

Addressing the Silent Epidemic of Excess Iron

A Special Interview With Dr. Christy Sutton

By Dr. Joseph Mercola

Dr. Joseph Mercola:

Dr. Mercola helping you take control of your health. And today, we are here with Dr. Christy Sutton, who is going to be exploring some of the dangers of excessive iron, because we're commonly taught and told that iron is really important. It is. It is absolutely important. Especially if you're a child [or] young adult, frequently you're going to need this, and if you don't get it, you're not going to be able to provide essential nutrients to form your red blood cells and certain proteins in your mitochondria, which are responsible for producing energy.

So, it is important, but when in excess, it could cause, actually, quite significant damage. So, I understand, Christy, your husband had a genetic anomaly that caused him to have excess iron and that was what captured your interest in it and you've been studying. So, why don't you start your journey from that? Because it's a big part of your practice at this point. Is that correct?

Dr. Christy Sutton:

Yes, yes. Well, my interest in iron definitely has been lifelong, not just because of my husband, but because personally, I have struggled with low iron because-

Dr. Joseph Mercola:

Oh, you got both ends of the spectrum.

Dr. Christy Sutton:

Right. So, I have Crohn's, celiac, lost part of my small intestine due to Crohn's when I was 16. Then because of that, I have to take a bile sequestrant. Then being a menstruating female who's had a child, low iron has been something that I have been watched very closely for and had to take iron a lot. So, like a lot of clinicians, when I came into practice, I seemed to be more hyper-focused on people's problems that were my own problems. So, I dealt with iron issues. So, I wanted to watch my patients' iron levels closely. Then I realized, "Oh, not everybody is low. A lot of people actually have high iron."

Then it wasn't until I was writing my first book, "Genetic Testing: Defining Your Path to a Personalized Health Plan" book, where I discovered the hemochromatosis genes. I realized that my husband had a hemochromatosis gene, and I realized that that was why I kept telling him, "Oh, you need to go donate blood." Because his doctor would order iron labs, a ferritin, CBC (complete blood count), and he would get elevated iron often, high ferritin. He was developing high liver enzymes and his red blood cells were getting high as well, which was a common issue with people that had too much iron. But his doctor never said anything about it. Eventually, he decided, "Okay, I need to do something about this."

So, he went to a gastroenterologist, because he was trying to figure out why his liver enzymes were high. I thought it was the high iron, but that was presented to the gastroenterologist and dismissed. So, then they went down this whole rabbit hole of misdiagnosing him with autoimmune hepatitis. Then later we went to a hematologist where we figured out he had hereditary hemochromatosis. So, it's not something that's particularly difficult to treat. Removing blood, diet, supplements, things like that can help.

But once I got really savvy about looking for the genes and the labs combined, I realized, "Oh, this is really an epidemic that is a silent epidemic that is not really being talked about." I would tell people, "You have a problem with high iron." And then they would often go and get a second opinion. Their second opinion would say, "You're fine. Don't worry about it," which is a common issue where people are getting high iron labs that should warrant more investigation and then they're just getting dismissed.

Dr. Joseph Mercola:

Discounted because it's not really commonly taught in the medical school curriculum or really understood or recognized as being dangerous.

Dr. Christy Sutton:

And there are some dangerous myths. So, with hereditary hemochromatosis-

Dr. Joseph Mercola:

Well, let's stop there, because you said a bunch and I just want to address that.

Dr. Christy Sutton:

Oh, I'm sorry.

Dr. Joseph Mercola:

No, don't worry. The dangerous myths, we'll come back to. We'll get into the reasons why you want to lower someone's iron in a moment, but the therapeutic strategies you recommended were diet, therapeutic lobotomies and supplements. So, I've been involved with or was aware of the dangers of iron in either the early '90s or late '80s. So, it's quite a while. At that time, actually, it was probably as a result of Bill Sardi's work. He made me first aware of it. Interestingly, my dad and I both have beta thalassemia, which is a hemolytic anemia that results in a high turnover of red blood cells. It's two months, instead of three months.

As a result, a lot of that iron is accumulated because of the turnover. It's not a hemochromatosis gene, but it results in similar problems in high iron. So, as a result, he had, I think, a ferritin close to 1,000.

Dr. Christy Sutton:

Oh, wow.

Dr. Joseph Mercola:

Which is pretty high of course. Ideally, it shouldn't be below 40, I think. We'll talk about the normals. So, I played with some of the supplements. That's the reason for the story is, and specifically the big one is inositol something. You would know. I just don't recall. IP6, inositol phosphate, what is the name of it?

Dr. Christy Sutton:

IP6. Yeah.

Dr. Joseph Mercola:

Yeah, but there's the chemical name I don't recall.

Dr. Christy Sutton:

Inositol – P-phosphate? I'm sorry.

Dr. Joseph Mercola:

Hexaphosphate because the hex is a six. Anyway, it's IP6 and it's speculated itself. It didn't do squat for my dad. Nothing. I rapidly came to the conclusion that the supplements are useless and perhaps potentially even dangerous, because they prevent you from doing what really is helpful is to remove the iron. The iron is primarily stored in red blood cells, the vast majority of it. So, that's the way to do it. So, I'm wondering if there are some supplements I'm unaware of or why you would mention supplements would be useful?

Dr. Christy Sutton:

Yeah, so it's interesting that you jump to IP6, because that's one that people like to talk about and ask me about. I did not include it in the supplements in the book, because I couldn't find any research to back up all of these claims. I wasn't willing to experiment on my patients with something that didn't have good research. So, I can't really speak to it. What I can speak to are the things that I have included in "The Iron Curse" protocols and the supplements. The most important one, I think, is curcumin, because-

Dr. Joseph Mercola:

Really?

Dr. Christy Sutton:

Curcumin, yeah. So, there's a handful that I think are very important, but I have seen clinically the curcumin's ability to lower iron almost to a fault. It's annoying to me, because I can't take

curcumin for inflammation because it makes me low in iron. But for people that are high in iron or even inflamed with high iron, high ferritin, that's a great place to start, because curcumin, which is the extract from turmeric, of course, it binds to iron and then it has all of these other wonderful health-promoting properties.

It's so good for your brain and it actually helps remove excess iron from the brain and the organs, other organs, the heart, liver, spleen. So, unlike other iron chelators that might be used pharmaceutically, it doesn't have all these possible negative side effects, but it works very effectively. I mean, I've seen this be used in hereditary hemochromatosis patients to lower iron without blood removal, because there are-

Dr. Joseph Mercola:

Wow, that's impressive.

Dr. Christy Sutton:

-a lot of people that cannot – You have a unique situation. You're more in an iron-loading anemia situation where you can get low in red blood cells from the thalassemia, which is why you have to be careful about not removing too much blood, but you still need to be able to pull that iron out. So, that's where curcumin is one of the most valuable things. You can take it with an iron-rich meal like if you're eating shellfish-

Dr. Joseph Mercola:

[inaudible 00:08:42].

Dr. Christy Sutton:

Yeah, or red meat.

Dr. Joseph Mercola:

As I recall, the only drug that's indicated for removal or lowering would be deferoxamine. Is that correct or is there another?

Dr. Christy Sutton:

I think there's another one. They all have specific side effects that-

Dr. Joseph Mercola:

Yeah, they're not good. Curcumin is much better. Yeah, it's a natural product.

Dr. Christy Sutton:

It has all these wonderful health bonuses. So, curcumin's one. I'm happy to go into other-

Dr. Joseph Mercola:

No, no, that's fine. It's just a curiosity question. The bottom line is people should not use the drugs. Stay away from the drugs.

