



EPISODE 865

FDA BANS Red No. 3 - A New Chapter for America's Health?

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SHAWN STEVENSON: So the FDA has banned red dye No.3. Is this a sign of positive change? Is it a distraction to cover up something even bigger? Is it even necessary or meaningful to do in the first place? Today, we're going to look at the science, the untold stories, and even the potential sleight of hand that could be affecting our society today. For years to come, starting now. First things first. What the heck is red dye No.3? Red dye No.3 is one of many artificial food dyes that are common in our food supply. According to the FDA, "Certified color additives are synthetically produced, i. e. human invented, and used widely because they impart an intense, uniform color, are less expensive, and blend more easily to create a variety of hues". Sounds really nice on the surface. Red dye No.3 is a synthetic food dye that's made from petroleum and gives certain foods and drinks a bright cherry red color. Some of the food products that frequently contain red dye No.3 include things like frostings, candy, and this ranges from candy corn to Pez to ring pops.

Shout out to anybody who wanted to look like a candy pimp. Various bubble gums. The list goes on and on. Also, Maraschino cherries is another big source of red dye No.3. In fact, the cherry industry has actually been the largest purveyor of red dyed products in the United States. And I know this one intimately as far as these bright red cherries and the syrupy nature because my grandfather, this is one of his favorite things, was chocolate covered cherries. I remember seeing him eat these a lot when I was a kid and just for me personally seeing it, tasting it, it felt like it was reminiscent of like a medicine and there's a reason for that because these red dyes are also used, in particular red dye No.3, is used in a variety of medications including things like cough syrup.

So for me, having those chocolate covered cherries, it was like taking cough syrup. In addition, things like bacon bits, veggie bacon as well. So we got the carnivorous version of bacon all the way to the vegan version of bacon utilizing red dye No.3. Also things like strawberry flavored milk drinks. One of my all time favorites growing up was the Nestle quick strawberry powder. Alright, when that hit the streets, it was bonkers. Alright, we didn't just have chocolate milk as an option, I can have strawberry milk now. And I was really about that strawberry milk life. So, strawberry flavored beverages like strawberry milk often contain red dye No.3. Now, keep in mind, on food labels, red dye No.3 can show up as different things.

SHAWN STEVENSON: It can be referred to as F, D, and C red No.3. F, D, and C standing for food, drugs and Cosmetics. FD&C Red 3, or simply Red 3. Now again, it's not just utilized in foods. FD&C denotes foods, drugs, and cosmetics. And keep this in mind as we move forward into this story. Now a question might be, if this is so dangerous, why was it permitted to be in our food supply in the first place? Well, right on the FDA's website, it states, "in 1992, the FDA announced its intention to revoke the permanent listings for the uses of FD&C red No.3 in food and ingested drugs based on the Delaney Clause due to its effects observed in male rats. The agency decided not to take action at that time, given the resources required to remove this authorization." The FDA back in 1992 announced that they had the intention to remove it from the food supply. But they didn't do it because they felt they didn't have enough resources to push that litigation through.

Alright, so again, this has been around for quite some time, this controversy. And if you're wondering, what is the Delaney Clause? The Delaney Clause is a provision in the Food Additives Amendment of 1958 that prohibited the use of any food additive found to induce cancer in humans or animals. It was designed to protect public health. By ensuring that potentially harmful substances are not added to food. Again, the data coming out early was that this was causing cancer in rats. But that is enough to get it removed from the food supply due to the Delaney Clause. So we don't have to sit around and wait to see if this causes cancer in humans because testing these things on humans is so much more difficult because of certain ethics, right?

You can't just have people come in and give them a bunch of red dye to see how much it takes to make them die. All right. We can't do that with humans, as is permitted with a variety of different laboratory animals, unfortunately. Now again, red dye No.3 was supposed to be removed from the food supply in the early nineties, but the FDA in their own words, didn't do it because of quote "the resources required to remove it". Specifically, one of the indications was that red dye No.3 caused thyroid cancer, specifically again, thyroid cancer in rodents, as noted in a 1988 study cited in the Japanese Journal of Cancer Research. This and other data prompted the FDA to ban the use of red dye No.3 in cosmetics and topical medications since 1990.

SHAWN STEVENSON: So apparently the FDA had the resources to get it taken out of things that you put on your body, but not the things that you put into your body. Again, they kept it in the food supply, breaking the amendment and the priority to protect public health. Even though the amendment was outright broken, they still could lean on the, "it's only animals affected, not humans". But even dating back to 1997, a study published in the journal Environmental Health Perspectives titled Estrogenic and DNA Damaging Activity of Red No.3 in Human Breast Cancer Cells. There were glaring holes already in the deflection that it's just animals and not humans. The study found that Red No. 3 generated cellular DNA damage and increased the binding of the estrogen receptors in human breast cancer cells.

