

HEALTHY AT HOME

Our Insatiable Love of Eating

Ever wonder why there’s always room for dessert?

Or why you can’t stop after just one chip? You have hedonic hunger to thank.

BY NAOMI BARR



IT’S A HOLIDAY TRADITION. You lean back in your dining chair in a mild food coma, as glazed and inert as a honey-baked ham. You can’t eat another bite. You may never eat again. And then someone says the magic word: “pie.” That golden crust, the tantalizing aroma of brown sugar and pecans—yes, you’ll have some pie!

There’s a scientific term for what you’re experiencing, and it’s not gluttony. (That’s the judgy one.) It’s called hedonic hunger: the desire to eat for pleasure, as opposed to consuming the calories your body needs for energy. Why are we so drawn to foods our systems don’t need? Because fatty, buttery, creamy, sweet-and-savory deliciousness has a powerful effect on the brain’s reward system, so our heads nod yes even when our stomachs say nah.

Your Brain on Mashed Potatoes

Remember the last time you ate so much steamed broccoli, you could barely get off the couch but just kept going back for more? Probably not. Hedonic hunger tends to be activated by calorie-dense foods that are pleasurable to eat; in other words, anything fatty, fried, salty, or sweet. When our ancestors were scrabbling for nuts and berries, hedonic hunger wasn’t a thing. But then someone figured out how to turn milk into butter, and someone else figured out that potatoes taste amazing when you cut them into sticks and drop them into a vat of hot fat, and everything changed.

“Over the course of our evolution, our taste range has gone from ‘This tastes awful but will keep me alive’ to ‘This tastes good’ to ‘Holy cow, this is so delicious.’ It makes it hard for us to hold back,” says Michael Lowe, PhD, a psychology professor at Drexel University who coined the term hedonic hunger to distinguish it from homeostatic hunger, which stems from your body’s need for energy (i.e., that rumbling in your stomach when you haven’t eaten in hours).

“When we eat delicious food, we get a surge of the neurotransmitter dopamine, which is part of the reward system in our brain,” Lowe says. “It makes us feel good, so we keep eating the food to get that feeling.” (This may help explain our time-honored impulse to try to fight sadness with brownies.) Eventually, Lowe adds, the brain changes, so even anticipating eating the food causes a dopamine rush: “This is why I called it hedonic hunger. It’s a hunger for more pleasure, not for more calories.”

Why We All Scream for Ice Cream

Unlike eat-to-live homeostatic hunger, which our bodies alert us to, hedonic hunger is largely prompted by external cues, like the sight of glistening chocolate sauce, the scent of a fresh pizza, or simply plopping down in front of the TV if that’s your favorite place to chill with ice cream. “I walk by a Starbucks and can smell that pumpkin

latte from outside—plus, there are pictures everywhere, which makes it hard to resist,” says Surabhi Bhutani, PhD, assistant professor of nutrition at San Diego State University’s School of Exercise and Nutritional Sciences, who studies how smell and taste perception influence diet and weight gain. Add cooking shows, fast-food signs, and enticing holiday commercials, she says, and you have almost omnipresent triggers for cravings.

What else makes us more inclined to eat for pleasure? Having a bounty of options on hand. The more we can choose from, the more we’re likely to consume, a phenomenon known as the variety effect. And working alongside it, like a skillful sous chef, is sensory-specific satiety. Allow us to explain: Imagine you eat all the brisket and green beans you think you can hold, and the sheer delight of those first few bites has faded—but then cheesecake shows up, promising to tickle a different set of taste buds, and you suddenly have “room.”

If this manipulation is starting to make you feel like a lab rat (or Templeton the rat from *Charlotte’s Web*, gorging himself at the county fair), don’t feel bad. Turns out, even nutrition scientists are susceptible. “If I’m at a hotel buffet, I may start with the dish that looks most appealing,

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but eventually sensory-specific satiety kicks in,” Bhutani says. “And then I look at 10 other highly palatable things I can try, and since I don’t feel satiated by those yet, I’ll go ahead and put them on my plate.”

If you tend to spend the holiday having a little more mac and cheese, then a cookie, then reheating some stuffing, then popping a few chocolates, that’s the variety effect in action.

