**Feeding Frenzy: The Food Industry, Marketing, and the Creation of a Health Crisis**

**SECTION - INTRODUCTION**

**Raj Patel:**
In every way that matters, we are being made for the food system. We are being transformed into the kinds of consumers who find the most ridiculous things palatable.

**Kelly Brownell:**
The food companies are in business to do one thing: sell as much food as they possibly can, without respect to how healthy it is.

**Yoni Freedhoff:**
I don't think consumers stand a chance. I really don't. I think people who are educated in nutrition don't stand a chance.

**Bruce Bradley:**
If as a marketer, I could be deceived, I really felt, "well what sort of chance does your average person have of really navigating the store that are truly healthy or better for them?"

**Michele Simon:**
We've taken an essential human need and really turned it over for corporate profit making.

**Sut Jhally:**
Food companies have essentially declared war on the health of American consumers. It's outrageous we allow it to continue.

**Kathryn Montgomery:**
It's all designed to further consumption, and to make consumption really unconscious.

**Kelly Brownell:**
And as those companies are selling as much food as they can possibly do, the world is gaining weight, and it's become a real crisis.
News Clips

*Human eating habits have changed more in the past century than in the previous 10,000 years.*

*Almost a third of Americans are obese. With all the problems of heart disease, type 2 diabetes, and other health conditions that go with it.*

*The study says that obesity is growing faster than any other public health problem in US history.*

*We now are seeing a veritable tsunami of healthcare costs.*

**Marion Nestle:**

Type 2 diabetes has become rampant as result of gaining weight so that changes the game because it means that somebody’s gotta pay for the healthcare of people that have obesity-related chronic diseases. And this changes obesity from being a personal problem to being a societal problem.

**Yoni Freedhoff:**

I don’t think people have changed as far as the notion that we are seeing an epidemic of gluttony and sloth that in turn leads to obesity that not what’s going on. But the world in which we all live –that has changed dramatically and one of the major contributors to that change has been marketing.

**FEEDING FRENZY TITLES**

**Kelly Brownell:**

There used to be a time in American history when the food you had available was something grown or raised on a nearby farm. There wasn't a lot of distance – physical distance or psychological distance from the food. But now there’s enormous distance. It’s genetically modified in some cases, lots of things are sprayed on it, and by the time it ends up in your market or on your table, it sometimes has undergone so many transformations that you’re pretty psychologically distant from it as well. And this creates a problem because then people aren’t attending to the system that produced the food and they’re likely to eat what ever happens to taste good or is most convenient or is cheapest and that’s a pretty difficult road to go down.

**Sut Jhally:**

We haven’t always had an obesity crisis. In fact, it was only in the 1980’s that we started to see the numbers rise. And that was also when Americans stated to diverge from the rest of the world as well. It’s led to the image of the “fat American”.

**Video Clip- Super Size Me:**

*The industry doesn’t want you to know the truth about what you’re eating, because if you knew, you might not want to eat it.*
**Morgan Spurlock:**
*I think I’m gonna have to go Supersize...look at that Coke!*

**Sut Jhally:**
There’s also been increasing awareness of the problem with documentaries, T.V. shows, and books dedicated to this topic. But along with this awareness has come the idea that the cause of obesity is down to personal failures in people – that some people with weak willpower just eat too much and don’t do enough exercise. That’s the central premise of one of the most popular reality shows on T.V., “THE BIGGEST LOSER”.

**Yoni Freedhoff:**
The Biggest Loser I think is a hideous spectacle that really embodies everything that is wrong about societal attitudes toward weight management today.

**Video Clip - Biggest Loser:**
**Allison Sweeney:**
*I swear to god, Loose the win, go home, goodbye Pam!*
**Pam:**
*No!*

**Yoni Freedhoff:**
It’s the under-eat, over-exercise, suffer literally ‘til you puke show, that teaches people that weight loss is incredibly challenging and simultaneously incredible easy. Its incredibly challenging because you have to do insane inane amounts of exercise, but it’s easy because if you just want too badly enough, you can do it.

Because truly, what that show also teaches people is that the only value of health is what the scale reads. And I really shudder to think what this show will do to people, especially kids, in regard to self-esteem, body image, and relationship with food.

**Video Clip - Biggest Loser:**
**Alison Sweeney:**
*One pound – Danny, you won!*

**Sut Jhally:**
If it’s just a matter of personal responsibility, we have to explain why obesity isn’t spread out evenly across the population, but appears in very structured ways. Historically, we can see that some regions and states develop higher rates much earlier than others. For example, Mississippi in 2001 is followed by Alabama and West Virginia in 2002 and Indiana in 2003 in having at least 25% of its population classified as obese. Are we saying that people in these states have less will power than the rest of the country? Once you realize that individual responsibility is just a small part of the answer, we can better focus on those broader structural factors in our food environment that are really driving the problem.
Yoni Freedhoff:
People want to believe – including society, we want to believe - that it was laziness that has got us where we have gotten. That we have slowed down, that we are gluttons, we are lazy. But you know you look at obesity rates rising in 3-6 year olds. I don’t think we've seen an epidemic loss of willpower in 3-6 year olds. I don’t think they’re just not trying hard enough anymore. This is clearly something different.

Sut Jhally:
It’s also really important to remember that obesity is just one of the health problems that are connected to diet – there have also been alarming rises in rates of cancer, hypertension, heart disease, hyperactivity in kids, and diabetes.

Yoni Freedhoff:
And even just back in the 1990s, we referred to type 2 diabetes as adult onset diabetes because we didn’t see it in children. And now that same adult onset diabetes is being diagnosed regularly in kids under the age of 10 years old. So things are changing very dramatically, very rapidly. And we've seen weights go up, we've seen chronic diseases go up over time. And these are diseases that, in some cases, may be relatable to weight but in some other cases are relatable, potentially, just to diet.