Dr. Christy Sutton:

Yes. Yeah. I mean, I'm happy to go into other supplements that I've-

Dr. Joseph Mercola:

Are there others that are binders like curcumin?

Dr. Christy Sutton:

Well, yeah. Okay. So, there are others that are binders. So, another one is silymarin, which is an extract from milk thistle, which is very good also for hemochromatosis patients, because not only are we lowering iron here, but we're also helping to protect and repair the liver. It's got other health-promoting effects, been shown to be good for sperm, because high iron destroys the testes and the ovaries and the brain. So, I don't think silymarin lowers iron quite as much as curcumin, but it's still a significant way to lower iron. The best way to take these to lower iron is take them with an iron-rich meal. If you want to take them just for medicinal properties but not lower iron, take them away from an iron-rich meal. Other things that help to lower iron-

Dr. Joseph Mercola:

Just to clarify that, their binding capacity to iron is iron in your gut before it's absorbed rather than extracting the iron from your tissues, which would be in the red blood cells primarily and the [inaudible 00:10:36].

Dr. Christy Sutton:

That's a really good question and I don't think I can speak to the specifics on that, because it seems like it actually is lowering iron out of – There are studies that have shown that the curcumin has been able to lower the iron in the brain and the spleen. So, I don't know if it has a way other than just-

Dr. Joseph Mercola:

Well, it might be an equilibrium, because I know that's true with oxalate crystals. If you can get the dietary intake down to really low, then it's going to come to an equilibrium, essentially come out of the tissues.

Dr. Christy Sutton:

If you get it low enough, then it's going to come out. Yeah, exactly.

Dr. Joseph Mercola:

I think that's part of the mechanism.

Dr. Christy Sutton:

Yeah. But can the curcumin also get past the blood-brain barrier and have some other effect there that can help pull the iron out? I don't know, and I don't know how to study that.

Dr. Joseph Mercola:

That seems to be useful. You notice a decrease in ferritin levels.

Dr. Christy Sutton:

It works very well. Now, some people might need to take more than others. People that have really high iron might need 3 grams a day, which at some point that can create diarrhea. So, you have to look at other potential limiting factors. Another thing that binds to iron and lowers iron is alpha-lipoic acid. So, alpha-lipoic acid not only lowers iron, but it's also great for protecting the nerves and lowering blood sugar, which hemochromatosis not only destroys your liver, but it also destroys your pancreas, causing diabetes, Type 1 and Type 2 diabetes. It destroys the brain, increasing your risk for Alzheimer's, Parkinson's, you name it, bipolar, schizophrenia. So, alpha-lipoic acid is a nice one for if you want to treat that higher blood sugar.

Dr. Joseph Mercola:

That's precisely what happened to my father. He developed what's called bronze diabetes from high iron.

Dr. Christy Sutton:

Oh, yeah.

Dr. Joseph Mercola:

He had bronze diabetes. It was like diabetes Type 3, which is typically referred to as Alzheimer's diabetes, but it was really Type 2 and Type 1. He had wound up having to really take insulin. I know it's commonly prescribed for Type 2 diabetes, foolishly prescribed. Needlessly, it's the wrong solution. But he really needed it. Because of the oxidative stress, it damaged the beta cells in the pancreas, and he stopped being able to produce his own insulin.

Dr. Christy Sutton:

So definitely, if you're getting that bronzing color, that's from high iron causing damage to the skin, and then you're getting that extra melanin production from the high iron creating all that damage. Then you get that bronzing effect, which if you lower the iron, then the bronzing effect

goes away. Then also the other risk for other skin issues like skin cancer is a higher risk for people that have high iron as well. Infections, skin infections-

Dr. Joseph Mercola:

Let me stop there because I think it's a catalyst actually. It was a question I wanted to ask you that's related to the skin cancer. Are you familiar with lipofuscin?

Dr. Christy Sutton:

With? Say that-

Dr. Joseph Mercola:

Lipofuscin?

Dr. Christy Sutton:

No.

Dr. Joseph Mercola:

It's damaged linoleic acid and it's damaged because it's oxidized by iron. It forms the liver spots, is the common name for them, these pigmentation in the skin. It's lipofuscin. It's actually a dermal representation of oxidative damage from high linoleic acid. So, the increased risk for skin cancer is not so much from the iron. It's only because you have high linoleic acid, and iron is one of the molecules that will absolutely damage those double bonds in linoleic acid, no question. And the sunlight. The combination, it's a combination of the two.

Dr. Christy Sutton:

I wonder, is it ferroptosis that – Are you familiar with ferroptosis?

Dr. Joseph Mercola:

Yeah. Yeah.

Dr. Christy Sutton:

So, I wonder if the linoleic acid with the iron increases the ferroptosis? Which is where you get more lipid peroxides and create this massive amount of oxidative stress.

Dr. Joseph Mercola:

Yeah, they're [a] really bad combination, really are. It's my perception that the high linoleic acid is more of a serious issue, because if it was normalized to ancestral levels of less than 2%, ideally less than 1% – and it's like 25% in most people, 25%. If you had normal levels, you could have

the higher iron and not get as much damage, hardly at all. Because that's what is damaging, is primarily that fatty acid. It's an overabundance in the body.

Dr. Christy Sutton:

Well, I don't know because you're always going to have cell membranes regardless of the linoleic acid.

Dr. Joseph Mercola:

Yeah, that's for sure.

Dr. Christy Sutton:

But you're always going to have the cell membranes. I would be interested to see if cell membranes that have a lower amount of linoleic acid did not create as much ferroptosis. I don't know. My guess is they don't.

Dr. Joseph Mercola:

No, because saturated fat is not predisposed to oxidation.

Dr. Christy Sutton:

Right, yeah.

Dr. Joseph Mercola:

If you replace it, that's the issue, or even have MUFAs or monounsaturated fats like oleic acid. But anyway, it's a tangent. So, I think it would be useful since you have experience in both and there's a lot of confusion on this topic. I would appreciate you sharing your journey of learning how to differentiate between the two, the obvious ones, because I've interviewed Morley Robbins a few times on this topic. He's perceived as an expert in this area. At least, self-perceived.

I think he's a little bit too hyper-focused on that, and he's not really seeing the bigger picture. That's why I really wanted to talk to you, because you get a different perspective than Morley's. He sees everything in the world of copper and iron. That's it. There's really nothing else. That's not accurate. I mean, they're definitely important molecules, but it needs to be in a bigger context. So, because his positioning is that there almost is no such thing as iron deficiency. I mean, it's almost at that extreme. The ideal ferritin level is zero, which I think is probably not-

Dr. Christy Sutton:

Dangerous.

Dr. Joseph Mercola:

Yes, very dangerous. That's what his belief is. So, at some point – I believe you can have single digits ferritin levels and still have excess iron because of copper.

Dr. Christy Sutton:

In your tissues.

Dr. Joseph Mercola:

Yes, in your tissues.

Dr. Christy Sutton:

Yeah, I'm more than happy to talk about that.

Dr. Joseph Mercola:

What I would be curious [about], if you could help us understand and navigate from your perspective, [is] how to differentiate between those two entities, because it is a clinical challenge. There's no question. In some ways, it's an advanced clinical challenge, because 98% of physicians wouldn't even understand it's an issue.

Dr. Christy Sutton:

Yeah. Okay. So, iron-deficient anemia versus copper-deficient anemia versus iron overload and hereditary hemochromatosis. Do you want me to-

Dr. Joseph Mercola:

Yeah, and those are the primary diagnoses. You're seeking to put a marker on it and boldly claim that this is the correct diagnosis. Please understand this is an advanced perspective because almost every medical doctor doesn't understand this. They have no clue.

