

Episode 106: "The French Guide to Eating Happier & Healthier"

with Yann Cornil, Associate Professor of Marketing and Behavioural Science at UBC Sauder School of Business.

As a French food researcher, Yann Cornil was surprised by North American eating habits and messaging about good vs. bad foods. Yann's research with Pierre Chandon suggests that we eat less and enjoy it more when we eat mindfully (read: with our TVs and phones off) and focus on the Epicurean or sensory pleasure of eating. So, listen to this episode and then go savour a small portion of your favourite, delicious, delectable snack!

Transcript:

KIRSTIN APPELT, HOST: Welcome to this edition of Calling DIBS. I'm your host, Kirstin Appelt, Research Director with UBC Decision Insights for Business and Society, or DIBS for short.

Today we're Calling DIBS on Yann Cornil. Yann is an Associate Professor of Marketing and Behavioral Science at UBC Sauder School of Business, and I've been lucky to count him as a colleague and dear friend since 2015. Before that, he did a PhD in Marketing at INSEAD in France and Singapore. And living up to the stereotype of the French foodie, does very neat research on the consumer psychology surrounding food decisions, and he's in the midst of writing a book about it. So, I thought it would be a fun time to invite Yann on the pod to learn more. So welcome to the podcast, Yann. Thank you. Thank you, Kirstin, for having me. Can you tell us a little bit about yourself?

YANN CORNIL, GUEST: Sure. The introduction was already very good. So, my name is Yann Cornil. As you mentioned, I'm an associate professor in marketing and behavioral science at UBC Sauder. And indeed, I come from France. I was born in the north of France in the city of Cornil, very next to Belgium, which has great food, by the way. And I did my PhD at INSEAD, so both in France and also in Singapore. So, it's a school that has two campuses on both continents. And I spent four years in Singapore, which was very interesting to be exposed to the food culture in East Asia. And I started my position as a faculty at UBC Sauder in 2015, which is when I had the pleasure to meet you, Kirstin, for the first time.

APPELT: Awesome. So, eating your way around the world, continent by continent. And now enjoying Canadian cuisine. So, we always like to ask people about their journey to working in marketing and behavioral science because everyone's journey is unique. So, what brought you to the world of marketing and behavioral science?

CORNIL: Sure. So, I first studied politics. So that was my bachelor's degree in France. And then I did my master's degree in marketing. So, it was as I wanted to embrace an academic career. It was a natural evolution for me to do my PhD in marketing. Which is an opportunity to study behavioral science. But I think most people doing research in behavioral science, it comes out of a curiosity about how and why people think and

feel and behave the way that they do, and especially how they tend to deviate from economic rationality. How can we explain that? failures in self-control, cognitive failures, for instance, why do people act in a way that is not beneficial for themselves on the long run? And based on this knowledge, it's of course very important and interesting to try to design interventions or nudges that with the goal of helping people achieve the types of long-term goals that are usually hard to achieve on the short run, right? So, a lot of people work, for instance, on how to encourage people to increase their retirement savings.

For me, I work on eating behavior, on obesity, how can we help people eat better with long-term positive consequences on health. And also, I have something that we might discuss a lot today, also an interest in causal inference, what allows us to claim that X causes Y as opposed to how X happens to be correlated with Y. And in food research, there's a lot of claims based on correlation. So, for instance, there has been for a long time this belief that drinking red wine makes you live longer, or even some not so serious research suggesting that eating chocolate improves cognitive function. So, you eat chocolate and you drink wine, and you're going to be smarter and live longer. Of course, those results are all based on correlation. So, in order to establish causality, there needs to be proper methods, proper techniques that we study in behavioral science, and in particular, the experimental method. All of these contribute to my deep interest in behavioral science.

APPELT: But all the claims about cheese making you live longer, those are true, right? Those are absolutely true. Phew. Getting on to this topic of food, you're in the midst of co-authoring this book with your former PhD supervisor and current collaborator, Pierre Chandon. And it's about the French approach to eating and how that leads to healthier and happier food habits. So, can you tell us a little more about the overall idea behind the book, the inspiration?