Sut Jhally:
The obesity epidemic is like the canary in the coalmine, telling us that our entire food environment has become toxic and if we really want to deal with the problem we’ve got to deal with the full complexity of it. To do that, we have to go back to how we farm.

SUBSIDIES AND PROFITS

Video clip – Archival farming:
*Back in 1920 it took one man on the farm to feed every 10 people in this country.*
*Nowadays one man feeds forty. One man does the work of four and the other three move on to new jobs.*

Marion Nestle:
The United States Agricultural Support System started out in the 1930’s as a way to support farmers who couldn’t sell their products because the public didn't have any money, it was during the Great Depression. Over the years, farmers came to take the subsidies for granted and push for them more and more, and because of the way the legislatures worked in the United States, they were able to form very close relationships with the Department of Agriculture and with members of Congress from agricultural states. So congress kept voting in more subsidies for increasingly larger farms and increasingly richer farms.
**Sut Jhally:**
The person who's often identified as creating this problem is Earl Butz, who was President Richard Nixon's agricultural secretary during the early 1970s. He created a new subsidy structure whereby the government was essentially paying farmers to grow more food, grow more corn especially. In fact his mantra was “Get big or get out,” and this led to an unprecedented increase in the amount of corn that was able to be produced for the market. And it also led to the rise of an agri-business sector that is dominated by huge conglomerates.

**Marion Nestle:**
So we've ended up with a subsidy system that subsidizes corn, soybeans and cottonseed – that treats fruits and vegetables as specialty crops and gives them nothing, except for a few very small pilot projects. It essentially subsidizes the basic ingredients for a lot of different kinds of processed foods.

**Bruce Bradley:**
They really create cheaper commodity foods that become ingredients that processed food companies depend on to deliver low-nutrient, low-quality food to consumers.

**Raj Patel:**
That’s really the story behind not only the sort of weird modifications of soy that we see every day, but also things like high-fructose corn syrup for example. It wasn’t someone just deciding, you know, someone looking at a cob of corn and thinking, “this will go well in soda!” It required invention, it required specific targeting, it required investment in processing, and a lot of that came courtesy of the US federal government.

**Sut Jhally:**
So the obesity crisis can’t be separated from the system that produces corn in this volume.

**Marion Nestle:**
The number of calories in the food supply rose from 3200 per capita per day – every man, woman, and child in the country, in the early 1980s – to the present 3900. Which is about twice what the country needs on average. So food companies had to figure out ways to sell it.

**Sut Jhally:**
In this situation, consumers thinking about their health, what they eat, how much they eat, is really a danger to the food industry because it will potentially limit consumption of precisely the kinds of cheap processed food they have in such abundance.

And so, in one way, the food industry has declared war on American consumers.
Raj Patel:
The head of Archer Daniels Midland, a man called Dwayne Andreas, once went on the record saying, “the customer is our enemy, and the competitor is our friend. And there is not one grain of anything in the world sold in a free market. The only place that you see free markets are in speeches of politicians.” Now that’s an odd thing for a Fortune-500 CEO to be saying, but actually he speaks the truth. He knows that the way that corporations and cartels of corporations work is by demanding large amounts of subsidy from the government, and being able to control markets, being able to manipulate prices, and also to manipulate what it is that consumers demand at the end of the day.

Marion Nestle:
The food industry is faced with a very, very serious business problem: there’s too much food available. And so, food companies are in the position not only of selling their products in an extremely competitive food environment, but because they’re publicly traded companies that must answer to Wall Street, they not only have to make a profit but they have to grow that profit every 90 days.

Bruce Bradley:
And so food companies are trying to spin themselves as growing and vital companies that can, in a way, compete with the Apples of the world for your investment dollar. To do that they’ve got to show growth, and then accurately hit their profit targets.

Video clip- Kraft corporate news story:
Kraft now expects to squeeze an additional 1 billion dollars in revenue from the transaction by 2013. That news yesterday sent Kraft shares to a 52-week high. Where is that coming from?

It will come in three areas, it will come in white space as the opportunity to put Kraft products through the Cadbury distribution system in markets like India and Africa, Turkey for example. We have a terrific opportunity to benefit from the sales and distribution strengths of Cadbury and their markets, particularly in immediate consumption channels...

Bruce Bradley:
When you put those demands against maybe trying to weigh consumers’ needs to eat healthy, the consumers’ needs totally pale and don’t even get discussed.

Marion Nestle:
And so food companies are under terrible, terrible pressure to sell as much food as possible, to increase their sales, and to do everything they possibly can to get people to buy their products. That’s why they pay advertising agencies a fortune to sell their products for them.
Sut Jhally:
Whenever someone tries to point out the amount of power that corporations have, the idea that comes back all too often is “personal responsibility.” Now, it’s not surprising when conservatives go along with this line of thinking.

Video Clip: Glen Beck:
It is the idea that there is absolutely no personal responsibility, that you are helpless because they come and hypnotize them or whatever it is.

Oh my, Big Food. Jamming food down Glen’s throat right now!

Sut Jhally:
New York mayor Michel Bloomberg has also been under attack.

News clip:
New York City planning to outlaw sales of big sodas and other sweet drinks...

Sut Jhally:
...for trying to limit the sales of sugary drink in New York. But it’s really surprising when liberals like Jon Stewart also buy into this corporate line of personal responsibility, hook line and sinker.

Video Clip - The Daily Show:
John Stewart:
I’m all for promoting public health, but Mr. Mayor this plan makes your asinine look big. You realize the position you personally put me in, don’t you? Watch this!

FOX News Pundit:
No one would argue that you should drink nine Mountain Dews a day but you ought to have the choice, as an adult, to make those decisions for yourself.

John Stewart:
I agree with Tucker Carlson. I will never forgive you for that Michael Bloomberg!

