

The Link Between Stress and Obesity

Stress has been linked to biochemical changes that can trigger cravings and lead to obesity. Learn how to break the cycle.

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For years, many people have suspected that stress and obesity are linked — and now scientific research has found evidence to support this connection. Specific biochemical reactions appear to help explain this link and, as doctors better understand these reasons, they may be better able to address the obesity epidemic facing the United States.

The most insidious aspect of the link between stress and **obesity** is that it tends to be self-reinforcing, notes Bonnie Taub-Dix, RD, of New York City, a weight-loss expert and spokeswoman for the American Dietetic Association. "Very often, when people are stressed they may eat inappropriately," Taub-Dix says. "If that causes them to gain weight, that can cause even more stress. You wind up causing exactly what you're trying to alleviate."

Stress and Obesity: The Biological Connection

Ever notice that when you're really stressed, you tend to crave comfort foods that are high in fat or sugar? Researchers have found that specific hormones may play a role in this process.

- **Serotonin.** When we reach for fattening comfort foods during stressful times, it may be an attempt to self-medicate. "When you eat carbohydrates, it raises the body's serotonin level," Taub-Dix says. "Serotonin is the body's feel-good chemical. It makes you feel [better]." Not surprisingly, people under stress don't tend to make smart food choices. "Very often the carbohydrates that people go for are laden with fat, like muffins, pastries, doughnuts, and cookies," Taub-Dix observes. "It's not like they're going for whole-wheat pasta."
- **Cortisol.** Researchers have also discovered that chronic stress can cause the body to release excess cortisol, a hormone critical in managing fat storage and energy use in the human body. Cortisol is known to increase appetite and may encourage cravings for sugary or fatty foods.
- **Neuropeptide Y.** More recent studies also suggest that our bodies may process food differently when we're under stress. One study found that lab mice fed a diet high in fat and sugar gained significant amounts of **body fat** when placed under stressful conditions. Mice fed a normal diet, however, didn't gain as much weight despite stress. Researchers linked that phenomenon to a molecule called neuropeptide Y that is released from nerve cells during stress and encourages fat accumulation. A diet high in fat and sugar appears to further promote the release of neuropeptide Y.

Stress and Obesity: Break the Cycle

So if we're wired to seek out unhealthy foods when we are under stress, how do we avoid gaining weight when times get tough?

- **Don't allow yourself to become too hungry.** "When you get hungry and you go too long without eating, you get a drop in your blood sugar. It's very hard to think rationally when your blood sugar levels are that low. You'll eat anything," Taub-Dix explains. To avoid this scenario, be sure you're not skipping meals, she advises.
- **Keep portion size in mind.** "When people are stressed out, there's a tendency not to think about what they're eating and how much they're eating," observes Taub-Dix. Smaller portions can help keep your total calorie intake under control.
- **Eat healthy snacks.** Taub-Dix recommends snacks that combine **protein** and carbohydrates. The body digests them more slowly, allowing you to feel fuller longer. "An example might be almond butter and whole-grain crackers, or cheese and a piece of whole-grain bread," she says. Avoid snacks high in fat and sugar.
- **Think about what you're eating.** "When people are really stressed, they think that paying attention to their **diet** will cause more stress," Taub-Dix notes. "Actually, it's just the opposite. Don't forget that food is fuel for your body and your brain. When you eat properly, you're fueling your body to fight stress."
- **Deal with your stress.** This may be easier said than done, but finding ways to manage your stress is essential to your overall health. Try yoga, tai chi, or meditation. Exercise regularly. Spend time with friends. Seek counseling. Reduce the number of stressors in your life.

If you find yourself reaching for high-fat, sugary snacks when you're feeling stressed, know that you're not alone. Fortunately though, you can break this cycle. Find ways to minimize stress in your life and focus on making better food choices. Stress may be a part of life, but it doesn't have to lead to weight gain.

Reference website: <http://www.everydayhealth.com/diet-nutrition/food-and-mood/stress-and-dieting/stress-and-other-causes-of-obesity.aspx>