CORNIL: Of course. First, I need to talk a little bit about Pierre Chandon, who was my PhD advisor at INSEAD and my longest collaborator. We've worked together for more than 15 years now. So, when I started my PhD, I didn't know that I wanted to work on food. At the time, I wanted to work on financial decision-making. I realized that food was much more exciting to study. And the first paper that we wrote, it was about back in 2012, I believe, it was about how the supporters of losing football teams tend to eat more junk food as a way to cope with our negative emotions. And this paper, it was a hit, right? The media absolutely loved it. So now every year at every NFL championship, there's going to be a story about it and we're going to be interviewed.

As we had a lot of fun working on this research and it was interesting for a general audience, we continued working together. And I think something quite critical in our research is that we're French, right? And we were both a bit uncomfortable with the current paradigm in food research, in behavioral research about food, which tends to oppose health and pleasure. If you're pursuing health goals, it means that you have to sacrifice pleasure. If you're pursuing pleasure goals, it means that you have to sacrifice health. And it's very consistent with the dominant paradigm in decision making about short-term versus long-term goals, about self-control failure. If you're pursuing a short-term pleasure goal, means that somehow you have to forget about your health long-term goals.

So, lots of research making people choose between the fruit salad and the chocolate cake, as if you were choosing between a virtue or vice or between good and evil. And this framing of pleasure as necessarily a bad thing, as necessarily an unhealthy thing made us a bit uncomfortable because it is so antithetical to the French food culture. And we wanted to challenge this dominant paradigm and especially explain how pleasure, how and when pleasure can be a good thing, something that we should cherish and pursue, that it's not necessarily

a self-control failure, right? And how essential it is to have to develop a good relationship with food for a happier and healthier life.

APPELT: I can't wait to dig in a little more. So, I think maybe a natural place to start is, you start in the book, is this idea that different cultures approach eating differently, and particularly European versus North American. So, can you tell us a little more about those differences?

CORNIL: Sure, so we've observed a lot of cross-cultural differences in food cultures. So, you can already see differences in fiction, in stories, in discourses, but also in research, right? And there has been a lot of research on world associations, for instance. There's a famous researcher called Paul Rosen, who has worked a lot on this topic, and he's one of my academic idols. So, the type of research is, if I say chocolate cake or if I say ice cream, what are the first things that come to mind? And here we can observe a lot of cultural differences. Typically, in American cultures, if I say cake or ice cream, people will kind of automatically think about weight gain, about unhealthy. But if I say cake or ice cream to a French participant, the first things that will tend to come to mind would be tasty or celebration, so something definitely more positive.

And while working with books, we also tried this technique with ChatGPT. ChatGPT is really based on associations, right? What is most likely in the whole web production to be associated with specific types of words. And if you ask ChatGPT to list the five words associated with chocolate cake in the US, right, the first thing that that is provided is decadent. If you do it in French, what is the first thing associated with a gâteau au chocolat? And the first answer will be a muelleux, which is soft, like a nice texture of a soft chocolate cake. Even with technology, we can observe these types of cultural differences.

There's also a lot of research about what are the types of preferences that people have when it comes to food. And what we observe across France and the US is that the French, they tend to be more willing to sacrifice comfort for good food. Like there's really an importance of having the best possible food on the table. So, it's a survey that shows that compared to only 11 % of American respondents, 77 % of the French would prefer one week at a modest hotel that serves gourmet food rather than a week at a luxury hotel that serves average cuisine. So most, large majority of the Americans would prefer the luxury hotel with a very average cuisine.

There's also another study, I retrieved some of the statistics here because they are quite telling. It's a study by Paul Rosin. Which shows kind of the ambivalent attitudes that the Americans tend to have when it comes to food. So of course we love food like everybody else, but it also comes with guilt, right? And it's very much associated with those negative world associations I was talking about. And in this study, it was among women only, 27 % of the American women would prefer to have a nutrient pill rather than an actual meal. Compared to only 10 % of the French respondents.