Yoni Freedhoff:
To suggest that personal responsibility is the solution to this, I think really is stupefying and dumb because we do know is that it is about overconsumption. What we can’t seem to do is reduce that consumption, and that is because we are living in a world that constantly pushes consumption on us, and we are living in a society that has normalized that.
SECTION: SELLING THE SURPLUS

Sut Jhally:
The issue of oversupply is a very old one for corporations – it’s been there since the
start of capitalism. And the answer has never been, as it might be, to cut back on
supply, i.e.- to limit production, but it’s been always to redefine the problem as
under-demand, that consumers aren’t buying enough. That’s why advertising and
marketing were created, as the tools to then create this demand.

Video clip – Archival:
This year American food companies will spend 150 million dollars to improve nutrition,
convenience, and variety in your daily menu. And you the customer win in this
competition. Competition and free enterprise has changed our lives for the better and
advertising is what keeps this competition key.

Michele Simon:
One mistake people often make is thinking about marketing as just advertising.
Right, so we think of commercials or magazine ads, and so forth. Advertising is just
one specific form of marketing. Marketing is a much broader concept, which means
everything from the presence of food in stores: just having them available is a form
of marketing. And then where they are placed in the store and then everything that
you see on the box: the logo, the coloring of the packaging, the "call outs" as they call
them on the front of the box – all a form of marketing.

Video clip: archival video:
The supermarket. Created by research and industry is the showplace of today's
agriculture.

Sut Jhally:
Historically, the shifts that accelerated in the 1980’s, started just after the Second
World War when corporations were looking to sell the products of an expanded
economy. The first thing they had to do was to get American consumers to buy
things in the market that they previously had done themselves.

Video clip: archival ad for Durkee’s Minced Onions
and use!

Marion Nestle:
During the Second World War, lots of new technologies were introduced. When the
war was over, there were lots of products that needed to be sold and marketing
efforts focused on convincing, women particularly, that their lives were oppressed
by cooking and that their lives would be much better if they bought pre-prepared
and processed foods, and that kicked off the processed food industry in a really big
way.
**Video clip - Archival Swanson’s TV Dinners:**

Get a world away from the every day with new Swanson international dinners! German. Chinese. Italian. Mexican Style. They take you away from the every day to a world where the food makes you want to stay. Those real sensational international frozen dinners from Swanson!

**Raj Patel:**
In the United States, one of the staple processed food is TV dinners. How they came about is kind of an odd story. They were invented in 1953. They were called TV dinners because TV’s were an aspirational consumer good that kind of looked like these aluminum trays.

TV dinners were a sort of cultural intervention that came as a result of a food surplus. There was an oversupply of frozen turkeys, these turkeys sort of wondered the railroads of the United States in their refrigerated cars. And some marketing whiz decided wouldn’t it be a good thing to take those frozen foods and make them available as frozen foods that women would take home and provide to their families.

Right there you have the intersection of a number of sort of factors behind the food system. One is just an oversupply that’s due in part to government subsidies, and then secondly the industrial oversupply – that then gets marketed back into society as a way of liberating people from the chore of having to cook. And in particular liberating women.

**Sut Jhally:**
As women moved into the formal work economy in the 1950s, they were still of course responsible for the traditional role of mother and cook, so the pressures on them were intense. In fact, a major demand of the emerging women’s movement was to recognize and deal with this gender inequality in the home. The food industry had no intention, and still don’t, of challenging gender inequality, they just wanted to sell to it

**Video Clip – ad:**

*Dinner time, oh dinner time...too late to make dessert? Wait! It's not too late to make dessert! Never too late anymore! Because now the Jello family of famous desserts bring you new Jello Instant Pudding that needs no cooking – just add to milk...*

**Sut Jhally:**
So despite all the talk of freeing women in commercials, we still live in a country where gender-based wage inequality is the norm, where a third of female-headed households are food insecure, and if anyone has the time or money for it, where the burden of cooking still falls disproportionately on women.

**Video Clip – Lean Cuisine:**
Fashion or food, it’s all about taste...
Yoni Freedhoff:
We have so normalized not-cooking. We want to have boxes give us health. We want the boxes to save time for us. The problem is that they, unfortunately, don't give you the same bang for your health buck as actual cooking does. But we truly have been, I think, brainwashed, both by marketers and by ourselves.

Sut Jhally:
So the obesity crisis has many ingredients: government subsidies, corporations putting profits ahead of the health of consumers, marketers pushing processed foods. But about thirty years ago all these factors began to accelerate.

Marion Nestle:
So, what happened in the late 1970's were a series of deregulatory measures that made food companies produce more food.

And this happened as a result of deregulation of agriculture, deregulation of marketing, and deregulation of Wall Street. Agriculture began to produce more food -- that food had to be sold. The lack of restrictions on marketing meant that food companies could advertise more prominently.

Video clip: Wendy's ad:
Where's the beef? At Wendy's we have a hamburger we modestly call a single, and Wendy's single has more beef than the Whopper or Big Mac...

Marion Nestle:
They could sell food in larger portions because the price of food was low because of supply and demand. They could put food everywhere and carry out the idea that we want a Coke within arm's reach of every single person in America. They had to make it socially acceptable to eat all day long.

Video clip-Kudos
Kudos, I'm Yours!

Video clip- Cupholder ad:
Oh cup holder, you're holding nothing – nothing but unlimited potential – coffee, smoothies, soda, chips...

Kelly Brownell:
When I was young nobody ate in their car. And now, if you're an automobile manufacturer and your cup holders aren't big enough to hold those large cups from a fast food restaurant, you'll lose market share. That's a food norm that's been entirely changed. When I was young, people ate three meals a day and maybe a snack, but that was about it. Now people are grazing all day long.

Video Clip-Taco Bell Commercial:
You're looking good, you know you do.
Kelly Brownell:
Now the fast food companies are trying to convince people that it’s okay to eat fast food after midnight...

