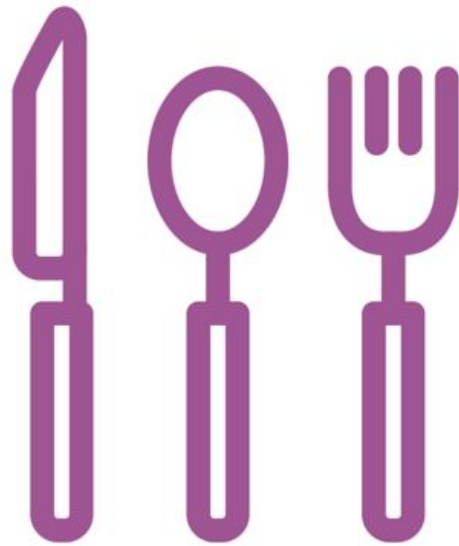


Sensible Nutrition:

A Brief Guide on How to Eat
Healthy Without Noticing



James Clear

Sensible Nutrition Guide

10 Things This Guide Will Teach You

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What Happens to Your Brain When You Eat Junk Food (And Why We Crave It)

Most of us know that junk food is unhealthy. We know that poor nutrition is related to heart problems, high blood pressure, and a host of other health ailments. You might even know that studies show that eating junk food has been linked to increases in depression.

But if it's so bad for us, why do we keep doing it?

There is an answer. And the science behind it will surprise you.

Why We Crave Junk Food

Steven Witherly is a food scientist who has spent the last 20 years studying what makes certain foods more addictive (and tasty) than others. Much of the science that follows is from his excellent report, Why Humans Like Junk Food.

According to Witherly, when you eat tasty food, there are two factors that make the experience pleasurable.

First, there is the sensation of eating the food. This includes what it tastes like (salty, sweet, umami, etc.), what it smells like, and how it feels in your mouth. This last quality — known as

“orosensation” — can be particularly important. Food companies will spend millions of dollars to discover the most satisfying level of crunch in a potato chip. Their scientists will test for the perfect amount of fizzle in a soda. These factors all combine to create the sensation that your brain associates with a particular food or drink.

The second factor is the actual macronutrient makeup of the food — the blend of proteins, fats, and carbohydrates that it contains. In the case of junk food, food manufacturers are looking for a perfect combination of salt, sugar, and fat that excites your brain and gets you coming back for more.

Here’s how they do it...

How Science Creates Cravings

There are a range of factors that scientists and food manufacturers use to make food more addictive.

Dynamic contrast. Dynamic contrast refers to a combination of different sensations in the same food. In the words of Witherly, foods with dynamic contrast have “an edible shell that goes crunch followed by something soft or creamy and full of taste-active compounds. This rule applies to a variety of our favorite food structures — the caramelized top of a creme brulee, a slice of pizza, or an Oreo cookie — the brain finds crunching through something like this very novel and thrilling.”

Salivary response. Salivation is part of the experience of eating food and the more that a food causes you to salivate, the more it will swim throughout your mouth and cover your taste buds. For example, emulsified foods like butter, chocolate, salad dressing, ice cream, and mayonnaise

promote a salivary response that helps to lather your taste buds with goodness. This is one reason why many people enjoy foods that have sauces or glazes on them. The result is that foods that promote salivation do a happy little tap dance on your brain and taste better than ones that don't.

Rapid food meltdown and vanishing caloric density. Foods that rapidly vanish or “melt in your mouth” signal to your brain that you're not eating as much as you actually are. In other words, these foods literally tell your brain that you're not full, even though you're eating a lot of calories.

The result: you tend to overeat.

In his best-selling book, Salt Sugar Fat (audiobook), author Michael Moss describes a conversation with Witherly that explains vanishing caloric density perfectly...

