## **Second International Conference on Nutrition**

19-21 November 2014



# WHY NUTRITION MATTERS

### WHAT IS MALNUTRITION?

Malnutrition is defined as an abnormal physiological condition caused by inadequate, unbalanced or excessive consumption of the macronutrients that provide dietary energy (carbohydrates, protein and fats) and the micronutrients (vitamins and minerals) that are essential for physical and cognitive growth and development. It manifests in many forms, including:

- undernourishment and undernutrition food intake that is insufficient to meet dietary energy requirements;
- micronutrient deficiencies being deficient in one or more essential vitamins and minerals; and
- overnutrition and obesity abnormal or excessive fat accumulation that may impair health.

#### EFFECTS ON HEALTH

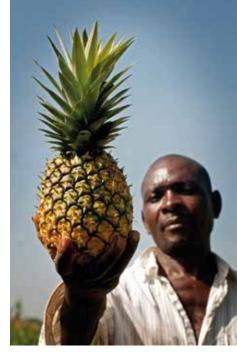
**Nutrition levels are not only an outcome of overall social and economic development,** but also an essential input, impacting health, productivity and overall well-being. People who are malnourished have a weakened defence against disease, become ill more easily and more frequently and are less able to recover quickly and fully from disease.

Undernutrition and micronutrient deficiencies can be particularly harmful to children, leaving them vulnerable to infectious disease and ultimately causing both physical and cognitive impairment. Chronic undernutrition can cause physical stunting—low height-for-age—and wasting—low weight-for-height. Diets that do not provide enough micronutrients can lead to severe illness, including anaemia, mental retardation and permanent blindness.

Both undernutrition and micronutrient deficiencies can impact children's cognitive functioning, preventing them from reaching their full potential in school, consequently affecting

their future job and income opportunities and perpetuating a cycle of poverty.

While undernutrition remains a pervasive issue in poorer countries, the global prevalence of overweight and obesity has risen across all regions—from 24 to 34 percent between 1980 and 2008. Overweight and obesity increase the risk of non-communicable



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diseases such as cardiovascular disease, diabetes, some cancers and osteoarthritis, posing a significant threat to public health.

### SOCIAL AND ECONOMIC COSTS

#### Despite the dramatic increase of overweight and obesity,

child and maternal malnutrition and underweight remain the leading nutrition-related health burdens in the world, with 167 million children under the age of five chronically malnourished.

Economically, the cost of undernutrition and micronutrient deficiencies is estimated at 2-3 percent of global GDP due to its impact on human development, productivity, and economic growth. Undernutrition is also one of the main pathways by which poverty is perpetuated through generations. Maternal

stunting is a strong predictor for giving birth to an underweight child, who will in turn have a higher risk of physical and cognitive impairment, and will suffer the resulting economic burdens.

The economic cost of overweight and obesity arises primarily from increased spending on health care and reduced economic productivity. Recent estimates of economic output find a loss of US\$47 trillion over the next two decades due to overweight and obesity-related non-communicable diseases. Combined with health care spending, the total cost will be even greater.

#### FAO STRATEGY ON NUTRITION

These recent trends in nutrition levels are increasingly attributed to economic transformations and lifestyle changes, which are facilitated by a food system that has become rapidly industrialized. Sustainable food systems are needed to provide for all people's nutritional needs while also contributing to economic growth and preserving the valuable natural resources necessary for future productivity. FAO's strategy for improving nutrition levels is food and agriculture-based, focusing on vulnerable populations at the household and local levels, and collaborating across sectors, including public health.

FAO advocates for the incorporation of explicit nutrition objectives into agriculture, health, education, economic and social protection policies in developing countries.

By applying a nutrition lens along the entire food chain from farm to fork, critical points may be identified where the food's 'nutrient value' is at greatest risk of being reduced and steps taken to safeguard the nutritional quality of the food. At the same time nutritionsensitive agriculture and food-based interventions give priority to supporting the livelihoods of farmers and communities and increasing year round food availability.



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### THE COST OF MALNUTRITION



global economy is estimated at US\$3.5 trillion per year



The cost of malnutrition to the The cost of undernutrition and micronutrient deficiencies is estimated US\$1.4-2.1 trillion



The cost of all obesity and overweight-related noncommunicable diseases was estimated at US\$1.4 trillion in 2010



Child and maternal malnutrition impose by far the largest nutrition-related health burden at the global level

Source: 2013 SOFA report