**Video Clip-Taco Bell Commercial:**
*Young Man:*
You’re not “Karen”—that’s a fourth meal!

Kelly Brownell:
...especially that youth demographic that are up late.

**Video clip – Taco Bell ad:**
Everyone’s a fourth mealer – some just don’t know it yet. If it’s not fourth meal, it’s just food.

Marion Nestle:
All of those changes, which occurred without anybody really noticing, created a food environment that encouraged people to eat more than they used to and more than they needed, and obesity is the result.

Bruce Bradley:
We used to eat food mainly to nourish ourselves, you know. Meals were very functional, they were more nutritious, they were usually home cooked. Food has become a bigger part of celebration and everyday celebrations.

**Video clip – Wendy’s ad:**
*Mother:*
Did you get hit by a pitch?
*Child:*
No!
*Mother:*
Well, that’s something to celebrate!
*Voiceover:*
There’s always something to celebrate with Wendy’s new frosty cone!

Yoni Freedhoff:
If they bend a blade of grass on a sports field, they get an ice cream sandwich. If they pass a test at school or they have some special occasion, there are cupcakes over there.

Sut Jhally:
So food marketing doesn’t just sell food, it tries to connect food to all the important aspects of people’s lives.
Video clip: Dunkin Donuts wedding ad:
Can I get an Iced Coffee?
Made with 100% Arabica beans, just the right amount of cream, and served over ice...

Sut Jhally:
From family diners around a table, to having a good time with friends, to love and emotional intimacy, even to the idea of what good parenting means.

Video Clip: Kelloggs Corn Flakes ad:
With each morning there comes a new beginning...

Marion Nestle:
We respond to these advertisements in a very emotional way that is absolutely under the radar of critical thinking, and that’s just exactly how we’re supposed to.

Bruce Bradley:
So tapping into those emotions is a really powerful way to sell product for the food industry. It’s also a really easy way to get around products that may not have a whole lot of attributes that you can spin a story around. So if it’s a fast-food meal, talking about the happy times with your family is a very convenient way of misleading people about how good the product actually is.

Video Clip-Lay’s Ad:
This thing called love – I just can’t handle it...

Sut Jhally:
Some food ads also promise an intense physical or taste experience, and tells us that food will make us happy and contented.

Video Clip- Dove chocolate Ad:
Only a chocolate this pure can be this silky...

Sut Jhally:
And sometimes this intense experience is carried over into a very intimate relationship with products that can border on love, or even sex.

All these connections that ads promise with food have to be consummated at some point, and the major place that happens is the supermarket.

Marion Nestle:
Supermarkets are not social service agencies. Even though they provide enormous convenience for you and an enormous convenience for the community. Their job is to make money and, in order to do that, they have to sell all the products they possibly can. They sell shelf space to the producers of processed food, so that it’s not an accident that when you walk into a supermarket, the entrance hallways, is lined with six foot high piles of soda cans. The first thing you see is always the
produce section, because that’s what attracts people to come into the store. And everything else in the store is the center aisles or the processed food aisles, where the companies buy shelf space.

The special exhibits that are at the end of the aisles -- the end caps, they’re called -- are also paid for by the company to try to push those products.

Most people want to go into a supermarket and get out as quickly as possible, but they know from vast amounts of research that the longer people stay in a store, the more they’ll buy. And so that’s why the aisles are so long and you can’t escape. That’s why the milk is always at the furthest corner from the door, so that you have to walk through the entire store to get to it. And many of the decisions about lighting, music, placement of products are very, very carefully designed to get you to stay in the store and impulse buy.

**Video Clip – news re: supermarket research:**

*From eye-tracking glasses to simulated stores – high tech tools in Bloomington are reshaping retail worldwide. Here I.U. professor Ray Burke and his students study how all of us shop and how stores encourage us to buy more.*

*A tracking map of hundreds of actual shoppers to a modern stores shows which aisles the shoppers pass, and which ones they wear out.*

**Raj Patel:**

Millions of dollars are spent every year trying to figure out how to short-circuit our rational, free choice. And that’s what supermarkets are designed to manipulate and to encourage us to use, to rely on impulse purchasing.

**Video Clip – news re: supermarket research:**

*Mini-fridges are powerful visual magnets. You see the frame around there? That tends to draw in the shoppers visual attention. That’s why you see so many of them now. Big name retailers under-right much of the research, hoping to sure up their shares of a trillion dollar a year industry.*

**Marion Nestle:**

It’s also why all supermarkets look pretty much alike.

**Bruce Bradley:**

I think we’re misled in every possible way out there. From the ingredients that are actually in our food, to where our food came from, the impact of those ingredients on our environment, the impact on our bodies, the messaging that the food companies tell us about that food (if it’s healthy or better for us). I think you can look at every single step of the process and point to deception that’s going on.
SECTION: WHAT IS FOOD?

Raj Patel:
In every way that matters, we are being made for the food system. We are being transformed into the kinds of consumers who find the most ridiculous things palatable, who find the most incredible odd foods to be weirdly attractive and acceptable.

And I’ve got no moral high ground here, I mean I drink Red Bull. I hate – I hate to admit it, but I drink Red Bull.

It’s kind of weird if you look at the ingredients: its sugar, caffeine, water, and a bunch of amino acids. Where is the place you can you find these amino acids more cheaply and plentifully? It’s in your own urine. But because of marketing, because of the way that this drink fits into our lives, the way that it gives you a couple of more hours in the day to be able to just make it through. All of a sudden, weird strange things that the food industry provides us, become convenient.

Michelle Simon:
Several years ago, the beverage industry got the bright idea of combining caffeine with alcohol. So we had products like "Four Loko" and Joose that were very attractive to youth, high in alcohol and caffeine.

This resulted in college students winding up in emergency rooms and, in some cases, even deaths.

Students:
Wow, Holy ****...

