

Excerpt from *Mindless Eating*

The Psychology of Eating

Taken from: Wansink, Brian. *Mindless Eating: Why We Eat More than We Think*. New York, NY: Bantam, 2006.

Assignment

Read the following excerpt from Brian Wansink's *Mindless Eating*, then answer each of the following questions in paragraphs of at least five (5) sentences each.

1. What is **your reaction** to the reading?
2. According to the article, what are two factors that cause people to **eat more than they think** they are?
3. **Describe the experiments** that Brian Wansink did to study these factors.
4. Think about *your* most **recent** meal. How did you decide that you were **done** eating? Is this what you **usually** do?
5. From time to time, most people **overeate**. Why do you sometimes eat more than you need?
6. Give **5 other reasons** why people eat when they are **not** hungry.
7. What are **three things that a person could do**, based on this article, to be **more aware** of how much they are eating, and **not eat too much**?

Chapter One

The Mindless Margin

Did you ever eat the last piece of crusty, dried-out chocolate cake even though it tasted like chocolate-scented cardboard? Ever finish eating a bag of French fries even though they were cold, limp, and soggy? It hurts to answer questions like these.

Why do we overeat food that doesn't even taste good?

We overeat because there are signals and cues around us that tell us to eat. It's simply not in our nature to pause after every bite and contemplate whether we're full. As we eat, we unknowingly—mindlessly—look for signals or cues that we've had enough. For instance, if there's nothing remaining on the table, that's a cue that it's time to stop. If everyone else has left the table, turned off the lights, and we're sitting alone in the dark, that's another cue. For many of us, as long as there are still a few milk-soaked Fruit Loops left in the bottom of the cereal bowl, there is still work to be done. It doesn't matter if we're full, and it doesn't matter if we don't even really like Fruit Loops. We eat as if it is our mission to finish them.

Stale Popcorn and Frail Willpower

Take movie popcorn, for instance. There is no "right" amount of popcorn to eat during a movie. There are no rules of thumb or FDA guidelines. People eat however much they want depending on how hungry they are and how good it tastes. At least that's what they say.

My graduate students and I think different. We think that the cues around us—like the size of a popcorn bucket—can provide subtle but powerful suggestions about how much one should eat. These cues can short-circuit a person's hunger and taste signals, leading them to eat even if they're not hungry and even if the food doesn't taste very good.

If you were living in Chicago a few years back, you might have been our guest at a suburban theater matinee. If you lined up to see the 1:05 p.m. Saturday showing of Mel Gibson's new action movie, *Payback*, you would have had a surprise waiting for you: a free bucket of popcorn.

Every person who bought a ticket—even though many of them had just eaten lunch—was given a soft drink and either a medium-size bucket of popcorn or a large-size, bigger-than-your-head bucket. They were told that the popcorn and soft drinks were free and that we hoped

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they would be willing to answer a few concession stand-related questions after the movie.

There was only one catch. This wasn't fresh popcorn. Unknown to the moviegoers and even to my graduate students, this popcorn had been popped five days earlier and stored in sterile conditions until it was stale enough to squeak when it was eaten.

To make sure it was kept separate from the rest of the theater popcorn, it was transported to the theater in bright yellow garbage bags—the color yellow that screams “Biohazard.” The popcorn was safe to eat, but it was stale enough one moviegoer said it was like eating Styrofoam packing peanuts. Two others, forgetting they had been given it for free, asked for their money back. During the movie, people would eat a couple bites, put the bucket down, pick it up again a few minutes later and have a couple more bites, put it back down, and continue. It might not have been good enough to eat all at once, but they couldn't leave it alone.

Both popcorn containers—medium and large—had been selected to be big enough that nobody could finish all the popcorn. And each person was given his or her own individual bucket so there would be no sharing.

As soon as the movie ended and the credits began to roll, we asked everyone to take their popcorn with them. We gave them a half-page survey (on bright biohazard-yellow paper) that asked whether they agreed to statements like “I ate too much popcorn,” by circling a number from 1 (strongly disagree) to 9 (strongly agree). As they did this, we weighed their remaining popcorn.

When the people who had been given the large buckets handed their leftover popcorn to us, we said, “Some people tonight were given medium-size buckets of popcorn, and others, like yourself, were given these large-size buckets. We have found that the average person who is given a large-size container eats more than if they are given a medium-size container. Do you think you ate more because you had the large size?” Most disagreed. Many smugly said, “That wouldn't happen to me,” “Things like that don't trick me,” or “I'm pretty good at knowing when I'm full.”

