



## Obesity

Like most things, obesity is a complex phenomenon about which it is dangerous to generalize. What is true for one person is not necessarily true for the next. Nevertheless, we shall try to make sense out of conflicting theories and give answers to people who struggle to maintain self-esteem in a world that seems to be obsessed with youth, thinness, and the perfect body — whatever that may be.

What is obesity?

A person with anorexia nervosa may define obesity as a weight gain of five pounds, from 89 to 94. A grandmother past menopause may call herself obese because she carries 165 pounds on her large-boned, muscular body. A modeling agency may

talk about obesity when one of the women on the payroll puts 135 pounds on her 5'10" body.

None of these women is clinically obese. The anorexic and the model are underweight.

Men are split in their personal definitions of obesity. Many are just as concerned about overweight as women are, while others, frankly rotund, believe they are just fine, perfectly healthy, and universally attractive to potential romantic partners.

Physicians consider a person to be obese if s/he weighs more than 20% above expected weight for age, height, and body build. Morbid or malignant obesity is weight in excess of 100 pounds above that expected for age, height, and build.

In recent years, the definition of expected, or healthy, weight has expanded to include more pounds per height in view of research that links reduced mortality (longer lives) with more weight than is currently considered fashionable.

How many Americans are obese?

A 1999 study reported by the Centers for Disease Control and Prevention indicates that sixty-one percent of adults in the U.S. are overweight. A breakdown of that figure shows that thirty-five percent are slightly or moderately overweight, and that twenty-six percent are obese or grossly overweight. In addition, about thirteen percent of U.S. children are overweight or obese.

Another government study published in October, 2002 indicates that thirty-one percent of the American public is obese. It further suggested that fifteen percent of young people between 6 and 19 are seriously overweight. Even ten percent of toddlers between 2 and 5 are seriously overweight. The study appeared in the *Journal of the American Medical Association* (10/9/02).

A more recent study indicates that about 31 percent of American teenage girls and 28 percent of boys are somewhat overweight. An additional 15 percent of American teen girls and nearly 14 percent of teen boys are obese. (*Archives of Pediatrics and Adolescent Medicine*, January 2004) Causes include fast food, snacks with high sugar and fat content, use of automobiles, increased time spent in front of TV sets and computers, and a generally more sedentary lifestyles than slimmer peers.

The prevalence of overweight and obesity is increasing in all major socioeconomic and ethnic groups, including children and younger adults between 25 and 44. (David Sacher, U.S. Surgeon General, December 2001)

### What are the causes of obesity?

- Consumption of more calories than are burned through work, exercise, and other activities. In the late 1990s, Americans ate about 340 more calories per day than they did in the mid-1980s, and about 500 more calories per day than in the 1950s. The extra food was often some kind of refined carbohydrate (white flour or sugar) combined with fat, saturated fat in the unhealthiest cases. (University of California Wellness Letter, January 2002)
- Americans are eating out more often than ever before. Restaurants and fast food outlets offer much larger portions than they used to. The amount of home cooked food eaten with family around the dining room table has decreased, but portion size has increased. Food prepared at home offers the easiest way to make healthy choices about fat, sugar, salt, etc., but in today's world convenience often wins out over a home cooked meal.
- Inexpensive, tasty, plentiful food and a combination of passive leisure pursuits, sedentary lifestyle, TV, time spent on the Internet, and other "activities" that require little or no physical effort.
- Attempts to numb or escape emotional pain and distress. For various emotional reasons, including loneliness and depression, some people eat when their bodies do not need food.
- Diets and prolonged caloric restriction. When people try to make the body thinner than it is genetically programmed to be, it retaliates by becoming ravenous and vulnerable to binge eating. Ninety-eight percent of dieters regain all the weight they manage to lose, plus about 10 extra pounds, within five years. Yo-yo dieting repeats the cycle of weight loss followed by ever-increasing weight gain when hunger ultimately wins.
- Some individuals are obese because of specific biological problems such as malfunctioning thyroid or pituitary glands. Others may have physical problems or disabilities that severely limit or prohibit exercise, strenuous work, and other physical activity.
- Studies published in the New England Journal of Medicine (March 2003) indicate that certain genetic processes are an important and powerful underlying factor in the development of obesity and binge eating.
- In addition, new research suggests that there is a biological link between stress and the drive to eat. Comfort foods -- high in sugar, fat, and calories -- seem to calm the body's response to chronic stress. In addition, hormones produced when one is under stress encourage the formation of fat cells. In

Westernized countries life tends to be competitive, fast paced, demanding, and stressful. There may be a link between so-called modern life and increasing rates of overeating, overweight, and obesity. (Study to be published in Proceedings of the National Academy of Sciences. Author is Mary Dallman, professor of physiology, University of California at San Francisco .)

- Researchers believe that in most cases obesity represents a complex relationship between genetic, psychological, physiological, metabolic, socioeconomic, lifestyle, and cultural factors.
- Miscellaneous factors.
  - The children of overweight parents are more likely to be overweight than the children of thin parents.
  - If friends and family members offer comfort in the form of food, people will learn to deal with painful feelings by eating instead of using more effective strategies.
  - Poor folks tend to be fatter than the affluent.
  - People living in groups that frequently celebrate and socialize at get-togethers featuring tempting food tend to be fatter than those who do not.
  - Even artificial sweeteners are implicated in weight gain and obesity. In a recent study at Purdue University, rats that were given artificial sweeteners ate three times the calories of rats given real sugar. Researchers hypothesize that the engineered sweeteners interfere with the body's natural ability to regulate food and caloric intake based on the sweetness of different foods. ("A Pavlovian Approach to the Problem of Obesity," International Journal of Obesity, July 2004)
  - Some individuals eat great quantities of food, exercise moderately or not at all, and never seem to gain weight. Others walk past a bakery and gain ten pounds. No two people are the same, and no two obesity profiles are identical.