Michelle Simon:
If we’re talking about the proper role of government I can think of no better example than the FDA saying these products have crossed the line. There is no way to safely combine caffeine and alcohol, and these products have to go. Then the products went away. And we forget about it when the next fight come along.

ABC News clips:
Tonight a lawsuit alleges one of those energy drink could be linked to a death, raising the question, “how much caffeine is too much?”

I don’t even understand why they’re even marketed. I think it’s irresponsible. Doctors say the doubling of ER visits is just a symptom. The real problem is the failure to regulate energy drinks.
Marion Nestle:
“Monster Energy” for example, has positioned itself as a dietary supplement. It uses a dietary supplement label. It is a way to take advantage of the looser regulation of dietary supplements than of food.

Kelly Brownell:
At first glance the question, “what is food?” seems pretty easy; it’s anything that we can put in our mouth and swallow for the most part. But once you scratch below the surface, it gets complicated.

Marion Nestle:
I’m a nutritionist, so we define food as any plant or animal substance that provides nutrients that are needed by the body.

An apple is unprocessed or it’s minimally processed. You wash it, you cut it up, and you eat it. You grind it up and turn it into applesauce, and you’ve got a somewhat more processed product. You start adding sugars and preservatives to it, and it’s more processed. And if you bake it into some kind of Pop Tart, you’ve processed it even more.

Kelly Brownell:
Look at a Pop Tart box, for example, and see what’s on that list. All these names of one chemical after another.

Sut Jhally:
So when pop-tarts say they are made with “real fruit filling”, what they really mean is that only 2% is fruit. In fact if you were to look at a dehydrated pop-tart, it would look like some kind of chemical compound made in a laboratory (which is actually what is), not food made in a kitchen.

Bruce Bradley:
The toolbox that big food companies use is much different than the one that you’ll find in your kitchen.

It involves using lots of salt, because out palettes love salt. Lots of sugars and fats. What they lack in freshness, those fats and sugars can either give mouth-feel or taste that compensates for that. And then there’s tons of flavorings in there, a chemist has combined to create a flavor profile. And there are all different flavor profiles out there that these food companies will test against consumers, try to understand what’s the right one that will get a consumer coming back to eat more, and more, and more.
Sut Jhally: Food scientists actually call this “the bliss point,” where you keep eating, endlessly, an addiction that’s never satiated or satisfied. So people will continue eating and drinking (and buying of course). The most successful products (like Coke or Doritos) have been scientifically formulated so you literally can’t just eat one.

Former FDA commissioner David Kessler actually compares it to how tobacco companies manipulated nicotine content to make their products more addictive.

Yoni Freedhoff: The reason that there is so much salt, sugar and fat in our foods is two-fold. One -- they sell food, right? So the "I bet you can’t eat just one" phenomena is very real.

Kelly Brownell: The parallel I make is how people deal with a coca leaf in nature. So the coca leaf in nature, mildly reinforcing but nobody over consumes it and people live in harmony with it. But when it gets processed into cocaine, or becomes hyper-processed into crack cocaine, the human body no longer deals with this in a very favorable way. So take corn, for example. Nobody abuses corn as far as I know, but when you process it into salty snack foods, people overeat these things like crazy. And when you do these sort of things, are they acting on the brain in an addictive way? Are they hijacking biology in some way that makes self-control and discipline difficult to achieve?

And there are now studies with lab animals and studies with humans, especially using brain imaging techniques, that show pretty striking results that some foods -- particularly sugar, it appears -- act on the brain in ways similar to things like morphine, nicotine and alcohol. Nobody claims the effect is as strong as it is with those highly addictive substances, but the effect still seems to be there. Namely, activation of the reward pathways in the brain.

Sut Jhally: From an evolutionary perspective, our bodies are designed to eat whatever food is put in front of us, because for most of our history as a species, our relationship with food has been one of scarcity – there was never enough, we didn’t know when we’d eat next. So when there was food our brains and bodies were programmed to eat however much we could, with the extra being stored as fat for when we needed it later.

Video clip: Welcome to a special addition of a reckless eating challenge. Today we’re gong to be taking on the full menu Taco Bell menu challenge...
Sut Jhally:
But when we’re no longer in a situation of food scarcity, but the opposite, then our genetic history is not going to tell us to stop, but instead it’s going to tell us to keep eating.
When this process is aided by food science, consumers are like sitting ducks.
Given what we know about evolutionary history.
We should be even more careful about how much we eat. Instead we have ignored the dangers and kept increasing portion sizes.

Video clip:
Oh no! It’s over!

Sut Jhally:
So over the years, the food industry has made portions bigger because it’s so profitable - and our sense of what’s normal has shifted without us even noticing how many more calories we’re consuming.

Marion Nestle:
The sixteen ounce soda in the 1950s was considered a large and big enough to serve three. Now it’s considered a small. That’s what happened with portion size.

Video clip - Parks and Recreation:
Leslie Knope:
Ms. Pinewood, recently many of the local restaurants have changed their small options to a whopping 64 ounces. Most people call it a gallon but they call it a regular. Then there is a horrifying 512 ounce version that they call child size. How is this a child size soda?

Kathryn Pinewood:
Well, it’s roughly the size of a two-year-old child, if that child were liquefied. It’s a real bargain at $1.59.

Leslie Knope:
I’m sorry Ms. Pynewood, but why would anyone need this much soda?!

Kathryn Pinewood:
It’s not my place to speak for the consumer – but everyone should buy it.

Marion Nestle:
And the research shows now that even people who are trained, who are completely aware of the fact that larger portions have more calories, encourage people to eat more calories, and encourage people to underestimate the number of calories they’re eating, as Brian Wansink, who’s a professor of Cornell has so brilliantly shown, people still fall for it. His own students fall for it!
**Brian Wansink:**
So, here’s one of the rooms here in the Food and Brand Lab. It’s got one-way mirrors, it’s got hidden cameras, which aren’t really too hidden, we have scales underneath the table to see how fast people are eating.