I brought him two shopping bags filled with a variety of chips to taste. He zeroed right in on the Cheetos. “This,” Witherly said, “is one of the most marvelously constructed foods on the planet, in terms of pure pleasure.” He ticked off a dozen attributes of the Cheetos that make the brain say more. But the one he focused on most was the puff's uncanny ability to melt in the mouth. “It's called vanishing caloric density,” Witherly said. “If something melts down quickly, your brain thinks that there's no calories in it . . . you can just keep eating it forever.”

Sensory specific response. Your brain likes variety. When it comes to food, if you experience the same taste over and over again, then you start to get less pleasure from it. In other words, the sensitivity of that specific sensor will decrease over time. This can happen in just minutes.

Junk foods, however, are designed to avoid this sensory specific response. They provide enough taste to be interesting (your brain doesn't get tired of eating them), but it's not so stimulating

that your sensory response is dulled. This is why you can swallow an entire bag of potato chips and still be ready to eat another. To your brain, the crunch and sensation of eating Doritos is novel and interesting every time.

Calorie density. Junk foods are designed to convince your brain that it is getting nutrition, but to not fill you up. Receptors in your mouth and stomach tell your brain about the mixture of proteins, fats, carbohydrates in a particular food, and how filling that food is for your body. Junk food provides just enough calories that your brain says, “Yes, this will give you some energy” but not so many calories that you think “That’s enough, I’m full.” The result is that you crave the food to begin with, but it takes quite some time to feel full from it.

Memories of past eating experiences. This is where the psychobiology of junk food really works against you. When you eat something tasty (say, a bag of potato chips), your brain registers that feeling. The next time you see that food, smell that food, or even read about that food, your brain starts to trigger the memories and responses that came when you ate it. These memories can actually cause physical responses like salivation and create the “mouth-watering” craving that you get when thinking about your favorite foods.

All of this brings us to the most important question of all.

Food companies are spending millions of dollars to design foods with addictive sensations. What can you and I do about it? Is there any way to counteract the money, the science, and the advertising behind the junk food industry?

How to Kick the Junk Food Habit and Eat Healthy

The good news is that the research shows that the less junk food you eat, the less you crave it. My own experiences have mirrored this. As I've slowly begun to eat healthier, I've noticed myself wanting pizza and candy and ice cream less and less. Some people refer to this transition period as "gene reprogramming."

Whatever you want to call it, the lesson is the same: if you can find ways to gradually eat healthier, you'll start to experience the cravings of junk food less and less. I've never claimed to have all the answers (or any, really), but here are three strategies that might help.

1. Use the "outer ring" strategy and the "5 ingredient rule" to buy healthier food.

The best course of action is to avoid buying processed and packaged foods. If you don't own it, you can't eat it. Furthermore, if you don't think about it, you can't be lured by it.

We've talked about the power of junk food to pull you in and how memories of tasty food in the past can cause you to crave more of it in the future. Obviously, you can't prevent yourself from ever thinking about junk food, but there are ways to reduce your cravings.

First, you can use my "outer ring" strategy to avoid processed and packaged foods at the grocery store. If you limit yourself to purchasing foods that are on the outer ring of the store, then you will generally buy whole foods (fruits, vegetables, meat, eggs, etc.). Not everything on the outer ring is healthy, but you will avoid a lot of unhealthy foods.

You can also follow the "5 ingredient rule" when buying foods at the store. If something has more than 5 ingredients in it, don't buy it. Odds are, it has been designed to fool you into eating more of it. Avoid those products and stick with the more natural options.

2. Eat a variety of foods.

As we covered earlier, the brain craves novelty.

While you may not be able to replicate the crunchy/creamy contrast of an Oreo, you can vary your diet enough to keep things interesting. For example, you could dip a carrot (crunchy) in some hummus (creamy) and get a novel sensation. Similarly, finding ways to add new spices and flavors to your dishes can make eating healthy foods a more desirable experience.

Moral of the story: eating healthy doesn't have to be bland. Mix up your foods to get different sensations and you may find it easier than eating the same foods over and over again. (At some point, however, you may have to fall in love with boredom.)

