

A sunburst graphic with numerous thin, light gray lines radiating from a central point behind the text.

Healthy Moms Podcast

BY **Wellness Mama**[®]
simple answers for healthier families

Episode 14: Stop the Sugar Madness

Katie: Hi and welcome to episode 14 of the Wellness Mama podcast, where I provide simple answers for healthier families. I'm Katie from wellnessmama.com. And today's podcast is going to be a single episode and more of a rant based on some circumstances that happened recently.

I decided once just to keep count of how many times in a given week my children were offered refined sugar by someone, whether it be, you know, people they know or at events or wherever it was. And we actually try to, you know, go to places where we eat healthy most of the time and most of our friends are on board with health. And even with that being the case, I counted 21 times that my children were offered sugar in some form in the course of a week.

Some of those were at the gym, after they were being...either working out or being in childcare, they would be offered a lollipop. Or, when we went to the bank, the teller would offer them a lollipop, or everywhere we go. If it's a birthday party, it's cake, it's ice cream, it's candy. It's just everything one thing after another. And that's a really big issue for me, and, I think, one, that I would really like a lot of people to get on board with for several reasons.

We always hear, "All things in moderation. A little bit won't hurt. They're just kids. The brain needs glucose." And all of these are justifications for consuming sugar in some amount. But the really question, the question we should be asking is, "Should sugar ever be consumed? And if so, in what amount?" And especially, should kids be consuming it? Because those formative years of childhood, they're developing their nutritional foundation and their gut bacteria, and so many aspects of their lifelong health.

So consider this, there are 27 million plus people suffering from thyroid problems in the US, 66% of the population is overweight or obese right now. The rates of cancer, heart disease, and diabetes are absolutely skyrocketing, and an estimated 95% of the population will be obese in the next few decades. On top of that, over one third of the population is suffering from metabolic syndrome. Also consider, that in 1700, the average person consumed about four pounds of sugar per year. In 1800, that amount was about 18 pounds. By 1900, consumption was about 90 pounds.

But most recent estimate, is that most Americans consume one half pound of sugar per day, so about 180 pounds of sugar per year. Or, put another way, they consume their body weight in sugar per year, which is a huge, huge over 40 times increase from what it was in 1700 when obesity was almost unheard of. And so if you don't know what metabolic syndrome is, it's a group of risk factors that when they're seen together, is given the name metabolic syndrome.

And Chris Kresser has a good list of the factors which are abdominal obesity, high cholesterol, or high triglycerides, high blood pressure, insulin resistance, tendency to form blood clots, and inflammation. And a lot of people could have this and not even know that they have it. Metabolic syndrome is also often called "chronic hyperglycemia," which means too much blood sugar at one time. And the most logical explanation for this, that many doctors give and my doctor has explained when I've talked to him about it, is that it's caused by eating too much refined sugar and too many simple carbohydrates.

So basically metabolic syndrome, which is one of the fastest growing problems in health care is caught, it could be called, you know, a disease of eating too many carbohydrates. And when you eat carbohydrates, the pancreas has to secrete insulin to move all that extra sugar out of the bloodstream and into the cells where it can produce energy. But if this happens over a long period of time, then the cells lose their sensitivity to the

insulin. And so the insulin is trying to push this extra glucose into the cells but the cells aren't responding, and this creates a really dangerous feedback loop because the pancreas has to make even more insulin to solve this problem. And really, that sets you up for metabolic syndrome and diabetes and so many problems.

And sugar exist in so many forms, not just the white powdered, usually the genetically modified beet sugar that we pick up at the grocery store, but sugar in all of its forms including corn syrup, processed honey, and even maple syrup, affects the body in very powerful ways. And that is not to say that we should never consume sugar, but we're consuming way too much. We're consuming more than ever.

For instance, there's an estimate I read that the consumption of sugary and processed foods has cost us over \$54 billion in dental bills each year. And with the average person consuming his or her body weight in sugar, plus over 20 pounds of corn syrup in addition to that, the human body is just not designed to deal with that much sugar, and we're seeing that manifested in so many other problems. And I often hear the argument from other parents, and this is where I'm going to get on my soapbox a little bit, that sugar is okay in moderation or that eliminating any "food group" is dangerous.