When we do studies we give people a small bowl or a large bowl, something more like what we have at home. The typical person will serve about 23% more in these bigger bowls. And the fact is, they don’t realize they’re eating more because 4 oz of cereal looks like a ton here, and 4 oz here is barely covering the bottom. So what do we do? We add more.

We did a study where we took people who weren’t hungry and gave them food that wasn’t any good to see what would happen. This was a movie theater and we gave people buckets of popcorn like this, free, or huge buckets of popcorn but this was terrible, 5-day-old stale, Styrofoam tasting popcorn. What happened is, if you give somebody a big bucket of terrible popcorn even though they were full, they still ate about 34% more. And if you asked them, "Well why? Were you hungry?" They’ll go, "No, I wasn’t hungry!" "Because the popcorn is good?" "No the popcorn was terrible," and if you say, "Do you think it was the size of the bucket?" to a person, they go, "No, it couldn’t have been." And that’s why mindless eating has such an incredible impact on us, it’s that we want to think that we’re smarter than a bucket.

**SECTION: THE FOOD ENVIRONMENT**

**Kelly Brownell:**
The words ‘personal responsibility’ ring true to most Americans. That we’re a nation of people that can pull themselves up by the bootstraps and, if you try hard, you can accomplish your life goals and the way you do this is you take responsibility for your own actions and you work hard. And that’s not a bad way to think about the world and a lot’s been accomplished with that kind of philosophy. But, in some cases, things occur in the environment that overwhelms personal responsibility. The food environment has become so bad, and so toxic even, that as you put this environment into a culture, there’s a very predictable rise in disease, especially obesity and diabetes. And if what’s happening in the United States isn’t convincing enough to you, it’s happening in every country in the world. Well it’s hard to argue that people in every country in the world are becoming less responsible.

**Sut Jhally:**
One of the best examples of how environment affects us is when we look at what happens to immigrants who come to the U.S. The typical 5’4” immigrant woman gains an extra 9 pounds compared to the average woman who stayed in her home country. So the question is, what’s in the food environment that encourages this kind of weight gain?
**Brian Wansink:**
Eighty percent of food decisions we make, eighty percent of food we eat is within five miles of our house. It includes our house, our school, where we go to work, our two or three most favorite frequented restaurants and where we do our grocery shopping. And for most of us, that’s the food environment that makes all the difference.

**Sut Jhally:**
So you could look at a map and mark those areas where it’s much more difficult to find access to food, especially to fresh fruits and vegetables. And not surprisingly, those places match up with where poor people and people of color tend to live.

**Raj Patel:**
_How_ the way that we choose, sits on top of a range of other social factors that have nothing to do necessarily with food, but about everything from health care to the geography, the layout of cities, where in poor neighborhoods, you just can’t find fresh fruits and vegetables.

Working Americans will live much further away from the places where that they work so you spend a lot more time in your car. You find yourself needing to hold down more than one job in order to be able to keep your health insurance. Then you have to pick up the kids and you have to be able to provide for them. In the circle of sort of accelerated capitalism that the U.S. has fomented, and with real wages for working Americans remaining pretty much the same since 1980, it’s not surprising that your choices really are between the “Dollar Meal” at Wendy’s or the “Dollar Meal” at McDonald’s— and that’s no choice at all. We’ve been sold a food system full of choice, and in the end the kinds of choices that are given us are choices dictated by the food industry.

**SECTION: THE ILLUSION OF HEALTH**

**Video clip - Jamie Oliver show:**
_Tell me how you feel looking at this_
Yeah, it’s gross.

**Michele Simon:**
The good news is that Americans are waking up to this problem.

**Video clip - Jamie Oliver show:**
_This stuff goes through you and your family’s body every week. And this is going to kill your children early._

**Michele Simon:**
We have all kinds of programs, and the first lady talking about it.
**Video clip-GMA News**

*Michele Obama:*
One in three kids are overweight or obese and we’re spending one hundred and fifty billion dollars a year treating obesity related illnesses, so we know there’s a lot at stake.

*Marion Nestle:*
Ten years ago, hardly anybody was working on food issues. Now, there are mass movements of young people who are trying to change the food system to make it healthier for people and the planet.

*Michele Simon:*
Well, this is bad news for the food industry. Because that means people might actually turn to real food that comes from nature, and the food industry can’t provide that. So they have to find ways to make you think that there’s real food in those boxes of highly processed food.

*Sut Jhally:*
So the very legitimate health concerns of consumers are being co-opted without much change to the actual products.

**Video clip – ad:**
The best thing about this bar: it’s not a candy bar. 130 calories, 7 gram of protein...

*Marion Nestle:*
Food companies wanted health claims because their research showed that, if there was a health claim on a package -- that this food would help you prevent heart disease or prevent cancer or keep you thin or whatever -- that people would buy more of it. In the early 1980’s, Kellogg made a deal with the National Cancer Institute, which was very eager to have the public learn the high fiber message.

**Video clip – Kellogg’s ad:**
I don’t usually do this, but I saw this number on TV and I called it, it’s to the National Cancer Institute and what I found out is pretty convincing. They believe that a high fiber low fat diet may reduce the risk of some kinds of cancer. So I made some changes, like eating All Bran the natural high fiber cereal from Kelloggs.

*Marion Nestle:*
That sort of broke the health claim barrier. And in 1986, Kellogg’s lawyers and nutritionists wrote a petition to the FDA to allow health claims on food packages, and the language from that petition was incorporated almost word-for-word in the 1990 act of Congress that put food labels on food packages, the argument being that if food packages were going to have to say what ingredients they had that were bad for people, like sugar and saturated fat, that food companies ought to be able to say what was good about their products -- and Congress agreed and ordered the FDA to allow health claims on food packages.
Yoni Freedhoff:
It doesn’t matter how sugary the cereal is -- I guarantee you, you will not find a cereal box that doesn’t have one direct or inferred health claim on it. For 3/4 of a bowl of "Reese's Puffs," you actually get more sugar than you would get in an actual Reese's cup.