That may be what they believed, but it is not what happened.

Weighing the buckets told us that the big-bucket group people ate an average of 173 more calories of popcorn. That is roughly the equivalent of 21 more dips into the bucket. Clearly the quality of food is not what led them to eat. Once these moviegoers started in on their bucket, the taste of the popcorn didn't matter. Even though some of them had just had lunch, people who were given the big buckets ate an average of 53 percent more than those given medium-size buckets. Give them a lot, and they eat a lot.

And this was five-day-old, stale popcorn!

We've run other popcorn studies, and the results were always the same, however we tweaked the details. It didn't matter if our moviegoers were in Pennsylvania, Illinois, or Iowa, and it didn't matter what kind of movie was showing, all of our popcorn studies led to the same conclusion. People eat more when you give them a bigger container. Period. It doesn't matter whether the popcorn is fresh or fourteen days old, or whether they were hungry or full when they sat down for the movie.

Did people eat because they liked the popcorn? No. Did they eat because they were hungry? No. They ate because of all the cues around them—not only the size of the popcorn bucket, but also other factors I'll discuss later, such as the distracting movie, the sound of people eating popcorn around them, and the eating scripts we take to movie theaters with us. All of these were cues that signaled it was okay to keep on eating and eating.

Does this mean we can avoid mindless eating simply by replacing large bowls with smaller bowls? That's one piece of the puzzle, but there are a lot more cues that can be engineered out of our lives. As you will see, these hidden persuaders can even take the form of a tasty description on a menu or a classy name on a wine bottle. Simply *thinking* that a meal will taste good can lead you to eat more. You won't even know it happened.

As Fine as North Dakota Wine

The restaurant is open only 24 nights a year and serves an inclusive prix-fixe theme dinner each night. A nice

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meal will cost you less than \$25, but to get it you will have to phone for reservations and be seated at either 5:30 or 7:00 sharp. Despite these drawbacks, there is often a waiting list.

Welcome to the Spice Box. The Spice Box looks like a restaurant; it sounds like a restaurant; and it smells like a restaurant. To the people eating there, it is a restaurant. To the people working there, it's a fine dining lab sponsored by the Department of Food Science and Human Nutrition at the University of Illinois at Urbana-Champaign. The Spice Box is a lab where culinary hopefuls learn whether a new recipe will fly or go down in flames. It's a lab where waitstaff discover whether a new approach will sizzle or fizzle. It's also a lab where consumer psychologists have figured out what makes a person nibble a little or inhale it all.

There is a secret and imaginary line down the middle of the dining room in the Spice Box. On one Thursday, diners on the left side of the room might be getting a different version of the shrimp coconut jambalaya entrée than those on the right. On the next Thursday, diners on the left side will be given a menu with basic English names for the food, while those on the right will be given a menu with French-sounding names. On the Thursday after that, diners on the left side will hear each entrée described by a waiter, while those on the right will read the same descriptions off the menu. At the end of the meal, sometimes we ask the diners some short survey questions, but other times we carefully weigh how much food our guests have left on their plates. That way we don't have to rely on what they say, we can rely on what they do—which version of shrimp coconut jamba- laya they polished off.

But on one dark Thursday night in the first week of February 2004, something a little more mischievous was planned for diners who braved the snow to keep their reservations. They were getting a full glass of Cabernet Sauvignon before their meal. Totally free. Compliments of the house.

This cabernet was not a fine vintage. In fact, it was a \$2 bottle sold under the brand name Charles Shaw—popularly known as Two Buck Chuck. But our diners didn't know this. In fact, all the Charles Shaw labels had been soaked off the bottles and replaced with

professionally designed labels that were 100 percent fake.

Those on the left side of the room were being offered wine from the fictional Noah's Winery, a new California label. The winery's classic, italicized logo was enveloped by a simple graphic of grapes and vines. Below this, the wine proudly announced that it was "NEW from California." After the diners arrived and were seated, the waiter or waitress said, "Good evening and welcome to the Spice Box. As you're deciding what you want to eat this evening, we're offering you a complimentary glass of Cabernet Sauvignon. It's from a new California winery called Noah's Winery." Each person was then poured a standard 3.8-ounce glass of wine.

About an hour later, after they had finished their meal and were paying for it, we weighed the amount of wine left in each glass and the amount of the entrée left on each plate. We also had a record of when each diner had started eating and when they paid their bill and left.

Diners on the right side of the room had exactly the same dining experience—with one exception. The waiter or waitress's carefully scripted welcome introduced a cabernet "from a new *North Dakota* winery called Noah's Winery." The label was identical to that on the first bottle, except for the words "NEW from North Dakota."