3. Find a better way to deal with your stress.

There's a reason why many people eat as a way to cope with stress. Stress causes certain regions of the brain to release chemicals (specifically, opiates and neuropeptide Y). These chemicals can trigger mechanisms that are similar to the cravings you get from fat and sugar. In other words, when you get stressed, your brain feels the addictive call of fat and sugar and you're pulled back to junk food.

We all have stressful situations that arise in our lives. Learning to deal with stress in a different way can help you overcome the addictive pull of junk food. This could include simple breathing techniques or a short guided meditation. Or something more physical like exercise or making art.

With that said, if you're looking for a better written and more detailed analysis of the science of junk food, I recommend reading the #1 New York Times best-seller, Salt Sugar Fat (audiobook).

10 Simple Ways to Eat Healthy Without Thinking, Backed by Science

Your environment has an incredible ability to shape your behavior.

I have written previously about [choice architecture](#) and [environment design](#), both of which are focused on the idea that, “By making small changes to the physical environment around you, it can become much easier to stick to good habits.”

And while the research studies I have shared in those articles are interesting, I thought it might be useful to list some practical ways to apply environment design to your world and make it easier to live a healthy, happy, and adventurous life.

With that in mind, here are 10 simple strategies for designing your environment to eat healthy without thinking and spend more of your time and energy on doing something awesome.

Keep in mind, these ideas are just a start. You can apply these concepts for designing your environment and creating better “choice architecture” to almost any habit or behavior.

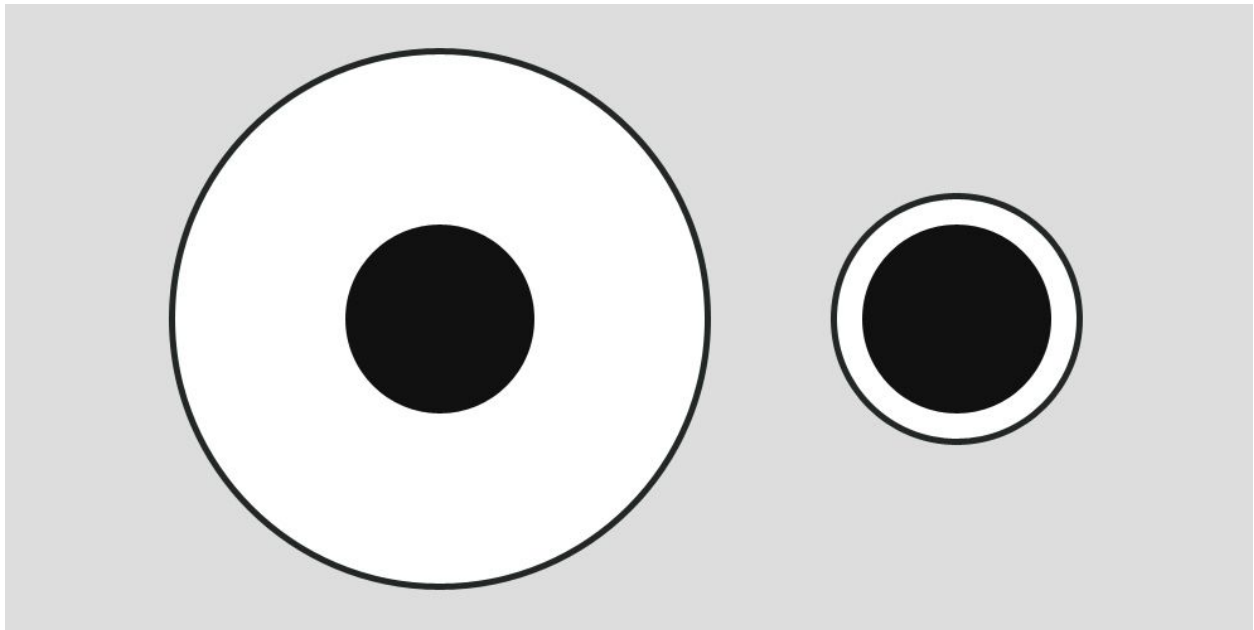
How to Eat Healthy Without Noticing

Before we begin, let’s give credit to the researcher behind many of these ideas. Brian Wansink is a professor at Cornell University and he has completed a variety of studies on how your

environment shapes your eating decisions. Many of the ideas below come from his popular book, Mindless Eating (audiobook).