Dr. Christy Sutton:

So okay, I'd like to start with hereditary hemochromatosis.

Dr. Joseph Mercola:

Sure. Let's start wherever you'd like.

Dr. Christy Sutton:

Okay. So, when it comes to diagnosing iron issues, it can get very complicated. The nice thing is that you can always fall back on labs and you don't really want to just use symptoms to guide you, because if you're using symptoms, then this person is well far down a pathological path that you could have potentially stopped years ago, if not decades before. So, if we talk about hereditary hemochromatosis, iron overload, iron-deficient anemia, copper-deficient anemia,

other anemias, hemolytic anemia, like what you deal with, there are different labs that basically you need to know and understand, and genes as well. So, the first one I want to discuss is hereditary hemochromatosis.

So, hereditary hemochromatosis is when you have inherited one of three hemochromatosis genes, which cause you to increase iron absorption by decreasing hepcidin, which hepcidin is this molecule that's a protein that your liver makes. If you have this gene, the hemochromatosis gene, you don't make as much hepcidin and then you absorb more iron. That can become pathological, because over time, it's like you just keep getting more and more and more, and you become this iron hoarder. Your body runs out of places to put it, because first it wants to put it in the liver, and then the liver overflows, and then it'll go to the next place, whether that's your heart, or your pancreas, or your brain, pituitary gland, gonads, ovaries, testes [or] skin.

Eventually, it will go everywhere because the body has evolved to hold onto as much iron as possible. There's not a lot of ways to lose iron other than you can lose a small amount through your skin, but mostly iron loss is through menstruation, which is why females tend to be at a lower risk for high iron and a higher risk for low iron. Because they menstruate every month and if you have a heavy period, you're going to lose a lot of iron. If you have a light period or no period, you're not going to lose as much. If you are pregnant, you're going to lose a ton of iron. So, females are just naturally at a higher risk for having low iron issues, whereas men are at a higher risk for having high iron issues.

Having said that, when you start looking at the hemochromatosis genes, all bets are off, because you'll see females that have these hemochromatosis genes that develop high iron, and you'll see men with the hemochromatosis genes that develop high iron as well. They often get diagnosed first. Then if you're really looking closely, which not many people are, you will even see children with the hemochromatosis genes that develop high iron. I discovered that in my colleague's 5-year-old, where hereditary hemochromatosis was causing her to have severe neurological problems and that was a very difficult thing to get through because the hematologist didn't really want to deal with it. Okay. That's hereditary hemochromatosis.

When you look at labs, hereditary hemochromatosis can look very similar to non-hereditary hemochromatosis, which is where you have high iron but you don't have one of those hemochromatosis genes. So, for you, you have more of a non-hereditary secondary hemochromatosis, because you have that thalassemia issue where your red blood cells are breaking and letting all this iron out and then you develop high iron with potentially low red blood cells. That's common with thalassemia. Some people, they don't have a thalassemia gene and they develop high iron without hemochromatosis gene, because they're just eating a lot of iron-rich foods and they're not losing iron through menstruation. This is usually men. Okay.

So, hereditary hemochromatosis on labs, the most important labs that you always have to start with are the full iron panel, which I'll go through that, the CBC, and then always get a comprehensive metabolic panel, because you need to have those liver enzymes anytime you're – You can get many more. It's always nice to get a copper and a ceruloplasmin and all that, but the reality is that most doctors are not going to be ordering the copper and ceruloplasmin. We need to not lose the forest through the trees, and we need to make sure that, if nothing else, we understand that iron panel, CBC and comprehensive metabolic panel, which has the liver

enzymes. So, for the full iron panel that has the ferritin, the TIBC (total iron-binding capacity), the UIBC (unsaturated iron-binding capacity), and the serum iron, and then just the iron saturation.

So, with hereditary hemochromatosis, you develop high ferritin with a high iron saturation. That combination is hereditary hemochromatosis. So, over 45% iron saturation and then high ferritin. Now, high-

Dr. Joseph Mercola:

Yeah. Give us your range that you would consider high.

Dr. Christy Sutton:

Yeah, so “high” is a relative term, because some doctors don’t care about ferritin until it’s over 1,000.

Dr. Joseph Mercola:

[inaudible 00:24:11].

Dr. Christy Sutton:

Yeah, that’s well outside of lab range, but that’s just how misguided some people are.

Dr. Joseph Mercola:

I would suggest they’re unguided.

Dr. Christy Sutton:

Delusional.

Dr. Joseph Mercola:

Not delusional. They’re just not guided, simple.

Dr. Christy Sutton:

They’re not guided.

Dr. Joseph Mercola:

The guides are pretty accurate if you listen to them, but they’re just not listening.

Dr. Christy Sutton:

Okay, that's fair. That's a fair point. So, some labs allow ferritin to go into the 400s or 300s for men. Often for women, the ferritin tops out around 150. I never like ferritin to be over 100.

Dr. Joseph Mercola:

What's your ideal?

Dr. Christy Sutton:

Ideal is relative depending on the person. So, I never like people to be over 100.

Dr. Joseph Mercola:

Like blood sugar levels.

Dr. Christy Sutton:

Blood sugar?

Dr. Joseph Mercola:

Fasting blood sugar levels.

Dr. Christy Sutton:

You mean, is it relative there too?

Dr. Joseph Mercola:

No, I'm saying just like you don't want a fasting blood sugar to be over 100.

Dr. Christy Sutton:

Correct. Exactly. Yeah. I'll tell you why, as far as the research goes. In my opinion, a ferritin over 100 means you're either inflamed, have high iron or both. There are some good studies that I reference in my book that show definitely anything over 200, it's pathological. The higher you get, the shorter your lifespan [is] by decades. It's not insignificant at all. You're more likely to die of a heart attack, you're more likely to die of cancer, you're just more likely to die at a younger age. Now, there is some more recent research that showed – they looked at COVID-related mortality and they found that a ferritin over 100 was associated with an increased risk for COVID-related mortality. I'll be honest with you, I just like nice round numbers and I don't like it ever to go above 100.

I feel like 100 is high enough that I'm not swooping everybody in, but low enough that I'm not leaving stragglers out. Now, if somebody has a ferritin over 100 with an iron saturation that is in the 40s or definitely higher, then I'm highly suspicious of a hemochromatosis gene and I immediately want to get those hemochromatosis genes tested. If they have a hemochromatosis gene, then we know why they're high on iron and we know where this story is going, and it's not

going to be a pretty picture most likely. Then it's time to refer to a hematologist who is probably not going to take them seriously at that point in time and talk to them about how to get iron lower.

Dr. Joseph Mercola:

Why couldn't you just manage it yourself? Because in most cases, you'll know to do it better than they will.

Dr. Christy Sutton:

I am a chiropractor, and in the State of Texas, I have to-

Dr. Joseph Mercola:

Oh, you're required by license to do that?

Dr. Christy Sutton:

Right. I can treat musculoskeletal conditions, which hereditary hemochromatosis is a musculoskeletal condition that causes muscle atrophy, joint pain, serious issues, osteoporosis. However, I am not, by my license, allowed – I can diagnose all these conditions and I can refer, but I cannot treat. And so, I always, to save my license, will refer out, and then I'm ultimately usually disappointed by the advice they got, which I think is dangerous. Then that's ultimately why I spent all this time writing "The Iron Curse," because I realized how many people were being misled and really dismissed about potential health problems that they needed to avoid.

Dr. Joseph Mercola:

That's good. Yes.