And certainly I agree, avoiding any actual micro nutrient category completely, like carbohydrates, or proteins, or fats would be problematic especially for children, but sugar itself is not a food group, just like I've ranted before gluten is not a food group. Though sugar in some form is naturally present in many foods, especially fruits and vegetables, by itself, it contains no nutrients, and no protein, no healthy fats, and no enzymes, just empty and quickly digested calories that actually pull minerals from the body during digestion.

And with the the rise of the low-fat movement over the last few decades, we've consumed a lot more sugar because sugar is low in calories, and it has no fat and it's used to make those no fat foods taste good, and we've created a very strong dependence on sugar in our society. And when we consume too much sugar, it creates a hormone cascade. So when we consume it, it starts a positive feedback loop in our body to encourage more consumption of sugar, and this serves a valuable purpose in the body, in times when food was scarce or things like sweet fruits were available mainly during the summer because you didn't have refrigerators and the ability to ship them overseas.

It was important to consume that sugar during the summer and store up a moderate amount of fat stores for winter that would then be used during the cold weather, and the lack of sugar. But in today's world ,we have a constant access to sugary foods, most people consume some form of refined sugar or carbs at every single meal. And when you combine this with the fact that we are not sleeping optimally, we're not moving optimally, and we're not eating a nutrient rich diet either in other ways that has really dangerous effects.

I believe it was Dr. David Reuben who wrote the book "Everything You Always Wanted to Know About Nutrition" said that refined sugar, white sugar is not a food, it's a chemical that's extracted from plants, and it's purer than cocaine, which it resembles in many ways. Its true name is sucrose, and its chemical formula is $C_{12}H_{22}O_{11}$. It has 12 carbon atoms, 22 hydrogen atoms, and 11 oxygen atoms and absolutely nothing else to offer. The chemical formula for cocaine, ironically, it's $C_{17}H_{21}NO_4$. So when you compare those for practical purposes, the difference is that sugar is, you know, missing just a couple of hydrogen atoms, and it really does create a very strong dopamine reaction in the brain.

So most often when we talk about sugar, we're referring to a mixture of glucose and fructose, which are both simple sugars that are contained in various amounts in certain foods. But there's a lot of other ways that we

encounter sugar, so there's dextrose, fructose, and glucose which are all considered monosaccharides or simple sugars, and the difference between them is basically just how the body metabolizes them.

Glucose and dextrose are very similar, however, a lot of times, you'll see the term just dextrose in a food list. And simple sugars can combine, you can see more complex sugars like the disaccharide sucrose, which is what we think of when we think of sugar, and that's half glucose and half fructose. But then you have the more dangerous forms which are like high fructose corn syrup, which is 55% fructose, and 45% glucose. And Dr. Robert Lustig talks a lot about the dangers of high fructose consumption, especially when it's isolated from fruit, which is its natural source, but which also contains and enzymes, and fiber and many other important things.

Then we have things like agave syrup, which many people think is natural, but it's actually extremely process. It's not just easily taken out of the agave plant, and it's usually 80% fruit. So in some ways it can be even more problematic than high fructose corn syrup.

We have things like ethanol, which is a drinking alcohol, and sugar alcohols like xylitol, and glycerol, and sorbitol, and mannitol, and erythritol, and all those different forms of sugar alcohols. And then we of artificial sugars like sucralose or Splenda which is not actually sugar, even though it sounds like it and it's often marketed as being as natural sugar or made from sugar. It's basically an artificial sweetener that's been chlorinated, and it's in the same family with aspartame and saccharin. And those are ones that we completely avoid.

So there's many different forms that we see sugar but the most common one is the table sugar, and the real question is, is there any safe amount to consume sugar?

And in my opinion, as a mom, and as a researcher, and with my background in nutrition, there is no safe amount of refined added sugar. Naturally contain sugars in fruit and vegetables are balanced by fiber, and vitamins, and enzymes, and other properties within the fruit especially when they're consumed close to where they were grown, and they're not shipped across the world before they're ripe.

And these properties are fruits and vegetables to some degree but slow sugar digestion and they help the body deal with sugar. They have the minerals that the body needs to digest sugar. When we just isolate sugar, it can pull calcium from the body because in these that for digestion but it doesn't provide it. And so, added sugar provides none of these benefits, and instead it can create stress for the liver, especially when we eat fructose, it goes to the liver, but if liver glycogen is low, such as like if we've been exercising or running, then that fructose will be used to replenish liver glycogen.

