

OBEESITY AND OVERWEIGHT

AHA Scientific Position

Obesity is defined simply as too much body fat. Your body is made up of water, fat, protein, carbohydrate and various vitamins and minerals. If you have too much fat -- especially in your waist area -- you're at higher risk for health problems, including high blood pressure, high blood cholesterol, diabetes (di"ah-BE'teez or di"ah-BE'tis), heart disease and stroke.

Obesity is now recognized as a major risk factor for coronary heart disease, which can lead to heart attack. Some reasons for this higher risk are known, but others are not. For example, obesity

- Raises blood cholesterol and triglyceride (tri-GLIS'er-íd) levels.
- Lowers HDL "good" cholesterol. HDL cholesterol is linked with lower heart disease and stroke risk, so reducing it tends to raise the risk.
- Raises blood pressure.
- Can induce diabetes (di"ah-BE'teez or di"ah-BE'tis). In some people, diabetes makes these other risk factors much worse. The danger of heart attack is especially high for these people.

Even when there are no adverse effects on the known risk factors, obesity by itself increases risk of heart disease. It also harms more than just the heart and blood vessel system. It's a major cause of gallstones and it can worsen degenerative joint disease.

Obesity is mainly caused by taking in more calories than are used up in physical activity and daily life. When people eat too many calories, or too much saturated fat and cholesterol, their blood cholesterol levels often rise. That raises their risk of heart disease.

How is body fat measured?

Waist circumference measurement and body mass index (BMI) are the recommended ways to estimate body fat. **A high-risk waistline is more than 35 inches for women, more than 40 inches for men.**

The body mass index formula assesses body weight relative to height. It's a useful, indirect measure of body composition, because in most people it correlates highly with body fat. Weight in kilograms is divided by height in meters squared (kg/m^2). Or multiply weight in pounds by 705, divide by height in inches, then divide again by height in inches. In studies by the National Center for Health Statistics,

- BMI values less than 18.5 are considered underweight.
- BMI values from 18.5 to 24.9 are healthy.
- **Overweight is defined as a body mass index of 25.0 to less than 30.0** (consistent with U.S. Dietary Guidelines for Americans). A BMI of about 25 kg/m^2 corresponds to about 10 percent over ideal body weight.

Obesity is defined as a BMI of 30.0 or greater (consistent with criteria of the World Health Organization), or about 30 pounds or more overweight. Extreme obesity is defined as a BMI of 40 or greater.