Dr. Christy Sutton:

Okay. So, hereditary hemochromatosis, the labs should not go above 45% on iron saturation. Then if you have a hemochromatosis gene, you want to keep that ferritin much lower. A lot of times, hematologists like to keep that ferritin below 50. Some even want to keep it in the 30s. So, if you have one of those hemochromatosis genes and you've proven that you can go high or on the high end of normal, then you want to keep your ferritin lower to give yourself a buffer towards your danger zone. Whereas like myself, if I get my ferritin into the 60s, I'm really ecstatic. I'm not going to do anything to lower that. I'm feeling really good about that.

Dr. Joseph Mercola:

Yeah. So, it's customized for the person, but in that common scenario, which is the hemochromatosis that your husband has and many others who have overload for a variety of reasons that you'll discuss, what is the ideal you're targeting for your husband? Is it 30, 20, 25?

Dr. Christy Sutton:

So generally, you need to get below 50, but in some cases, you have to get into the 30s to get those liver enzymes down to normal. It can take a long time to get the liver enzymes down to normal. It's interesting, because some of these people with really bad hemochromatosis genes – by bad, I mean they inherited two of the worst ones. They're called C282Y, C282Y. They inherited two of the highest risk genes. These people can jump up very quickly because they're genetically just excellent at absorbing iron, which at one point in time was this evolutionary advantage.

Dr. Joseph Mercola:

Yeah, sure.

Dr. Christy Sutton:

Not anymore. Well, in some cases, it still is. I would love to have a hemochromatosis gene but I don't.

Dr. Joseph Mercola:

Sure.

Dr. Christy Sutton:

Okay, so that's hereditary hemochromatosis. With the iron panel, you'll see with high iron, you'll see the TIBC go low, the UIBC go low. The serum iron often goes high, and then that ferritin will go high. You'll often see the liver enzymes go high and it's common to see the red blood cells, hemoglobin, hematocrit go high. But that doesn't always happen. These days, so many people are taking testosterone. So, you have to always ask, "Are you on testosterone?" Because that can cause those things to go high as well. The red blood cells, hemoglobin, hematocrit.

Dr. Joseph Mercola:

In the past, I interviewed an expert who didn't really have a medical degree, but he was, I think, part of some hemochromatosis foundation. He was advocating GGT (gamma-glutamyl transpeptidase) as the most sensitive enzyme to assess. I don't think it's part of the normal comprehensive metabolic profile or panel. It's an inexpensive test. It's well under \$10, like 5 or 6 bucks. But have you experienced that?

Dr. Christy Sutton:

I always get the GGT as a part of the labs that I order. Occasionally, I will see a high GGT when the AST (aspartate aminotransferase) and ALT (alanine transaminase), which are the other two liver enzymes, are normal. More often than not, I'll see a high ALT or high AST. Usually, if

they're not drinking alcohol and they just have high iron, you're going to see that high ALT. If there's alcohol involved-

Dr. Joseph Mercola:

These numbers ideally should be in the "-teens," not the 20s, right?

Dr. Christy Sutton:

Right. But my husband's were well out of range in the 80s and 90s and his doctor wasn't saying a word to him, because I think they just see so many people with really-

Dr. Joseph Mercola:

Yeah, it's normal. It's normal.

Dr. Christy Sutton:

Right. They always think, "Oh, you're drinking too much alcohol or whatever," and some people are. That was not our problem. Also, then I didn't get into this, but my husband developed a pituitary tumor that was causing him to have high cortisol, Cushing's disease. Ultimately, I think the high iron created a lot of oxidative stress on his pituitary gland.

Dr. Joseph Mercola:

Wow, that's so rare. Yeah.

Dr. Christy Sutton:

So, he had this ACTH pituitary tumor, and the only reason we diagnosed that "early," even though it'd been going on for probably a decade, was that I had been ordering his cortisol and DHEA (dehydroepiandrosterone). Periodically, they would jump up and then go back down.

Dr. Joseph Mercola:

Wow.

Dr. Christy Sutton:

Then when the hemochromatosis got properly treated and the DHEA was still high, we were like, "Why is this happening?" So we went to the endocrinologist and I said, "I'm worried my husband has Cushing's." She was like, "He doesn't have Cushing's. He doesn't look like somebody with Cushing's. His hemoglobin A1C is normal." Anyways, five months later, he's having surgery to remove the pituitary tumor. So, the reason I say that is because for years, he was told, "You just need to exercise and lose weight."

It's like, okay, his problem was not exercise and he had a pituitary tumor and hemochromatosis. Hemochromatosis was destroying his liver and his brain and his heart and everything else, and

the pituitary tumor was causing him to have high cortisol, which made him look overweight. He had a beer belly, but just so often these conditions don't even get looked into, this idea that everything's just, "Well, you need to try harder."

Dr. Joseph Mercola:

So, did he hit an MRI (magnetic resonance imaging), microadenoma pituitary?

Dr. Christy Sutton:

Yes. So, the MRI interestingly enough showed, they said that they saw one, but then when they went in to do surgery, they were like, "Oh, actually, that was a capillary on the MRI. He did have pituitary tumor, but it was in a different part of the pituitary and it was much bigger than we thought." The very esteemed neurosurgeon, we now realize, totally botched the surgery, because we had to go back five years later, which was just like six months ago for the second surgery, which was a much better experience from a different surgeon that was younger and had a better technique.

Hopefully, that's it. Hopefully, they removed it all, but the first surgery did not remove it all. He missed part of it and he knew that, but he also caused the cerebral spinal fluid leak, and I think he was just ready to get out of there. So, the second surgeon I think got it all out. That's a whole nother story that, I mean, if you want to talk about Cushing's for another day.

Dr. Joseph Mercola:

[inaudible 00:34:51] the dangers of the medical system.

Dr. Christy Sutton:

Yes, I have been living in that. So, I don't mean to digress. I'm happy to go back and we can circle back around to the other diagnoses of – we can talk about low iron.

Dr. Joseph Mercola:

Sure.

Dr. Christy Sutton:

Okay. One thing I wanted to say to follow up on the hereditary hemochromatosis versus non-hereditary is, really, the key is you don't have a hemochromatosis gene and then you need to figure out, "Why does this person have high iron? Do they have a thalassemia gene? Are they just eating a lot of iron? And then do they have hemolysis for some unknown reason?" But that's a non-hereditary hemochromatosis situation. The treatment is basically the same other than you want to use more of the supplements, really heavy on the supplements to lower iron.

Dr. Joseph Mercola:

It was my understanding that the therapeutic phlebotomy is the first intervention.

Dr. Christy Sutton:

Okay. Yeah. So, if you have plenty of red blood cells and hemoglobin, then therapeutic phlebotomy is a wonderful place to start. A lot of times people don't, because they either have a thalassemia issue where their red blood cells are getting chewed up too quickly or they have really lost so much blood so quickly because their doctors are just trying to get the iron down that they become low in hemoglobin or red blood cells. Rather than waiting for months for that to recover, you could be doing the supplements to lower the iron while you're still-

Dr. Joseph Mercola:

Well, that makes sense. But there's another option that you may not be aware of, and it doesn't really require a physician or a physician's license. Because typically therapeutic phlebotomy is implied that you're donating your blood, which is 16 ounces of blood. That's a big hit. It's a big hit on most people, especially if you're already anemic. The alternative is to do it less, more frequently, which is what I do. I was actually doing, let's see, 60 cc, 2 ounces once a week, but then I was just getting too many holes in my veins. So, I started doing 120 cc, which is 4 ounces every two weeks. So, 8 ounces a month, so a pint every two months.