And I’ll tell you something else, people don’t pour just 3/4 of a bowl. So chances are they’re going to pour two. So they are getting more sugar than they would get in a pack of Reese’s Peanut Butter Cups in a cereal that is being marketed as something you should eat every single day for breakfast.

Reeses ad:
A delicious part of this complete breakfast!

Yoni Freedhoff:
You look at "Go-Gurt": it has very little nutrition, it has 2.5 teaspoons of sugar per little tube. And we are suggesting to children, and many parents believe it, that this is a healthful choice. Why? Because it contains the word, well I guess "gurt,". And so that’s this whole area of inferred health. So you don’t even have to make a claim anymore. All you have to do is put the word "yogurt" on or put the word "whole wheat" on, or put the word "Omega 3" on -- you don’t have to suggest what those words do. There’s already enough of a buy in out there for people to believe that those products will be healthful.

Sut Jhally:
So food companies started to include logos on the package that kind of looked like there was some kind of official government health label. In reality they were just made up by ad agencies, but it was enough to give the illusion of health, and that’s all that’s required, not the reality of health but the idea of it. The same is true of the label “natural” on a package – it means absolutely nothing, but it’s meant to confuse people that it might be organic.

Bruce Bradley:
More and more all the advertising behind products has, if not a dead on health message, some sort of healthy wink or nod. Even using the color green has been seen as improving the health halo of products.

Video clip – Coke 140 ad:
I just wanna be OK...

Yoni Freedhoff:
Coca Cola has an advertisement that’s called "Be Okay." And it’s their new 'let’s fight obesity' advertisement. They show a bunch of very exciting activities and talk about how long each of them take, and they put this little plus sign between them. Although almost everybody
who I’ve shown this ad to doesn’t notice the plus sign. What the "plus sign" is saying is that to burn those calories, you have to do all of these activities. But people watch it and infer that just going for a brief walk with your dog will burn 140 calories and I’ve got news for you, it actually takes a lot of exercise and a lot of effort to burn 140 calories. It is much easier to just not drink those 140 calories.

**Sut Jhally:**
So if you eat a Big Mac (without fries or a soft drink) that is 550 calories. To burn those calories would require jogging for an hour at 5 miles an hour. A Snickers bar is 250 calories, so you would have to jog for 30 minutes. Even a small bag of Doritos is 150 calories, so you would have to jog for 20 minutes. When you turn to the issue kids and food, those kinds of conscious choices just don’t hold, because they’re not able to make those decisions - they don’t have the mental capabilities yet. Kids are at the greatest risk from marketers.

**SECTION: SELLING OUT KIDS**

**Kelly Brownell:**
When I was a boy, about the only kind of marketing one saw were sugared-cereal advertisements during cartoon television on a Saturday morning.

**Cereal ad:**
*Plus energy vitamin B1 that gives you go power!*

**Kelly Brownell:**
And it was pretty darn clear when the show paused, and there was an advertisement. But now the messages are much more subtle and they’re woven into the themes of television shows and movies: there are product placements, lots of things happening on the internet. As a consequence, people knowing that they’re being exposed to marketing is a much bigger problem than it used to be. Parental monitoring of what their children are seeing is a much bigger problem than it used to be, and the marketing is much more effective.

**Video clip - Lisa Ling documentary excerpt / Oprah W Network:**
*It’s estimated that over 12 million children in America are considered obese – a number that’s tripled in the last thirty years. This is a health crisis the likes of which we’ve never seen. For the first time in history, our children may have shorter life spans than their parents.*

**Jennifer Harris:**
One of the reasons that the issue of food marketing to children and teens has become so crucial for public health is the rise in obesity among those age groups.

**Video Clip-Cereal Ad:**
*To do well, kids need to eat well.*
Jennifer Harris:
Well companies know that brand preferences are pretty well set by the time someone reaches the age of twenty. So the earlier you can reach a child, the more they’re going to love your brand and the more loyal they’re going to be to that brand for the rest of their life.

Video Clip-Cereal Ad:
Grow up strong with big G kids cereals.

Jennifer Harris:
Children really don’t have the cognitive ability to understand that the ad is trying to convince them to do something. And because of that, they’re not equipped to defend against messages that you may not want them to hear. So that makes any kind of advertising to children unfair and potentially deceptive.

Kathryn Montgomery:
For me, when I got involved in this issue, the big realization was the study was the study that the Institute of Medicine did identifying the huge number of products that had come onto the marketplace in the last three decades that are processed foods, that are what they call low-nutrient, high-fat, high-calorie -- basically junk-food, unhealthy foods -- that make up 90% of what’s marketed to kids.

Video Clip-McDonald’s Ad:
One more time!

Kathryn Montgomery:
If they’re growing up in a media environment where almost every message they see is to promote a product that really is not healthy for them, we have a major problem here.

Bruce Bradley:
Food companies could be trying to market healthier products to kids but they don’t make as much money off of those healthier real foods. The highly processed foods have much larger profit margins than real fruits and vegetables so it’s not in big food companies’ interest to become a seller of fruits and vegetables – it can make them a lot of money to sell empty calories.

Video clip: Oreo ad
Wonder if I gave an Oreo to my dad before he made me go off to bed, could we stay up...

Sut Jhally:
The aim of marketing to kids is two-fold. On the one hand they have their own money to spend and food companies want them as direct customers. But children also influence a much larger amount – over $700 billion a year – of spending by
their parents, and so the aim of a lot of advertising directed to kids is to turn them into lobbyists for products against their parents. That’s what the industry calls the nag factor or pester-power.

