

Fact Sheet: Obesity and its health risks

Obesity is the result of a disorder in body energy balance that occurs when energy intake chronically exceeds energy expenditure. Body mass index (BMI) is used as an index of overweight and obesity, and calculated by dividing weight in Kg by height in meters squared. BMI values and classification of overweight and obesity are shown below with an example.

BMI & Classification of overweight and obesity

Classification	Normal weight	Overweight	Obesity I	Obesity II	Morbid obesity
BMI	18.5 ~24.9	25 ~29.9	30 ~34.9	35 ~39.9	> 40
Weight range for 5'6''(lbs)	115 ~ 154	155 ~ 185	186 ~ 216	217 ~ 246	>247

Two thirds of the US adults, over 20 years of age, are overweight or obese, and nearly one third are obese. The prevalence of overweight and obesity has increased about 38% and 100%, respectively, during the past two decades, and 75% of the US population will be overweight or obese by 2015 if the trend continues.

The high prevalence of overweight and obesity in the US continues to be a public health concern since obesity is closely related to non-insulin dependent diabetes, hypertension, cardiovascular disease, and certain cancers (Clinical guidelines 1998 & Flegal *et al.* 2005).

- ❖ Overweight or obese individuals have a 10 to 50% increased risk of death compared with normal weight individuals: Obesity is associated with about 112,000 excess deaths/year compared to normal weight individuals in the US.
- ❖ A weight gain of more than 10 pounds increases a person's risk of developing type 2 diabetes 2 times compared to individuals who have not gained weight.
- ❖ Diabetes, the fifth leading cause of death, affected approximately 20.8million, 7% of the US adults in 2005. From this group, 67% have a BMI of at least 27 and 46% have a BMI of at least 30.
- ❖ A weight gain of 10 ~ 20 pounds has shown to increase risk of heart disease 1.25 times in women and 1.6 times in men, with increasing risk with further weight gains.
- ❖ Nearly one third of the US adults have some form of cardiovascular disease in 2007.
- ❖ Obese individuals have 5 times higher risk of developing hypertension than healthy individuals.
- ❖ Approximately 10% of all cancer deaths are associated with obesity.

References

- ❖ Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults-The Evidence report. NIH, NHLBI. Sept 1998.
- ❖ Flegal KM, Graubard BI, Williamson DF, Gaial MH. Excess deaths associated with underweight, overweight, and obesity. JAMA 293(15):1861-1867, 2005
- ❖ Flegal, KM. Trends in body weight and overweight in the U.S. population. Nutr. Rev. 54: S97-S100. 1996.
- ❖ Statistics related to Overweight and Obesity, Weight-control Information network fact sheet, NIDDK, NIH, www.win.niddk.nih.gov/statistics, updated 2007