The Myth of Self-Control

Most of us are surrounded by the same sensory cues, but some of us are more compelled to follow through on our hedonic drives. That has nothing to do with a lack of willpower, Lowe says.

According to a 2016 study in the *Journal of Nutrition*, when offered appetizing food, people who reported that they often experience hedonic hunger showed more activity in the reward areas of their brain than their peers who were less compelled by cravings. Research suggests there’s a complicated interplay between dopamine, the hunger hormones ghrelin and leptin, and our endocannabinoid system, a vast collection of neurotransmitters that help control eating as well as functions like memory, emotional processing, and sleep. The fact that some people have a greater neural response than others seems to be partially due to differences in DNA, Lowe says. “It’s clear that someone’s genetic makeup can predispose them to problems controlling food intake,” he adds. “But this is a frontier area.”

One thing that’s not necessarily tied to hedonic hunger: body mass and weight. In that *Journal of Nutrition*

study, high hedonic activity wasn’t linked to a particular level of BMI. An analysis of 50 studies conducted by Lowe and colleagues did find a slight correlation between experiencing hedonic hunger and being overweight or obese, but it was less than they expected.

Dialing Down Hedonic Hunger

Of course, there’s nothing wrong with hungering for delicious food. By all means, rejoice and be grateful to spend this holiday eating meals you love with people you love. But if you’re consistently wishing you could reduce the cravings a bit, here are

a few ideas that may help soothe the neurochemical urge to eat all the things. They may sound like often cited chestnuts (mmm, roasted chestnuts), but that’s because they’ve been repeatedly proven by research.

AIM FOR 7 TO 8 HOURS OF SLEEP

Research has shown that the reward regions of the brain become more sensitive to cravings when people are sleep deprived (getting less than six hours of sleep a night). So the more tired you are, the more easily you’ll give in to foods high in sugar and fat. In a 2019 study, Bhutani and her



Just one night of sleep deprivation can leave us more susceptible to the siren song of tempting food.

colleagues found that just one night of sleep deprivation left subjects more susceptible to the siren song of tempting food.

MANAGE STRESS Though an isolated high-stress episode, like a bad breakup, can reduce hedonic eating, chronic stress has been shown to do the opposite (as you know if you've ever munched your way through an intense period at work). If you think stress is leading you to eat more than you need, consider passing up the vending machine for a walk, a session with a meditation app, or a yoga class. It may not give you the same immediate kick as a bag of Funyuns, but Future You will feel better for it.

PICTURE YOURSELF IN THE BAHAMAS

Or Disneyland. Or wherever you would love to be at the moment of your craving. "The idea is to imagine engaging in something that's not related to food but equally pleasurable," Bhutani says. In a 2021 study, participants with self-reported chocolate cravings were asked to imagine that their favorite chocolate was sitting in front of them, then to either let their minds wander or visualize sitting peacefully by a stream in a forest watching leaves float by. Afterward, those in the latter group said they felt less compelled to gobble the chocolate.

THINK ABOUT YOUR HABITS "First, ask yourself something like 'When am I enticed by those high-calorie foods? When I'm with certain people? In certain situations? When I'm scrolling through social media?'" Bhutani says. Then try to imagine the outcomes: "If I do this, how is it going to make me feel? Guilty? Bad about myself? If so, what if I *don't* act on it?" "This kind of mindfulness can be hard to do, but if you stick with it, it has been shown to be a really effective strategy in managing hedonic hunger and overeating," Bhutani says.

EXERCISE Regular moderate to vigorous physical activity has been shown to lessen the desire for high-fat foods. It can help with overeating too: In one 2021 study, women who were overweight or obese found that doing around 190 minutes of moderate exercise a week (a little less than half an hour daily), either walking on a treadmill or elliptical trainer, significantly reduced their desire to overeat, and they were less likely to do so over the course of three months.

CONSIDER THERAPY If disordered eating is interfering with your daily life and happiness, therapy may help. "Cognitive behavioral therapy has been shown to be effective with binge-eating disorders," Lowe says. "Other types, like mindfulness-based, dialectical behavior, and acceptance and commitment therapies, can also help you learn not to respond impulsively to strong urges and emotions." ■

