

**THE MODEL  
HEALTH  
SHOW**

**EPISODE 787**

**Cereal Killers Reloaded!**

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**SHAWN STEVENSON:** On the heels of Kellogg's new marketing campaign aimed at making breakfast cereal, a high minded dinner option. I was inspired to revisit the science around breakfast cereal and really to share the surprising history that most people have no idea about. Again, the shocking history of cereal itself. All of that for you in this episode. And first up Kellogg's the family friendly household name, Kellogg's brand cereal. Kellogg's is going on the offensive to regain market share right now with a new campaign advocating for families to save money. It's good for you. Save money. It's good for your health as well. Advocating for families to save money by eating cereal for dinner. Here's Kellogg's CEO and co chairman Gary Pilnick talking about their new campaign.

**GARY PILNICK:** The cereal category has always been quite affordable and it tends to be a great destination when consumers are under pressure. So some of the things that we're doing is first messaging. We got to reach the consumer where they are. So we're advertising about cereal for dinner. If you think about the cost of cereal for a family versus what they might otherwise do, that's going to be much more affordable. In general. The cereal category is a place that a lot of folks might come to because the price of a bowl of cereal with milk and with fruit is less than a dollar.

So you can imagine why a consumer under pressure might find that to be a good place to go. Right. I'm all for innovation and marketing, but the idea of having cereal for dinner. Is there the potential for that to land the wrong way? We don't think so. In fact, it's landing really well right now, Carl. When we look at all of our data, of course we would know that breakfast cereal is the number one choice for in home consumption. We understand that for breakfast. It turns out that over 25 % of our consumption is outside the breakfast occasion. A lot of it's at dinner, and that occasion continues to grow. As well as the snacking occasion, but, cereal for dinner is something that is probably more on trend now, and we would expect to continue as that consumer is under pressure.

**SHAWN STEVENSON:** Now again, that's Kellogg's CEO and co chairman Gary Pilnick being very blatant and honest about what they're doing. And they already have commercials running that are in play right now on television, on social media, on YouTube videos and the like, running these ads with their new pitch. And here's Tony the tiger himself in this commercial. Leading a family in an enchanting chant to eat cereal for dinner. Check it out.

**TONY THE TIGER COMMERCIAL:** When I say cereal, you say dinner. Cereal, dinner! Cereal, Dinner! chicken. You can have the night off, chicken. Okay, I'll go marinate. Cereal! Dinner! Cereal! Dinner!

**SHAWN STEVENSON:** Now, in this commercial, you have Tony the Tiger, an animated fantasy character, busting into a live action, a family construct, their home, speaking to real children. Alright, now, I don't know about you, but you know, I would think if I saw an animated character in the real world, a la Roger Rabbit, a la Space Jams, it would freak me out as a kid. But these characters elicit a lot of nostalgia, elicit a lot of love and admiration because they just seem bigger than life. They seem magical. And so having these characters advocating for this family, again, leading them in a chant, To demand cereal for dinner. What do you think is going to happen? You know, and kicking chicken to the curve, of course, in the commercial, they are saying, you know, chicken, you've got the night off and we're going to eat this sugary cereal for dinner.

They know what they're doing. Kellogg's has a history of unethical marketing to kids and legal issues as a result. Back around 2006, the center for science in the public interest tracked the frequency of ads for Kellogg's products. On multiple television stations during the 27 and a half hours of Saturday morning, child based programming. During that Saturday morning airtime, they counted 54 commercials for Kellogg's products and 98 % of them were for foods deemed to have poor nutritional quality. And with looming legal action against Kellogg's for their marketing practices to children. In 2007, Kellogg's vowed to no longer market foods on TV, radio, and the internet. print or website ads aimed at children that have more than 200 calories per serving in them and no more than 12 grams of added sugar per serving. They also announced that they will no longer use popular cartoon characters to market ultra processed foods to young children.

Now by that they meant cartoons like Shrek and Spongebob Squarepants and brand collaborations. This did not mean they would stop using their own cartoon characters like Tony the Tiger and Toucan Sam. And so again, these are those little loopholes being a little fruit loopy. So they can keep doing this same stuff in marketing to children. Because the question is does it really matter What fantasy character or cartoon that the message is coming from if it's coming from Shrek or if it's coming from Tony the Tiger. Does the animated character influence the child's choices and their Preferences in what they're eating. Now a report published in the archives of pediatric and adolescent medicine detailed an eye opening study that sought to find if placing a cartoon character on the box of cereal influenced children's taste preferences.

**SHAWN STEVENSON:** The children were asked to taste test what they believed to be different cereals and rate them on a five point smiley face scale. Some of the cereal boxes had cartoon mascots. While some did not, but the cereal was exactly the same. It was the same cereal. Alright, so again, same cereal, sometimes they put a cartoon character on the box, for the kids sometimes there was no cartoon character. Now, even though the cereal was exactly the same cereal, kids consistently rated the taste of the cartoon featured cereals better. When they had the cartoon character, it could be Fuddy Duddy Jenkins. It can be Toucan Sam. It can be You know, Mighty Moose. It could be any type of character. It didn't matter. Having that cartoon character made the children feel more connected to the cereal. They had a better experience just by knowing that this cartoon character was in a way behind their ability to eat this bowl of cereal. Now, again, Kellogg's has been doing this for quite some time. In that time 2006-2007, they also vowed to make To increase the nutritional value of their ultra processed cereals as well, i. e., adding in more synthetic nutrients, of course. Now, that doesn't take away from the stark reality today, still to this day, that breakfast cereals marketed to kids have over 40% protein more added refined sugars than cereals marketed to adults, according to the Environmental Working Group. Plus, the most popular chemical and sugar laden breakfast cereals like Fruit Loops, Cap'n Crunch, and Apple Jacks contain well noted, and we're going to talk about these today, well noted hormone disruptors like BHT. Chemical food dyes linked in several studies to attention deficit and hyperactivity disorders, as well as several potential carcinogens. These are cancer causing agents and obesogens. These are obesity causing agents. Now we're going to dive into the latest science and reveal what's actually in a typical bowl of cereal.

