



Fact sheet N°311
September 2006

Obesity and overweight

What are overweight and obesity?

Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health.

Body mass index (BMI) is a simple index of weight-for-height that is commonly used in classifying overweight and obesity in adult populations and individuals. It is defined as the weight in kilograms divided by the square of the height in meters (kg/m²).

BMI provides the most useful population-level measure of overweight and obesity as it is the same for both sexes and for all ages of adults. However, it should be considered as a rough guide because it may not correspond to the same degree of fatness in different individuals.

The World Health Organization (WHO) defines "overweight" as a BMI equal to or more than 25, and "obesity" as a BMI equal to or more than 30. These cut-off points provide a benchmark for individual assessment, but there is evidence that risk of chronic disease in populations increases progressively from a BMI of 21.

The new WHO Child Growth Standards, launched in April 2006, include BMI charts for infants and young children up to age 5. However, measuring overweight and obesity in children aged 5 to 14 years is challenging because there is not a standard definition of childhood obesity applied worldwide. WHO is currently developing an international growth reference for school-age children and adolescents.

Facts about overweight and obesity

WHO's latest projections indicate that globally in 2005:

- approximately 1.6 billion adults (age 15+) were overweight;
- at least 400 million adults were obese.

WHO further projects that by 2015, approximately 2.3 billion adults will be overweight and more than 700 million will be obese.

At least 20 million children under the age of 5 years are overweight globally in 2005.

Once considered a problem only in high-income countries, overweight and obesity are now dramatically on the rise in low- and middle-income countries, particularly in urban settings.

What causes obesity and overweight?

The fundamental cause of obesity and overweight is an energy imbalance between calories consumed on one hand, and calories expended on the other hand. Global increases in overweight and obesity are attributable to a number of factors including:

- a global shift in diet towards increased intake of energy-dense foods that are high in fat and sugars but low in vitamins, minerals and other micronutrients; and
- a trend towards decreased physical activity due to the increasingly sedentary nature of many forms of work, changing modes of transportation, and increasing urbanization.

What are common health consequences of overweight and obesity?

Overweight and obesity lead to serious health consequences. Risk increases progressively as BMI increases. Raised body mass index is a major risk factor for chronic diseases such as:

- Cardiovascular disease (mainly heart disease and stroke) - already the world's number one cause of death, killing 17 million people each year.
- Diabetes – which has rapidly become a global epidemic. WHO projects that diabetes deaths will increase by more than 50% worldwide in the next 10 years.
- Musculoskeletal disorders – especially osteoarthritis.
- Some cancers (endometrial, breast, and colon).

Childhood obesity is associated with a higher chance of premature death and disability in adulthood.

Many low- and middle-income countries are now facing a "double burden" of disease:

- While they continue to deal with the problems of infectious disease and under-nutrition, at the same time they are experiencing a rapid upsurge in chronic disease risk factors such as obesity and overweight, particularly in urban settings.
- It is not uncommon to find under-nutrition and obesity existing side-by-side within the same country, the same community and even within the same household.
- This double burden is caused by inadequate pre-natal, infant and young child nutrition followed by exposure to high-fat, energy-dense, micronutrient-poor foods and lack of physical activity.

How can the burden of overweight and obesity be reduced?

Overweight and obesity, as well as their related chronic diseases, are largely preventable.

At the individual level, people can:

- achieve energy balance and a healthy weight;
- limit energy intake from total fats and shift fat consumption away from saturated fats to unsaturated fats;
- increase consumption of fruit and vegetables, as well as legumes, whole grains and nuts;
- limit the intake of sugars; and
- increase physical activity - at least 30 minutes of regular, moderate-intensity activity on most days. More activity may be required for weight control.

The implementation of these recommendations requires sustained political commitment and the collaboration of many stakeholders, public and private. Governments, international partners, civil society and nongovernmental organizations and the private sector have vital roles to play in shaping healthy environments and making healthier diet options affordable and easily accessible. This is especially important for the most vulnerable in society – the poor and children – who have limited choices about the food they eat and the environments in which they live.

Initiatives by the food industry to reduce the fat, sugar and salt content of processed foods and portion sizes, to increase introduction of innovative, healthy, and nutritious choices, and to review current marketing practices could accelerate health gains worldwide.

WHO's strategy for preventing overweight and obesity

Adopted by the World Health Assembly in 2004, the WHO Global Strategy on Diet, Physical Activity and Health describes the actions needed to support the adoption of healthy diets and regular physical activity. The Strategy calls upon all stakeholders to take action at global, regional and local levels and aims to lead to a significant reduction in the prevalence of chronic diseases and their common risk factors, primarily unhealthy diet and physical inactivity.

WHO's work on diet and physical activity is part of the overall WHO chronic disease prevention and control framework of the Department of Chronic Diseases and Health Promotion. The strategic objectives of the department are to: advocate for health promotion and chronic disease prevention and control; promote health, especially for poor and disadvantaged populations; slow and reverse the adverse trends in the common chronic disease risk factors; and prevent premature deaths and avoidable disability due to major chronic diseases.

This work is complemented by that of the Department of Nutrition for Health and Development. The strategic objectives of the department are to promote healthy diets and improve the nutritional status of the population throughout the life course, particularly among the vulnerable. This is achieved by providing support to countries in developing and implementing national intersectoral Food

and Nutrition Policies and Programmes to address double-burden of nutrition-related ill-health, and to contribute to the achievement of the Millennium Development Goals (MDGs).

For more information contact:

WHO Media centre

Telephone: +41 22 791 2222

Email: mediainquiries@who.int