But most of us aren't exercising enough, and just doing enough activity to use our liver glycogen. And so after consuming fructose, it's not going to replenish our liver glycogen, because our livers are already full with glycogen. So when this happens, the fructose is then stored as fat. And some of the fat gets shipped out, but some of it can remain in the liver. And you may have heard the term non-alcoholic fatty liver disease, and this is partially what causes that, is when excess data stored in the liver.

There's also research that excess sugar consumption can increase cholesterol and triglycerides, and that's why we see that tie in with metabolic disease and metabolic syndrome. It can also contribute to leptin resistance which I've talked a lot about before, which can lead to weight gain, and cravings, and sleep trouble, and so many other problems. And especially when it's consumed in those formative years regularly, sugar can create

an addictive response in the brain.

And I know so many people, and even myself to some degree, who ate sugar a lot as a child, and then had to break that addiction as an adult. And it's much more difficult to have to break that than if it had never begun, and if you didn't have that in childhood. Whereas I also know many people who ate very little sugar growing up and who ate a lot of vegetables, and local foods, and grass fed meats. And they, for the most part, don't have a lot of these metabolic problems that so many people have, and they don't know actually have a taste for sugar, and they never had to break that addiction. So when they do occasionally sugar, it's just doesn't affect their body in the same way as someone who's been acclimated to eating it first so long.

And sugar also is just empty calories it doesn't fill us up and encourages us to eat more. So practically speaking in today's world, obviously, it's very tough to completely avoid sugar because it's so readily available. And unfortunately, just because it's widely available it doesn't make it any healthier, and it drives me absolutely nuts that sugar is marketed so much to kids, or to see adults who themselves don't eat sugar and who aren't eating birthday cake, but who are trying to give birthday cake to kids, or who when kids say no, even try to push them to eat birthday cake or think it's fine for them to have it just once in a while.

But the problem is it's not just once in a while, it's not every couple months, it's not just on their birthday it's rich and they turn around, it's every classmate's birthday, it's every time they go to, like I said, child care to the bank, to anywhere, they're always offered sugar. And so especially for kids who are still developing their nutritional foundation, and their metabolism, and their hormones, even that little bit of extra sugar can be harmful. And I know how hard it can be sometimes, and I'm always that mean mom but we really try to stick to whole real food with our family as much as possible, and avoid any processed foods, especially, those with refined grains, and refined sugars.

If you still think sugar isn't a big deal, there's a great paper called "The Harmful Effects of Sugar on Mind and Body," and a quote that I love from that it says, "Many times so much calcium is used to neutralize the effects of sugar that the bones become osteoporotic due to the withdrawn calcium. Likewise, the teeth are affected, and they lose their components until decay occurs, and thus hastens their loss. Refined sugar is void of all nutrients. Consequently, it causes the body to deplete its own stores of various vitamins, minerals and enzymes. If sugar consumption is continued, then over-acidic condition result, and more minerals are needed from deep in the body to correct the imbalance.

If the body is lacking more minerals, that are needed from deep in the body to correct the imbalance, if it's lacking those, then it will not be able to properly handle and get rid itself the poisonous residues. These wastes accumulate through the brain and nervous system, which speeds up cellular death. The bloodstream becomes overloaded with waste products, and symptoms of chronic poisoning result."

And it goes on to talk about how the British Medical Journal reported, and, I think, the article is called "The Sweet Road To Gall Stones," that refined sugar is a risk factor in developing gall stones because gallstones are composed of fats and calcium. And, like I mentioned, that sugar can upset all the minerals and pull calcium out of the bones and into the bloodstream, it can become toxic or non-functioning in deposit in the body, especially in the gallbladder. And gall stones are becoming a big problem. I think the latest estimate I saw was that 1 in 10 Americans has gall stones, and the risk of getting gall stones has gone up exponentially.

Sugar consumption also takes B vitamins out of the cells, which can weaken the cells, and insulin production is

inhibited and it messes with the insulin cycle in the pancreas. And so when we have high blood sugar, it can also interfere with proper mental function and lead to a confused state, and it just affect the body in so many ways.

Another quote from that article about the harmful effects of sugar on mind and body that I loved is that, "One of the keys to an orderly brain function is the glutamic acid, and this compound is found in many vegetables," which is yet another reason it is so important to eat vegetables, "but when sugar is consumed, the bacteria in the intestines which manufacture B vitamin complex as begin to die. These bacteria normally thrive in a symbiotic relationship with the human body, but when the B vitamin complex levels decline, the glutamic acid, normally transformed into "go" and "no-go" directive natural enzymes by the B vitamins, is not processed and sleepiness occurs, as well as a decreased ability for short-term memory function, and numerical calculative abilities. The removal of B vitamins when foods are processed makes the situation even more tenuous."