But first, the origins of these popular cereal companies in particular, the origin of Kellogg's is a story that you need to know, because it is some of the most fascinating information that you're ever going to hear, but also going to see how things evolve or devolve into something that is so pervasive in our culture. And oftentimes, again, we are unaware that it is rooted in something strangely diabolical, very, very weird. And that's what we're going to dive into next. Because I don't think that most people even realize that breakfast itself is a relatively new invention in human history. Because it's within these stories that you can start to understand how these types of foods become so pervasive in our culture. And also being able to decipher the strange initial intentions of these cereal companies. And again, what we've allowed to be a very normal part of our diet today, in particular for our children. And I'm saying this from a place of somebody who is a cereal connoisseur. All right. Up until the early two thousands, I dabbled in just about any cereal you can name.

All right. So one of my very first memories coming online. As a human being walking and talking on planet earth, I was around three or four and I had this experience with my great grandmother, my great grandmother, and she was living in a senior living home and they had a little bus that comes and picks him up and takes him to the grocery store.

**SHAWN STEVENSON:** I remember getting on the bus with her and I felt like a celebrity. All right. You got a little three, four year old kid and all the, you know, other elderly folks who, with my great grandmother, you know, they want to shake my hand. Pinch my cheeks, you know, all this stuff, little kid. And you know, went to the grocery store and we got back to her place and she poured me a bowl of fruity pebbles. All right. Just, I can hear the sound and I took that first bite. Oh, it transported me. Right to bedrock. All right. I can make it bedrock. And it was phenomenal. I can taste it to this day, that flavor explosion, my little brain was not ready to handle. It captured me and it captured my attention, being able to sit there and to look at this box with Fred Flintstone, a cartoon that I watched as well.

And Dino and Bam Bam and Wilma, right? And then they got the. They have the little activities on the box as well, you know, little mazes and stuff like that. And there's a toy in the box! Can you believe that? So many wonderful things for me to experience. And so, love at first bite, truly. And this carried on throughout the rest of my life. And going from that to, you know, Smurf Berry Crunch discontinued, of course. But man, that was my jam. All the popular characters in popular culture, right? Got their own cereal, Ghostbusters cereal, Mr. T cereal, the list goes on and on. And then the staples, Applejacks top five dead or alive. That's for me, Applejacks top five dead or alive. Of course, the Fruity Pebbles experience. Cap'n Crunch, but the Crunch Berries were essential. Alright, that's in the mix for me as well. Then I get more advanced into the Honey Nut Cheerios being a little bit more mature, more mature palate. Alright. And then, of course, to probably round out my top five, I gotta throw Fruit Loops in there.

Alright, so, I'm not just speaking from this High and mighty perspective on cereal. I've been in the trenches. All right. I've been double cupped up with bowls of cereal. All right. I know what that life is like. And I was shocked to find out just how many newly invented chemicals are going into the making of these cereals. But I was even more surprised by where the origin of this cereal paradigm actually came from. And I'm very excited to share this with you today. Now I want you to keep in mind that for parents out there in particular, there are still wonderful options for our kids for snack foods and things like that because we've got a lot going on in our lives and just being able to have Snacks for our kids and snacks for ourselves as well. When I travel, even here at the studio, when guests come in and my team, when we're on breaks and things like that, we've got incredible snacks that are real food based and my incredible friends at paleo valley keep us stocked. I highly recommend checking them out. I utilize paleo valley for my snacks when I'm traveling in between my son's aau basketball games.

We've got paleo valley snacks as well. They got some incredible food bars that are all again real food based and they're amazing grass fed meat sticks.

**SHAWN STEVENSON:** They've got a wide variety Of different spices and things that they use different flavors but again grass fed and also They're utilizing a fermentation process instead of utilizing newly invented chemicals to stabilize and be a quote preservative for These foods and they've got so much more so many incredible things. They got new spice blends as well Head over there. Check them out [paleovalley.com/model](http://paleovalley.com/model) and you're going to get 15% off store Wide, I know you're going to find some things that you love and amazing things for your family for your kids So hop over there check them out [paleovalley.com/model](http://paleovalley.com/model) for 15 off Now, diving back in in the story of cereal.

I don't think many people realize that breakfast itself is a new invention in human history. It's only been a couple of years that breakfast has been a kind of standardized part of human culture. Generally, it's considered that breakfast was invented around the 15th century. Along with the advent of structured work hours and employment. Now humans obviously have been working and doing things for a very long time, creating commerce and, you know, doing things to take care of their families, their communities, their tribe, but predominantly people were effectively more entrepreneurial and having like families passing down a certain trade. Whether that's farming and growing certain things, whether that is being a blacksmith, whether that is being, you know, somebody who is a tailor or a creator of clothes. There was widespread change with industry and having structured business hours for these factories and things like that to start to come online.

And breakfast at the time, once this became something that was more normalized in culture, It consisted typically of things like bread and butter, beer! Beer was a popular breakfast item, believe it or not. And also just leftovers from other meals from the night before, you know, from the day before. But more elaborate breakfasts of the time were typically eaten by, quote, noblemen. And would consist of things like fish or boiled beef. Beer is in the mix, wine, bread and butter, and eggs. Now. Where things get really interesting is at the turn of the 20th century when breakfast itself was revolutionized. The first inkling of modern day breakfast cereal was born in 1863, thanks to a physician named James Caleb Jackson. James was also a vocal abolitionist, a religiously conservative vegetarian, and an author of such timeless classics as Consumption, how to prevent it and how to cure it. And of course, The mega hit dancing, it's evils and it's benefits. Now, of course, these are not timeless classics. You probably have not heard of these books before.