The scientists stated, " consumption of Red No. 3, which has estrogen-like growth and stimulatory properties, and may be genotoxic, could be a significant risk factor in human breast carcinogenesis". Potentially toxic to our genes, strong carcinogenic potential cancer causing agent. This is not new. 1997. All right. This is when Master P in the no limit records was popping. All right, this was a while ago. All these decades later, the data is not just coming out. It's been coming out, but it's being affirmed with this move by the FDA. But I'm here to tell you there's another part to the story that's not being told.

But here we are finally today, again, decades later with it being removed largely in response to a 2022 petition, from the Center for Science and the Public Interest and other advocacy groups. Really sounding the alarms on this and really standing up and saying, Hey, we've got all this data. Why are you not acknowledging it? Why are you not doing anything about this? You're supposed to be the "watchdog" for America's health. We're harming our citizens. Why are you not doing anything about this? And so, as of now, manufacturers of foods and drugs that utilize red dye number 3 have until January 15th of 2027, and for drugs, January 18th of 2028, to remove this dye from their products. So, they got a couple of years still. Let's take your time, take your time.

One of the things that I want to alert you to and to remind you of is that this trend, although they might replace it, although they might be demanded to remove it from their products, the trend has been to simply replace it with another newly invented understudied chemical complex and go through this process all over again.

SHAWN STEVENSON: And how do we know? Because a bunch of food dyes have been outlawed over the years. Have you ever thought about why is it starting at red number 3? What happened to red 1, or red 2, red 4? What about the other reds? Did we just go with number 3 because it's like a jersey number of their favorite player?

Well, here are just a few of the notable synthetic food dyes that have already been banned by the FDA. Red dye number one was banned in 1961 after researchers discovered a link to liver cancer. Red dye number two was banned by the FDA in 1976 after studies linked the dye to cancer. Red dye four was banned by the FDA in 1976 because consuming, quote, high levels of the dye was found to cause a, "damaged adrenal cortex in laboratory animals". Yellow 1 and Yellow 2 were banned in 1959 for causing intestinal lesions at high doses. While Yellow 3 and 4 were banned in the same year for potentially causing heart damage. All of this, by the way, can be found from the Center for Science in the public interest. Green 1 was banned in 1965 after research suggested that it could cause liver cancer.

Orange 1 was commonly used as a dye for candy for years. But it was banned in 1956 after it was found to cause serious gastrointestinal issues in children. There was a big holiday, you know which one, where kids were eating a lot of candy, got a bunch of this orange dye in their bodies, and caused them serious gastrointestinal damage. And this story, by the way, is right on the FDA's website. So again, this process has been going on for decades. One chemical is removed, another set of chemicals is used to replace it. And we keep going through this again, and again, and again. This sleight of hand being done by food manufacturers, drug companies, and the FDA as well.

And so, when you see this message now, and you see it all over, a lot of my friends and colleagues were posting about it, Yeah, look it, we got a victory! And I'm just like, whoa. Guys. We know what they're doing. We know who they are. We've got to reserve our celebration. Because for me, it's like the FDA is coming out and saying, Hey, look at us. We're cracking down on these companies that are selling these chemicals to your kids. Look at us. We're banning one food dye of the thousands of newly invented chemicals in your food supply. Look at us. Can we get a pat on the back? We got you. Indeed, if the data is analyzed, if the history is analyzed, it's not a stretch to see that distraction is making headlines.

SHAWN STEVENSON: That the appearance of change, the appearance of innovation is the modus operandi because this problem is too big and too deep and too profitable for food companies and the FDA to address the real underlying issue without creating mass change and eliminating, again, thousands of potentially dangerous chemicals. Many of which have been proven in study after study to do just that. That's what this would really require, not this headline. Oh, they ban this food dye. There's so much more. So much more. And with that said, it's up to us to dig a little bit deeper, to become more informed, and to share this message.

Because this is unacceptable. This is not enough. We're not going to fall for this sleight of hand and allow again, this chemical to be removed only to be replaced by something else because the system is sick. Many of these harmful chemicals are found in a single food like product. Again, I struggle to call it food, but a food like product. But I know about these food like products and I know the difference because up to 80 to 90 percent of my diet at one point was made of ultra processed foods, which is not abnormal here in the United States. As a matter of fact, a study that was published in the journal of the American Medical Association, JAMA, Revealed that the average child in the United States is now consuming almost 70 percent of their diet is made of ultra processed food.

