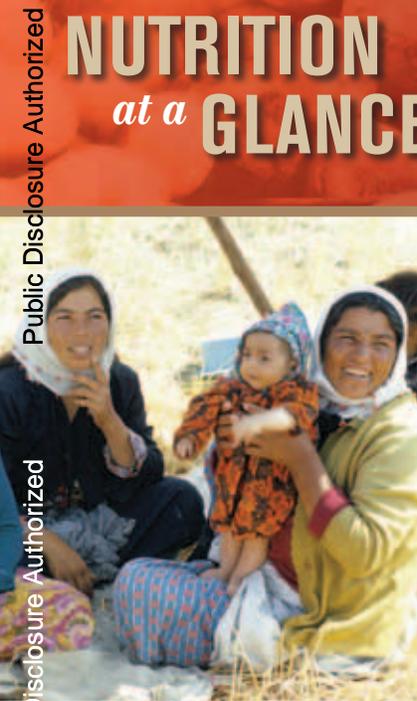




NUTRITION at a GLANCE

TURKEY



Country Context

HDI ranking: 79th out of 182 countries¹

Life expectancy: 72 years²

Lifetime risk of maternal death: 1 in 880²

Under-five mortality rate: 22 per 1,000 live births²

Global ranking of stunting prevalence: 109th highest out of 136 countries²

Technical Notes

Stunting is low height for age.

Underweight is low weight for age.

Wasting is low weight for height.

Current stunting, underweight, and wasting estimates are based on comparison of the most recent survey data with the WHO Child Growth Standards, released in 2006.

Low birth weight is a birth weight less than 2500g.

Overweight is a body mass index (kg/m²) of ≥ 25 ; **obesity** is a BMI of ≥ 30 .

The methodology for calculating nationwide costs of vitamin and mineral deficiencies, and interventions included in the cost of scaling up, can be found at: www.worldbank.org/nutrition/profiles

The Costs of Malnutrition

- Children who are undernourished between conception and age two are at high risk for impaired cognitive development, which adversely affects the country's productivity and growth.
- Over one-third of child deaths are due to undernutrition, mostly from increased severity of disease.²
- Turkey is anticipated to lose a cumulative US \$4.7 billion to chronic disease by 2015.⁵
- The economic costs of undernutrition and overweight include direct costs such as the increased burden on the health care system, and indirect costs of lost productivity.
- Childhood anemia alone is associated with a 2.5% drop in adult wages.⁶

Where Does Turkey Stand?

- 1 in 10 of children under the age of five are stunted.²
- Two-thirds of those aged 15 and above are overweight or obese.⁷
- 16% infants are born with a low birth weight, more than double the 7% average of OECD peers.^{2,8}

With 10% stunting rates, Turkey has a much higher prevalence of stunting than other European countries. Within the country, there is wide variation across geographic areas and socio-economic groups: 22% of children in the lowest wealth quintile are stunted compared with 2.1% in the highest wealth quintile. Among regions, 21% of children in the East of the country are stunted compared with 4.5% in the Central region.¹⁶

Most of the irreversible damage due to malnutrition in Turkey happens during gestation and in the first 24 months of life.

The Double Burden of Undernutrition and Overweight

Though Turkey is currently on track to meet MDG 1c (halving 1990 rates of child underweight by 2015), it has seen a recent increase in adult obesity⁹. Low-birth weight infants and stunted children may be at greater risk of chronic diseases such as dia-

Annually, Turkey loses over US\$5.5 billion in GDP to vitamin and mineral deficiencies.^{3,4} Scaling up core micronutrient nutrition interventions would cost less than US\$36 million per year.

(See Technical Notes for more information.)

Key Actions to Address Malnutrition:

Incorporate nutrition-related services into positive incentive payments for family doctors.

Include nutrition as an explicit condition in the conditional cash transfer program (CCT).

Target existing micro-nutrient supplementation, salt iodization and fortification programs to reduce regional disparities.