I have mentioned them before in a encapsulation of the history of cereal, but reenergizing this. I went back and read and it's so fascinating, I couldn't stop reading, a segment of the book, dancing. Its evils and its benefits and i've got to read you a short passage from this So again, this is from the evils of dancing and this is the title of this section He wrote that with christian believers there is a general distrust existing towards dancing as an amusement.

**SHAWN STEVENSON:** They feel that it is productive of wide evil and the more liberal of them believe that it is at best productive of only incidental good. Hence, as a general fact, they are arrayed in firm opposition to it and are strongly indisposed to the recognition of the consistent Christian character of him who advocates or partakes of it. And of it speaking of dancing. As dancing is conducted generally in this country by those who partake in it, I have no hesitation in saying that the evil far overbalances the good that comes from it, so that it is indefensible and should not be sustained by Christians. Let's look at some of the evils arising from it.

And then, of course, he goes into the evils arising from dancing. And they're just as shocking as this opening. But, you know, these are some of the mindsets and just, again, it's not that it's negatively intended. It's just the mindset of the time and seeing a certain behavior connected to outcomes that might not be seen as righteous at the time. But if that reminds you of the plot of the movie Footloose a little bit, then you're right with me already. All right, Kevin Bacon, you know, he's coming into town talking about, you know, let's, let's dance. Let's get our, our movement on and they're just madly against it. Like dancing is evil. Dancin's out here killing people and you know, all of this stuff. And by the way, did you see the, the new version of footloose? Let me know if you're watching the youtube version in the comment section Did you see the remake? of footloose All right. Let me know and also did you see the original? Let me know in the comment section. Now, again, this author and physician, Dr. James Jackson ran a medical sanitarium in Western New York, and these facilities were very highly regarded as kind of these panaceas of health. And they had all of these kind of innovative. treatments, but a lot of it had to do with kind of hygiene perspective, diet interventions, movement, things that have some sound evidence.

And it was there that he was storied to have created a breakfast cereal from gram flour dough that was dried and broken into shapes. But it turned out to be so physically hard, so physically hard to eat that it needed to be soaked in milk overnight. And he called it granola. Yeah, that's right granola, you know the name it has a resonance in our culture This is the origin of it well one day a fellow physician named dr. John harvey kellogg dropped into Dr. Jackson's sanitarium. Now, Dr. Kellogg was already well regarded and he had his own very, very popular sanitarium that was getting visitors or would be getting visitors from all over the world. I'm talking about the upper echelon of society as well. So, Top actors, you know, people like Henry Ford, you know, Henry ford. And all of these folks coming into the sanitarium seeking the wisdom of Dr. John Harvey Kellogg. But he saw this cereal idea and took that back with him because for him diet was a big part of this health and natural hygiene approach. And today, modern cereal. Truly began to take shape when Dr. Kellogg stumbled upon a new recipe with his younger brother, Will Kellogg. Dr. John Harvey Kellogg wanted to create a cereal for his patients to improve their mental health, improve their physical health, and to suppress their sexual desires.

**SHAWN STEVENSON:** Wait a minute. That didn't seem to fit. One of these things is not. That last part didn't seem to fit, right? Improve mental health, physical health, suppress sexual desires. Why would he want to do that? Well, I had to go and read through some of Dr. Kellogg's old fangled writings and to see if this was true for myself. And, well, here's what I found. Dr. Kellogg was seriously concerned about the health of U. S. citizens. And he believed that a big problem plaguing people's health was rampant sexual desire and masturbation. In his book plain facts for old and young Embracing the natural history and hygiene of organic life. He listed some of the symptoms of masturbation to be poor digestion, mood swings, bad posture, clearly. Impaired vision. Not so clearly. Paralysis of the lower extremities and even seizures from double clicking the mouse or from choking the chicken. Truly, you can't make this stuff up. I'm waiting for the biopic. He's got to get his own biopic. Alright, Dr. Kellogg, we need to see that. Or maybe not, or maybe not actually. Now, in Dr. Kellogg's opinion, one of the biggest culprits stimulating people's uncontrollable desires was rich, spicy, salty, sweet, and intensely flavorful foods.

While plain foods, like bland grains, could reduce those strong sexual impulses. Just giving people what he believed their bodies needed. Nothing more, no pizzazz of the mouth, because that might lead to your hands going down South. Now with this in mind, he set out to create breakfast foods that could help people stop these impure desires. His golden moment was when his brother Will accidentally left out some cooked grains that ended up getting hardened and a bit moldy. Will decided to roll the stale grains out and found that they had a nice, crispy, flaky consistency after they were baked in the oven. He tinkered with the formula a bit and found that corn was actually the best base. And of course, corn being bland in and of itself after it was baked in this formula. And of course, being that it was bland, it was anti masturbation approved. And the first ready to eat breakfast cereal was now in existence. The baby was born. The new flakes had been created. Will was the one who was tasked with working in the kitchen and happened upon this cereal recipe, but it was Dr. Kellogg who took all of the credit for it. Truly, I mean he did have the idea and told his brother to get to work on it. But he shared that this idea for these cornflakes came to him in a dream. That's what Dr. Kellogg stated. Now if you're wondering how we got from anti masturbation cereal to getting lucky charms.

We have Dr. Kellogg's brother Will and one of Dr. Kellogg's patients to thank for that. Will Kellogg actually had a background in business and sales and had a substantial education around it. But he chose to work for his brother and really be his understudy in many aspects and taking on a lot of the executive grunt work of running the sanitarium. And apparently, Dr. Kellogg wasn't very kind to his little brother. Dr. Kellogg would actually have Will constantly shadowing him to take notes of his ideas. This included when Dr. Kellogg decided to ride his bike for some exercise. Will would have to be running alongside him, taking notes on his ideas if he would feel inspired during his bike ride.