That's the average child in the United States. So you know there's going to be children on both ends of the spectrum. But that's the average 67.5 percent as of just a couple years ago in 2018. So when I say that about 80 percent of my diet was made of ultra processed food, it's not an exaggeration. I ate cereal a lot. All right, and it just wasn't reserved just for breakfast, by the way. And I know many people enjoy a nice bowl of cereal at different times of the day. But I definitely was a connoisseur. And one of my favorite cereals, one of the most popular cereals to this day is Fruity Pebbles. Fruity Pebbles. Alright.

Eating little ultra processed rocks. Alright. Call it Pebbles. But just that flavor profile. The mouth feel. The whole experience. The milk afterwards. I can get you going, but just in that one product, not only does a bowl of fruity pebbles contain an absurd amount of refined sugar. It also contains red 40, yellow five, yellow six, blue one, and blue two. And according to a study published in environmental health perspectives, red 40, yellow five and yellow six

contain a well noted human carcinogen that's permitted in our food supply in low, presumably safe levels. It is well established to be a human cancer causing agent. But, just a little amount. A little bit won't hurt.

But, I don't know about you, but when I was eating these ultra processed foods, I wasn't just eating a little bit. We also have a randomized, double blind, placebo controlled crossover study. This is the highest level of randomized controlled trial that we can do that included hundreds of children to test whether intake of artificial food dyes affected their behavior. The study, published in The Lancet in 2007, demonstrated that artificial colors and conventional preservatives in our children's diet resulted in increased hyperactivity in the majority of the children in the study. In fact, in one subset of over a hundred of these kids of over a hundred three year olds found that all of the kids were negatively impacted by artificial colors and preservatives.

As a result of this kind of data, the European Union started requiring food labels to indicate that a product contained any of these potentially harmful food colorings. Very different from here in the U. S. Bernard Weiss, Professor at the Department of Environmental Medicine at the University of Rochester Medical Center. whose research this issue for years says that 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 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". To reemphasize this, in Europe, the manufacturer has to prove that it's not harmful. Whereas here in the United States, many of these chemicals are approved with limited safety data.

And then it's often up to grassroots advocacy groups to prove that it is harmful. The responsibility is often on the public to prove that a company, a food manufacturer, is doing harm. In other places on the planet, at the same time, the company has to prove that its product is safe. And so we have the ability to make these changes. No country is doing everything perfectly. But if we're going to have these foods lining our store shelves and they are littered with these chemicals and promoted even slanted unethically by companies to

promote human health, having a heart healthy stamp, for example, on a box of Honey Nut Cheerios.

We've got to have more intelligence, better ethics, and more standards. And know that this is possible. But we have to stand up and we have to say enough is enough. We're not just going to accept this sleight of hand. Again, I'm speaking about this from a place of real experience, from deep experience, in the United States food culture. I know the variety of the spectrum of food here in this country. And as most children are, I was completely oblivious that the colorings on the different stuff that I would eat were unnatural. I just thought that that's how the food looked or that's how the drink looked. I didn't know that it was a thing that was invented.

And that was the end of the story. For me, I was exposed to these food dyes in hundreds, if not thousands, of other newly invented chemicals on a regular basis. Going to the local corner store, one of my favorite things was to get penny candy. So there were all these different containers and you can get one piece of candy for a penny. You can get yourself a dollar. If you can come up on a dollar, you can get a hundred pieces of candy. Plus, you know, a couple of cents tax. But all of these different candies, these were all food dyes. And a variety of different chemicals to boot. My favorite sodas. Strawberry Vess. I didn't think about the fact that this red color was coming from a food dye that could be harming me.

The grape soda, same thing. I didn't realize, I just thought that that was a grape soda. That's a strawberry soda. I'm not thinking in terms of these chemicals. And for me, and to B1000, yeah, I dug some of the sodas. But really I enjoyed more of the "grape drink type things or strawberry drink". One of my favorites was prairie farm grape drink. It literally said on the jug. Sometimes I get a gallon of this stuff. It says on the jug number one. It's got the prairie farms so it kind of generates this feeling of a farmer made. And it actually said it on there in this cute little banner, Farmer Owned. So it invoked this feeling of wholesomeness. And I was like, this is, this is a grape drink, this is better than soda.

SHAWN STEVENSON: But it says zero percent juice. Zero percent juice on the grape drink. Let me share with you the ingredients, cause I, due to the nostalgia, I had to go look it up. Here's the ingredients. Water. High fructose corn syrup. Citric acid, propylene glycol, glycerol, natural and artificial flavor, red number 40, blue number one, potassium sorbate, acyl fame potassium, and sucralose to top it off. Now again, being from St. Louis, this was apparently made Close by me in Edwardsville, Illinois. Alright, so again, I just felt connected. I felt like Prairie Farms was looking out for me. But the question is, with this framing of wholesomeness, with this label of being farmer owned, I don't know what farmers are whipping up propylene glycol in blue one and 20 other man made chemicals together in a vat like it's Breaking Bad or something.