1. Use smaller plates. Bigger plates mean bigger portions. And that means you eat more. According to a study conducted by Wansink and his research team, if you made a simple change and served your dinner on 10-inch plates instead of a 12-inch plate, you would eat 22% less food over the course of the next year.

On a related note, if you're thinking "I'll just put less food on my plate" ... it's not that simple. The picture below explains why. When you eat a small portion off of a large plate, your mind feels unsatisfied. Meanwhile, the same portion will feel more filling when eaten off of a small plate. The circles in the image below are the same size, but your brain (and stomach) doesn't view them that way.



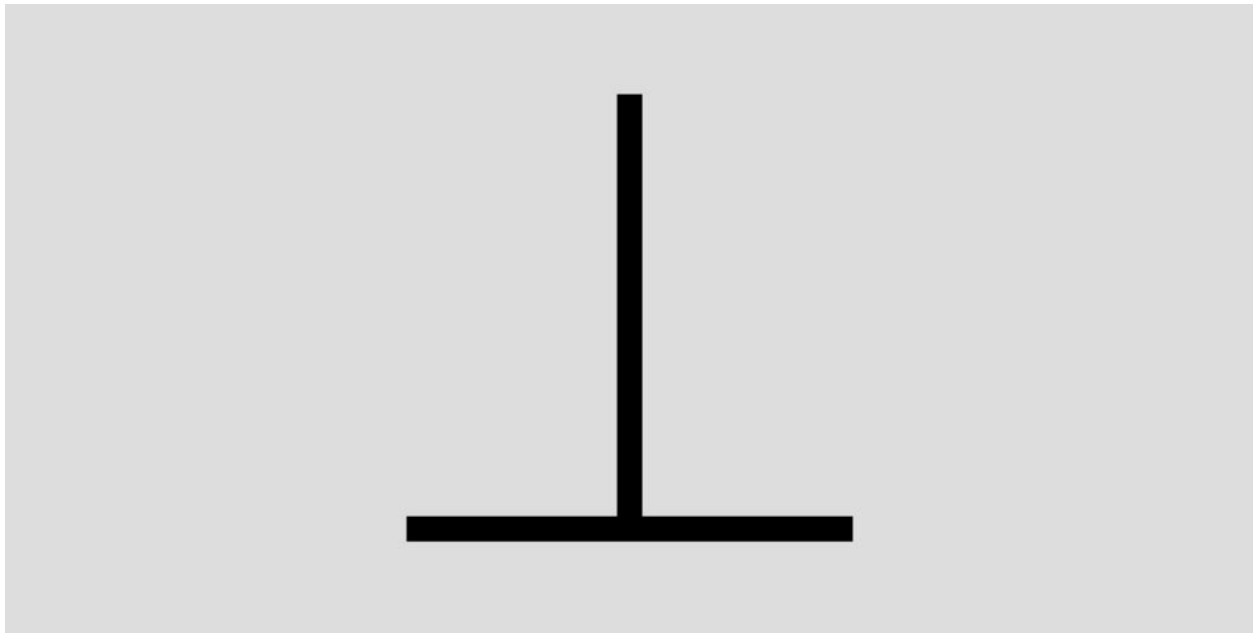
This image shows how small portion sizes can look filling on a small plate, but sparse on a large plate.

2. Make water more readily available. Most of us mindlessly take a swig of soda or a sip of coffee as we do other tasks. Try this instead: buy a large bottle water and set it somewhere close to you throughout your day. You'll find that if it's sitting next to you, you'll often opt for water instead and avoid less healthy drink options naturally.

