

Essay about obesity

[Health & Medicine](#), [Obesity](#)



Essay about Obesity Obesity results from chronic energy intake that exceeds energy expenditure and is characterized by "excessive" body fat. The precise assessment of an individual's body fat is an expensive and complicated procedure. Instead, body mass index (BMI), though somewhat controversial, is used commonly because it is easy to assess and correlates highly with body fat. BMI is calculated by taking an individual's weight in kilograms and dividing it by that individual's height in meters squared (kg/m^2). For adults a healthy BMI is between 18.5 and 24.9. A BMI of 25 to 29 is classified as overweight, obesity is defined as a BMI of 30 to 39, and clinically severe obesity is defined as a BMI of 40 or more. Because of the pervasive social stigma associated with the term obesity, it is avoided for children; at risk for overweight and overweight are the recommended terms. To account for normal age and sex differences in children's body fat, at risk for overweight is defined as a BMI at or above the 85th percentile and overweight as a BMI at or above the 95th percentile of the sex-specific BMI-for-age growth charts.

PREVALENCE OF OBESITY Health statistics for the United States reveal a dramatic upsurge in obesity prevalence during the early 1980s, and the rates have continued to rise. U. S. national health statistics in 2007 estimated that 34.1 percent of adults were overweight, 32.2 percent obese, and 4.8 percent clinically obese; 17.1 percent of children and adolescents age six to nineteen were estimated to be overweight, and 16.5 percent were at risk for overweight. Sociodemographic risk factors for obesity include being of a racial/ethnic minority and being of low socioeconomic status.

CONSEQUENCES OF OBESITY Obesity is associated with high morbidity and mortality rates. The medical sequelae of obesity

include type II diabetes, coronary heart disease, stroke, osteoarthritis, sleep apnea, and some cancers, including breast and colon cancer. Among the most insidious and common adverse effects are the socioemotional consequences of obesity. Obese individuals are significantly more likely to experience social stigmatization and discrimination in all domains, including education, employment, social relationships, and health care. Also, obesity is associated with low self-esteem, body image disorders, anxiety, and depression. Associations between BMI and body satisfaction vary with race/ethnicity and gender. African Americans have a higher mean BMI than do European Americans but tend also to have greater body satisfaction. Generally, females report significantly lower body satisfaction than do males regardless of race/ethnicity.

ENVIRONMENTAL EXPLANATIONS The escalating rates of obesity since the 1980s are attributable to a complex interaction of environmental, socio-cultural, behavioral, and biological/genetic factors that is not well understood. At a macrosystemic level, U. S. food policy is fundamentally at odds with the goal of healthful eating. Food is overproduced, and as a result of the abundant supply, food companies must compete aggressively for market share. Cheap, palatable, and accessible energy-dense foods are mass-marketed and offered in portions vastly disproportionate to individuals' caloric needs. A marked shift toward away-from-home and prepared food consumption probably has resulted from time constraints caused by a rise in dual-career and single-parent working families. In 1977, 9.6 percent of meals were eaten at restaurants and fast food outlets; by 1996 that proportion had risen to 23.5 percent. Over roughly the same period consumption of high-fructose corn syrup (HFCS)

increased 1000 percent or more. HFCS is used instead of sugar (glucose) as a caloric sweetener in many foods and all soft drinks; however, it is digested, absorbed, and metabolized differently than glucose is. Fructose, unlike glucose, distorts levels of insulin, leptin, and ghrelin, the hormones that act as key signals in food regulatory processes and body weight, making dietary fructose a prime suspect in the obesity epidemic. A sedentary lifestyle is an important contributing factor, especially in light of the fact that decreased energy expenditure has been accompanied by increased energy consumption. A sedentary lifestyle is a natural consequence of a built environment characterized by urban sprawl that necessitates travel by car or mass transit and time-consuming commutes. Technological advancement that reduces energy output, low-energy office occupations, and leisure preferences such as television viewing and computer use increase the probability of a physically inactive lifestyle.

EARLY PSYCHOLOGICAL THEORIES

Two classic psychological theories of obesity predate the onset of the obesity epidemic. To explain differences in the eating patterns of obese and normal-weight individuals, in 1968 Stanley Schacter proposed the internal-external theory of obesity and in 1972 Richard Nesbitt proposed the set point theory. Schacter hypothesized that obese individuals are more likely to be responsive to cues from the external environment such as the sight and palatability of food, whereas normal-weight individuals are more likely to eat in response to internal physiological cues. Nesbitt countered with the hypothesis that each individual has a unique, biologically determined ideal weight, with obese individuals having an above-average set point. He theorized further that societal ideals of thinness cause obese

individuals to restrain their intake and eat below their set points, essentially causing a chronic state of deprivation and hyperresponsiveness to external food cues. These models of obesity have faded in importance because of a lack of empirical support. However, the derivative construct of dietary restraint and its effect on individuals' eating patterns continues to generate much research and some controversy. **DIETARY RESTRAINT** Dietary restraint is defined as the deliberate and persistent restriction of food to promote weight loss. Restraint theory proposes that restrained eaters may develop disordered eating patterns as a result of the stress inherent in chronic appetitive self-control. Although research has supported a relationship between dietary restraint and disinhibited eating, the validity of the restraint measurement scales is at issue and further work on more definitive construct measurement and the role of dietary restraint in disordered eating is warranted. **BIOLOGICAL EXPLANATIONS** Obesity also is explained by reference to biological processes. Research indicates that neuroendocrinological processes, most centrally the hypothalamic-pituitary-adrenal (HPA) axis, figure prominently in obesity. The HPA axis, which consists of the hypothalamus and the pituitary and adrenal glands, is a key player in stress regulation as well as in physiological processes such as digestion, energy use, and mood. Stress, which is inherent in the daily demands of the twenty-first-century environment, causes elevated cortisol secretion by the HPA axis. Protracted stimulation of the HPA axis results in a flood of neuroendocrine disturbances that in turn cause insulin resistance and visceral (abdominal) obesity. Visceral obesity carries the highest risk for comorbidities. Genetic research is still in its early stages.

There is substantial heritability of individual differences in BMI. However, more than twenty genes, hypothesized as working in conjunction with a wide range of environmental factors, have been linked to obesity: Clearly, obesity is causally very complex. Equally clearly, however, obesity is an urgent health problem that will continue to be a challenge for the foreseeable future. Done by : Hassan Mohamed Shamsi Grade : 11 / scientific / B