Dr. Christy Sutton:

I wonder if you were to do the curcumin and maybe some quercetin, which lowers iron absorptions, so it increases hepcidin. So, then you're going to be able to lower iron absorption. You could do some of those supplements like in "The Iron Curse."

Dr. Joseph Mercola:

When you take the meal, when you're taking the iron.

Dr. Christy Sutton:

Right, or even without. Just get them in. Then you might not need to have so much blood removed because you're not absorbing as much iron as you otherwise would be. That might be an interesting experience.

Dr. Joseph Mercola:

Yeah, that's an interesting alternative. It's easy to monitor because I've taken my blood pretty much once a month for decades. So, a lot of data to look at.

Dr. Christy Sutton:

Yeah, try that. So, those are the high iron issues. Now, I think next, we should probably talk about iron-deficient anemia, which is the most common nutritional deficiency in the world. It's

very common just because of – In fact, iron-deficient anemia is the reason that the hemochromatosis genes exist and exist in over 30% of the global population that's been tested.

Dr. Joseph Mercola:

It's a response to this common nutritional deficiency evolutionary.

Dr. Christy Sutton:

Yes, because low iron has been a historical gauntlet that has killed countless people, whether it was blood loss due to an injury or pregnancy, delivery, just famines. So, the whole reason that Ireland has over 60% of the population with one of these hemochromatosis genes is because of the Irish potato famine. So, anyways, this gene that allows you to absorb more iron exists because low iron killed so many people and evolution was like, "Okay, we're going to keep that one because that's going to help us have more kids."

So iron-deficient anemia is a serious issue that if you are pregnant with low iron, your child is more likely to have a significantly lower IQ, more likely to have ADD (attention-deficit disorder), ADHD (attention-deficit hyperactivity disorder), serious neurological problems that often do not go away with age. Many kids suffer from low iron, because they eat a lot of calcium-rich foods, which calcium binds to iron and then you get low in the iron. Maybe they're picky eaters, they're growing rapidly. So, many kids are not being checked for their iron levels and they're being diagnosed with ADHD when their problem is actually just low iron, because if you don't have enough iron, you can't make dopamine. So, low iron is a serious issue. What that looks like on labs – so iron-deficient anemia is a different condition from copper-deficient anemia, which I'll talk about next.

So, iron-deficient anemia on labs, you're going to be looking at the iron panel, which has the TIBC and the UIBC will be high, and then that's because the body is trying to get more iron to be mobilized and moved throughout the body. The serum iron will often be low. The iron saturation will often be low, and then that ferritin, I think, is usually the first marker to really indicate you're in trouble. It's probably one of the best markers, assuming you're not super inflamed. But anybody that has a ferritin below 30, I think they need to be figuring out how to get that iron higher. Now, iron-deficient anemia is more complicated in many ways because the question is why are you low in iron? There are so many reasons that you can be low in iron.

Are you just not eating enough? Are you not absorbing it? I think the most common reason that people develop low iron is because they have a GI bleed. They have intestinal malabsorption issues, maybe undiagnosed celiac disease. There is a gene that can cause you to be more likely to have low iron. I have that gene – and that gene actually causes you to make more hepcidin, so that you absorb less iron. But iron-deficient anemia, you'll also see on labs, low red blood cells sometimes, low hemoglobin, low hematocrit, things like that. The MCH (mean corpuscular hemoglobin) might get low, the MCV (mean corpuscular volume) might get low, things like that. Now, where I know a lot of your viewers and you are interested in is the caveat of well, copper-deficient anemia, and so copper-deficient-

Dr. Joseph Mercola:

Well, before we go there, one of Morley's concerns – just as something to integrate into your answer – is that as you get elderly, 50, 60, 70 and older, you've had a lot of time to absorb this iron, especially those who have iron overload, and you can even – I forget the equation. He contends that you only need 5 grams of iron in your body to meet your body's needs, 5,000 milligrams. Many people can have 25,000 milligrams.

I forget the exact amount, you can lose about 100 milligrams a month, but that would take many years, many years, decades, to remove the excess iron from your body if you were using phlebotomy. Even if you had the optimal binding supplements you recommended, you're not going to – Because that's the other issue. You not only have to address it, but you have to address the new iron that's coming in your body, right?

Dr. Christy Sutton:

Right. Yeah.

Dr. Joseph Mercola:

So, do you believe that's accurate that many people as they get older, they may have 20, 30, 40 grams of excess iron that needs to be removed?

Dr. Christy Sutton:

My understanding from what I've read in the research is that 50 grams is the highest reported for a hemochromatosis patient, which these are going to be the people that are the highest. At some point in time-

Dr. Joseph Mercola:

How was that determined? Was it like a liver biopsy?

Dr. Christy Sutton:

I don't know. See, that's a really good question-

Dr. Joseph Mercola:

Morley had this, and I think it's really good. I never followed up on it. It was a few years ago, but apparently the best tool – I mean, there's no blood test for it. Those are blood markers. It's not tissue markers, which is what we're seeking to address, but an MRI has the potential to do this to actually give you a reading of what your total body ferritin is.

Dr. Christy Sutton:

Oh, you mean like an abdominal MRI to look at your liver?

Dr. Joseph Mercola:

Well, I think it might be a total body. I don't know, but the data is there. You just have to have the software to interpret the data. It may be available now, not widely, but I know there were some scientists working on that.

Dr. Christy Sutton:

I don't know because I don't order a lot of total body MRIs on my patients. Most people are not doing that at this point in time, not because it's not clinically relevant. It's just not within the realm of norm. So, I can't comment on that. At some point in time, around 50 grams, if somebody's up to 50 grams, that's fatal. They're going to die. Then what is your ferritin at that point in time? Probably 5,000. It's really high.

Dr. Joseph Mercola:

But do you believe that the ideal is 5,000 milligrams or 5 grams and that many people have 20, 30, maybe not 50, but 20 or 30 grams?

Dr. Christy Sutton:

I think there are many people with undiagnosed hemochromatosis that are in the 20s and 30s, and the speed that they come down largely depends on what they're doing. Everybody's doing different things. So, it's hard to quantify exactly how fast that's going to come down. Iron is such an individual thing, because there's so many environmental factors. I think the research shows that the average person has between 2 to 3 grams of iron in their body, like an average adult. I don't know how much iron I have in my body, honestly. I've never done a total MRI to figure that out.

Dr. Joseph Mercola:

Well, I didn't mean to imply that that's a convention. It may not be. It may just be a research tool at this point, but I know there were some people looking at it. I should follow up and find out if that's been widely adopted, but we will assert. I'll ping Morley, because that was two years ago, maybe three years that we discussed it. I know they were looking to bring it to market, but it may not be available. So, it's not one of the options on diagnosis.

Dr. Christy Sutton:

Right. There's a lot of things I'd love to have diagnostically [that] I don't have. I'd love to be able to check hepcidin and hemosiderin. We don't have those either, so we do the best we can with what we have. But the highest I'm aware of that's been documented was 50 grams in a hereditary hemochromatosis patient. Then at that point in time, they died, because their body was just done.

Dr. Joseph Mercola:

Oxidized big time.

Dr. Christy Sutton:

Yeah. So, did you hear about that Scottish lady that her ferritin was 5,500 and she's like [a] Scottish royal? She's [a] royal Scottish with two hemochromatosis genes, and she was just never diagnosed and died in her 50s from hemochromatosis.

Dr. Joseph Mercola:

Oh, geez.

Dr. Christy Sutton:

Yeah.

Dr. Joseph Mercola:

So, are you of Irish ancestry? Just curious.