Scale up the "Promotion of Breastfeeding and Baby Friendly Hospitals" Program.

betes and heart disease than children who start out well-nourished.¹¹

This "double burden" is the result of various factors. There could be further improvements in population health measures to reduce undernutrition; at the same time, the adoption of Western diets high in refined carbohydrates, saturated fats and sugars, as well as a more sedentary lifestyle are commonly cited as the major contributors to the increase in overweight and chronic diseases.¹⁰

Vitamin and Mineral Deficiencies Cause Hidden Hunger

Although they may not be visible to the naked eye, vitamin and mineral deficiencies impact well-being and are prevalent in Turkey, as indicated in **Figure 1**.

- **Vitamin A:** 12% of preschool aged children and 23% of pregnant women are deficient in vitamin A.¹³
- **Iron:** Turkey began providing free iron supplements for infants between 4–12 months and iron treatment for children between 13–24 months with anemia in 2005 under the "Iron-Like Turkey Program." As a result, anemia prevalence for children between 12–23 months has decreased from

Poor Infant Feeding Practices: Progress has been Made but More is Needed

- The proportion of infants under six months who are exclusively breastfed doubled from 2003 to 2008;² the Government should continue to promote breastfeeding.^{2,4}
- During the important transition period to a mix of breast milk and solid foods between six and nine months of age, one-third of infants are not fed appropriately with both breast milk and other foods.²

Solution: Continue to expand the “Promotion of Breastfeeding and Baby Friendly Hospitals” Program to support women and their families to practice optimal breastfeeding. Breast milk fulfills all nutritional needs of infants up to six months of age, boosts their immunity, and reduces exposure to infections.

High Disease Burden

- Undernourished children have an increased risk of falling sick and greater severity of disease.
- Undernourished children who fall sick are much more likely to die from illness than well-nourished children.
- Parasitic infestation diverts nutrients from the body and can cause blood loss and anemia.

Solution: While Turkey has made strides to ensure that 85% of children under the age of five are routinely immunized against the major childhood diseases, vaccination against the major childhood diseases within the first twelve months is essential to ensuring the well-being of every child.¹² Hand-washing, deworming, zinc supplements during and after diarrhea, and continued feeding during illness are also important.

Access to Nutritious Food

- Achieving food security means ensuring quality and continuity of food access, in addition to quantity, for all household members.
- Dietary diversity is essential for food security.

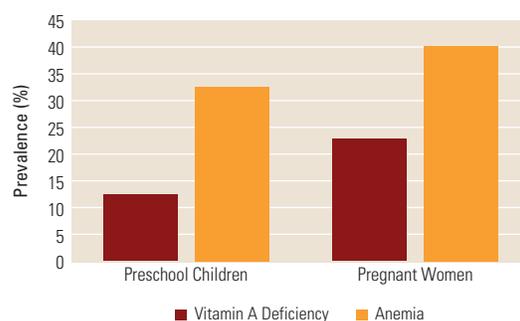
Solution: Involve multiple sectors including agriculture, education, transport, gender, the food industry, health and other sectors, to ensure that diverse, nutritious diets are available and accessible to all household members. Examine food policies and the country regulatory system as they relate to overweight and obesity.

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30% to 7.8%.¹⁵ Turkey should continue to expand coverage of its iron program as well as consider providing multiple micronutrient supplements to infants and young children, and fortification of staple foods.

FIGURE 1 High Rates of Vitamin A and Iron Deficiency Contribute to Lost Lives and Diminished Productivity



Source: 1995–2005 data from the WHO Global Database on Child Growth and Malnutrition

World Bank Nutrition-Related Activities in Turkey

The World Bank's lending program supports the Government's Health Transformation Program,

which has a strong focus on improving maternal and child health. In addition to supporting the Government's efforts to strengthen its public health system to address ongoing and emerging challenges, a results-based financing component specifically focuses on incentives for physicians to improve detection and treatment of non-communicable diseases through risk-factor prevention, including that of obesity/overweight.

The Bank also supported the Government in the implementation of a conditional cash transfer program targeted at the poorest 6% of children, conditional on improved use of basic health, nutrition and education services which has now become a national program of the Government of Turkey with impact evaluation results showing net positive behavioral changes.

Addressing undernutrition is cost effective: Costs of core micronutrient interventions are as low as US\$0.05–4.86 per person annually. Returns on investment are as high as 8–30 times the costs.¹⁴

