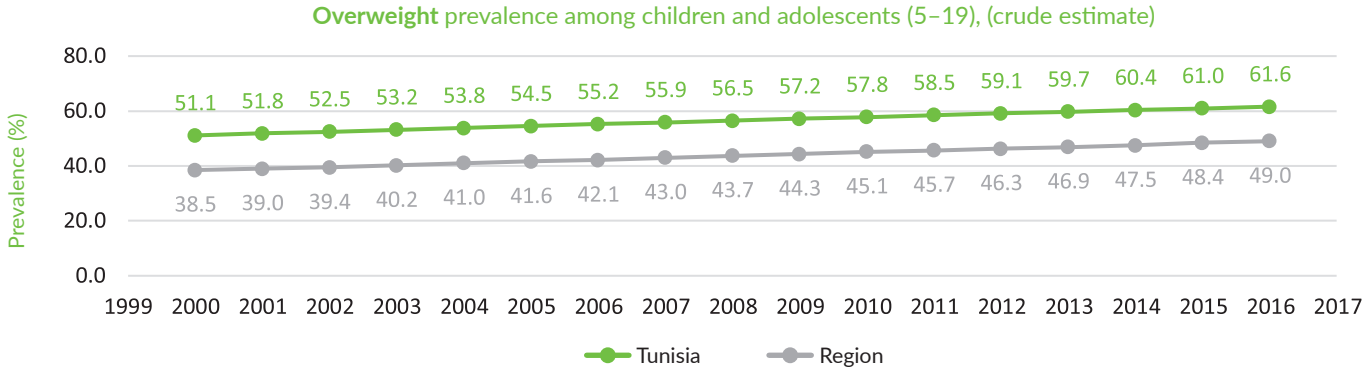
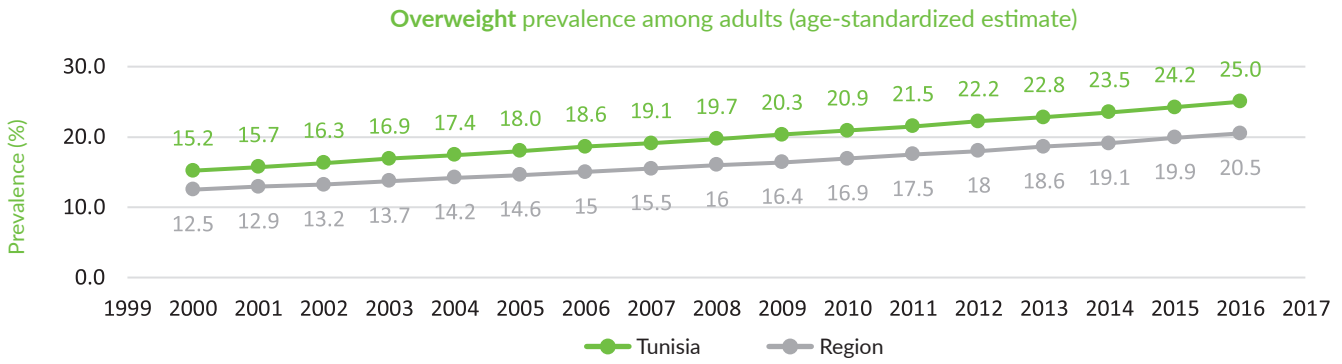
Overweight and obesity

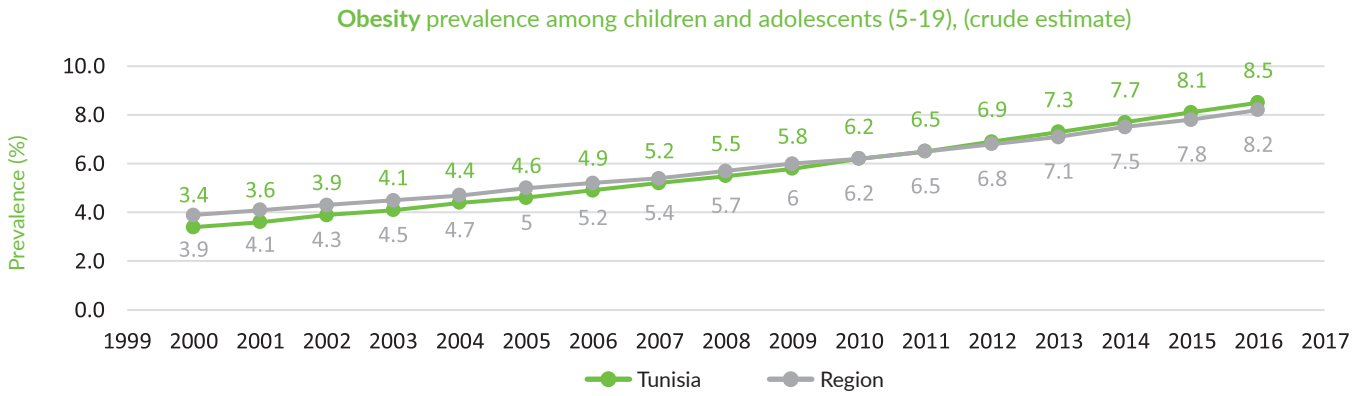
A significant increase in the prevalence of overweight among adults in Tunisia was recorded between the years 2000 and 2016 (from 51.1 to 61.6%). Also, the prevalence of overweight among children and adolescents aged 5–19 rose from 15.2% in 2000 to 25% in 2016.





