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Weight
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## WEGHT

### How much should you weigh? What can you do about it?

Food is the source of energy for our body. We need energy just to keep alive—for continuous body functions, such as breathing, the beating of the heart, and maintaining muscle tone. We also need energy for carrying out all our work and leisure activities.

In many animals hunger is nature's way of telling them to eat when they are hungry and to stop eating when they are full. It is not that easy in humans. In addition to the hunger drive, we have a learned response to food. This is called appetite. Have you ever been "hungry" for a banana split?

Hunger is physical and appetite is psychological. We have little control over hunger, but we can modify our appetite. Appetite depends a great deal on food-related experiences of the past.

#### Your Weight

How much should an adult weigh? In general, the weight that is desirable for you when you are in your midtwenties is considered the best weight for later years, too.

Tables of "ideal" weight are availa-

ble from many sources. These are computed from the average weights of people of each sex and of a specific height and body frame. These figures represent standard weights; they really are not "ideal" weights. You should not necessarily weigh the same as the average person of your height and body frame. However, these tables are useful for determining desirable weight or possible weight problems.

Your body composition determines your actual weight. Water makes up 59 percent of the average man's body weight and 55 percent of the woman's. Extra water accumulation or loss of water can cause dramatic, but temporary, changes in weight.

For the normal weight man, 18 percent of his weight is fat; for the normal weight woman, about 22 percent of her weight is fat. The rest of the body weight is muscle and bone. Muscle and bone weigh more than fat and water, so an athlete or other muscular person could weigh more than the weight on the charts and still not be overweight.



#### Underweight

Being underweight usually means weighing more than 10 percent below the "ideal" weight. Underweight is usually caused by undernutrition. An underweight person is frequently sick. Undernutrition can cause a person to have infections more often. It also affects physical and mental performance. An undernourished person will not have the energy to work or participate in strenuous activities. Also, undernourished adults have more difficulty concentrating then well nourished people.

#### Overweight and Obesity

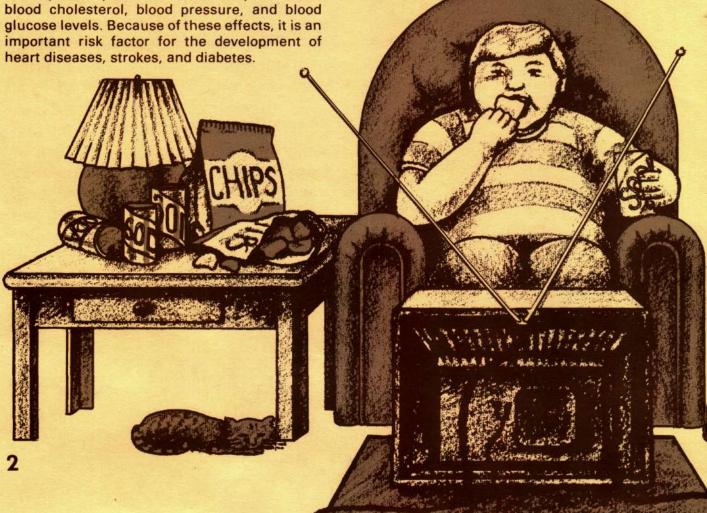
Like underweight, overweight is based on the "ideal" weight charts. You are considered overweight if you are 10 to 19 percent above the "ideal" weight. Obesity is a word often used to mean 20 percent or more above the "ideal" weight. Technically speaking, however, overweight means weighing more than you should and obese means having more body fat than you should have.

Obesity is a major health problem in the United States. It is estimated that one-third of the population is overweight to the degree that their life expectancy is lowered. Obesity increases

## Skipping meals leads to snacking.

Although the exact mechanisms leading to obesity are often unclear, the fact remains that to gain weight, you must take in more kilocalories than you use. (1 kilocalorie = 1 Calorie) This can happen for several reasons:

- High Food Intake. Research indicates that the eating habits of overweight people are different from those of normal weight people. Overweight people are influenced more by environmental, or external, cues than by actual hunger.
- Low Energy Use. The less active you are, the less energy you need from food. Studies have shown that overweight people tend to use less energy than normal weight people, even when participating in similar activities.



- Reduced Kilocaloric Needs. As a person gets older, the body processes slow down and less energy is required. Unfortunately, appetite does not usually decrease!
- Combination of Causes. A combination of some or all of these causes accounts for the problem of being overweight in the majority of people.