### Health risks associated with obesity

- **Hypertension.** (High blood pressure, a contributor to stroke and heart disease). Overweight young people (20-45) have a six times higher incidence of hypertension than do peers who are normal weight. Older obese folks seem to be at even greater risk.
- **Diabetes.** Even moderate obesity, especially when the extra fat is carried in the stomach and abdomen (instead of hips and thighs), increases the risk of non-insulin dependent diabetes mellitus (NIDDM) ten-fold.

- **Cardiovascular disease.** Both the degree of obesity and the location of fat deposits contribute to the potential for heart and blood vessel disease. The fatter the person, the higher the risk. People who carry extra weight in the trunk area (stomach and abdomen) are at higher risk than folks who store fat in hips and thighs.
- **Cancer.** Obese men are at elevated risk of developing cancer of the colon, rectum, and prostate. Obese women are at elevated risk of developing cancer of the breast, cervix, uterus, and ovaries.
- **Endocrine problems.** Irregular menstrual cycles; other menstrual problems; and pregnancy complications, especially toxemia and hypertension. Hormone imbalances of various kinds may contribute to, or be the result of, obesity.
- **Gall bladder disease.** Obese women 20-30 years old are at six times greater risk of gall bladder disease than their normal-weight peers. By age 60 almost one-third of obese women will have developed gall bladder disease.
- **Lung and breathing problems.** Obesity can impede the muscles that inflate and ventilate the lungs. Obese individuals may have to work hard to get enough air and over time may not be able to take in the oxygen needed by all body cells.
- **Arthritis.** Obese individuals are at increased risk of developing gouty arthritis, a distressingly painful disorder. In addition, excess weight stresses vulnerable joints, in particular the back and knee, which may develop osteoarthritis, a mechanical rather than metabolic problem.
- **Premature death.** Research indicates that obese people die sooner than their normal weight peers.
- **Other problems associated with obesity:**
  - Sleep disturbances, including sleep apnea (breathing stops for several seconds; then the person rouses, gasps, and struggles to catch breath. Episodes may continue through the night)
  - Inability to fully participate in recreational activities
  - Inability to compete effectively in sports and athletics; being picked last, or not at all, for team sports
  - Inability to perform some jobs; reduced job opportunities
  - Prejudice and discrimination in school and the workplace
  - Restricted social opportunities
  - Restricted opportunities for romantic relationships
  - Low self-esteem and body-image problems, related at least in part to prejudice and discrimination encountered in school, at work, and in social settings.

## One important piece of good news

Obese people do not seem to have any more psychological problems, or more serious psychological problems, than folks of normal weight. The problems they do have are more likely a consequence of prejudice and discrimination than a cause of overweight. In fact, several studies have suggested that the obese are significantly less anxious and depressed than normal-weight peers.

## What can be done about obesity?

- The simplistic answer: eat less and exercise more.
- The realistic answer:
  - Work with a physician to identify and correct any underlying medical, biological, or metabolic problems contributing to excess weight.
  - Check with a counselor to see if you are using food for a purpose food cannot fulfill: love, comfort, escape, an antidote to boredom, and so forth. If you are self-medicating with food, work with the therapist to come up with better ways of managing stress, painful emotions, and problems.
  - Don't ever diet or restrict calories when you are legitimately hungry. If you do, you will set yourself up to binge later.
  - Eat normal, reasonable, moderate amounts of healthy foods. Emphasize fruits, vegetables, and whole grains. Don't cut out sweets and fats completely. If you do, you will crave and sneak them. Besides, your body needs the nutrients found in fats and carbohydrates. Just don't overdo it.
  - Most important: Exercise consistently. Get regular amounts of moderate, self-loving exercise. Start with a few minutes of walking and slowly extend the time until you can do 30-60 minutes a day, 3-5 days a week. If you haven't exercised in a while, be sure to check with your doctor first.
  - Find a support system. Friends are great; so are support groups. There are both online and in-person opportunities.
  - Be gentle and realistic with yourself. If everyone in your family is round and sturdy, chances are you will never be a super model — but you can be happy and healthy. Also remember that healthy, realistic weight loss takes time. Losing one-half to one pound a week isn't very glamorous, but if you go any faster, you will make yourself hungry, and hunger will inevitably make you overeat.

How about diet pills and other weight-loss products? Surgery?

- **Over-the-counter products.** There are many items in drugstores and health food stores that claim to help people lose weight. None seem to be both safe and effective. The ones that are effective are only minimally so, and they have significant side effects and health risks. The ones that are safe don't seem to be very effective in helping folks lose weight and keep it off. Think about it: if there really were a safe and effective weight loss product available over the counter, everyone in the United States would be thin. Our best advice: save your money.
- **Prescription medications.** In spite of a tremendous amount of research, there still is no magic pill that melts pounds away effortlessly. Obese people and their physicians had great hope for fen-phen, a combination stimulant and antidepressant, but those hopes were dashed when some of the people taking it developed potentially fatal heart problems. New medications are available, and more are in the pipeline. Talk to your doctor about their pros and cons. For the time being at least, the steps outlined above in the section titled "What Can Be Done About Obesity" seem to be the safest and most effective way of reducing excess weight.
- **Surgery.** For some obese people, gastric bypass (and stomach stapling and related techniques) may be a lifesaving measure. The procedure is major surgery and is associated with risk of significant side effects and complications. For this reason it should be considered a treatment of last resort. Also, to be successful, the patient must cooperate with an entirely new way of eating and managing food. If nothing else has worked for you, and if your medical situation warrants such a drastic approach, talk to your physician to see if you might be a candidate for this procedure.