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 greatest total number of disability-adjusted life years (DALYs) in Tunisia in 2019.[1] The prevalence of obesity increased from 18.2% to 26.9% between 2000 and 2016. Similarly, the prevalence of obesity among children and adolescents aged 5–19 in Tunisia significantly increased between 2000 and 2016 from 3.4% to 8.5%.



Source: WHO Global Health Observatory, Global Burden of Disease Study 2019.

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/.

[1] GBD 2019 Diseases and Injuries Collaborators. Global burden of 369 diseases and injuries in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. Lancet. 2020;396(10258):1204–1222. doi:10.1016/S0140-6736(20)30925-9.

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Micronutrient status

The prevalence of vitamin A deficiency (defined as serum retinol level <1.05 µmol/L) in Tunisia was 19.3% among preschool age children (children 5-7 years) in 2010.[2] However, iodine intake in Tunisia is considered adequate (defined as 100–299 µg/L) as the estimated median urinary iodine concentration among school children was 220 µg/L in 2012.[3]

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

Nutrition policies and strategies

Key national programmes		Date
Development of national nutrition strategy or action plan [a]	✓	1995
Plan of action for obesity prevention [a, b]	✓	For 2013–2017
Strategy or plan of action on infant and young child feeding [a, b]	✓	Since 2002
Code of marketing of breast milk substitutes [a, c, d]	✓	Since 1983
Child growth monitoring [a, b]	✓	Since 2015
School feeding programme [a, b, e]	✓	

Policies	Policy to reduce salt/sodium consumption [e, f, g]	Tax on sugar sweetened beverages [e]	Policy to limit trans-fatty acid intake [h]	Policy to reduce the impact of marketing of food to children [e]	Policy on salt iodization [a, b, g]	Front-of-pack nutrition labelling for food [a, f, i]	Wheat flour fortification [a, j]
	☑	☑	☑	☒	☑	☑	☒
	2018		2018		1995–19 Mandatory		

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

[a] Policies in Tunisia: In: Global database on the Implementation of Nutrition Action [website]. Geneva: World Health Organization; 2022 (https://extranet.who.int/nutrition/gina/en/policies/1560, accessed 13 July 2022).

[b] Global nutrition policy review 2016-2017: country progress in creating enabling policy environments for promoting healthy diets and nutrition. Geneva: World Health Organization; 2018 (https://www.who.int/publications/i/item/9789241514873, accessed 13 July 2022).

[c] Al Jawaldeh A, Sayed G. Implementation of the International Code of Marketing of Breastmilk Substitutes in the Eastern Mediterranean Region. East Mediterr Health J. 2018(1):25–32. doi:10.26719/2018.24.1.25.

[d] Marketing of breast milk substitutes: national implementation of the international code, status report 2020. Geneva: World Health Organization; 2020 (https://www.who.int/publications/i/item/9789240006010, accessed 6 July 2022).

[e] 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.

[f] Al-Jawaldeh A A, et al. Salt reduction initiatives in the Eastern Mediterranean Region and evaluation of progress towards the 2025 Global Target: A systematic review. Nutrients. 2021;13(8):2676. doi:10.3390/nu13082676.

[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.org/10.1007/s12011-020-02083-1.

[h] 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.

[i] 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.

[j] 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.

[2] 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

[3] 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.

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Success stories

Salt iodization to tackle iodine deficiency disorders in Tunisia

Tunisia implemented an iodine deficiency disorder control programme in 1996, including legislation to require salt iodization. By 2000, 97% of households were reported to be using iodized salt and the country was the second in the Eastern Mediterranean Region to be declared free of iodine deficiency disorders. Nearly two decades later, however, progress has slipped and in 2017 only half of the households were using adequately iodized salt, and while urinary iodine concentrations were acceptable at the population level, regional disparities were found.

Successful pilot experiment of salt reduction in Tunisian bread

The Tunisian government has embarked on a national programme to improve the nutritional quality of the Tunisian diet and to combat obesity as well as noncommunicable diseases by reducing the consumption of fat, sugar and salt . As bread is the food most consumed by the Tunisian population and the major source of salt, a pilot experiment of salt reduction in bread was conducted in the city of Bizerta. The application of a salt reduction programme included a gradual decrease of salt content in bread by 35% during three years without detection by Tunisian consumers.[4]

[4] El Ati J, Doggui R, El Ati-Hellal M. A Successful Pilot Experiment of Salt Reduction in Tunisian Bread: 35% Gradual Decrease of Salt Content without Detection by Consumers. Int J Environ Res Public Health. 2021;18(4):1590. Published 2021 Feb 8. doi:10.3390/ijerph18041590.

Ministry of Health Website: http://www.santetunisie.rns.tn/ar/

WHO-EM/NUT/309/E