I, I don't, I don't know where that's happening. And unfortunately, this is the sleight of hand that takes place with food manufacturers. And things like this become a daily part of our lives. I was drinking some form of fruit drink or fruit punch, right? If I actually had a couple extra dollars, did we get the like quote name brand fruit punch like Hawaiian punch? And go crazy on that. And the same thing, it's just littered with these artificial food dyes. Not to mention all the different candies, as I spoke about earlier. But then sometimes outside of the penny candy. What are some of your favorite candies growing up? I want you to share with me in the comment section.

What was your favorite colorful candies? For me, the thing that jumps out right now as I'm saying this, just jumping out, top of my head, Laffy Taffy. The Laffy Taffy, the Laffy Taffy. Laffy Taffy was my joint and it had the, the Laffy part was it had the jokes inside. You open up, you get the delicious taffy with all the chemicals, and then you got some jokes, right, for your friends. So Laffy Taffy, what was your favorite colorful candy? Share with me down in the comment section. In addition, the cakes, pastries and other baked goods. Another one of my favorites was, this was a seasonal one, was the Little Debbie Christmas cakes. Mmm, what do you know about that? The Little Debbie?

I wonder if this was a real person, right? Cause, you know, was this early AI? You know, I don't know, but Little Debbie, those Christmas cakes? Went and looked it up. Yellow 5. Blue 1. Red 40 and we can't complete any childhood saga here in the United States without mentioning

the epic potato chips and the like tortilla chips, Doritos. I mean, come on now, what's more American than a flaming hot bag of Cheetos or some Doritos? All right, the Doritos, that classic red bag, yellow five. Yellow 6 and red 40. So hopefully I'm taking you on a little trip down memory lane as well. And just us waking up to like, wait a minute, these food dyes were in so many foods that became normalized in our culture.

And when I'm talking about these food dyes being one category of the issue, I want to reemphasize how big this issue is because according to the National Research Council Committee on Diet, Nutrition and Cancer. There are nearly 15, 000 newly invented synthetic chemicals that can be found in our food supply. And these are just the ones that are somewhat being tracked. The question is, how are all of these chemicals able to be introduced into our food supply? You might wonder if the FDA is reviewing these thousands of chemicals. Well, No, no, absolutely not. They're absolutely not. And this is because they don't have to.

There's a big loophole in policies that allow companies to use these newly invented chemicals, including various food dyes, and they almost don't have to tell the FDA anything. They don't have to get their approval. According to the FDA, when a company makes a GRAS determination, GRAS being generally recognized as safe. When a company makes a GRAS determination, which shows the company believes, "the substance is generally recognized among qualified experts as having been adequately shown to be safe under the conditions of its intended use." it can submit a notice to the FDA through a process that is entirely Voluntary.

Let me emphasize this. Voluntary. You don't have to even say it. Voluntary. Right? But generally recognized as safe by, quote, qualified experts. I don't know about you, but I've seen a lot of so-called qualified experts spout out some really bad information that was proven to be wrong over the years. The FDA can review these notices. And issue a, "no answers letter". But it does not approve GRAS substances or affirm a company's GRAS determination. The FDA is not even really involved in that. If the FDA does raise questions about a company's safety conclusions, the company can simply withdraw its GRAS notice. But despite agency reservations, the FDA saying, you know, we have some skepticism.

SHAWN STEVENSON: The company can continue to use the ingredient anyways without further FDA review. And to top it all off, little to no information is available when companies make their own gross determinations. But do not notify the FDA. It's crazy. It's crazy. We think that there are all these parameters and You know, these safety checks and balances, but it's just an illusion. The truth is, other synthetic dyes, besides red number 3, and other newly invented chemicals, with more than enough data on their harms, need to be banned by the FDA as well, if they really want to demonstrate authenticity. For instance, the data on the potential harms of these food dyes has been around for decades, as we've affirmed.

But this gets deeper. A meta-analysis in the International Journal of Occupational and Environmental Health from 2012 that included studies from years earlier found that, "all of the nine currently U. S. approved dyes raise health concerns of varying degrees". The conclusion of the study stated, "The inadequacy of much of the testing and the evidence of carcinogenicity, genotoxicity, and hypersensitivity, coupled with the fact that dyes do not improve the safety or nutritional quality of foods, indicates that all of the currently used dyes should be removed from the food supply and replaced. If at all, by safer colorings. It is recommended that regulatory authorities require better and independent toxicity testing. Exercise greater caution regarding continued approval of these dyes and in the future approve only well tested, safe dyes".

