

July 30, 2009

Food cravings are different in obese

Overweight women keep wanting more

By Amanda Gardner
HealthDay

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 state.

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 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.

Working for snacks

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.

Addict behavior

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."

Additional Facts

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The American Dietetic Association has more information on healthy eating at www.eatright.org.
