

The Psychology of Food Cravings

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Swimsuit season is almost upon us. For most of us, the countdown has begun to lazy days lounging by the pool and relaxing on the beach. However, for some of us, the focus is not so much on sunglasses and beach balls, but how to quickly shed those final five or ten pounds in order to look good poolside. It is no secret that dieting can be challenging and food cravings can make it even more difficult. Why do we get intense desires to eat certain foods? Although food cravings are a common experience, researchers have only recently begun studying how food cravings emerge. Psychological scientists Eva Kemps and Marika Tiggemann of Flinders University, Australia, review the latest research on food cravings and how they may be controlled in the current issue of *Current Directions in Psychological Science*, a journal of the Association for Psychological Science.

We've all experienced hunger (where eating *anything* will suffice), but what makes food cravings different from hunger is how specific they are. We don't just want to eat something; instead, we want barbecue potato chips or cookie dough ice cream. Many of us experience food cravings from time to time, but for certain individuals, these cravings can pose serious health risks. For example, food cravings have been shown to elicit binge-eating episodes, which can lead to obesity and eating disorders. In addition, giving in to food cravings can trigger feelings of guilt and shame.

Where do food cravings come from? Many research studies suggest that mental imagery may be a key component of food cravings — when people crave a specific food, they have vivid images of that food. Results of one study showed that the strength of participants' cravings was linked to how vividly they imagined the food. Mental imagery (imagining food or anything else) takes up cognitive resources, or brain power. Studies have shown that when subjects are imagining something, they have a hard time completing various cognitive tasks. In one experiment, volunteers who were craving chocolate recalled fewer words and took longer to solve math problems than volunteers who were not craving chocolate. These links between food cravings and mental imagery, along with the findings that mental imagery takes up cognitive resources, may help to explain why food cravings can be so disruptive: As we are imagining a specific food, much of our brain power is focused on that food, and we have a hard time with other tasks.

New research findings suggest that that this relationship may work in the opposite direction as well: It may be possible to use cognitive tasks to reduce food cravings. The results of one experiment revealed that volunteers who had been craving a food reported reduced food cravings after they formed images of common sights (for example, they were asked to imagine the appearance of a rainbow) or smells (they

were asked to imagine the smell of eucalyptus). In another experiment, volunteers who were craving a food watched a flickering pattern of black and white dots on a monitor (similar to an untuned television set). After viewing the pattern, they reported a decrease in the vividness of their craved-food images as well as a reduction in their cravings. According the researchers, these findings indicate that “engaging in a simple visual task seems to hold real promise as a method for curbing food cravings.” The authors suggest that “real-world implementations could incorporate the dynamic visual noise display into existing accessible technologies, such as the smart phone and other mobile, hand-held computing devices.” They conclude that these experimental approaches may extend beyond food cravings and have implications for reducing cravings of other substances such as drugs and alcohol.