EPISODE 47: SPECIAL SERIES—12 KEYS TO END BINGE EATING, KEY #7: UNLEARN THE DESIRE TO OVEREAT (V)

What's the connection between a dugout, dopamine, and Danishes? Keep listening!

Welcome to *The Done Bingeing Podcast*. This is the place to hear about how you can pair the emerging brain science about why you binge with powerful life coaching to help you stop. If you want to explore a non-clinical approach to end binge eating, you're in the right place. It's time to free yourself. You have more power than you know. And now, your host, Life and Weight-Loss Coach Martha Ayim.

Welcome to Episode 47 of *The Done Bingeing Podcast* and to part 13 of this special series, *12 Keys to End Binge Eating*. We've been discussing the seventh key: Reduce the Desire to Overeat. So far we've talked about emotional eating and conditioned eating as factors that contribute to the desire to overeat. In this episode, we're talking about dopamine.

I have to say, whenever I go over the brain science with my physician clients, they are very polite and patient with me. Of course, I don't know the ins and outs of the brain the way they do, but what they really care about is can I help them stop bingeing. And when they show up and do the work and I show up and coach my face off, their bingeing becomes a thing of the past. And all that crap in the physicians' lounge that used to take them down between cases is a "no." They couldn't be bothered. Not because they're still *fighting* the desire for those treats, but because they no longer *have* the desire for those treats.

So, I'm going to ask you to bear with me as we take another dive into what's going on in your brain. I cannot remotely cover the true complexity of what's happening upstairs, but I can sketch out enough of what's relevant and helpful for us.

Okay, so here we go—we are going to talk about dopamine! Dopamine operates in the brain as a neurotransmitter that helps to control our reward and pleasure centers. Dopamine allows us to see rewards *and* to take action to seek out rewards (*Psychology Today*, n.d., https://www.psychologytoday.com/us/basics/dopamine).

Like other neurotransmitters, dopamine is a chemical messenger that sends signals from one neuron (or nerve cell) to another (Wikipedia, https://en.wikipedia.org/wiki/Dopamine). This signaling is called neurotransmission, or synaptic transmission.

In this process, the neurotransmitters carry information across a synapse—that's the gap between one nerve cell and another. The neuron before the gap is called the presynaptic neuron. The neuron after the gap is called the postsynaptic neuron. (Wikipedia, https://en.wikipedia.org/wiki/Neurotransmitter)

Stay with me. There's a reason I'm going into this level of detail!

Neurotransmitters that are released by the exit point (called the axon terminal) of the presynaptic neuron travel across the synapse and bind to and activate the receptors on entry point (called the dendrites) of the postsynaptic neuron.

The postsynaptic neuron's ability to respond to a chemical messenger depends on the presence of receptors able to hear the specific molecular message being sent. Think of a key fitting into a lock. For the neurotransmitter (the key) to be able to activate the receptor (the lock), they key has to be the right fit for the lock. The more receptors or locks a postsynaptic cell has that are the right fit for the neurotransmitter or the key, the more the postsynaptic cell will respond to the message being sent.

Okay, we are almost done!

Receptors can be upregulated (meaning increased) when the neurotransmitter signal is weak. And receptors can be downregulated (meaning decreased) when the neurotransmitter signal is strong.

Downregulation occurs when receptors have been continually exposed to excessive amounts of neurotransmitters. This result? A desensitization of that receptor. (Wikipedia, https://en.wikipedia.org/wiki/Downregulation_and_upregulation)

So . . . let's see how this plays out when it comes to what we eat.

The neurotransmitter dopamine increases when we eat certain foods. The extent of the dopamine increase depends on the food we eat. Brussel sprouts, for example, don't spike dopamine. You might not be surprised to hear that! Sugar, however, does. So, let's look at sugar a little more closely.

If you were to eat the small amount of naturally occurring sugar in fruit (called fructose) in, say, a cup of organic blackberries, your dopamine level would go up and you'd probably experience some pleasurable desire from eating the 7 grams (about) of sugar in the berries. (And, may I add, you'd get some vitamins, minerals, phytonutrients, fiber, and water, too! Just sayin'.)

Now, compare that with synthetically concentrated sugar—for example, in a Danish—where 39 grams or so of sugar are condensed into one of these delightful pastries. Now your dopamine goes through the roof. And now you set yourself up to experience pleasurable desire on a whole new level.