**SHAWN STEVENSON:** Even when Dr. Kellogg had to take a dump. Will would be required to sit in and take notes. Again, if he should feel the muse come about while he's dropping a load. All right. So again, it's kind of humiliating, For Will, in, in many aspects, and from the reports, even in testimonials from himself and also other family members, he didn't feel valued.

And Will kept advocating that they need to get this serial out to more people because Dr. Kellogg just wanted for patients of the sanitarium. But when Will saw what happened with one of Dr. Kellogg's former patients, a man named C. W. Post Who was staying at the sanitarium and getting treatment, but also he was caught several times watching over or "spying" on the cereal making process. And this was even reported to Dr. Kellogg. He's it's fine. I would want this information to, to reach more people, to spread health. Right. But what happened was post adapted Kellogg's cereal idea into his own mass produced version that he called Grape nuts. All right, grape nuts cereal. And this was a tremendous hit and this included of course the kind of foundational cereal makeup, but also adding in sweetener and having this more Noticeable familiar cereal experience that we have today. And Will seeing this will kellogg seeing post have all the success He made a million dollars!

He became a millionaire, Post became a millionaire. And people began clamoring to the sanitarium to essentially try and steal ideas on how to make cereal. And so battle creek michigan, home of the battle creek sanitarium, became a nationwide hot spot for cereal producers, all right. And this was all started from Kellogg's sanitarium, but Post was the first to hit it big and Will witnessing this and having beef about CW Post doing this was even more motivated to strike out on his own because Dr. Kellogg wouldn't let him go to get the cereal out to more people. And Will eventually bought the rights to the flake cereal recipe and struck out on his own, starting his own company in 1906. And so again, Dr. Kellogg facilitated several inventions. If you look at his story, it's really fascinating that are commonplace in our society today.

One of them being housing this kind of serial idea. But also the statement that breakfast is the most important meal of the day Traces back to the writings of dr Kellogg, all right, and other things are tied closely to him as well things like peanut butter in particular. And different forms of Mechanical exercise equipment. Also, you know, there's many different things have come from this sanitarium and from this part of the world. But it was his brother Will who struck out on his own in 1906 And he took the flake recipe and he added malt. He added sugar. He had his salt and began manufacturing Kellogg's corn flakes in mass quantities and it was a massive massive hit. And all of those pro masturbation ingredients, according to Dr. Kellogg, really ticked him off. Because Dr. John Kellogg tried to fight it in court, but the company had already grown so fast in its popularity that there was nothing he could really do to stop it. Kellogg's corn flakes took off like a rocket. Post grape nuts. Took off like a rocket.

**SHAWN STEVENSON:** And the rest is really history in the breakfast cereal industry. Post and Kellogg's have become two household names, but most folks don't realize that it started with a guy trying to create a cereal to make everyone's sexual desires soggy. Now let's go through a quick chronological layout of the history of sugar. And it was in the 1900s, again, it was 1906 with the advent of the Kellogg's cereal company and the Kellogg's Corn Flakes brand. But it was in the 1900s that Kellogg's added sugar to cereal and began mass marketing them, including the first in box prize. This dates back to the 1900s. Now, quick question, little sidebar here. Was it sugar and salt and all these things that Dr. Kellogg believed was increasing sexual desires? Or was it the opposite? Was adding sugar actually helping? Dr. Kellogg's Puritan Mission. Well, a recent study published in Clinical Endocrinology had researchers studying the impacts of sugar on testosterone.

The researchers found that sugar induces a significant reduction in total and free testosterone levels. So maybe Dr. Kellogg's had it backwards. Maybe we need to give more sugar to mess up people's sexual desires. Maybe they get a short term little boost, little frisky, but then go soggy after that. It was in the 1910s when there was an explosion puffing technology invented. All right, explosion puffing technology invented for rice and wheat, and this was in full effect. The Quaker Oats Company acquired a method of forcing rice grains to explode under pressure and began Marketing puffed rice and puffed wheat as a breakthrough in food science. They called them quote the first food shot from guns. Yeah Sounds killer, Sounds killer to me. It was in 1921 that a health clinician in Minnesota was simmering wheat gruel for intestinal distressed patients and accidentally spilled the gruel on a hot stove and saw it dry into wheat flakes. This was the birth of Washburn's gold medal whole wheat flakes soon to become known as Wheaties.

Wheaties was the first cereal to create a truly iconic marriage between sports and product. In the 1930s, testimonials from sports heroes like Lou Gehrig and over 40 of the other players on the 1939 Major League All Star team turned the modest wheat flake into something of a legend. It was what you ate if you wanted to be like The professionals. It became the glorified quote breakfast of champions. In the decades they followed one legendary athlete after another has graced the orange box. Names like Michael Jordan, Larry Bird, Dan Marino, even athletes in gymnastics like Mary Lou Retton, golf superstars, Tiger Woods, Michael Phelps, the list goes on and on as an iconic thing for the superstar athletes to be found on the box of Wheaties. Now also in the 1930s, the Ralston Perina company introduced an early version of wheat checks called Shredded Ralston. Now if Ralston Perina brings anything to mind for you, it's probably dog food. All right, that's what they're talking about. Definitely known for, but they also created something called shredded Ralston, which was an early version of wheat checks.

**SHAWN STEVENSON:** Now it was intended to feed followers of Ralstonism, a strict racial supremacist movement that included a belief in controlling the minds of others. Castration of impure race males at birth. And other sassy things like that. The name Chex, a rice version of the cereal, and the first recipe for Chex mix would not arrive until the 1950s. But, even superstars like Elizabeth Taylor, were on this box of cereal. Now, by the way, Ralstonism had some other principles that again, there was a lot of Potential good and kind of science backed efficacy to those things because the name itself is a acronym and so the word Ralston was R is regime, A activity, L light You know getting light, S strength, T temperation, O oxygen, and N nature. And again Rawlstonism required its adherents to follow strict guidelines regarding diet and personal hygiene. But the other parts about castrating those who are deemed to be impure, that's going a little far.