Note: I love [this Vapur water bottle](#) because it holds a good amount of water and folds up small enough to fit in a backpack, purse, or pocket. It's perfect for travel too.

3. Want to drink less alcohol or soda? Use tall, slender glasses instead of short, fat ones.

Take a look at the image below. Is the horizontal or vertical line longer?



Like the lines in this photo, vertical glasses will look bigger than horizontal ones and will therefore naturally help you drink less.

As it turns out, both lines are the same length, but our brain has a tendency to overestimate vertical lines. In other words, taller drinks look bigger to our eyes than round, horizontal mugs

do. And because height makes things look bigger than width, you'll actually drink less from taller glasses. In fact, you will typically drink about 20% less from a tall, slender glass than you would from a short, fat glass. (Hat tip to [Darya Pino](#) for originally sharing this image and idea.)

4. Use plates that have a high contrast color with your food. As I mentioned in [this article](#), when the color of your plate matches the color of your food, you naturally serve yourself more because your brain has trouble distinguishing the portion size from the plate. Because of this, dark green and dark blue make great plate colors because they contrast with light foods like pasta and potatoes (which means you're likely to serve less of them), but don't contrast very much with leafy greens and vegetables (which means you're likely to put more of them on your plate).

5. Display healthy foods in a prominent place. For example, you could place a bowl of fruits or nuts near the front door or somewhere else that you pass by before you leave the house. When you're hungry and in a rush, you are more likely to grab the first thing you see.

6. Wrap unhealthy foods in tin foil. Wrap healthy foods in plastic wrap. The old saying, "out of sight, out of mind" turns out to have some truth to it. Eating isn't just a physical event, but also an emotional one. Your mind often determines what it wants to eat based on what your eyes see. Thus, if you hide unhealthy foods by wrapping them up or tucking them away in less prominent places, then you are less likely to eat them.

7. Keep healthy foods in larger packages and containers, and unhealthy foods in smaller ones. Big boxes and containers tend to catch your eye more, take up space in your kitchen and pantry, and otherwise get in your way. As a result, you're more likely to notice them and eat them. Meanwhile, smaller items can hide in your kitchen for months. (Just take a look at what you have lying around right now. It's probably small cans and containers.)

Bonus tip: if you buy a large box of something unhealthy, you can re-package it into smaller Ziploc bags or containers, which should make it less likely that you'll binge and eat a lot at once.

8. Serve meals by using the “half plate” rule. You can design your eating environment as well. When you serve yourself dinner, start by making half of your plate fruits or vegetables. Then, fill the rest of the dish based on that constraint.

9. Use the “Outer Ring” strategy to buy healthier foods. The concept is simple: when you go grocery shopping, don't walk down the aisles. Only shop on the outer perimeter of the store. This is usually where the healthy food lives: fruits, vegetables, lean meats, fish, eggs, and nuts. If you only shop on the outer ring, then you're more likely to buy healthy foods. And that, of course, means you're more likely to eat healthy foods when you get home.

10. And for the tenth strategy, let's apply these concepts to some other areas of life...

Applying Environment Design to the Rest of Your Life

When you really break down each of these strategies, you'll see that each one is a small tweak that puts more steps between you and the bad behaviors and fewer steps between you and the good behaviors.

For example...

- Wrapping unhealthy foods in tin foil adds another step. You have to see the dish, then open it to see what is inside, then decide to eat it. (Rather than just spotting some leftovers in plastic wrap and grabbing them.)

- Using small plates adds another step between you and eating more. If you want more, you have to go back for seconds and fill up again.

You can take this same approach to almost anything in life. If you want to make a bad behavior more difficult, then increase the number of steps between you and the behavior.

Meanwhile, if you want to make a good behavior easier, reduce the number of steps between you and the behavior. For example, if you want to make it easier to go for a run then lay out your shoes and running gear the night before you exercise. One less step between you and your workout.

How to Start Eating Healthy (And Actually Stick to It)

Most people would like to eat healthy on a consistent basis. And even if you already eat healthy most of the time, it's likely that you could do a better job of staying on target.