So really sacrificing the pleasure of eating in order to avoid all the guilt associated with eating food. So, there are differences in the perception of food and there are also differences in how much time we spend eating. And so, it's another survey done by the OECD last year. And this is quite telling and also informs about what's happening in Canada. So, Canadians tend to be quite similar to the US when it comes to food attitudes. And among the 20 OECD countries that were surveyed, the French spent the longest time eating. So here we're talking about proper meals, not snacking. So, French spend 133 minutes eating every day, which is a lot. Indeed, I have experience of taking American friends to the restaurant in France. And sometimes they are very surprised about how much time they need to wait between meals and how slow the French eat. So, for

instance, the lunch break in France, when you're working, the lunch break, it's pretty standard to spend an hour and half eating with your colleagues while here it's more like 10 minutes sometimes.

And so compared to the 133 minutes that the French spend eating every day, the Americans spend only 67 minutes, so less than half the time spent by the French. And the Americans only come before to last when it comes to a how quickly they eat. And the very last country, unfortunately, is Canada. Canada spends even less time eating every day than the Americans, with 65 minutes a day. And I think the last, perhaps the most important cultural difference across countries is portion sizes. So, there's a lot of research that suggests that One of the main culprits of weight gain and the obesity, what has been called the obesity epidemic, is not so much the type of food that we eat, but how much food we eat, the portion sizes.

And here it's been shown so many times how large portion sizes tend to be in the US compared to France, but many other countries as well, in particular in East Asia that tend to share some communities with France when comes to food. And portion sizes at restaurants, in supermarkets, and also at home tend to be much, much larger in the US than in France. And so, for instance, there's a study that looked at what is the largest size available at Walmart in the US compared to the French equivalent, which is called Carrefour. And at Walmart, you can buy a 62-ounce jar of peanuts M&Ms, right? Which is more than twice the size of the largest portion size sold at the French supermarket.

Or the Haribo gummies, for instance. The Haribo gummies, you can buy portion sizes that are five times larger than the largest portion size available in France. And same for the popcorn, right? The popcorn at the movies, the largest popcorn you can buy in North America. It's always a surprise for non-Americans going to the movies in North America how big the packs of popcorn can be. It's three times larger than the biggest size of popcorn available in France. I think you can make the same comparisons with other countries in France, as I mentioned, in Europe or in East Asia.

APPELT: Like the joke from Parks and Rec where the child-sized soda isn't for children, it's just the size of a small child.

CORNIL: Yeah, it's in Parks and Rec. We tell the joke, it's pretty dark. It's not a child's size; it's size of a child. It was liquefied.

APPELT: That's very telling. That sums up so much right there. So, it's really interesting to hear about these cultural differences that they exist. I'm also curious about why it matters. And so, I think part of this comes down to this idea you have in the book and from your research about different types of pleasure that come from eating, the idea that there's visceral pleasure and epicurean pleasure. Can you explain what those are and how they're different?

CORNIL: Of course. There are many explanations why portion sizes tend to be larger in the US compared to France. There are of course tons of cultural differences, approaches to food that can explain those differences also in the industry. Like two concepts that we try to develop in the book is the idea that there are two forms of pleasure. One that we call the visceral pleasure and another one that we call the epicurean pleasure. So, it's not new, it's an old idea. It dates back to Plato, to ancient Greek philosophy. The idea that you have two layers of pleasure, one that tends to be more body-related. Some philosophers call it more animal, and one that

tends to be more cognitive. Some might call it also more civilized, an expression of civilization. And both coexist. Both coexist in all cultures, right?

But some cultures tend to focus more on one versus the other. So, what is the visceral pleasure? Visceral pleasure comes from body needs, like hunger, for instance. Food tends to be more pleasurable when you're hungry. And we will discuss why. The idea is that it comes from the body. But food is not only more pleasurable when you're hungry, it also comes with cravings. And cravings can be completely unrelated to hunger. Just the mere sight of a chocolate cake can develop what people interpret as hunger, but it's more like a craving, an appetite, something psychological. Also, negative emotions can trigger cravings and this short-term search for satisfaction. Or a relief of negative emotions or impulse.