Stick to the oxygen and the light and the diet, that's all good. But, you know, this is one of those classic cases of things going way too far. Now in the 1940s, this is when Our society sees the continued rise of breakfast cereal. Thanks in part to physicist Lester Borchardt, who was working for general mills in minnesota. He and his team developed a puffing Gun machine that puffed oats. So they've already done the puffing for the rice and the wheat now it's puffing oats into small o shapes. And the new cereal was called cherrioats. I didn't roll off the tongue, quite as well. And the name was quickly changed to Cheerios. It's still one of the top selling cereals today. Cheerios has become famous, or should I say infamous, for being a healthy cereal option. Now, of course, taking an ultra processed food and making it appear to be healthy is all about framing. And Cheerios became well noted for making claims like these in this vintage commercial.

**CHEERIOS COMMERCIAL:** Hey kid, what you got there? Gee Suzie, it's the greatest thing. Cheerios helps lower cholesterol as part of a heart healthy diet. You know, for grown ups. Well, that sounds amazing!

**SHAWN STEVENSON:** Now, in this commercial, and if you're seeing this in the video version of this episode, In the commercial, in tiny letters at the bottom, it says "Studies show that 3 grams of soluble fiber daily from whole grain oat foods, like Cheerios cereal, in a diet low in saturated fat and cholesterol, may reduce the risk of heart disease. Cheerios cereal provides 1 gram per serving". Now, this is an incredible marketing ploy because they're going after one of the biggest fears, Of modern man, which is the fear of heart attacks and stroke and high cholesterol and heart disease that's really been monetized by the medical model. But the problem was What they were saying didn't have any proof. And in 2009 the FDA took issue with the claim on Cheerios boxes That Cheerios can lower bad cholesterol by four % in six weeks. So they used to have the little heart healthy stamp of approval and they had to change it.

**SHAWN STEVENSON:** In a letter, the FDA told General Mills that it either needed to change the print on Cheerios boxes or apply to get Cheerios classified as a cholesterol lowering drug. The label on all Cheerios boxes changed to clarify that eating Cheerios as part of a healthy diet may, that's the magical word, may help lower cholesterol and the risk of heart disease. Just finessing the claim a little bit more. Now this is superficial health marketing. Superficial health marketing, going on buzzwords of health fear, which is targeting cholesterol. Hey, this cereal can lower my cholesterol. I want to make sure I don't have high cholesterol, let me eat this cereal. Never mind that you need cholesterol to build your sex hormones. In particular your anabolic hormones like testosterone going back to Dr. Kellogg. All right. Low key, actually the cholesterol was needed to make testosterone and never mind the cholesterol is also needed to build and repair your nervous system. The myelin in our brains that's laid down to really support nerve transmission signal transduction to help our brain cells to talk to each other, Myelin is a huge source in our body where cholesterol is housed, is found in our myelin and other aspects of the brain as well.

So just to villainize this term and use it as a leverage to get people to buy a box of cereal, that's the definition of health washing, right? Using these terms, even though, Hey, this is an ultra processed food, but we frame it as something that is healthy. Now, if you're wondering like I was, when did the other varieties of Cheerios come out? Well, the first was actually in 1976, and this was Cinnamon Nut Cheerios. And it was quickly discontinued, but General Mills struck gold with the release of Honey Nut Cheerios three years later. Honey Nut Cheerios were instantly popular and eventually became the number one cereal in America. Now, even back in the 1940s, kids were adding sugar to their cereal. So, if the kids didn't get the fancier, you know, honey nut cheers and things like that. If they had the corn flakes, for example, or some wheat flakes, or puffed rice. Kids were adding sugar to the cereal. I know that I did as well. You know, we get those. You know, staple foods, especially my family would oftentimes get food from charities and from government assistance.

So we got standardized cereals, like for example, corn flakes. I didn't want corn flakes. I wanted lucky charms. I wanted tricks, but we got the corn flakes or some kind of wheat flakes and we take some teaspoons of sugar. Or whatever kind of spoon, dump that bad boy into the cereal and get to eating. We just kind of like try and drag the spoon at the bottom of the bowl and sop up some of that sugar as we go along. And at the end, you got a bowl of white sand at the end. And that's that milk though. Sheesh! That milk. Lord knows what they're doing with that milk. Now that cereal milk is that's, if we want to give the alien something impressive when they get here, like you want something to drink, give them some cereal milk. That's going to trip them out. Or don't, maybe don't do that and start something. Alright, now, let's take our time traveling DeLorean to the 1950s. Where sugar began to truly take center stage in breakfast cereals. This is when cereals like Kellogg's Frosted Flakes hit the scene.

**SHAWN STEVENSON:** With its pitch man, Tony the Tiger. Tony the Tiger. It was also a new era of television advertising and marketing to children. This is when it all kicked off. Another popular cereal was Alphabits. And it's promoted by the cartoon character Mighty Mouse. Check out this old black and white commercial with a message from Mighty Mouse.

**MIGHTY MOUSE COMMERCIAL:** Here I am! Hooray! Won't you join us in some Alphabits? Yes, sir, cause they're good for you. Made of crisp oats to help build strong bodies. Sparkle with just the right amount of sugar for quick, extra energy. Like I need to get rid of him. A, B, C, D, E, F, G. Alphabets for you and me.