We have to take a stand for ourselves, and especially for our children. Our children are the group, the demographic that is most affected by us allowing these dangerous chemical additives to be in our food supply. These dangerous food dyes. I have so much more published data on this, but I'm going to share just one more with you because it was really well done and emphasizes this point to protect our children. This was published in the journal, Environmental Health. This was a huge meta analysis that analyzed the potential neurobehavioral impacts of food diet consumption.

The scientist stated, "We identified 27 clinical trials of children exposed to synthetic food diets in this review, of which 25 were challenge studies. All studies used a randomized crossover design, and most were double blinded. 64 percent of the studies identified evidence of common food dyes having a harmful neurobehavioral impact on children".

SHAWN STEVENSON: For example, one of the most popular dyes, yellow number five, saw a dose response pattern between increasing doses and worsening behavioral scores. Truly enough is enough. How much more evidence do we need? Are we going to allow this light of hand and what prompted the FDA to finally, after decades of openly notifying the public that, hey, we think that this dye is a problem.

We intend to remove it, but we don't have the resources. Currently, the FDA is primarily funded by their science review specifically by the pharmaceutical industry. And so they're involved in this whole conglomeration as well. Whether it's the offshoot of treating symptoms for the problems created by food dyes, in particular for our children and all the psychoactive medication that's being given to children today. Study after study has affirmed removing these food dyes can dramatically improve mental health and the behavioral, neurobehavioral aspects of our children's lives. And there's a film on this that you might want to check out and it's called To Dye For, with the die being D Y E, if you want more information specifically for our children.

And again, it's got to get you questioning, why now? Why with this political transition that's taking place, would this story come out just, you know, a week or two ahead of that? You know, is it in reaction to RFK, Robert Kennedy Jr. coming into office and, you know, the FDA saying, hey, like we're, we're, we're getting our act together. We're doing, we're doing the stuff. Is it out of fear? Is it truly out of integrity? And we got to keep in mind, regardless of who is coming into office and who's taking these different positions. This system is so deeply ingrained into our culture and there are companies that are literally, this is not an exaggeration, making trillions, trillions of dollars profiting off of our collective ignorance, regardless of who's in a position.

This is a system wide, societal change that has to be addressed. We can't just trust that any of these political figures are going to, "do the right thing". There are steps involved here. We can start to open the door for some hope. But the best thing that you can do is to create a culture of health in your own household. And so my encouragement for you today, a couple of things to walk away with, a couple of actionable tips. Number one. We cannot sit back and wait for these companies and these so called regulatory agents to get their stuff together.

SHAWN STEVENSON: Number one tip is to simply do your best, and truly your best, to avoid these artificial food dyes. If they're in the food, don't buy the food. Chances are, and this is tip number two, if it's a real food, it's not going to have a chemical food diet in the first place. So do your best to avoid eating ultra processed foods for the majority of your diet. Okay, now again, we live in, it's 2025 now in the United States. There's a lot of stuff to eat. There's a lot of food experiences, a lot of, a lot of pleasure traps. All right, a lot of different things going on that we can partake in and enjoy. But we want to make that the exception and not the rule. Make sure that the majority of your diet and your family's diet is made of real food that doesn't come with ingredients.

We know again that almost 70 percent of the average U. S. child's diet is made of ultra processed, newly invented fake foods, and adults are not that far behind according to the BMJ. A little over 60 percent of the average American adult's diet is made of ultra processed foods. Shift that ratio. I encourage you to make it at least 80 percent of your diet to be real food that humans have been eating for thousands of years. And there are a ton of amazing things that we can do with real food. And that was the catalyst for creating the Eat Smarter Family Cookbook to demonstrate all of the incredible food experiences, food pleasure, and just eating experiences together with your family as well. That can come from real food because I'm a big foodie.

I told you how I grew up. I'm about that life. I love flavor. I love having great food experiences. And so to bring that to life for families, that's what the Eat Smarter Family Cookbook is all about. So if you don't have a copy, make sure to pick up. Your copy today. And so that is my advocacy for you. My advocacy for us is to not wait around, not be fooled that these companies are suddenly going to change their ways. There are so many levels you have no idea. We have no idea how deep the rabbit hole goes with interest having huge monetary connections to these things and they will not let go of their grip easily. And so yes, we can have aspiration for societal change. But the greatest change that we can make is in our own households today. I appreciate you so much for tuning into this episode today.

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