**Video clip – Fruit Snacks ad:**
*Pleeeaaaassseeee….Betty Crocker fruit-flavored snacks, less than 100 calories and made with real fruit. Thanks mom!*

**Jennifer Harris:**
One of the most egregious types of marketing targeted to kids in the super market is the fruit snacks. Those products are basically sugar in a gel form. And their name, "Fruit Snacks," implies that they're healthy, they're a lot of times in the shape of licensed characters which really appeal to the kids.

**Sut Jhally:**
While television and television advertising are still very important, marketers know that the best place to target kids these days is online.

**Online Fruit Loops ad:**
*Go to fruit loops dotcom and search for my treasure!*

**Online Reese’s ad:**
*Reese’s Puffs, Reese’s Puffs. In the a.m. it’s the flavor I savor.*

**Jeff Chester:**
Food marketers have been focused on the Internet and digital media since the very beginning of the commercialization of the World Wide Web back. This, in fact, was the new television. It was better than TV because you could deliver an ad or a message to one individual, and you could create a virtual world.

**Jennifer Harris:**
When kids go to a website and interact with a branded game, an adver-game, they’re actually more engaged in the experience than passively watching a television ad. And because of that and because of the amount of time that they're spending with those games is longer than the ads that they're seeing, it can really be much more impactful in creating these positive brand associations that the companies are trying to establish.

**Kathryn Montgomery:**
And some of the campaigns that are being done in the digital arena are designed to promote more, and more, and more, consumption. So you get “rewards”, the more you consume of that product.

**Video clip – Hotel 626:**
*Doritos decided to stop talking to moms and start talking to the people that actually ate their product: teenagers. Everything is scarier at night. In a 3D world never before*
seen in a website you’re trapped in a haunted hotel and have to do whatever it takes to get out.

Kathryn Montgomery:
The "Hotel 626" campaign is a good example of the emblematic techniques that are being used in digital marketing, particularly targeting teens. So they've made a kind of horror movie to attract teenagers, and made it very, very interactive. But it also taps into the kid's social networks and it involves their friends.

Video clip – Hotel 626:
Hotel 626 uses your webcam to sneak a picture of you and shows it to you in a serial killer's lair.

Kathryn Montgomery:
It also invades privacy...

Video clip – Hotel 626:
Your one salvation is a phone call on your actual cell phone that gives you directions on how to get out.

Kathryn Montgomery:
It is disguised as entertainment, when in fact the whole thing is a marketing campaign -- that is, to us, the essence of what's deceptive advertising.

Jeff Chester:
The basic fundamental paradigm of advertising is called one-to-one marketing. That’s what was made possible by the Internet. I can know everything you do and I can reach you at any point. First, in the 90's, it was when you were in front of a computer. But now, because of the growth of the Internet and especially mobile devices, I can reach you 24/7. I can reach you and your friends, I can target you, and I can engage in visible digital behavior modification. So advertising and marketing is at a pivotal point, not only in the United States, but across the world.

The commercial surveillance system that the advertisers have created all across the world is stunning and a cause for serious alarm. It threatens our civil liberties. It’s about getting us to buy high interest rate credit cards, junk food, prescription drugs for illnesses we may or may not have, politicians who may or may not be good for us. That’s what all this data is being used for. We have no access to this data, we have no ability to control this information, we can’t challenge it, and we can’t correct it. We’ve allowed the Google’s and the Facebook’s and the Yahoo’s to create invisible repositories of information about each and every one of us that they can use, but it’s closed to us. So ultimately it’s not just about selling. It’s about, maybe the next evolution of capitalism, creating an undemocratic society.
SECTION – CONCLUSION

Kelly Brownell:
The country took on the tobacco industry and made tremendous public health strides as a consequence. But it took forty years, or even longer, to accomplish those victories. The same series of steps are occurring with respect to food, but they’re being compressed into a much shorter period of time. So things that at one point were inconceivable, like a tax on sugared beverages, those taxes exist now in four or five different countries outside the U.S., they’re being considered all around the country. And I think these are signs that people are willing to give government permission to act on their behalf.

Marion Nestle:
Food is a human right, people can’t live without it. We don’t like, in the United States, to see people starving on the street. We don’t mind at all if they’re eating food that’s not good for them, that’s a separate issue and blamed on personal responsibility.

Sut Jhally:
It’s also a matter of social justice because we know that the health risks associated with food and with fast food are connected to income and to race. In fact the poorer you are the more vulnerable you are.

Raj Patel:
The American diet is killing Americans. I mean, there’s profit to be made every step of the way, don’t get me wrong. The makers of Ben & Jerry’s Ice Cream, Unilever, are also the people who will sell you Slim Fast. So already they’re selling you the fat on your ass and the way of getting it off at the same time – and they’re making profit both ways.

Kelly Brownell:
They’re running out of customers in the U.S. So what do you do? You go outside the U.S. They’re doing exactly what the tobacco companies did. In my mind, that’s the greatest shame of all these companies have to face up to, is the exploitation of the developing world. In some ways, it’s the food colonization of the developing world.

Bruce Bradley:
Consumers really need to adopt a new attitude, caveat emptor, buyer beware. Because what food companies are telling you about their product, they’re not truly your friend, they’re really just trying to sell you more.

Sut Jhally:
And it’s also important that we don’t forget that it’s not just all about over consumption – in fact there are millions of Americans and a large percentage of kids who live in a situation in what we would call food insecurity, who go to sleep hungry.
Our food system is broken and fixing it should be a priority for any society that thinks of itself as democratic or civilized.

Yoni Freedhoff:
The analogy I like best is David Katz’s -- he’s from Yale and he says what we’re seeing right now is a flood. A flood of obesity, a flood of calories, a flood of chronic disease that are relatable to diet. When you've got floods, there's no really one solution to a flood. Instead you stack a whole pile of sandbags. And that's what we're really going to have to do. We need to change the world around us, rather than continue to focus on individuals, because focusing on an individual when there is a flood is like suggesting that swimming lessons are the answer to flooding, which I don't really think is very wise.