So, it's a very, very short-term type of pleasure that we call visceral pleasure seeking. And then we oppose it to Epicurean pleasure seeking. So, this is more the expression of a culture. That's the multi-sensory, symbolic, aesthetic appreciation of food, like food as a form of art. The idea that food is not only the satisfaction of bodily needs or the relief from negative emotions or impulse, but it's also something that expresses knowledge, right? Developing the best possible taste, multisensory dimensions of food. It also has cultural symbolic dimensions, so different foods express something, they tell something about our culture, so for instance, Thanksgiving, can also tell something about religion, about our relationship to God in every single relationship, in every single religion, there is food involved. It's used as a means to communicate with the sacred, for instance.

And it's also something aesthetic, right? Food, cuisine as a form of art, which is something that only appeared in the 19th century, right? Food was always something kind of lower level, different from paintings or music. And in the 19th century, cuisine was elevated as a form of art. So that's the second type of pleasure that we call epicurean pleasure. And it matters because what we find repeatedly in our research is that while trying to satisfy visceral pleasure tends to make people go for larger portions, right?

When we're a bit hungry, we always tend to overshoot, like going for much larger portions. What is actually necessary to satisfy energy needs. And in contrast, when we are pursuing epicurean pleasure, when we are choosing food for the multi-sensory pleasure, for its aesthetic or symbolic dimensions, we tend to be content with smaller portion sizes.

APPELT: That's very interesting. And I'm curious to hear more. Are there pros and cons of each approach? Or is one just dominating and completely better than the other.

CORNIL: Well, I would say that both are necessary. Both have to exist to some extent. But there are pros and cons, right? Visceral pleasure, it exists for a reason. Survival. We need visceral pleasure. The fact that, for instance, food is more pleasurable when hungry in order to survive. That's an evolutionary mechanism. It's something that is deeply anchored in our brain, in any animal's brain. Food is more pleasurable when hungry simply because hunger is your body's way to communicate that you need energy. So, pleasure is obviously extremely motivational in that sense. And for the same reason, high calorie foods, foods that are high in fat and sugar. They also tend to be more pleasurable for the same reason, because high fat and high sugar, it means more calories, so more energy for body functioning. And that's why our brain has developed into a releasing dopamine, right? When we are eating those types of foods.

But there's already a few cracks in this essential survival mechanism. going back to philosophy, philosophers very very quickly have identified an issue with this visceral pleasure is that it kind of expresses our animal, our primal nature that kind of distracts us from the pursuit of wisdom and beauty.

And also, the other maybe more important crack is what has happened in the world. Over the past 40-50 years. The fact that food has become much cheaper, much more available everywhere in any circumstance without providing any effort to get it. So, food used to be something scarce, something that we need to spend energy in order to acquire. For hundreds of thousands of years, humans had to hunt or fish. Or harvest in order to acquire food, something that requires a lot of energy. So, it would make sense that our brain would force us to go for the most high-calorie foods via pleasure. It was necessary for survival. It is no longer necessary for survival because food is everywhere and easy to acquire.

And obviously over the past 40, 50 years, our brain has not adapted to this new environment. Which leads to overeating, right? We still consider high calorie foods are extremely pleasurable, even though we don't need as much, right? In order to satisfy our energy needs. And that's why we tend to eat too much, develop weight gain. And that's why obesity has started to be considered as a crisis, as an epidemic all over the world, right? So, these are the highest pros and cons of visceral pleasure. And now for epicurean pleasure, same thing, there are pros and cons.

So, the obvious pro is that what we show in our research is that developing food culture, looking for the multisensory aesthetic symbolic dimensions of food, it just makes people happier. And it's to some extent also makes them healthier. Because as I mentioned earlier, what we've shown in our research is that pursuing epicurean pleasure makes people content with smaller portion sizes, which is obviously better for weight management and for all types of disease, cardiovascular disease that are associated with overeating.

Now, the big problem with epicurean eating is that it is effortful. It is hard, right? Especially when you've developed bad habits. So, it requires to focus on food. It requires to turn off the TV and turn off the phone, avoiding endlessly scrolling on Instagram while eating, for instance. In order to truly experience epicurean pleasure, you need to really focus on the act of eating and focus on the sensations that you experience when eating and maybe celebrate the cultural dimensions of it. Of course, it requires a lot of cognitive space that you don't have if the TV is on or if you're scrolling on Instagram, for instance.