Dr. Christy Sutton:

Yeah, yeah.

Dr. Joseph Mercola:

Because you had the inflammatory bowel disease, wasn't it?

Dr. Christy Sutton:

Yeah, I have Crohn's and I have celiac.

Dr. Joseph Mercola:

Celiac is really common in Irish people.

Dr. Christy Sutton:

Yeah.

Dr. Joseph Mercola:

I don't know why that is. Prevalence seems like it's over 25%, maybe over 50%.

Dr. Christy Sutton:

I don't know. I wish I know. It's got to be high. I've heard part of that is because Rome never conquered Ireland, but it could also be that the celiac gene just started at a very early-

Dr. Joseph Mercola:

Well, there's some reason for it. When I was treating patients, if someone was Irish, that was part of the instructions. They couldn't have wheat because there's a high likelihood they wouldn't do well with it.

Dr. Christy Sutton:

Yeah, yeah. I look a lot at the celiac genes and most people that have one of those genes have a problem with gluten and they just don't know it. Once they get off of a gluten-free diet, they often feel better. But celiac does commonly cause low iron. Because we're not looking at a lot of nutrients commonly in medicine, iron is the first one that often gets diagnosed. But if you're low in iron and you have celiac, you're probably low in everything else too, because you're just not absorbing anything. So, when you're looking at a low-iron person, you really have to figure out, the question is, "Why?"

Are they low because they have undiagnosed celiac? Do they not make enough hydrochloric acid? Do they have a GI bleed? What's going on with their gut? Have they had part of their bowel removed or done a bypass? There's all these different reasons that people can be low in iron and you really have to figure out why that is, which is often much a harder equation to solve for, I think, in my opinion. Of course, low copper can cause low iron too, but copper is interesting, because-

Dr. Joseph Mercola:

Is it low iron or just causing the indices to appear like it's low iron?

Dr. Christy Sutton:

Copper-deficient anemia, which is where you don't have enough copper, causes iron-deficient anemia, but it also causes iron overload in the tissue. The reason for that is because copper is necessary for two key enzymes. The first one is called hephaestin, and the second one is called ceruloplasmin. Hephaestin is in the lining of the gut, intestinal lining. Copper is necessary for iron to be absorbed in the gut lining. So, without copper, you will not absorb iron and you will develop iron-deficient anemia. Now, once iron has been absorbed in the gut lining by hephaestin, it passes it off to ceruloplasmin, which is the second copper-rich enzyme.

Ceruloplasmin basically then allows that copper to hop on to transfer in and then move throughout the body. So, without ceruloplasmin, iron gets stuck in the tissues. It'll get stuck in the digestive system, it'll get stuck in the retina, it'll get stuck in the brain, it'll get stuck in the liver. So, you develop iron overload in the tissues. But eventually, if you're low enough in copper long enough, you might then become low in iron and then you don't end up with all this extra iron in the tissues. The solution is take copper to fix that problem. That's the way you solve copper-deficient anemia. Now, how copper-deficient anemia looks on labs is it looks very similar to iron-deficient anemia if you're looking at the iron panel.

You'll have a high TIBC, high UIBC, low serum iron, low iron saturation [and] low ferritin. You'll also potentially see low neutrophils and low white blood cells, because you need copper to have normal immune function as well. So, you might be more at risk for infections. Then of

course you can look at the ceruloplasmin. I don't find ceruloplasmin to be the easiest lab to look at, because it's an inflammatory marker as well as ferritin, but ceruloplasmin, I think, can jump around. If you're taking hormones like estrogen or birth control, or you're pregnant, or you're just inflamed or have an infection, ceruloplasmin can jump around and go high.

If you have a low or low normal ceruloplasmin and then you take copper and that ceruloplasmin goes up, that's a good sign that you didn't have enough copper and you needed that copper to increase your ceruloplasmin. I find just serum copper to be a hard lab as well, because it's all over the place and I don't think it's very accurate. I think a red blood cell copper is more accurate, but that, for some reason, is not available at all of the lab companies that we know and love and use. It's not that it's impossible to order. It's just at some point in time people get lab fatigue and they're like, "Let me just do this." So I don't tend to order as much of the red blood cell copper because I have to go to another lab. It's another expensive test.

With copper-deficient issues, if I see somebody that their iron's not coming up like I'd like it to, they have some of those lab findings I just talked about. "Let's just try copper and see how you feel." But it's really important to make sure they have a healthy gallbladder, bile [and] liver, because typically people don't become high in copper, unlike iron, because the body has a way to excrete excess copper through the bile. Whereas with iron, the only way to really lose the extra iron is through blood loss.

So, if somebody has a bile issue, they're not making enough bile, they have an unhealthy gallbladder or liver, whatever, you got to be a little bit more careful about just throwing some copper at them, because then that could get stuck in the liver and then really create a lot of damage in the liver. Then there are some rare genetic issues like Wilson's [disease] and Menkes [syndrome] that can cause a copper issue as well.

Dr. Joseph Mercola:

Are you taking copper personally?

Dr. Christy Sutton:

Yeah.

Dr. Joseph Mercola:

How much do you take and what type?

Dr. Christy Sutton:

Oh, am I taking copper?

Dr. Joseph Mercola:

Yeah.

Dr. Christy Sutton:

I take copper sometimes. I'll sometimes take, I think, 2 milligrams of copper glycinate.

Dr. Joseph Mercola:

Or bisglycinate.

Dr. Christy Sutton:

Yeah. I don't always take it, because I get a lot of copper in my diet.

Dr. Joseph Mercola:

Oysters?

Dr. Christy Sutton:

Oysters. I like chocolate. I like cherries. I like all sorts of things that have copper in them. So, I'll take it sometimes. Iron and copper are two things that I'm never willy-nilly about. It's always guided by the labs. I'm not just going to say, "Take this, just keep taking it." There are some things [like] glutathione, "Just keep taking it, you're fine." Whereas with iron and copper, we need to be getting some labs to make sure we're not creating any problems unintentionally.

Dr. Joseph Mercola:

Okay. So, that's good advice. How do you differentiate between someone who – I mean more or less the contention is that there is no such thing as iron deficiency. I mean, I really think that's what we believe from my previous discussions with them, and it's almost always copper deficiency. So, if you address the copper, the iron deficiency is resolved.

Dr. Christy Sutton:

The reason I don't think that's true is because I've tried giving women copper without iron and it doesn't fix their iron-deficient anemia.

Dr. Joseph Mercola:

You tried it yourself?

Dr. Christy Sutton:

Mm-hmm.

Dr. Joseph Mercola:

You tried without the iron?

Dr. Christy Sutton:

Yeah. Yeah. The thing that I see [as] the biggest problem is unaddressed GI issues, not enough hydrochloric acid, unhealthy gut issues, I think, are among the most common, and then heavy periods for women. It's just really hard to have that much blood loss every month for decades and have children, which are also siphoning off iron. It is really hard to lose that much iron through your blood every month and not become anemic. I mean, I guess to me as a female that has been low in iron and dealt with a lot of people with low iron, you're never going to convince me that iron-deficient anemia doesn't exist. I think there's a lot of mistreatment and mismanaged.

Dr. Joseph Mercola:

Yeah, that's one of the reasons I want to have you on because we needed a different perspective on it that wasn't as focused as Morley was. Well, first of all, there are two questions then I'm sure I'll have more. But the first one is what is the ideal type of iron supplement? It would seem to me that it's not a supplement. It's red blood cells from an animal. So, meat typically, but you could theoretically have blood, too. Because interestingly, I do my self-lobotomies and I just got a puppy. So, it was four months old. So, essentially, he's a child and they need iron. They have extra iron needs because they're growing. So, I don't throw my blood away, I just give it to my puppy. They love it. Yeah.

