

Dairy Nourishes a Healthy, Sustainable World

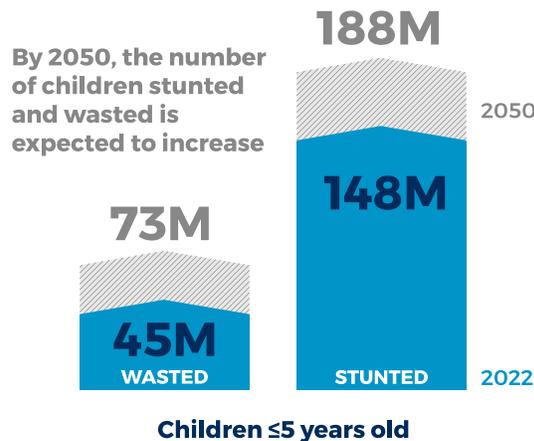
Dairy's Contribution to the Global Food System

There are challenges to global nutrition and food security

The world needs nourishment

By 2050, the global population is expected to reach nearly 10 billion people, creating greater need for nutrient dense, climate resilient food¹

- Malnutrition persists worldwide, jeopardizing well-being and future development by creating less productive individuals who are prone to disease.¹
- ~8% of the global population, 673 million people, experience hunger, meaning they are undernourished.²
- The cost of malnutrition is 3 trillion US dollars annually in lost productivity because it has stunted people's physical and cognitive abilities.³



UNICEF, WHO, World Bank Group. 2023. Joint childhood malnutrition estimates. Levels and trends in child malnutrition. Institute for Health Metrics and Evaluation. 2024.

No country is immune to malnutrition

Hidden hunger, the presence of multiple micronutrient deficiencies despite sufficient food, affects an estimated 2 billion people worldwide^{4,5}

- In high-income countries, these gaps are often accompanied by overnutrition (i.e., overweight and obesity), increasing healthcare costs, compromising health outcomes, and limiting human potential on a global scale.⁴
- More than half the global population do not consume enough iodine, calcium, iron, or riboflavin from food.⁵



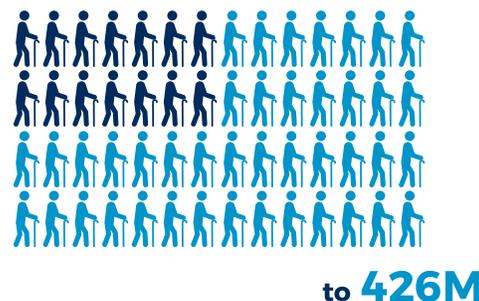
Passarelli, S., et al. 2024. Global estimation of dietary micronutrient inadequacies: a modelling analysis. *The Lancet Global Health*.

The global population is aging

While lifespans are increasing, healthspans lag, escalating rates of noncommunicable diseases (NCD)⁶

- The lifespan-healthspan gap has led to escalating rates of NCD and age-related conditions – such as type 2 diabetes, dementia, sarcopenia, osteoporosis, and cardiovascular disease – placing strains on healthcare systems, labor and resourcing, and public health expenditures.⁶ With fewer people to care for older persons, it is important to take steps to help them live more years vibrantly and independently.
- In 2050, 80% of older people will be living in low- and middle-income countries, exacerbating their risk of malnutrition and related disorders.⁶

By 2050, the number of people aged 80+ is expected to triple



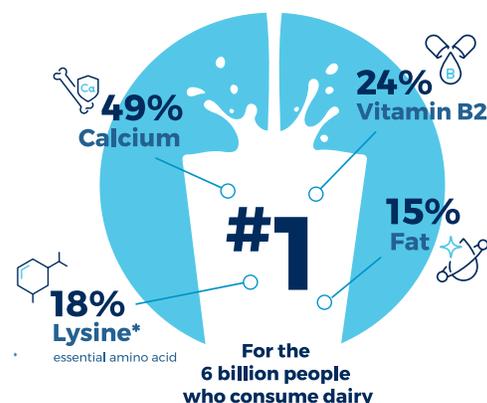
WHO. 2024. Ageing and health fact sheet.