And something we might discuss as well today is that we also need to unlearn some of the things that have been deeply ingrained in our perception of food, such as this good food, bad food mentality, this dichotomy. Like, I cannot eat ice cream because it's bad for me. So, these kinds of things like dietitians, nutritionists spend a lot of time with their patients trying to erase, trying to make people unlearn because feeling guilty about food is just the gateway to self-control failure. We need to feel happy about eating even ice cream and chocolate cake just in smaller portions and ideally with better quality.

So, it's effortful. It requires unlearning a lot of the things that we have been habituated to. And that's why trying to develop Epicurean eating, it works extremely well with very young kids. We've done several experiments in which we kind of teach the Epicurean way to kids and they just acquire it very easily. And cheerfully, right? And we see that it works particularly well among this population.

And something that exists a lot in France, in Northern Europe, and that I've seen a little bit in Canada, is the idea of integrating food in the class curriculum, like teaching about food, about the pleasure of eating at a very young age in primary school, in nursery school. And especially avoiding like good food, bad food. It's all about the sensory appreciation of food, the respect for food, learning about how food is made, the cultural dimensions of food. I think this is really, really essential to teach at a very young age in order to help people develop good relationships and good habits when it comes to food.

APPELT: That's so interesting. And definitely this, you've mentioned is the changes over time. I feel like even in our own lifetimes, um, just like when we were kids and like growing up in the U S for me, bacon used to be like a very special thing. And now it's like almost hard not to get bacon on things because they're like, oh, big burger, put bacon on it. Mac and cheese, put bacon in it. It's just changed so much. It's really interesting to think about how that has changed and, the consequences of that. Something else I wanted to ask about is you talk about some of the traps of this over eating. And one thing you mentioned is the health. I was wondering if you can both explain what the health halo effect is and how it's related to visceral eating.

CORNIL: Sure. So, this is something that marketing is partly responsible for. Marketers love to put some positive labels on food packaging. They're going to say, oh, this is natural food, or there's no GMO, or there's reduced fat, or there's zero sugar, for instance. And the health halo is the tendency to overgeneralize those claims. If it's good in one specific dimension of what is usually considered as healthy, consumers will infer that it's good in any other dimension.

So, for instance, people will infer that if a food is labeled as natural, it's necessarily going to be healthier, lower in calorie, lower in fat, and lower in sugar. So, it's not necessarily the case. There are foods that are natural and that are extremely high in calories. And conversely, some highly processed foods. So high processing is not good. It tends to be less healthy. Think research is pretty clear about that. But it doesn't necessarily mean that it's going to be high in calories. We have a lot of low-calorie foods that are highly, highly processed, for instance. So, it's this generalization. If it's good in one specific dimension, people tend to think that it's going to be good in any other dimension of what is considered healthy.

And the big, big trap of this health halo effect is that people tend to think, oh, if it's good, I can eat a lot of it. And that's a big problem with foods that are marketed as healthy. People tend to overeat them. There have been studies on that. You have two groups, a group that is served regular M&Ms and another group that is served M&Ms that is labeled as low in sugar. And then you measure what is the quantity of M&Ms that people eat. And people will eat many more M&Ms if it's labeled as low in sugar, for instance, because they feel allowed to do it. It's a way to alleviate their guilt. And it can definitely lead to overeating.

So usually, it's better to go for I'm talking to a convert already to the full sugar Coca-Cola. Maybe not, but going for the food that is not really claimed as reduced in fat, it might be better in terms of taste and it might also make people go for more reasonable portion sizes.

APPELT: This is also making me think, because we've already talked about portion size and this idea of health halo, and you might overeat if you think oh a food has this health halo. And so, something you talk about is the idea that if eating is about pleasure, then savoring that pleasure is important. And intuitively, you might think that to maximize pleasure, you need that more, you want to eat more and more, but you suggest that actually less is more. So why is eating less the key to savoring?

CORNIL: Yeah. So, this is a very important point here. It's about how pleasure works, right? The mechanics of pleasure when it comes to food. And here I need to introduce a concept that has a terrible name called sensory-specific satiety, SSS. So, what is it? It's something that we all experience, even animals and babies experience. It's the idea that the first few mouthfuls of a good food are very pleasurable, and then each additional bite will be less and less pleasurable.