**SHAWN STEVENSON:** Sparkle with just the right amount of sugar for quick, extra energy. Ooh. He says sparkled with that's different even the languaging hits different. Now this is a blatant example of a cartoon character telling kids straight up eat sugar so you could be like me. Get your energy up. It's a quick source of extra energy. And This was just the beginning. This was just the beginning this again. This is a black and white commercial marketing children's cereal. Now when we time jump to the 1960s and 70s, this is where we see the explosion of colorful fruity flavored cereals with the popularized use of artificial flavors and colors in cereals. Not only do we have these artificial flavors, artificial colors and sugar But in particular, these food colorings have raised serious concerns for decades that's only now peeking out from time to time getting major media attention. And going back to one of my childhood favorites, Fruity Pebbles, in addition to the absurd amount of sugar, It also contains red 40, yellow 5, yellow 6, blue 1, and blue 2. And according to a study published in Environmental Health Perspectives, red 40, yellow 5, and yellow 6 contain a well noted human carcinogen.

It is a human carcinogen, cancer causing agent, that's permitted In low, presumably safe amounts in dyes. Now, my question is if there's controversy on safety and evidence pointing to it not being safe, shouldn't it be removed from the products that we give our kids rather than waiting to see how bad things can get. We also have this randomized, double blind, placebo controlled, crossover study. This is the best construction of a study that you can get that included hundreds of children to test whether intake of artificial food colors affected their behavior. The study published in the Lancet in 2007 demonstrated that artificial colors and conventional preservatives in the diet result in increased hyperactivity. In the majority of children in the study. In fact, one subset of over 103 year olds found that all of those kids were negatively impacted by the artificial colors and preservatives. As a result, the European Union started requiring food labels to indicate that a product contains any of these potentially harmful food colorings.

**SHAWN STEVENSON:** Bernard Weiss, Professor Emeritus of the Department of Environmental Medicine at the University of Rochester Medical Center, who has researched this issue for years, says He is frustrated that the FDA has not acted on the research showing the connection between artificial dyes and hyperactivity. He said, "all the evidence we have has shown that it has some capacity to harm in Europe. That's enough to get it banned because a manufacturer has to show a lack of toxic effects. But in this country, it's up to the government to find out whether or not there are harmful effects". Weiss supports banning artificial colors until companies have evidence that they cause no harm. Like most other scientists in this field, he thinks more research, particularly investigating dye's effects on the developing brains of children, is imperative.

So to reiterate Professor Weiss's point, in Europe, companies have to prove their ingredients are not harmful. In the U. S., it's up to the government to prove that the ingredients are harmful. Additionally, researchers at Purdue University published a study uncovering that cereal is in the top three highest sources of artificial food dyes in children's diets. The report estimates that a child could easily consume 100 milligrams of food dyes per day and that some children are consuming over 200 milligrams per day. And by the way, the cereals that had the most food dyes were Cap'n Crunch's Oops! All Berries cereal and General Mills Trix cereal. Now listen, it's in the name of the cereal. If you're eating something that has oops in the title or Trix, they're just, they're just telling you. Oops, I did it again. Now also in the 1970s, We saw the release of another classic cereal, cookie crisp. Somebody was like, you know what? You know, it would be an amazing, healthy breakfast for children. Cookies. That's right. You got cookies, chocolate chip cookies, pour some milk on it. Boom. I'm gonna feed these little rugrats and get them out the door. All right, cookie crisp. Let's turn cookies into a cereal. Now let me read you their ingredients really quickly. Whole grain corn, sugar, cornmeal. Just all, again, carbohydrates and sugar.

Yellow corn flour, more. Canola oil, corn syrup, more sugar! Cocoa processed with alkali, brown sugar syrup and more sugar, different versions, salt, caramel color, baking soda, natural flavor. All right. Wow. Wow. Speaking of sugar and breakfast cereals, I really don't think we realize how much sugar we can actually be downing to start the day. To hear that a parent is giving their child a Coca Cola for breakfast would sound pretty ridiculous. That's just too much sugar for a kid to have first thing in the morning, right? Well, the regular 12 ounce serving, which is one and a half cups of Coca Cola is about 39 grams of sugar. While one half cup of one of Kellogg's most popular cereals, Honey Smacks is 30 grams of sugar. Add on a serving of 2 % milk on top of that. And you've got a total of over. 40 grams of sugar before heading off to school. It's more sugar than a 12 ounce of Coca Cola. But Hey, they did it again with the title. They put smacks right in the title. This is about to smack your metabolism around, smack your mental health around.

**SHAWN STEVENSON:** They're just coming out with it. Maybe it's a Freudian slip. I don't know. Maybe they're just letting you know what this is about to do, but that cartoon frog on that box and his cartoon friends have it coming. I see the way that they're looking at us. And many of us are looking back and seeing them for what they really are serial killers. It was during the 1980s that it was considered to be the golden age of serial and co branding. And this is when we see the advent of things like the Gremlin cereal, Teenage Mutant Ninja Turtles cereal, Ghostbusters cereal, and my personal favorite Smurfberry Crunch. Now marketing. Was targeting children in a major way in the FTC Supposedly started cracking down more and more on cereal companies who were spending the majority of their marketing dollars on advertising to kids. According to one of the latest reports from the federal trade commission the FTC, The makers of breakfast cereals, fast food and carbonated beverages, all major sources of added sugars in the american diet Had the majority of their marketing budget in Going towards marketing to children. 72 % of their marketing dollars were spent marketing to children. We're talking billions of dollars used to market to our kids. The concept of quote cradle to the grave branding really came into its own in the 1980s and nineties. Industry veteran, marketing consultant, James McNeil, author of the book, Kids as Consumers, a handbook of marketing to children, reports that “the only way to increase customers is to switch them from other brands or to grow them from birth”.

