

Curbing the Obesity & Undernutrition Epidemic Could Forestall Major Assault on Global Health

Sounding the Alarm: Obesity Scourge Spreads Unchecked

by Anna Ferro-Luzzi and Pekka Puska, World Health Organization, Geneva

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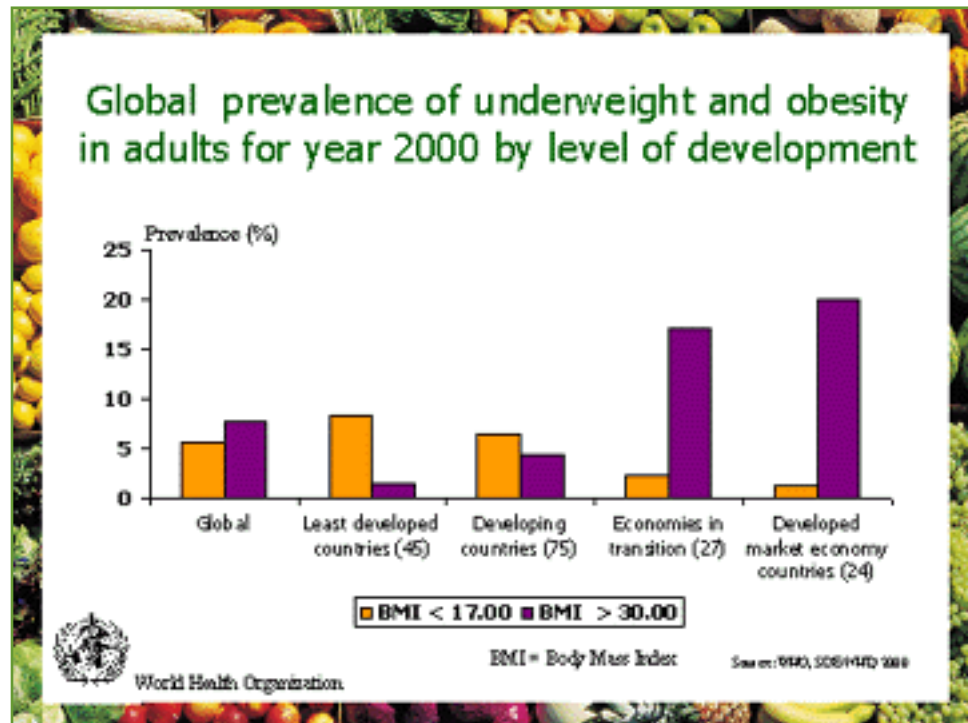
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More people are obese than ever before. In fact, while representative country data remain somewhat limited, the picture emerging is that of a global obesity epidemic, rapidly spreading from the developed to the developing regions of the world.

The Epidemic

The magnitude of the problem is staggering. Recent analysis reveals 1 billion overweight people worldwide. And one in three of them – 300 million men and women – are clinically obese. ([World Health Report 2002](#); www.who.int/whr)

The prevalence of obesity varies across countries. In Europe and the United States, 10 to 25 percent of the population is obese, while in Brazil, 6 percent of men and 13 percent of women tip the scales. In Western Samoa, obesity affects 77 percent of urban women, and it is a fact of life for 44 percent of black women in the Cape Peninsula of the Republic of South Africa.

In general, obesity is highest among lower-income populations in developed countries, and

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WHO's obesity control strategy deserves more applause than critique.

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among more affluent people in developing ones.

One of the most alarming features of the obesity epidemic is how quietly it is spreading. (WHO Expert Consultation 2000; <http://www.who.int/hpr/gs.who.fao.report.shtml>) The prevalence of obesity has doubled over the last 20 years in the United Kingdom and Japan, and it has increased 10 to 50 percent in most European countries. Sadly, surveys repeated over time show that between 0.5 and 1 percent of all children in the United States, Brazil, Canada, Australia and some European countries become overweight each year, according to *Obesity in Young People: The Coming Crisis in Public Health*, a 2003 report to the World Health Organization (WHO) by T. Lobstein, L. Baur and R. Uauy. Meanwhile, the rate of increase in obesity in Mexico and Morocco is six times higher than it is in the United States.