And eventually, if you're eating a very large portion size, and you commit to finishing it all, which usually people do because they tend to finish their plate, then the last bites are not pleasurable at all and sometimes even a bit disgusting. And the thing is that what is also like the overall pleasure that you remember from eating a meal or eating a chocolate cake. So, the overall pleasure that you remember, it's not the sum of each pleasure experience from each bite. It's more heavily influenced by the last bite. And so, if you're having a very large piece of cake and that last bite will be quite unpleasant, you will have bad memories about that piece of cake. As opposed to if you have a smaller piece of cake, the last bite will be quite pleasurable and you will remember greater pleasure from it compared to a large piece of cake.

It's something that we've seen in different studies, right? Serving different groups, portions of brownies of different size. And then we ask them how much pleasure did you have eating that chocolate cake or that brownie? And people reporting the highest pleasure are the ones who ate the smallest piece of cake. So, interestingly, we should remember, right? We should know that. We should know that, you know? We eat all the time. We eat every day. We have chocolate cake at least every week or any type of pleasurable food. So somehow, we should learn. That a large piece of cake, a large portion of food, results in less remembered pleasure than a smaller piece of food. But when it comes to food decisions, we are rarely rational, right? And we act on impulses. And we definitely tend to overshoot, to choose larger portions, first, what is necessary for energy intake, and second, for what is necessary to maximize pleasure.

But what we show in our studies is that it's easy to remind people of this. We just ask them, OK, imagine the sensations of eating a delicious chocolate cake. Try to keep in mind the taste of it, the texture, the scent, the feeling in your mouth. And when people are in this mindset, when they really, focus on the sensory pleasure of food, they can retrieve this relationship, this intuitive relationship that a large piece of cake is not going to be beneficial for pleasure. And focusing on sensory pleasure, tends to make people go for a smaller piece of cake compared to a controlled condition when people think about something else. Is it going to be a good value for money? Is it going to satisfy my hunger, for instance? No. Focusing on pleasure, focusing on sensory pleasure, keeping in mind the sensations you're going to get, it tends to make people be more content with choosing smaller portion sizes.

APPELT: So, it sounds like part of the reason that we are so often tempted to eat more is that we're either in a mindless state of just eat, eat without savoring, or we're thinking about other considerations, like you said, cost. Does that sum up some of the reasons we often eat larger portions?

CORNIL: Exactly. So, food decisions are a typical system one type of decision. We act on impulses without thinking much about what will be the consequences for our body but also for our pleasure. Especially when guided by hunger. Hunger is a terrible guide when it comes to portion sizes. We have no idea what is a reasonable portion size to satisfy our hunger. So, we just go with what's available. We go with okay, what's the medium size of Frappuccino sold by Starbucks? We go with social norms because we have no idea what is

necessary or what is optimal. And the medium size of Frappuccino at Starbucks is already huge. It's probably way too much. Or we go with value for money.

And indeed, that's a big problem, right? Here, I think we need to talk about how the food industry makes profits. So, the food industry, you think of food sold in supermarkets or food sold in restaurants in particular, it's a fixed cost business. Most of the costs at McDonald's, for instance, it's just to pay for the building and to pay for the employees. It's all fixed costs. And the variable costs, which is the cost of food, it's a very, very small fraction of the overall cost for restaurants, for McDonald's, for instance. So, what this means is that restaurants can serve super large portion sizes and it's not necessarily going to increase their cost very much, right?

So, McDonald's or 7-Eleven can sell a double gulp or a super gulp, like two liters of Coke. And it's not going to cost them much more than serving a reasonable quantity of Coke or a reasonable quantity of ice cream. And so, they can just increase the price a little bit and this little increase in price will be pure profit for the restaurant. And it will be perceived as good value for money by the consumers. More bang for the buck. Oh, I get like twice the size of ice cream for just 20 cents more. So why not? Why not go for the super large quantity of foods? But indeed, the problem is that it's never going to make people happier nor is it going to make them healthier for sure.