And in our society, it is actually easier to grow customers from birth than switch them. They know exactly what they're doing and we have no idea. When we plop down to watch Saturday morning cartoons, I had no idea that these marketers were manipulating my psychology. Another study conducted by researchers at UCLA determined that watching commercial television as opposed to DVDs or educational programming, directly correlated to higher body mass index, particularly in children younger than six years old. This the researcher stated was due to the fact that the average child watching commercial television programs sees about 4, 000 commercials for food by the time they're five years old. Another study conducted by researchers at Yale and Cornell university reestablished that Cereal mascots like Cap'n Crunch, who make eye contact with purchasers, encouraged more feelings of trust and connection with their product and led to 28 % more brand loyalty.

I think it's time for us to really clear up our vision ourselves so that we can see the big picture with these food companies. It was in the 2000s that we saw a big shift towards quote, health conscious cereals, still largely touting the benefits of so called healthy whole grain cereals, even though they are generally ultra processed foods that flood your body with a ridiculous amount of sugar to start the day. And framing this again is the ideal choice for health conscious consumers. And this speaks to my transition into a more what I believe to be mature cereal choice, right? Going from the, no apple jacks, moving on from that, no more, even the honey nut cereals that was on the fence. Let me partake in a more distinguished cereal such as honey bunches of oats or Quaker oatmeal squares.

**SHAWN STEVENSON:** There's nothing more mature than that Quaker on the box. Little did I know I'm still consuming a substantial amount. Of refined sugars to start the day. Now keep in mind, and I want to really emphasize this point. It's not to villainize sugar. Sugar is a umbrella term. It's a blanket term and that could mean so many different things, but we tend to really oversimplify things when it comes to Nutritional science and all sugars simply are not the same. The human body is running on glucose We can utilize sugars in a wide variety of ways and there are certain sugars that have been in the human diet for thousands of years in an efficacious way. And one of those sugars still today, if you're hanging out with the hunter gatherer tribe, like the Hadza, for example, and they come across some honey, it is a fantastic day.

Everybody is all over that honey because there's something really remarkable about honey. and being a naturally occurring sweetener. And it's really impossible to classify honey as just a mere sweetener because it's truly like nothing else on earth. Raw honey. And this is the key. We've got refined cane sugar and we have raw honey. Raw honey has been found to actually improve insulin sensitivity where refined ultra processed sugar, cane sugar has been found to dramatically disrupt insulin sensitivity. A recent study published in the peer review journal nutrients detailed how raw honey intake can improve fasting blood sugar levels, improve lipid metabolism and reduce the risk Of heart disease. Additionally, the scientists noted the vast antioxidant and anti inflammatory properties that honey has It's like nothing else on earth. I'm a huge fan of honey. I Love honey. I love honey And as with anything I want to make sure that you're getting the very best honey because a lot of people don't realize this There are honey products that don't even have much honey in the honey there are companies that and by the way, this is the Honey gate scandal you could look up, but there are companies that are cutting their honey.

They're making the crack version of honey with other sweeteners, corn syrup and things like that to get truly Raw honey from regenerative minded beekeepers. You've got to check out Beekeepers Naturals. Go to [beekeepersnaturals.com/model](https://beekeepersnaturals.com/model). And you're going to get 20 % off storewide. Their superfood honey is amazing. It's the only honey on my family's shelf. Also their propolis immune spray, their nootropic that's based on real jelly. is phenomenal. These are all products that I use on a regular basis. Highly encourage you to check them out, get your family, the good stuff. And by the way, they're doing third party testing for dozens of common contaminants in B products to make sure that there's no heavy metals, pesticides, any of that nefarious stuff, just the highest quality honey that you are going to find. Go to [beekeepersnaturals.com/model](https://beekeepersnaturals.com/model). That's B E E K E E P E R Snaturals.com/model, you're going to get 20 % off store wide. Now also keep in mind, it's not just the refined sugar product itself that is problematic. It's also the way that it's being grown today. And just one of the herbicides used in sugar production that is highly controversial is glyphosate.



**SHAWN STEVENSON:** Data published in the journal, Interdisciplinary Toxicology, details how glyphosate can increase the risk of everything from cancer to celiac disease to infertility. The most alarming thing is that this study was published almost 10 years ago. Numerous peer reviewed studies have come out since on the clear detrimental impact of glyphosate.

Even the world health organization has classified glyphosate as a class two, a carcinogen noted as probable carcinogenic to humans, right? It probably causes cancer in humans, not a hundred % sure, but probably. Additionally, glyphosate is used widely in grain production, which again, these cereals, these breakfast cereals are made from a variety of different grains. And according to the environmental working group, wheat, oats, corn, and other bread/ cereal grains are by far the largest source of glyphosate consumption in the average American's diet today. Now the environmental working group published data affirming glyphosate contamination in 80 to 90 % of popular wheat based products. While another study on a wide range of popular breakfast cereals, oatmeals and snack bars, Found glyphosate contamination in all of them. This included a variety of Cheerios, Quaker oatmeal and Quaker chewy granola bars. But the highest level of glyphosate found by the lab, which was 2837 parts per billion, was in Quaker oatmeal squares breakfast cereal.

This was nearly 18 times higher than the Environmental Working Group's Children's Health Benchmark. Again, this was my favorite cereal. When I met my wife, then girl, when I met her, Quaker oatmeal squares would, that was my jam. All right. She saw I, because I was a health guy. All right. I was a health guy. She saw all the empty cereal boxes. Like I had them in little section. I had so many little recycling box I had. All right. Because I was trying to improve my health. Little did I know that not only is the sugar contaminated, but the grain products themselves were contaminated. Now to switching out these ultra processed conventional cereals to other types of food. Even organic versions actually reduce the incidence of developing diseases like cancer. Is there any data on that? Well, a recent study that was published in the Journal of the American Medical Association Internal Medicine found that eating organic foods free from pesticides and herbicides led to a significant reduction in the risk of cancer for the nearly 70, 000 test subjects who were analyzed.