Today, the total number of overweight people in the world exceeds the number of underweight ones. Nationally, representative data convincingly show that this is true for the urban as well as the rural populations of practically all developing countries, with the notable exception of the Indian subcontinent and sub-Saharan Africa.

The Causes

This rising tide of obesity is the outcome of cumulative exposure to two main factors: energy-dense, "fast food" diets and increasingly sedentary lifestyles. The energy density of foods is directly related to fat content, with added sugar often contributing substantially. The average energy density of a wide range of well-known, typical fast foods is almost 2.5 times higher than that of the African diet and 1.7 times greater than that of the typical British diet. Because humans have only a weak innate capability to down-regulate the bulk of food consumed in order to maintain energy equilibrium, people tend to eat in excess of their needs when exposed to a high-fat, sugar-rich, energy-dense diet. This phenomenon is called "passive over-consumption." (Prentice A.M., Jebb S.A., *Fast foods, energy density and obesity: a possible mechanistic link*, *Obesity Reviews* (2003) 4, 187-194)

The other major risk factor for obesity, especially powerful if associated with the consumption of an energy-dense diet, is a sedentary lifestyle. Unfortunately, today sedentarism is a fact of life in many communities thanks to the changes over the second half of the last century reducing overall physical activity and energy expenditure. In short, the energy costs of both leisure and labour have plummeted, aided by technological changes and the ubiquity of motorised transportation. In addition, opportunities for physical activity have been curtailed by environmental structural changes in school environments, street safety, transport policies and urban design.

The Consequences

In and of itself, obesity can be a debilitating condition, but its importance as a global public health problem stems primarily from the fact that it represents a substantial risk factor for several health conditions. Type 2 diabetes is one of the most significant health consequences, with about 90 percent of diabetics being obese or overweight. And with 300 million cases of adult diabetes projected in 2025 (228 million of these in developing countries), the situation is only expected to worsen.

Diabetes is not the only co-morbidity of obesity. Hypertension, cardiovascular and gallbladder disease, certain types of cancer, insulin resistance, dyslipidaemia, osteo-arthritis, sleep apnoea and breathlessness, and asthma, hyperuricemia and gout are also associated with the condition.

So is a substantial financial burden. Roughly estimated, the cost of the management and treatment of obesity imposed upon health services is 2 to 8 percent of the overall health budget for the developed countries. (A similar estimate for developing countries is not possible at

present.) It is important to note, however, that the rapidity with which the epidemiological transition is taking place in developing countries has generated a double burden of disease, with the emerging obesity epidemic and its attendant chronic diseases happening at a time when communicable diseases and undernutrition are still paramount problems. The public health implications of this double burden are extremely worrying, as they may impose an intolerable strain on the limited financial resources of impoverished countries.

The situation is severe. In response, at the request of the World Health Assembly (WHA) 2002 (www.who.int/whr), WHO has proposed a “[Global Strategy on Diet, Physical Activity and Health](http://www.who.int/hpr/global.strategy.shtml)” (<http://www.who.int/hpr/global.strategy.shtml>). If adopted by WHA in May 2004, this action plan will provide a roadmap for countries and other stakeholders to adopt healthier diets and physical activity – and to start to curb the global epidemic of obesity with all of its serious health consequences. [[back to front page...](#)]

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Valeska C. Stupak, Editorial and Design Consultant

Mike Netherland, Webmaster

**Center for Communications, Health and the
Environment**
4437 Reservoir Road, NW, Washington, DC 20007
Tel: (202) 965-5990 . Fax: (202) 965-5996
Email: CECHE@att.net

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