



# Hormones and Obesity

### WHAT IS OBESITY?

Obesity is a chronic (long-term) medical problem of having too much body fat. Health care providers diagnose obesity using a number called the body mass index (BMI). Your BMI is calculated from your current height and weight.

For most people, the higher their BMI, the more body fat they have. Some bodybuilders and athletes have high BMIs, but they have more muscle mass than average and are not considered obese.

BMI WEIGHT STATUS	
Below 18.5	Underweight
18.5–24.9	Normal
25.0–29.9	Overweight
30.0 and above	Obese
Visit www.nhlbisupport.com/bmi to calculate your BMI.	

#### WHY IS OBESITY A CONCERN?

Both overweight and obesity can make it more likely that you will develop serious complications. These problems include diabetes, high blood pressure, heart disease, stroke, gallstones, high cholesterol, gout, and many types of cancer. Obesity even raises the risk of early death. Obesity also can make many other medical problems harder to treat.

#### WHAT CAUSES OBESITY?

Obesity is very complex and not just a simple problem of willpower or self-control. In general, it results from a combination of eating too much, getting too little physical activity, and genetics. Overweight or obesity occurs when, over time, the body takes in more calories than it burns. However, some people do gain weight more easily than others.

Another possible cause of obesity is a hormone imbalance, as in hypothyroidism (underactive thyroid gland) or Cushing's syndrome. This is rare, though.

Some medications may cause weight gain, such as those used to treat diabetes, psychiatric illnesses, neurologic disorders, or inflammatory conditions. Your doctor may be able to suggest a different medication that has less effect on weight gain.

Our understanding of obesity is growing rapidly. For instance, we now know that fat cells, the gastrointestinal tract, and the brain produce many hormones that play an important role in how much you eat, how much energy (calories) you spend, and how much you will weigh.

### DID YOU KNOW?

The safest way to lose weight is slowly: 0.5 to 2 pounds a week.

#### **HOW IS OBESITY TREATED?**

There is no simple solution or a pill to cure obesity. However, there are effective treatments to help manage it. Obesity needs a long-term approach that combines diet, increased activity, and lifestyle changes. Some obese patients may also benefit from weight loss medication or even bariatric (weight loss) surgery.

Some people with health problems such as diabetes may need to be under a doctor's care while they lose weight. They also may need a physical exam before they begin physical activity. Endocrinologists, who are specialists in hormones and metabolism, can help assess the cause of your obesity and the possible complications. They also can direct how you should be treated, and prescribe and monitor your medications.

Don't expect overnight results with a weight loss plan. There are no quick fixes. Weight loss takes time. To start, aim to lose 5 to 10 percent of your weight. To keep the weight off, you will need to make changes in diet and activity a part of your routine for the rest of your life.

## WHAT YOU CAN DO TO LOSE WEIGHT?

These lifestyle changes are a good place to start:

- Reduce portions of foods that are high in fat or sugar.
- Eat more fruits, vegetables, and whole grains.
- Spend 30 minutes a day in moderate physical activity (such as brisk walking).
- Eat three meals each day, including breakfast.
- Find ways to be more physically active. For instance, take
  the stairs whenever possible or park your car farther out in
  the parking lot.

### Questions to ask your doctor

- How will losing weight help me?
- How much weight do I need to lose, and how much should I try to lose each week?
- What weight loss treatment options are best for me?
- What are the risks and benefits of each of these treatment options?
- Are weight loss medications or bariatric surgery an option for me?
- Should I see an endocrinologist?

#### **RESOURCES**

- Find-an-Endocrinologist: www.hormone.org or call 1-800-HORMONE (1-800-467-6663)
- Hormone Health Network information about obesity and related health problems: www.hormone.org (search for obesity)
- The Obesity Society: www.obesity.org/resources-for/ consumer.htm
- American Dietetic Association: www.eatright.org/public
- Weight-control Information Network (National Institutes of Health): win.niddk.nih.gov

#### **EDITORS**

Caroline Apovian, MD Judith Korner, MD, PhD The Hormone Health Network offers free, online resources based on the most advanced clinical and scientific knowledge from The Endocrine Society (www.endo-society.org). The Network's goal is to move patients from educated to engaged, from informed to active partners in their health care. This fact sheet is also available in Spanish at www.hormone.org/Spanish.