So I want you to keep this in mind as well, that terms like organic do have more efficacy than a lot of other health washing terms that can be thrown on a box of cereal like Low fat, like made with whole grain oats, like naturally flavored, can help lower cholesterol. These are all health washing terms that are taking advantage of an unaffiliated public. And each of these labels that I just gave you have been slapped onto boxes of sugar filled, ultra processed, pesticide laden cereals. And this is then marketed to our children as healthy breakfast options or, scratch that, healthy dinner options. And this is where we have to draw the line because all of this leads to an important point.

**SHAWN STEVENSON:** Number one, starting our day with incredibly high amounts of highly refined sugars is probably a bad idea regardless. But doing the same thing for dinner is probably a bad idea as well. Now, I know we just went through some information that can frame this as This is all or nothing. These serial killers are in fact out to get you. But I want to keep this in perspective because you probably heard that there is a Joy, there's an affinity in my history in my Experience as a human being in this life of having these cereals And we don't want to create this all or nothing mentality with anything Because it can put us into a dangerous place where we might end up at a sanitarium With the bland foods. All right, let's keep this in context. We definitely want to minimize foods like this in our diet. Absolutely, but a nutritional framework that is You Largely filled with real food. Real, minimally processed and unprocessed, real foods. And all of the incredible meals and flavor sensations. And recipes that we can create from that.

Oh! It's scary good. It's scary good. And that's what we all have the ability to take advantage of. It's just Knowing it's half the battle, you know, shout out to G. I. Joe from those 80s cartoons that was then Directing me to eat some frosted flakes But if you're wondering where to get connected to recipes like that Definitely check out the eat smarter family cookbook and a lot of the information That we went through as far as what is in these foods and also a hundred You Delicious recipes.

And that's the thing that you'll see, you know, if you go to Amazon, like people are making these recipes and they are just blown away with the flavor sensations and the food experiences and kids love them. And I want to share this with you. What is the probable optimal source? Of food for breakfast. What does that look like? Well, a study conducted by researchers at St. Louis University, that's my hometown in St. Louis, and published in the International Journal of Obesity sought to discover what happens with fat loss when you eat a high carbohydrate breakfast. In this case, it was a bagel or bagels, right? And this can be switched out for a bowl of Cheerios.

This can be switched out for a bowl of Honey Bunches of Oats or Quaker Oatmeal Squares. So this was looking at fat loss with a high carbohydrate breakfast versus a high protein slash fat breakfast, which was eggs. With the calorie count of the two meals being the same. Same calories. This is so important. The researchers did have the study participants decrease their overall caloric intake for the day, but they had different people use different macronutrient ratios, different foods for their first meal. Here's what they found after the eight week study period, the participants in the lower carb breakfast group, the whole food, real food group, By the way, showed a 61 % greater reduction in body mass index, a 65 % greater weight loss, a 34 % greater reduction in waist circumference, and a 16 % greater reduction in body fat percentage.

**SHAWN STEVENSON:** They're eating the same amount of calories. Same amount of calories. Their breakfasts are the same amount of calories. But one group is eating a high carbohydrate, ultra processed food, one is eating real food. And that's really the key. We're not going to eliminate all of the other stuff. The ultra processed foods still exist. We can sprinkle in some of that stuff. Or, as Mighty Mouse said, sparkle in. But we need to be mindful. We want to base our diet on real food. This is going to put our metabolism in a healthy state and really create true metabolic health from the inside out. And so having our breakfast being, for example, yes, in this study, they utilize eggs, having some eggs along with some avocado, along with some stir fried veggies of choice, or maybe along with some fruit, right?

Some Kiwi and strawberry, whatever the case might be. There's so many different options on what we can utilize, even going back to what our ancestors were doing and eating foods that are more synonymous, maybe with a dinner and making that into a breakfast option as well, right? So maybe we're doing a quiche, a salmon quiche, for example, or maybe we're doing a sweet potato frittata. Or if we want to, again, lean into that experience of having something that is more synonymous with a meal. Traditional American breakfast like pancakes, for example. What if we utilize Sweet potato as the base instead of a highly refined flour, right? Sweet potato protein pancakes is another recipe in the eat smarter family cookbook, which is delicious And also can make up a big batch, freeze them and you got them for an easy heat up breakfast for the kids All right. There's so many different options and so many different ways To utilize real food and that's my encouragement at the end of the day. Let's move away from, especially for our children's breakfast, these ultra processed cereals and give them real food to start the day. I'm telling you this as a kid who grew up most of my days in elementary school, I didn't get to eat at home.

I didn't get to eat breakfast at home. I was on the free lunch program and I had to eat breakfast at school or I didn't eat. And those breakfast options were single serving cereals. Frosted flakes. Fruit loops. Those were the things that were given to me at school to fuel my performance. Or donuts. Little juice cup, little milk cup. That's what I had to get by on. We can do better. And it starts with education. So please share this out with your friends and family. Share this with people you care about, especially people with kids. We need this information. And I appreciate you so much for being a part of this mission and this community. And again, send this directly from the podcast app that you're listening on. Of course, check out this episode on YouTube. So you can hang out with me in the studio. And see some of these visuals as well. And we've got some epic masterclasses and world class guests coming your way very, very soon. So make sure to stay tuned, take care, have an amazing day.

**SHAWN STEVENSON:** And I'll talk with you soon. And for more after the show, make sure to head over to [themodelhealthshow.com](http://themodelhealthshow.com). That's where you can find all of the show notes. You can find transcriptions, videos for each episode. And if you've got a comment, you can leave me a comment there as well. And please make sure to head over to iTunes and leave us a rating to let everybody know that the show is awesome. And I appreciate that so much and take care. I promise to keep giving you more powerful, empowering, great content to help you transform your life. Thanks for tuning in.