Ultimately, it is the *anticipation* of the pleasure of the Danish—the anticipation of that reward—that raises dopamine levels in the brain. Often dopamine is portrayed as the body's pleasure chemical. But it's probably more accurate to describe dopamine as a kind of mediator of the *desire for* pleasure and of the *incentivization or motivation* to get the pleasure, rather than a mediator of pleasure itself. In other words, dopamine seems to be central to pleasure-seeking or reward-motivated behavior.

Most of the time we don't think about desire itself being pleasurable, but as you can see, it really is. When we look at something that we want, we feel pleasure. We don't feel satisfied by looking, but we feel pleasure from looking.

The process goes kind of like this: You see a plate full of Danishes. You eat an apple Danish and it tastes amazing. Your dopamine goes up and you want more. And in that wanting, in that longing, is the pleasurable promise of a looming reward. So you have a cinnamon Danish and your dopamine surges, which makes you want again. And, again, in the wanting and longing for more is the pleasurable promise of yet another reward. So you have a blueberry Danish and up, up, and away your dopamine goes, which makes you long for even more.

Now, how often and for how long can you long for more? Well, for some of my clients, when they first start working with me, it's until they're so stuffed they're unbuckling their jeans and pulling out the yoga pants! You know what I'm talking about.

Neuroscientist and research psychologist Dr. Nicole Avena, the author of *Why Diets Fail*, has studied the role of neurotransmitters and brain receptors involved in eating (Barklay, 2014, https://www.npr.org/sections/thesalt/2014/01/15/262741403/why-sugar-makes-us-feel-so-good). Her work has demonstrated how overeating synthetically manufactured tasty foods (like sugary treats) can alter the brain and behavior of rats in ways that resemble addiction. And some researchers have even suggested that sugar is, in many ways, as addictive as heroin. They argue that, as with drug use, overeating high-sugar foods rewards and changes the brain. Both drugs like heroin and foods like sugar spike dopamine—the chemical rock star behind how the feeling of pleasure is created.

The more dopamine there is in your system, the more it floods and overloads the receptors on the postsynaptic neurons. To compensate, those receptors downregulate. They're like, "Enough already. I can't handle this."

So, where one Danish used to give a hit of dopamine, now it gets you nothin'. You'd have to eat at least two just to get the same experience as you did with one. And the blackberries? Forget it. Their appeal is probably starting to vastly pale in comparison. Why? Because the dopamine surges from repeatedly eating high-sugar foods have led to downregulation and desensitization of dopamine receptors. Now, you're developing an increased tolerance to the sugar and it takes more and more sugar just to get the same effect.

Our bodies haven't adapted to how we refine and concentrate sugars. And so our brain tries to offset dopamine spikes by diminishing the capacity of our receptors to be activated by it. In other words, by desensitizing our receptors to dopamine.

And now, other factors enter the scene, including urges for more sweets and a sense of being completely out of control—not to mention the potential for weight gain and dependence on sugar down the road.

So . . . what does all of this mean for you? What are you supposed to do when you're faced with high-sugar foods and . . . you want some?

Well, for one thing, it's helpful if you plan for this ahead of time and decide whether or not you're going to eat sweets before you begin your day or before you go to an event—that way, you're working with your prefrontal cortex, your higher brain. I advise planning at least 24 hours ahead of time if you can.

Now, suppose you've decided ahead of time that, at tonight's cocktail party, either you're not going to have a high-sugar food or you're only going to eat one serving of it. Now you're mingling and the glasses are tinkling but you're not eating any more of the sweets than you'd planned.

What do you notice? Well, probably that you still want them. That's desire—sometimes urgent desire—or what we've been calling the urge.

What can you do?

Well, you could resist, fight, and resent the desire, like, "I hate this urge. I want it to go away right now!"

Actually, I have to tell you, I am working with the absolutely most amazing group of people right now in my group coaching program and we were talking about just this very thing. What do you do when you get an urge to binge? And one woman said she wanted to take a baseball bat to her desire.

And I'm like, "Okay, whoa, whoa, whoa, let's put the bat down . . ." Right?

I asked her how she felt when she thought she needed a baseball bat to fight her urges. She said, "terrified." And I could totally relate. I had been in that dugout, too, for many, many years. I felt the same terror when my urges came because I thought that something had gone terribly wrong and they were too terrible to feel.

Then we talked about what else she might be willing to believe in the presence of her urges. She was open to believing that she was learning how to allow urges—in other words, how to allow desire—to unfold with less and less distress. She was open to believing that if she was truly physically hungry, she would feed herself nourishing food. She was open to believing that the urge was just an outdated signal from her brain and she was really okay.

What happened? She began to allow her urges. She began to willingly feel the discomfort of unanswered desire. One night she found herself at the pantry door, hand on the knob, opening the door, scanning the treats inside, then closing the door, and walking away.

