

## What Is Obesity?

Obesity is a condition in which a person has an abnormally high and unhealthy proportion of body fat. To measure obesity, researchers commonly use a scale known as the Body Mass Index (BMI). BMI is calculated by dividing a person's weight (in kilograms) by their height (in meters) squared. BMI provides a more accurate measure of obesity or being overweight than weight alone.

Guidelines established by the National Institutes of Health (NIH) place adults age 20 and older into the following categories based on their BMI (National Institutes of Health [NIH], 2011):

BMI	<b>BMI Categories</b>
Below 18.5	Underweight
18.5 to 24.9	Normal
25.0 to 34.9	Overweight
35.0 and above	Obese

According to the research, 65% of the U.S. population is overweight or obese. Obesity is a serious chronic disease, meaning that its symptoms build slowly over an extended period of time. Obesity is related to genetics and environment and can be very difficult to treat. A body mass index (BMI) above 40 indicates a person is severely obese. People with a BMI between 30 to 40 with additional medical illnesses can also be classified as suffering from severe morbid obesity.

Co-morbid medical problems include diabetes, sleep apnea, acid reflux, fatty liver, heart disease, hypertension, venous stasis disease, and more. Visit our website to calculate your personal BMI: dhmf.org/bakersfield/weightloss



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## **Medical Complications of Obesity**

## **Endocrine Abnormalities:**

Morbidly obese women have more irregularity in menstrual cycles, as well as more frequency of other menstrual abnormalities. There is also a higher frequency during pregnancy of developing toxemia and hypertension. The onset of menarche is younger for obese girls.

Diabetes: Type 2 diabetes, which normally develops in adulthood, is associated with obesity; approximately 80 percent of patients with Type 2 diabetes are overweight. Weight loss is the best treatment for Type 2, or insulin-resistant diabetes.

Hypertension: In overweight young adults, ages 20-45, the occurrence of hypertension is six times that of normal-weight peers. Weight gain in young adult life is a potential risk factor for developing hypertension in later life.

Respiratory/Pulmonary
Abnormalities: Pulmonary
abnormalities are common in
obese individuals. These include
the less debilitating problems of
decrease in lung volumes and
expiratory reserve volume to the
extreme of patients with sleep
apnea, Pickwickian syndrome,
somnolence, and hypoventilation.
Obese patients often have
disrupted sleep patterns from
waking to "catch their breath."

Gallbladder Disease: Obese women in the 20-30 year age range have a six times greater expectancy of developing gallbladder disease than their normal-weight peers. Nearly one-third of obese women can be expected to have developed gallbladder disease by the age of 60. Fatty infiltration of the liver is also associated with obesity.

GERD: Many obese individuals suffer from Gatroesophageal Reflux Disease (GERD). Acid reflux occurs when stomach acid sloshes up through the valve at the top of the stomach into the esophagus, causing heartburn. Stomach acid can eat away the tissue of the esophagus, which can lead to cancer of the esophagus.

## **Degenerative Arthritis: A**

significant correlation between uric acid levels and weight has been found. The chance of gout is dramatically increased when a patient's weight is greater than 130% above desirable. Weight loss will markedly decrease the obvious mechanical problem of stress on weight-bearing joints that causes pain and loss of mobility. Obesity also increases the chance of developing osteoarthritis.

Cardiovascular Disease: It is calculated that for each 10% increase in body weight, there is an approximate 20% increase in incidence of coronary artery disease. Blood pressure increases 6.5mmHg. Cholesterol and glucose are both significantly increased as well.

Cancer: Morbidly obese men have a significantly higher mortality rate for colorectal and prostate cancer. A 20-year follow-up study showed that men who are 130% over normal weight are 2.5 times more likely to die of prostate cancer compared to their normal-weight peers. Menopausal women with upper body fat have an increased risk of developing breast cancer. Higher rates of uterine and ovarian cancer are found in morbidly obese women.

Psychological: There is no doubt that obese individuals have lifestyle restrictions. Poor functional mobility and physical incapacity due to back/joint problems and shortness of breath are very common among morbidly obese individuals. This can contribute to absenteeism and unemployment. Impairment of body image is a major form of psychological disturbance for the obese. Repeated failure of diet and exercise to help their "problem" can cause a feeling of despair and depression.

Depression: Research shows a link between obesity and depression. Individuals who are obese may be more likely to become depressed because they experience themselves in poor health and are dissatisfied with their appearance.