



July 28, 2009

[>> Home](#)
[En Español](#)
 [Printer Friendly Format](#)

## Related Stories

[Many Cancer Survivors Don't Adopt Healthy Lifestyle](#)

[Almost 10 Percent of U.S. Medical Costs Tied to Obesity](#)

[High-Salt Diet Dampens Effects of Blood Pressure Drugs](#)

[Unhooking the Obesity-Diabetes Connection](#)

[FDA Mandates Tougher Warnings for Pain Pills](#)

[Brain Scans Show Differences in Cocaine Addicts](#)

# Eating Habits in the Obese May Echo Drug Addicts' Patterns

Sensitization could be at play, nutrition expert says

By Amanda Gardner  
*HealthDay Reporter*

WEDNESDAY, July 22 (HealthDay News) -- When it comes to weight control, it might not be the kind of snack that matters, but who eats it.

When researchers gave similarly "sinful" snacks to obese and non-obese women, the healthy-weight women wanted less of the treat over time, but obese women kept wanting more.

"Obese and non-obese women respond to high-energy, high-density snacks in different ways," said Jennifer Temple, lead author of the study, which appears in the August issue of the *American Journal of Clinical Nutrition*. "For us, this underscores a need for really doing detailed studies comparing obese and non-obese women in terms of how they respond to food to try to understand things that work better to improve healthy eating."

"You can't take what you see in non-obese women and think it will automatically have the same effect in obese women," added Temple, an assistant professor in exercise and nutrition science at the University at Buffalo, in New York.

Such information could one day be useful in tailoring dieting strategies for different people.

According to background information in the study, only 10 percent of people who lose weight through dieting and exercise manage to keep that weight off for five years.

Scientists have postulated that one reason for the high failure rate is that people feel deprived of their favorite foods and end up making up for their period of abstinence.

In an earlier study, the same research team had found that "food reinforcement," the term they use to describe motivation to eat, decreased in non-obese women who were asked to consume their favorite snack, be it M&Ms or Oreo cookies, for days at a time.

"After two weeks of eating the same snack food, the women came back into the lab and said, 'I don't ever want to see a potato chip again,'" Temple said. "They had no interest in working for the food."

But 300 calories is a large portion, so the researchers decided to do a similar study but with smaller (100-calorie) portions as well as the large portions. In addition, a



third group of women consumed no snack calories. The study included 31 obese and 27 non-obese women.

All participants were asked to "work" for their food by performing tasks on a computer program set up as a sort of slot-machine. When all of the shapes on the screen matched, volunteers earned points toward eating.

The women were given pre-packaged portions of their favorite snack to eat every day for two weeks. Snacks tended to fall into one of two categories: high-fat and high-sugar (cookies, candy bars) or savory, meaning just high in fat (such as potato chips).

"For the zero and 100-calorie portions, the obese and non-obese groups looked the same," Temple said. "The food reinforcement didn't change before and after the two weeks, which would be expected."

However, non-obese women who snacked on 300-calorie portions exhibited no increase in motivation to eat, but motivation did increase in obese women who consumed the larger portion, the study found.

"They actually worked harder for the food," Temple said. "This was surprising to us. We had anticipated in the beginning that we might not see a decrease or as large of a decrease, but we didn't expect to see an increase."

In some cases, women reported still wanting the food even though they didn't like it.

The pattern is strikingly similar to that seen in drug addicts.

"We're exploring this idea of sensitization, which happens with drug use," Temple said. "Response to a drug will actually decrease over repeated use."

And that leads to more drug use.

"I stop short of calling overeating an addiction," she added. "I don't think it has all of the same properties, but I think we can learn something about overeating behavior from the drug world. We're applying the same experimental paradigms to food and trying to see if obese people might be more susceptible to having an increased response to repeated food administration."

Marianne Grant, a registered dietitian and health educator with the Texas A&M Health Science Center's Coastal Bend Health Education Center in Corpus Christi, said that something else could be at work.

"This suggests to me that people who were obese were not eating out of hunger," Grant said. "There was some other need that eating was filling for them."

"Everyone is different and approaches eating in a different way," she said. "What works for one person may not work for another person. Overeating may be because of some reason other than hunger. That issue needs to be addressed."

#### **More information**

The American Dietetic Association has more on [healthy eating](#).

SOURCES: Jennifer L. Temple, Ph.D., assistant professor, exercise and nutrition science, University at Buffalo, State University of New York, Buffalo, N.Y.; Marianne Grant, R.D., registered dietitian and health educator, Texas A&M Health Science Center, Coastal Bend Health Education Center, Corpus Christi, Texas; August 2009 *American Journal of Clinical Nutrition*

Last Updated: July 22, 2009

Copyright © 2009 [ScoutNews, LLC](#). All rights reserved.