APPELT: That reminds me. I was just in the US at a McDonald's using the kiosk to order and I noticed that now when you see the different sizes of soda, the medium is first, then the small, then the large. Sorry, it goes medium, large, and then small. So, it really makes it hard to find a small size.

CORNIL: Exactly. And it also has to do, as I mentioned, to norms about portion sizes. Until the early 90s, a time that was way before we were born. Obviously. The only available portion size of coke was this glass bottle of 25 cL of coke. And people were very happy with 25 cL. That's enough to satisfy your thirst. Of course, you can have water. But also satisfy your craving for Coca-Cola. But now 25 centiliters, it's less than the child size at McDonald's. And who would go for the child size, right? A normal portion is like 60, even 75 centiliters, for instance, of almost pure sugar.

APPELT: So, I feel like we've talked a lot about how we are tempted to eat more. If you could distill down the message of the book around the advice for making it easier to eat less, is there kind of a top line summation of the research you want to share?

CORNIL: So first, what we make very clear in the book is that there's no trick, right? There's no secret formula that we're going to reveal and that's going to make people lose weight. We don't have the whole new diet that will solve every problem when it comes to food and overeating.

It's really about understanding how pleasure works and trying to consistently remind oneself that more quantity will not bring more pleasure. And the importance of smaller portion sizes to maximize pleasure and also the importance of trying to be more mindful when it comes to eating. So mindful eating is difficult to do. It requires concentration, cognitive effort, but it can just start with deciding to turn off the TV when eating. It can also come to, what food am I going to choose on the restaurant menu or what ice cream am I going to buy at Walmart? If there's an ice cream that is maybe higher in quality with better flavors that come in smaller

portion sizes, then just go for it because we know that larger portions, especially of lower quality food, is definitely not going to improve pleasure.

So, we've tried to develop some interventions among adults to try to encourage them to focus on sensory pleasure prior to choosing portion sizes. Of course, those interventions that we developed, they are for research purposes, they are hardly applicable in everyday life. But there can be some applications we can think of. The first one, something that I mentioned a bit earlier in this interview, is with kids, right? Integrating sensory education, food education in the classroom, like developing those habits very, very early at a young age. With, I believe, lifelong results in the way people approach food and make decisions about food as adults.

And the second thing, at least for adults, I would say it's almost too late. We can't get minds set about food. We're just very much anchored in our habits, right? There can be some nudges. There can be some nudges that can be actually developed by restaurants and by food manufacturers. It's something we've done a study at an experimental restaurant. We just, what we manipulated through intervention was what's written on the menu. And we were very much inspired by a menu from one of the trips that I did in Japan. And on the menu, the menu was educating people about how to eat, which was very interesting. Like first providing a lot of sensory information about the food.

And then telling them the importance of savoring, of appreciating each bite. So, the menu can contain those reminders, right? About the importance of mindful eating, about appreciating pleasure and the sensation. And in the experiment that we did, so we had three versions of the menu. The first version of the menu was like a simple description, like you can find on any restaurant menu. The second version had this type of pleasure intervention. Like providing details about the sensory characteristics and some reminder about the importance of savoring. And we added a third menu which would contain calorie and fat information. And then it was an all-you-can-eat type of restaurant, fixed price, and people could order any portion that they wanted.

So, what we find is that compared to the control condition with a very brief description, The people who received the sensory pleasure menu and also the calorie labeling menu tended to choose smaller portions and to eat less. But there was a critical difference between the sensory pleasure menu and the calorie labeling menu. It was how much enjoyment people recall from their eating experience. Those in the calorie menu... Calorie labeling menu recalled less pleasure because they were so obsessed about health and about weight. So, it kind of spoiled a little bit their eating experience. While those in the sensory pleasure menu condition, they reported higher pleasure and also a higher willingness to pay, a higher monetary evaluation of the food that they ate.

So, what we achieved here with this sensory menu or this epicurean menu, as we call it in the paper, is that there is a way for restaurants to serve smaller portion size while making consumers happier and potentially willing to pay more. So of course, it's not a trick to exploit a bias among consumers. The restaurant has to deliver with quality. They cannot just sell crap food and pretend that it's going to be delicious and then they can just serve less of it and increase their price. It has to come with also higher quality.