Dr. Christy Sutton:

That's interesting. I've never tried that.

Dr. Joseph Mercola:

I wouldn't do it to an adult dog for sure. Probably stop it in a few months, I would think. There's a time in your life when you need extra iron for sure. Certainly, that's for people who have been properly diagnosed as truly iron-deficient. So, there are many people who are strong aversions to eating any animal products. I don't think it's a wise choice, but that's their choice. So, obviously, you have recommendations for those too.

Dr. Christy Sutton:

Yeah, so typically any patient I've seen that is vegan, vegetarian, they tend to develop low iron issues just because they're not getting enough in their diet. I think it is hard to sometimes supplement your way out of low iron if you're not getting any through your diet. I agree with you that the best way to get iron is through your diet. Shellfish, beef, these are iron-rich foods with highly absorbable iron. So, that's really the key, because there's two types of iron. There's heme iron and then there's non-heme iron. Heme iron is what you get in animal products. Non-heme iron is when you eat spinach and "iron-rich vegetables," that is 100% non-heme iron, which is not very absorbable.

So, you're going to absorb a fraction of what you would otherwise absorb of whatever iron you're consuming. So, if you're not eating red meat, iron-rich foods, then you're more likely to

get low in iron if that is something that you struggle with. If you struggle with being high in iron – maybe you don't want to eat as many of those things or maybe you just want to remove blood – and supplement accordingly so that you continue to eat those things, I think there's a case to be made there and a world where there's fewer and fewer healthy options to fight for the healthy ones that you can't eat. So, I agree with you, iron-rich foods are the best source of iron.

Having said that, as a female, especially, or maybe even a male that has a bad GI bleed or lost a lot of blood during a surgery, if they need to come up quickly, but especially as a female, because we are fighting this constant tide. For men, they usually don't have these constant tides of iron loss like us. So, females often do end up needing to take supplemental form of iron to help them overcome that loss of iron. The form that I like if I'm going to go to a supplement is ferrous peptonate, which I found to be the gentlest on my gut, but also get the iron levels up. I really don't like ferrous sulfate, which is the most common given iron. Most doctors are recommending ferrous sulfate.

I'm not a big fan. I don't think it works very well, and it tends to create a lot of stomach pain. So, for me, I always have to take my iron with food and sometimes I'll add copper or vitamin C or whatever to it. But if I don't take it with food, it's really going to upset my stomach. Then there are other forms that it doesn't matter if I take them with food, they're just going to upset my stomach, too. So, nobody likes that.

Dr. Joseph Mercola:

Well, I'm curious, when did your husband first come down with his Cushing's? Let me just first mention that Cushing's disease is very rare. Cushing's syndrome is actually quite common because of inappropriate use of steroids, but that's not the disease. I've seen it once in my career. Most physicians don't see it at all because it's so rare. But when did he first get it?

Dr. Christy Sutton:

Okay. So, I met my husband about 13 years ago, and the first time I saw him with his shirt off, I said, "You have Cushing's." He had striae and he didn't have a really big belly. He had a little bit of a belly, but he said, "No, those are stretch marks from when I gained all this weight during college and then I lost the weight." I was in chiropractic school at the time and I was like, "Oh, my gosh. I'm such a bad diagnostician. I can't believe I just – That's so embarrassing."

Dr. Joseph Mercola:

You early diagnosed it.

Dr. Christy Sutton:

Yeah. Then I was like, "Oh, I'm a stupid chiropractic student."

Dr. Joseph Mercola:

No, no, no, you were guided.

Dr. Christy Sutton:

Well, it's funny because when he finally did get diagnosed, he was like, "You should have stuck with your gut feeling that first time you saw me."

Dr. Joseph Mercola:

Yeah. That's a great illustration. You were spot on, because you listened to yourself, you trusted yourself.

Dr. Christy Sutton:

But I did do labs and I thought, "Oh, he just has this stressful career and his cortisol is high because of stress." It was so confusing because he would go slightly high and then he would come back down to normal and go slightly high and come back. So, you would think he would be always high. His hemoglobin A1C was in the fours. He's never had a high. He's very atypical. But when did he actually develop Cushing's? I think he developed Cushing's in college.

Dr. Joseph Mercola:

Yeah, probably. So, did he have any unusual dietary behaviors? Was he keto or carnivore or something odd, [inaudible 01:03:39]?

Dr. Christy Sutton:

He was disgusting.

Dr. Joseph Mercola:

Normal diet.

Dr. Christy Sutton:

College student, diet sodas.

Dr. Joseph Mercola:

Okay. So, it was just the standard American diet.

Dr. Christy Sutton:

Yeah, it was just bad. This is an interesting story. During college, he went through this huge anxiety attack and he had to drop out of college. He gained all of this weight and he had this huge anxiety attack, which I think was when the tumor really started growing. Then he went home, because he had to drop out of college and start all over. He went home and the psychiatrist gave him all these medications for the anxiety and never looked into why he might've gained all this weight and had all this anxiety. I guess they just figured, "College student, gaining weight, having anxiety, that's not that abnormal, I guess."

Then he lost the weight. Then as we started dating, he got healthier and lost more weight. But then it wasn't until years after we got married and we figured out this hemochromatosis thing that we finally were looped in to figure out the Cushing's thing. The interesting thing is that the doctors always were like, "You caught this so early. He's so mild." But it's like he's had this for-

Dr. Joseph Mercola:

It's a classic. That's classic.

Dr. Christy Sutton:

-forever. He's had this forever. It's just they never diagnosed it because you don't diagnose things you're not looking for.

Dr. Joseph Mercola:

Do you like my opinion of what caused it?

Dr. Christy Sutton:

What was that?

Dr. Joseph Mercola:

No, I think it was caused, the tumor, the Cushing's. What do I believe caused it? It was a combination. It was his diet, which is high in linoleic acid, very high, exceptional. Probably it was extraordinarily high because he had a poor diet as you've mentioned.

Dr. Christy Sutton:

Yeah.

Dr. Joseph Mercola:

That in combination with the hemochromatosis and maybe some other unidentified, but it's a combination that did it.

Dr. Christy Sutton:

Yeah, I agree, 100%.

Dr. Joseph Mercola:

That's what caused it.

Dr. Christy Sutton:

I agree.

Dr. Joseph Mercola:

It's impressive that you were able to pick it off. That is very impressive.

Dr. Christy Sutton:

Well, iron has a particular affinity for the anterior pituitary gland.

Dr. Joseph Mercola:

Oh, I did not know that. Is that where the adenoma is in, the anterior pituitary gland?

Dr. Christy Sutton:

Yeah. For some reason, it doesn't damage the posterior pituitary gland as much, but the adenoma, the ACTH (adrenocorticotropic hormone)-secreting tumor was in the anterior pituitary gland and it was very small, but they don't have to be big to secrete a lot of hormones. So, for a lot of people, high iron will shut down their pituitary gland and they will develop hormonal problems. I think for him, he just had so much oxidative stress in there that some bad cells went wild and here we are years later.

Dr. Joseph Mercola:

As a clinician, I think you've contributed to the literature, because I would offer that those who are responsible for assessing the management of Cushing's disease and even syndrome to a certain extent, but certainly the disease, as part of the management, they need to look at this. They need to be aggressively sensitive to this Cushing's syndrome for those with hemochromatosis. Anyone with hemochromatosis, if they're eating a bad diet, they have got to be aware that Cushing's is a possibility because your husband's not in the lab but I suspect there are many others out there who have this and are just undiagnosed.