So when you look at it in that light, then you realize that many kids are starting their day with breakfast cereals, which in many cases, have more sugar than donuts, and has genetically modified grains, and have artificially added nutrients, and that's what they're they're starting their day with. And then we wonder why they're having trouble in math class, when that extra fructose can interfere with brain functioning, calculative ability, and it makes it hard for them to sit still, and then it's somehow still a mystery to us when ADD and ADHD are skyrocketing, and kids are having trouble sitting still.

So this is just a huge, huge, huge complaint of mine, how much sugar is marketed to kids. And so for us, personally, this means that we cook at home a lot of the time, but more importantly, we work on teaching our children that they need to learn and be educated and make these correct interesting choices themselves. Because even if I can, at this point in their lives, control what we cook in our house and make sure that they have the best food available, I'm not always gonna have that ability.

And, I think, it's incredibly important for parents to provide children the resources to understand how some foods affect your body in the negative way, and other foods affect your body in a positive way. And really let them learn to make those positive choices themselves. I think we really undervalue kids and don't let them learn to make those decisions, and we don't we don't trust them to do that, but, I think, that a lot of times when you educate them they really well.

And so, my kids are pretty used to eating a healthy diet. And usually if they eat processed foods they'll feel gross, but I also try to make those learning experiences, because, like I said, I could control everything they eat right now, but if we're out and about somewhere, and someone gives them cake, or gives them a lollipop, sometimes I let them eat it, because I realize they're gonna feel bad and they're going to make that connection. And I find that my older kids are starting to learn to not choose those foods to begin with.

And I know it sounds like a lot of work to avoid excess sugar and refined sugar in breakfast cereals, and it definitely is more work than just dumping a meal in a box in a skillet, but it is so worth it, and I really, really implore other parents, and especially moms to make this jump, because this is my trumpet call and I'm always on the soapbox, but the statistics for our kids' future are not good. And when we look at the estimates for when they're adults, and one in two chance of getting cancer, and heart disease, and diabetes, and auto immune disease, and they deserve a better future than that, but we can't wait till they're 30 to try to give it to them, we have to start giving it to them right now.

And we still have that power. Moms control 80% of the food budget in the US. And I know that if moms start making these conscious decisions in educating the next generation to make these conscious decisions, we will absolutely, absolutely see changes in the future.

So my challenge to you this week right now, is to take one step and to swear off of refined sugar for a month, and see how your family does. If your family is still consuming breakfast cereals, which are completely loaded with sugar, genetically modified, throw those out and don't look back. Most breakfast cereals contain more sugar than donuts. They have a host of additives that your children can't hear and pronounce, and should certainly not be eating, and they really provide very little nutritional value.

And it's definitely a switch to make, but for us, breakfast is usually leftovers from the night before or some kind of stir fry of grass-fed meat, and tons and tons of vegetables. And a hashtag I use often on Instagram now that I got from the paleo parents is, "more vegetables than a vegetarian." And we try to include as many vegetables as possible in every meal, especially green vegetables which encourage that proper B vitamin formation in the gut, and so many other reactions in the body.

And even just that one step of getting rid of refined sugar, and getting rid of breakfast cereals, can have such a lasting impact on children's health. And I beg other moms and other parents to make that jump now while we still can, and while we still have a chance to change the future for them, and to give them a solid nutritional foundation for their entire lives.

This has been episode 14 of the "Wellness Podcast." Definitely have been a bit of a rant, so that's a soap box for me. If this is something that you struggle with or you're having trouble getting your family off sugar, please tag a friend and have them subscribe to this podcast also, and go into it together. And keep each other accountable, help each other meal plan, and make that change, because your children and your family deserve it.

And if you've enjoyed this podcast, or any other podcast, I would absolutely love it if you would subscribe on iTunes, and take a second to give it a rating or review, because that's how iTunes allows other people to find it. And my hope is to reach many moms, and many families, and many parents. And I know that together, that we can actually make these changes for our children's future, and that's what I beg of you to do.

So until next time, have a healthy week. Thanks for listening.