But it's just a way to show that calorie labeling and health warnings are not the only solution, right? A higher focus on pleasure can also lead to similar desirable consequences on the portion size preferences. And it's also something that would be more business friendly. So, it's a type of intervention that can be done directly on

restaurant menu. It can also be done on food packaging, right? So, you have some package of a cookies, for instance, that can be a bit smaller, but that would definitely focus on the sensory quality of it.

Consumers are likely to accept that. They are likely to accept a decrease in quantity for an improvement in sensory quality. So that would be the main takeaways here, like the main methods in order to encourage epicurean eating.

APPELT: It's really amazing to see that there is a solution that makes it both more pleasurable and reduces portion size. That is kind of the ideal and that the epicurean descriptions get you there is really exciting and makes me very curious to read more of the books. I'm looking forward to that. But before I let you go, we always ask if our guest has a message for BI practitioners in training or folks new to the field.

CORNIL: Sure, it's something that I love teaching actually. It's really training yourself about understanding causality versus correlation. It's a mistake that I see everywhere all the time, including in academic research, this confusion between causality and correlation. And as a matter of fact, for a very long time, something that I briefly mentioned, there was this belief that drinking red wine would increase life expectancy. Lots of media are crazy about that story, which was based on academic research at the time. If you use the proper methods to establish causality, such as experimenting, then you're not going to find the same type of results as with pure correlational studies.

It's really the importance of experimentation. Understanding the importance of randomly assigning participants to different conditions, which helps controlling for any confounding factors, and just observing the differences across the groups. This is the only way to, or one of the main ways to establish causality, to prove that whatever intervention you're designing will have a causal impact on the behavior that you want to change.

So clearly understanding correlation versus causality, just being extremely suspicious, extremely skeptical about any consultant report or any media story. And sometimes even academic research that claims causality, because when you're looking at the details of a study, you realize that it's only a correlational study and that they've not used the proper tools, the proper methods to establish causality. Of importance of understanding that and learning about proper experimentation, which is not hard to do, especially online. You can experiment online extremely easily at a low cost.

APPELT: I think that's really great advice. And I think both the points you made of in your own work, making sure you disentangle correlation and causation as much as you can. Any time you're um a consumer of news, also being having your skeptical hat on and thinking if it sounds too good to be true, it likely is. And so, thinking through, are there confounds? Are there ways this could be correlation rather than causation? So, I think that's a really good message. I also always ask our guests if I should have asked anything else and didn't. Did you have any last thoughts you wanted to share?

CORNIL: I think we've covered it also. The last words would be food is great. Eating is awesome. There's nothing to be guilty about. But learn about the food that you're eating, the stories behind the food, how it's prepared, what is the cultural significance of it. Appreciate the savors, the textures. And I know we're both fans of cheese. There is so much to learn about cheese. Every cheese has a specific story and it's beautiful. And it's delicious, something that we should enjoy, celebrate, and definitely not feel guilty about.

APPELT: Well, that is a perfect message to end on. I'm always happy to end with the message of eat more cheese and enjoy it and learn about it. So, thank you for joining us today. Good luck finishing the book. It's going to be hard to wait to read it, almost as hard as waiting to eat my next piece of cheese. So, thanks for doing the work, thanks for sharing the work, and we appreciate your time.

CORNIL: Thank you very much, Kirstin.

APPELT: And thanks to our listeners for joining another episode of Calling DIBS.

Calling DIBS is recorded and edited on the traditional, ancestral, and unceded territory of the xwməθkwəyəm (Musqueam), Skwxwú7mesh (Squamish), and Səlílwəta?/Selilwitulh (Tsleil-Waututh). Calling DIBS is edited by Rishad Habib, Siobhan Cook, Isabella Jaramillo, Parnian Ashrafi, Kashish Khatri, Ethan Lee, Olin Becker, and Kirstin Appelt. Intro and outro music are excerpts from "resonance" by airtone (2020; http://ccmixter.org/files/airtone/61321), licensed under Creative Commons Attribution Noncommercial (3.0).