Obesity Causes Diagnosis and Treatment

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Abstract

Obesity is a medical condition in which excess body fat has accumulated to an extent that it may have a negative effect on health. People are generally considered obese when their body mass index (BMI), a measurement obtained by dividing a person's weight by the square of the person's height, is over 30 kg/m²; the range 25–30 kg/m² is defined as overweight. Some East Asian countries use lower values. Obesity is correlated with various diseases and conditions, particularly cardiovascular diseases, type 2 diabetes, obstructive sleep apnea, certain types of cancer, and osteoarthritis. High BMI is a marker of risk, but not proven to be a direct cause, for diseases caused by diet, physical activity, and environmental factors. A reciprocal link has been found between obesity and depression, with obesity increasing the risk of clinical depression and also depression leading to a higher chance of developing obesity.

Keywords: Obesity, Diet, Cardiovascular diseases

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Introduction

Obesity has individual, socioeconomic, and environmental causes, including diet, physical activity, automation, urbanization, genetic susceptibility, medications, mental disorders, economic policies, endocrine disorders, and exposure to endocrine-disrupting chemicals. While a majority of obese individuals at any given time are attempting to lose weight and often successful, research shows that maintaining that weight loss over the long term proves to be rare. The reasons for weight cycling are not fully understood but may include decreased energy expenditure combined with increased biological urge to eat during and after caloric restriction. More studies are needed to determine if weight cycling and yo-yo dieting contribute to inflammation and disease risk in obese individuals.

Obesity prevention requires a complex approach, including interventions at community, family, and individual levels. Changes to diet and exercising are the main treatments recommended by health professionals. Diet quality can be improved by reducing the consumption of energy-dense foods, such as those high in fat or sugars, and by increasing the intake of dietary fiber. However, large-scale analyses have found an inverse relationship between energy density and energy cost of foods in developed nations. Low-income populations are more likely to live in neighborhoods that are considered "food deserts. Medications can be used, along with a suitable diet, to reduce appetite or decrease fat absorption.

Obesity is a leading preventable cause of death worldwide, with increasing rates in adults and children. In 2015, 600 million adults (12%) and 100 million children were obese in 195 countries. Obesity is more common in women than in men. Authorities view it as one of the most serious public health problems of the 21st century. Obesity is stigmatized in much of the modern world (particularly in the Western world), though it was seen as a symbol of wealth and fertility at other times in history and still is in some parts of the world. In 2013, several medical societies, including the American Medical Association and the American Heart Association, classified obesity as a disease.

A 2016 review supported excess food as the primary factor. Dietary energy supply per capita varies markedly between different regions and countries. It has also changed significantly over time. From the early 1970s to the late 1990s the average food energy available per person per day (the amount of food bought). The United States had the highest availability with 3,654 calories (15,290 kJ) per person in 1996. This increased further in 2003 to 3,754 calories (15,710 kJ). During the late 1990s Europeans had 3,394 calories (14,200 kJ) per person, in the developing areas of Asia there were 2,648 calories (11,080 kJ) per person, and in sub-Saharan Africa people had 2,176 calories (9,100 kJ) per person. Total food energy consumption has been found to be related to obesity.

The widespread availability of nutritional guidelines has done little to address the problems of overeating and poor dietary choice.
From 1971 to 2000, obesity rates in the United States increased from 14.5% to 30.9%. During the same period, an increase occurred in the average amount of food energy consumed. For women, the average increase was 335 calories (1,400 kJ) per day (1,542 calories (6,450 kJ) in 1971 and 1,877 calories (7,850 kJ) in 2004), while for men. Consumption of sweetened drinks such as soft drinks, fruit drinks, iced tea, and energy and vitamin water drinks is believed to be contributing to the rising rates of obesity and to an increased risk of metabolic syndrome and type 2 diabetes. Vitamin D deficiency is related to diseases associated with obesity.

In the United States consumption of fast-food meals tripled and food energy intake from these meals quadrupled between 1977 and 1995. U.S. farm bill has made the main sources of processed food cheap compared to fruits and vegetables. Calorie count laws and nutrition facts labels attempt to steer people toward making healthier food choices. Obese people consistently under-report their food consumption as compared to people of normal weight. This is supported both by tests of people carried out in a calorimeter room and by direct observation.

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