### Desirable Weights for Men and Women, According to Frame, at Ages 25 and Over.

	WEIGHT (with indoor clothing)		
HEIGHT (with shoes on)	Small Frame	Medium Frame	Large Frame
WOMEN		pounds	
5'0"	96-104	101-113	109-125
5'2"	102-110	107-119	115-131
5'4"	108-116	113-126	121-138
5'6"	114-123	120-135	129-146
5'8"	122-131	128-143	137-154
5'10"	130-140	136-151	145-163
6'0"	138-148	144-159	153-173
MEN			
5'4"	118-126	124-136	132-148
5'6"	124-133	130-143	138-156
5'8"	132-141	138-152	147-166
5'10"	140-150	146-160	155-174
6'0"	148-158	154-170	164-184
6'2"	156-167	162-180	173-194
6'4"	164-175	172-190	182-204

Source: Metropolitan Life Insurance Company.

## It takes about 3500 kilocalories to produce a pound of stored fat.

#### **Basic Weight Control Facts**

You can help control your body weight by regulating the amount of food you eat, the amount of activity you get, or both. To maintain the same weight, you must balance the kilocalories provided by your food with the amount of your activity. To lose weight, you must get fewer kilocalories from food than your body needs.



Many foods provide both kilocalories and good amounts of essential nutrients. Others, mostly foods high in fat or carbohydrate, provide little besides energy and are sometimes called "empty" kilocalorie foods.

Each meal is important. Don't skip meals or eat a token breakfast or lunch to cut kilocalories. Skipping meals leads to snacking. Snacking usually leads to more kilocalories than you want and less nutrients than you need.

If you are limiting kilocalorie intake to lose or maintain weight, watch for extra kilocalories that can easily slip into the diet. However, if you are trying to gain weight, these extras can help you.

#### Food Preparation.

Fat or sugar added while cooking or at the table increases the kilocalories in foods. So do the sauces, gravies, whipped cream, and salad dressing added to foods before serving. Often these additions contain more kilocalories than the food itself.

#### Serving Sizes.

When planning meals for losing weight, limit the size of the servings. When you exceed this limit with larger servings and second servings, unplanned kilocalories add up quickly.

#### Snacks.

Planned snacking can be an effective aid if you're trying to gain weight. Unplanned snacking can mean failure of any attempt at weight reduction. Skipped meals or inactivity, such as watching television, may lead to unplanned snacking or nibbling. Another form of nibbling to guard against is sampling food during cooking or when you are putting it away after meals.

#### Summary

Reaching and maintaining a weight that is normal for you is not a guarantee for good health and a long life. But it can make the quality of your life better.

#### References

- 1. Alabama Vital Statistics Quarterly Reports, 1978-1979.
- James, W.P.T. Research on Obesity. Her Majesty's Stationery Office, London, 1976.
- 3. Senate Select Committee on Nutrition and Human Needs. Dietary Goals for the U.S., 2nd Ed., 1977.
- 4. USDA. Food and Your Weight. House and Garden Bulletin No. 74, 1977.

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It is estimated that one-third of the population is overweight to the degree that life expectancy is lowered.

#### Food

Weight may be gained or lost by regulating the amount of food you eat. It takes about 3500 kilocalories to produce a pound of stored fat. That means for each pound you want to gain, the foods you eat must contain 3500 kilocalories more than your body needs for energy. For each pound you want to lose, there must be 3500 fewer kilocalories from your food than your body needs.

#### Activity

Because there is usually little variation from day to day in the time spent at work and in the daily routine of living, leisure time probably offers the best opportunity for increasing or decreasing activity for weight control. Long hours spent in strenuous exercise are not necessary to keep weight down. Regular, less strenuous exercise can be effective for losing or keeping your weight the same.

# An underweight person is frequently sick.

#### **Planning Food for Weight Control**

When you plan meals for weight control, food energy (or kilocalories) is one of the first considerations. But there is more to food than kilocalories. Food also should furnish the vitamins, minerals, and proteins needed to build the body and to keep it in good working condition.

ACTIVITY TYPES	ACTIVITY	KILOCALORIES USED PER HOUR
SEDENTARY	Reading, writing, eating, watching television or movies, listening to the radio, sewing, playing cards, typing, and other activities done while sitting that require little or no arm movement.	80 to 100
LIGHT	Preparing and cooking food, doing dishes, dusting, handwashing small articles of clothing, ironing, walking slowly, personal care, office work, and other activities done while standing that require some arm movement. Also strenuous sitting activities such as rapid typing.	110 to 160
MODERATE	Making beds, mopping, sweeping, light polishing and waxing, laundering by machine, light gardening and carpentry work, walking moderately fast, and other activities done while standing that require moderate arm movement. Also activities done while sitting that require more vigorous arm movement.	170 to 240
VIGOROUS	Heavy scrubbing and waxing, handwashing large articles of clothing, hanging out clothes, stripping beds, walking fast, bowling, golfing, and gardening.	250 to 350
STRENUOUS	Swimming, playing tennis, running, bicycling, dancing, skiing, and playing football.	350 or more





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