Dairy is part of the solution

Dairy provides nourishment across the lifespan

The FAO recommends milk as part of diverse, healthy diets to improve nutrition and health⁷

- 109 million cases of childhood stunting could be prevented by 2050 by improving dairy productivity and supply in just five countries - Ethiopia, India, Kenya, Nigeria, and Tanzania.³
- Dairy foods are nutrient-dense, providing many nutrients lacking in the global diet, including calcium, iodine, B vitamins, and high-quality protein.⁸ These nutrients are crucial for immunity, cognitive function, health and well-being.⁷
- According to the FAO, milk and dairy consumption reduces the risk of all-cause mortality, hypertension, stroke, type 2 diabetes, colorectal cancer, breast cancer, obesity, and osteoporosis in adults.⁷
- The World Health Organization recommends dairy to increase energy, high-quality protein and micronutrients in older adults.⁹



Smith NW, et al. 2022. Modeling the contribution of milk to global nutrition. *Front Nutr.*
FAO. Gateway to dairy production and products.

Dairy provides affordable nutrition

Dairy accounts for a significant portion of nutrients at a lower cost¹⁰

- 28% of the global population, 2.3 billion people, are moderately or severely food insecure, meaning they do not have regular access to adequate food.²
- Milk is among the most affordable food groups to deliver nutritional value per unit.¹⁰
- Nutritionally adequate diets that do not include foods from animals cost 35-45% more than those that include animal source foods, such as dairy, to complement the diet.¹¹

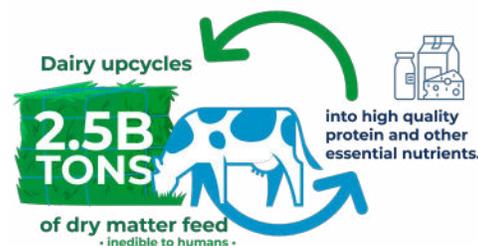


Chungchunlam, SMS, Moughan, P.J. 2024. Diet affordability: a key dimension in the assessment of sustainable food systems and healthy diets. *Front Nutr.*

Dairy is a sustainable choice

The dairy sector is improving its performance through programs such as the Dairy Sustainability Framework and Pathways to Dairy Net Zero

- Global farm-gate emissions intensity decreased ~24% from 2000 to 2022.¹²
- Dairy upcycles 2.5 billion tons of dry matter feed that are inedible to humans - such as grass, straw, and crop byproducts - into high quality protein and other essential nutrients.¹³ 95% of feed consumed by domestic ruminants globally is inedible to humans.¹⁴
- Cow manure, as a natural fertilizer, enhances soil fertility, reduces reliance on synthetic fertilizer, and improves crop yields.¹⁵

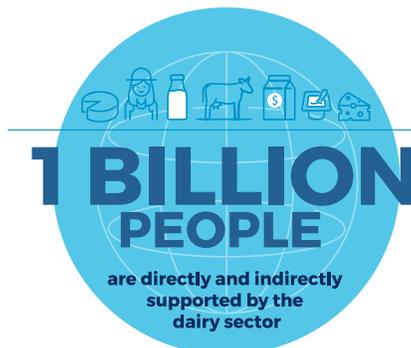


FAO Animal Production and Health Division, 2010. Greenhouse gas emissions from the dairy sector: a life cycle assessment.

Dairy has impact

Dairy is the largest agricultural commodity by value, third by volume¹³

- There are 600 million people living on 133 million dairy farms around the world. 400 million additional people are supported by full time jobs related to dairy farming.¹³
- Approximately 80 million women are employed in the dairy sector, leading ~37 million farms.¹³
- Dairy sector development improves consumer access to nutritious food, increases farmer income while decreasing environmental impact, and provides tax revenue for governments, which can go toward improved services for communities.¹⁶



FAO. 2016. The global dairy sector: facts. Elaborated from FAOSTAT and the World Bank Development Indicators Database.



Scan to view references