

# For Those Addicted, Food Is Like a Drug

Study Shows Brain Activity in Food Addicts Similar to Other Addicts



**BY KIM CAROLLO, SARAH AMOS AND BOJANA ZUPAN**

April 4, 2011

For Michael Prager, food used to be much more than a way to get his daily doses of nutrients or to satisfy a craving for a tasty treat.

"From an early age, I ate for reasons that other people didn't, and I ate in amounts that other people didn't," Prager said. "I stole money from my mother's purse and I stole candy from stores before I was 10 years old."

As an adult, he often stocked up on junk food after work and ate almost all of it. Food controlled him so much, in fact, he felt the need to stop for food after getting off at midnight so he wouldn't have to go back out in the middle of the night.

Now 53, it took years of binge eating and yo-yo dieting to realize he had an addiction to food.

"I used food as a coping mechanism. It's similar to the way people use drugs, or alcohol, or shopping or sex."

That's an idea supported by a new study that found food may indeed be just like a drug.

Researchers led by Yale University doctoral student Ashley Gearhardt discovered that women who exhibit more signs of food addiction, when shown a picture of a milkshake and then given a taste of it, had more activity in areas of the brain associated with "craving" than women who showed fewer signs of food addiction. The women who showed more signs of food addiction had less activity in the part of the brain that decreases the desire to eat.

In order to measure food addiction, the researchers used a scale similar to the one used to measure drug addiction.

"We got interested in this research because there have been a lot of interesting findings in looking at parallels between obesity and substance dependence. Studies have shown brain pattern similarities," said Gearhardt.

"Anticipation of a delectable treat provided the greatest activation, even more so than getting a taste of it," said Bonnie Levin, director of the Division of Neuropsychology at the University of Miami School of Medicine. Levin was not involved in the study.

## **Stigma Surrounds Food Addicts**

Food addicts exhibit many of the same symptoms as those addicted to drugs and alcohol, including an obsession or preoccupation with food, binge eating and a lack of control over eating. Food addicts are often criticized about their inability to say no to overeating.

Not all food addicts are obese, and not everyone who overeats is a food addict.

"We saw the same brain activation patterns in lean participants as well as the obese ones," said Gearhardt. "BMI [body mass index] is not a good indicator about whether you're out of control with eating."

Experts say there's a lot of stigma surrounding food addiction, including the assertion that it's just an excuse for overeating and avoiding personal responsibility. In reality, food addicts are driven to eat.

"Part of the brain responds to anticipation of a reward," said Levin. "Some people can resist it and others cannot."

"I wanted no part of the realization that I had an addiction," said Prager. "Everyone thinks obesity is a matter of sloth and that obese people need to try harder."

Although it may seem that an addiction to heroin, cocaine or alcohol is more dangerous, experts say an addiction to food is just as serious. Obesity is associated with a number of serious health problems as well as soaring health care costs.

We already see such a large amount of people struggling with obesity, but kids are also eating a lot of unhealthy foods. The earlier people are exposed, the more likely they are to develop an addiction," said Gearhardt.

The study's authors also hope future studies can determine how the brain responds to food ads and whether certain foods are addictive. With that knowledge, they believe, advertising can be used to send healthier messages about food.

"Addicted to Food," premieres on the Oprah Winfrey Network. The eight-episode series follows food addicts and others with eating disorders at a treatment facility with the goal of addressing issues that led to their problems with eating and finding their way to recovery.

Prager knows all about that long road to recovery. After years of therapy, he realizes now that food no longer controls him. He even wrote a book about it.

But as with most addicts, it's a battle he fights every day.

"There's no such thing as solving something forever. You have to take it one day at a time."

The following questions are part of the survey done by researchers at Yale University to help determine if you could have a food addiction.

Answer options for this section: 0 - Never 1 - Once per month 2 – 2-4 times per month  
3 - 2-3 times per week 4 - 4+ times per week

1) I find myself consuming certain foods even though I am no longer hungry. THRESHOLD:  
4

2) I worry about cutting down on certain foods. THRESHOLD: 4

3) I feel sluggish or fatigued from overeating. THRESHOLD: 3 or 4

4) I have spent time dealing with negative feelings from overeating certain foods, instead of spending time in important activities such as time with family, friends, work, or recreation.  
THRESHOLD: 4

5) I have had physical withdrawal symptoms such as agitation and anxiety when I cut down on certain foods. (Do NOT include caffeinated drinks: coffee, tea, cola, energy drinks, etc.)  
THRESHOLD: 3 OR 4

6) My behavior with respect to food and eating causes me significant distress. THRESHOLD:  
3 OR 4

7) Issues related to food and eating decrease my ability to function effectively (daily routine, job/school, social or family activities, health difficulties). THRESHOLD: 3 OR 4

Answer options for this section: No Yes

IN THE PAST 12 MONTHS...

8) I kept consuming the same types or amounts of food despite significant emotional and/or physical problems related to my eating. YES or NO

9) Eating the same amount of food does not reduce negative emotions or increase pleasurable feelings the way it used to. YES or NO

TO MEET THE FOOD ADDICTION THRESHOLD PEOPLE NEED TO MEET THE  
THRESHOLD FOR EITHER QUESTION 6 OR 7 AND MEET THE THRESHOLD FOR 3 OR

MORE OF THESE QUESTIONS (1-5, 8-9). IF YOU MEET THE FOOD ADDICTION THRESHOLD, THE RESEARCHERS AT YALE SAY YOU SHOULD SPEAK WITH A DOCTOR.