Did her unanswered desire feel great? Not really, but she watched it and noticed what was behind the urge was actually stress. And when she allowed the stress to be there, it wasn't as intense as she'd expected it to be. She played her keyboard for a while and eventually took a nap. She allowed herself to feel difficult feelings, took care of her needs in a genuine way, and learned that she was capable of both.

When you pay attention to what your desire is really about, you get a whole lot closer to the truth about what you're feeling. And here's what you'll notice: The better you get at experiencing what's really there and not just eating sweets to make what's really there go away, the easier it will get for you not to eat the

sweets, to feel the truth of what's happening for you, and to give yourself what you really need. This is a very different experience than feeling totally possessed when your urge to binge comes.

Many of my clients feel addicted to sugar and have so much shame about this, and are tormented by the disconnect between how smart and accomplished they are, yet how out of control they feel around sugar.

But neuroscientist and developmental psychologist Dr. Mark Lewis, in his book *The Biology of Desire*, helps us to understand that our brains are just doing exactly what they were designed to do—to seek pleasure and relief. Of course, we never meant it to lead to any form of dependence or addiction. And so I wonder, as I often do, if this understanding of your brain—if this acknowledgment that you are not broken or flawed or inept—can help you to give yourself permission to let go of some shame or guilt or disappointment and to focus instead on Lewis's reassurance that neuroplasticity—training the brain to learn a new pattern—can help you recover.

One of the reasons I wanted a solid foundation of self-regard and other important keys to stop bingeing before I mentioned the role of sugar and dopamine is because so many people are still caught in an all-or-nothing diet mentality, often driven by self-hatred. But you don't have to implement an understanding of sugar's effect on dopamine in an all-or-nothing way, and you for sure don't have to be driven by self-loathing.

If the thought of eliminating sugar puts you in a tailspin, you're not alone. And you don't have to eliminate sugar if you don't want to. My teacher, Brooke Castillo, sometimes says that having a little bit of sugar is kind of like messing with just a little bit of heroin, maybe just on Mondays, right? If you have foods with concentrated amounts of sugar, you do need to be prepared for the desire that will follow. And that's why I went into the detail I did—so that you can have a better understanding of what you're signing up for when you have sugar.

Now, you can totally do that work and I have many clients who do so that they can have some high-sugar foods and so that those foods don't drag them down the slippery slope toward bingeing. And in my own recovery, allowing myself to have several servings of dessert—and I don't meant a sliver, I mean like a serving—of dessert a week offered a huge step forward in my recovery from bingeing.

But here's something else you can do. You can figure out what's behind your tailspin. And you can ask yourself if you want to continue to give sugar the power to freak you out.

What is it that you believe that sugary foods give you? I hear many of my clients say that they feel foods, like especially sugary foods, are their friend, right? They bring them comfort. But as Brooke would say, "Food doesn't give an fuck about you." Now, if that makes you as sad to learn as it did me, and if you cannot imagine what your life would be like without a dependence on sugar, this is where coaching is truly an ace in your hand. This is where the thought work has to happen, so that you can begin to manage your mind to allow you to manage and experience your emotions, without reacting to them with a binge.

So much of what's going on here, is happening in your brain. And that's why I share the best of what I know about how to end binge eating on this podcast. I want to teach you how to untangle what's happening cognitively and neurologically so that you can address what's happening emotionally, so that your emotions become fuel for you to show up in your life the way you really want to, so you can truly honor who you're meant to be.

Working with a coach, especially one who's been through it all and found her way out, can help you retrain your brain so you can get there, too. It's like having an extra higher brain to check in with whenever you need to. Ultimately, my job is to coach myself out of a job, to teach you everything I know about how to coach yourself through your life meal by meal, moment by moment.

You can come out of the dugout. And you can get to home plate.

You can get there running.

You can get there walking.

You wheel around the bases or you can hop.

However you ride, however you roll, you'll get there a whole lot faster and with a whole lot more fun, with your coach by your side.

Just remember to drop that bat.

That's it for Episode 47. Thank you for listening! If you're ready to apply the concepts in this podcast at the deepest level, sign up for a free private coaching session with me at www.holdingthespace.co/book. I'm only able to offer a limited number of free sessions per month and the spots fill up pretty quickly. So reserve yours now, before it's gone.

Thanks for listening to *The Done Bingeing Podcast*. Martha is a certified life and weight loss coach who's available to help you stop bingeing. Book a free session with her at www.holdingthespace.co/book. And stay tuned for next week's episode on freeing yourself from binge eating and creating the life you want.