There is no Bordeaux region in North Dakota, nor is there a Burgundy region, nor a Champagne region. There is, however, a Fargo region, a Bismarck region, and a Minot region. It's just that there are no wine grapes grown in any of them. California equals wine. North Dakota equals snow or buffalo.

People who were given "North Dakota wine" believed it was North Dakota wine. But since it was the same wine we poured for those who thought they were getting California wine, that shouldn't influence their taste. Should it?

It did. We knew from an earlier lab study that people who thought they were drinking North Dakota wine had such low expectations, they rated the wine as tasting bad *and* their food as less tasty. If a California wine label can give a glowing halo to an entire meal, a

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North Dakota wine label casts a shadow onto everything it touches.

But our focus that particular night was whether these labels would influence *how much* our diners ate.

After the meals were over, the first thing we discovered was that both groups of people drank about the same amount of wine—all of it. This was not so surprising. It was only one glass of wine and it was a cold night. Where they differed was in how much food they ate and how long they lingered at their table.

Compared to those unlucky diners given wine with North Dakota labels, people who thought they had been given a free glass of California wine ate 11 percent more of their food—19 of the 24 even cleaned their plates. They also lingered an average of 10 minutes longer at their table (64 minutes). They stayed pretty much until the waitstaff starting dropping hints that the next seating would be starting soon.

The night was not quite as magical for those given wine with the North Dakota label. Not only did they leave more food on their plates, this probably wasn't much of a meal to remember, because it went by so fast. North Dakota wine drinkers sat down, drank, ate, paid, and were out in 55 minutes—less than an hour. For them, this was clearly not a special meal, it was just food.

Exact same meals, exact same wine. Different labels, different reactions.

Now, to a cold-eyed skeptic, there should have been no difference between the two groups. They should have eaten the same amount and enjoyed it the same.

They didn't. *They mindlessly ate.* That is, once they were given a free glass of "California" wine, they said to themselves: "This is going to be good." Once they concluded it was going to be good, their experience lined up to confirm their expectations. They no longer had to stop and think about whether the food and wine were really as good as they thought. They had already decided.

Of course, the same thing happened to the diners who were given the "North Dakota" wine. Once they saw the label, they set themselves up for disappointment.

There was no halo; there was a shadow. And not only was the wine bad, the entire meal fell short.

After our studies are over, we "debrief" people—often by e-mail—and tell them what the study was about and what results we expect. For instance, with our different wine studies, we might say, "We think the average person drinking what they believe is North Dakota wine will like their meal less than those given the 'California' wine." We then ask the kicker: "Do you think you were influenced by the state's name you saw on the label?" Almost all will give the exact same answer: "No, I wasn't."

In the thousands of debriefings we've done for hundreds of studies, nearly every person who was "tricked" by the words on a label, the size of a package, the lighting in a room, or the size of a plate said, "I wasn't influenced by that." They might acknowledge that others could be "fooled," but *they* don't think they were. That is what gives mindless eating so much power over us—we're not aware it's happening.

Even when we *do* pay close attention we are suggestible—and even when it comes to cold, hard numbers. If you ask people if there are more or less than 50 calories in an apple, most will say more. When you ask them how many, the average person will say, "66." If you had instead asked if there were more or less than 150 calories in an apple, most would say less. When you ask them how many, the average person would say, "114." People unknowingly anchor or focus on the number they first hear and let that bias them.

A while back, I teamed up with two professor friends of mine—Steve Hoch and Bob Kent—to see if anchoring influences how much food we buy in grocery stores. We believed that grocery shoppers who saw numerical signs such as "Limit 12 Per Person" would buy much more than those who saw signs such as "No Limit Per Person." To nail down the psychology behind this, we repeated this study in different forms, using different numbers, different promotions (like "2 for \$2" versus "1 for \$1"), and in different supermarkets and convenience stores. By the time we finished, we knew that *any* sign with a number promotion leads us to buy 30 to 100 percent more than we normally would.

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After the research was completed and published in the *Journal of Marketing Research*, another friend and I were in the checkout line at a grocery store, where I saw a sign advertising gum, “10 packs for \$2.” I was eagerly counting out 10 packs onto the conveyer belt, when my friend commented, “Didn’t you just publish a big research paper on that?”

We’re *all* tricked by our environment. Even if we “know it” in our head, most of the time we have way too much on our mind to remember it and act on it. That’s why it’s easier to change our environment than our mind.