The benefits of good nutrition are obvious: you have more energy, your health improves, and your productivity blossoms.

So if we want to eat healthy and if it's obvious why we should eat healthy, how come it's so difficult to actually eat healthy?

And most importantly, is there anything we can do to make it easier?

Short-Term Goals vs. Long-Term Goals

I used to be terrible at achieving long-term goals.

I was decent when working on short deadlines, but if a project lasted more than a month, then my time management was totally off. I used to feel bad about this, like I was the only one who couldn't properly execute on a big goal. But as I've started to pay more attention to people who are good with long-term projects, my tune has changed.

I don't think anyone is good at achieving long-term goals.

Some people are just good at breaking long-term goals down into short-term ones. They have a small chunk that they work on each day or week and at the end of the project, they enjoy this big, beautiful result.

Good habits — eating healthy, for example — work in much the same way. Some people are really good at breaking their long-term desires down into small behaviors that they can focus on each day. In other words, they are good at focusing on lifestyle choices rather than their life-changing goals. (More on that [here](#).)

Eventually, these daily actions cascade into powerful, life-changing habits. But like a successful long-term project, a good habit starts with breaking the end goal down into very small steps.

I'm not great with long-term goals yet, but I'm getting better. And I've learned a lot about the process along the way. For example, here's one way you could use this process to start eating healthy...

Breaking Down the Steps of Eating Healthy

Good habits are smaller than you think. We often get caught up in the end goal and think that we need to do it all at once, but usually it's best to start with a very small section of our overall goal.

For example, many people want to eat healthy, but quickly find out how much work it takes to change their diet.

Here's a list of what you need to do if you want to eat healthy...

1. You have to buy new groceries.
2. You have to prepare healthy food.
3. You have to eat healthy food.
4. You have to clean up and do the dishes.

If you're the type of person who eats out often, then those four steps represent a huge shift in your daily life. It's unlikely that you'll change all of those things at once. I believe that most diets fail not because of a lack of willpower or motivation, but because we bite off more than we can chew.

Take a look at that list again. If you're trying to change all of those things at the same time, it's no wonder that it's hard to stick to diet.

But imagine a different scenario...

The Minimalist Approach to Eating Healthy

What if you eliminated everything except the most critical part of the new habit?

For example, what if you did these 3 things...

1. Start intermittent fasting, so that you only need to eat two healthy meals per day instead of three.
2. For the first two months dieting, you buy disposable plates to minimize clean up time.

3. For the first month, you hire someone on Craigslist to cook a healthy dinner for you 5 nights per week. (This is surprisingly inexpensive. I've seen options for around \$10/meal and it would ensure that you eat healthy after work each night without having to cook.)

Now, I realize that buying disposable plates and hiring someone to cook your meals is expensive, but we're not talking about doing this forever. We're just talking about making the habit easier to start with. We're talking about making an investment for the first month or two, so that you make it as easy as possible to start eating healthy.

With our setup above, the only thing you focus on doing for the first month is actually eating healthy meals. In the second month, you start buying healthier groceries and cooking your meals. In the third month, you stop buying disposable plates and do the full clean up.

Imagine how much easier it is to eat healthy when you take those barriers away at the beginning.

Don't Do It All, Just Start Doing It

Obviously, you can manipulate this basic strategy to fit your needs. If you can't afford to hire someone for 5 meals per week, then how about 2 meals per week? Do whatever works for you, but the general idea is to eliminate everything except the most essential task in the beginning.

Break down the goal into small chunks, remove the excuses, and make it as easy as possible to say yes to your new habit. You don't have to do it all, you just have to start doing it.

It might require an investment, but would you rather simplify the process, pay a bit more now, and actually stick to a healthy diet ... or try to do everything at once, drain all of your willpower, and quit out of frustration two weeks later?

If you're serious about long-term change, then smaller is better, especially at the start. Break down your long-term desires into short-term habits and you'll find success comes much easier.