Dr. Christy Sutton:

Yes, I agree. I've brought it up with his doctors and they quickly dismissed me, but I'm used to that at this point in my life.

Dr. Joseph Mercola:

Yeah. Well, congratulations. It takes great courage and bravery to go forward and be dismissed by supposed experts. That's a great illustration of having the courage to really act on your beliefs and trust yourself in spite of what the experts are saying. You're leading by example, and I really admire your courage to do that.

Dr. Christy Sutton:

I appreciate it. I just don't have a lot of confidence in the alternative, so I just have to keep figuring it out.

Dr. Joseph Mercola:

It's because you're trusting yourself and because the lack of confidence is warranted, 100%. Absolutely, it's 100% warranted. Because for the most part, they don't know what they're doing. It's not that they're stupid or foolish or ignorant or willfully in some type of conspiracy at all. They've been brainwashed and propagandized by a system that was literally over 100 years ago designed to do precisely this, to hoodwink the entire medical system. They've done it very effectively. It's going to change. I'm going to tell you it's going to change. I've got a plan.

Dr. Christy Sutton:

I hope so. I hope so.

Dr. Joseph Mercola:

It will change, because on its current map, the current trajectory, they're about to destroy everything. They're about to destroy everything.

Dr. Christy Sutton:

Yeah, it is. Going through my husband's surgeries, we were really thrown into the medical system. We couldn't get out of it, because he had to have these surgeries. It was there deep in the throes of the medical system that I realized it's not until you're really looking at it straight in the eyes that you're like, "Oh, my gosh. This is so, so broken."

Dr. Joseph Mercola:

Let me offer you another suggestion, because obviously this is your passion now and you're going to see a lot of people with hemochromatosis and you're sensitive to the Cushing's, but I suggest that there's another way than surgery. I'm pretty confident you could treat it without surgery. Would you like to know how?

Dr. Christy Sutton:

Yes, I would love to know how.

Dr. Joseph Mercola:

Okay. You need to do a cortisol blocker, a natural cortisol blocker. You know what the best cortisol blocker on the planet is? Natural progesterone.

Dr. Christy Sutton:

Oh, that's so smart.

Dr. Joseph Mercola:

Of course. Well, I'm a pretty smart guy.

Dr. Christy Sutton:

That's so smart.

Dr. Joseph Mercola:

So, if you have done it now, he would need a high dose. Normal dose is 25 to 50 milligrams. I would've put him on 300 milligrams for sure and watch the cortisol drop. Maybe if you could figure out when he's pulsing, then it would be high. It was lower in normal times. But it's almost impossible to overdose on progesterone. There are no downsides. If you do it the right way, almost all the progesterone is administered incorrectly. The guy who figured it out was Ray Peat. Because you don't want to use a cream at all. You certainly don't want to swallow a pill. That's a disaster. I wouldn't even do a rectal suppository or vaginal suppository. The way to do it is you get vitamin E, a very specific type, 95% of vitamin E isn't that good.

The kind we have is almost perfect, but there are others. Just go to our site, look at the label. If you find something with that ratios and stuff, that's what you need. You take progesterone. You can buy it, USP progesterone, pharmaceutical-grade progesterone, the real deal. You can get a year's supply for under \$50. It's cheap. You measure it out. A 32nd of a teaspoon, that'd be 50 milligrams. Yeah, 60-40 is 25 milligrams. So, you prick open the capsule of the vitamin E. Most women need this, by the way, too. So, this is not just for this odd condition of relatively rare artifact of hemochromatosis.

So, you put that vitamin E in there and you measure out the progesterone. You put it in the tablespoon, and then you mix it with a paperclip until there's no white powder. Then you just put it on your gums and that will get the progesterone in your system. If you go to 50 milligrams, it's actually almost like an anesthetic, a local anesthetic. So, you'll feel a little numb on your gums with the progesterone.

Dr. Christy Sutton:

So, if I have already a compounded pill with 100 milligrams, can I just mix that with vitamin E?

Dr. Joseph Mercola:

Yeah, 100%. That compounded pill is USP progesterone, it's pharmaceutical-grade. So, you just take half of that for 50 [milligrams] or a quarter for 25 milligrams. But put it in the vitamin E. Don't swallow that pill. Do not swallow that pill. Put it in the vitamin E. Mix it up, because vitamin E is really the only natural chemical we know that dissolves it completely.

Dr. Christy Sutton:

Okay.

Dr. Joseph Mercola:

You're not going to get the progesterone, you think. You need to take really high levels to get it, but that is not the way to take the progesterone. If you're going to take it once, the best time to take it is if you're just taking one dose and you're not treating Cushing's disease. I would take it like an hour before you go to bed, because it actually is a GABA (gamma-aminobutyric acid) agonist. So, it'll help you sleep better too. You'll sleep much better with progesterone.

Dr. Christy Sutton:

Okay.

Dr. Joseph Mercola:

I will send you a book. I think I've got your email. I think I did, didn't I get your email? Yeah. I'll send you one of Ray Peat's books that he wrote. It is out of print now. I think it's like \$500 if you were to buy it on Amazon.

Dr. Christy Sutton:

Oh, wow.

Dr. Joseph Mercola:

But it is the best health book I've ever read.

Dr. Christy Sutton:

Is he the formulator of the Progest-E supplement?

Dr. Joseph Mercola:

Yeah, it's his. It's his.

Dr. Christy Sutton:

Oh, I love that stuff. It's just not strong enough.

Dr. Joseph Mercola:

Yeah. Well, you can make it yourself. You don't need it.

Dr. Christy Sutton:

I never thought about that.

Dr. Joseph Mercola:

I don't like the Progest-E, even though I hate to say that, because his wife is a dear woman. I hope to meet her soon. He was the greatest health educator of the 20th century. No question. I

hope to support her in some way, but I think there are better products. He was brilliant and it was a good idea, but it needed to be improved and refined.

Dr. Christy Sutton:

Yeah, it's not strong enough.

Dr. Joseph Mercola:

Yeah, and you can't really measure it. It's so thick. There's a lot of problems with it, but it's the right formula for sure. But if you do it this way and just put in vitamin E, you can put in whatever you want. You can put 50 or 100 [milligrams], and you can play with it and you'll figure it out because you're smart.

Dr. Christy Sutton:

You're so right about the blocking.

Dr. Joseph Mercola:

You're guided. You're guided, too.

Dr. Christy Sutton:

Well, can I tell you a story real fast? Do you have time?

Dr. Joseph Mercola:

Yeah, of course. Yeah.

Dr. Christy Sutton:

After the first surgery where they went in and they removed part, but not all of the tumor, they were like, "Okay, it came back and we can put you in a study here at UT Southwestern and here are your options. We have this study where you might get a placebo or you might get this medication that's been shown to shrink these tumors. It's a cortisol blocker, and it's been shown to shrink the tumors." They had just started this study a couple of years ago. So, what I asked was, I said, "Well, when he is done with this study, what happens if he gets this drug that blocks the tumor and then he gets off of it? Does it come back? Does the tumor come back?" At UT Southwestern, they said, "Well, we stopped looking at them after they're done with the study."

Dr. Joseph Mercola:

Of course.

Dr. Christy Sutton:

So, they don't even know the side effects and then it turns out it does grow back. Now years later, we know that. Because my husband didn't want to have another surgery. The first surgery was very painful because this surgeon messed up. But then we did this trial of this medication that I think it was called Isturisa, and that was a cortisol blocker. That drug started out at \$60,000 a month. Then by the time we were done, they kept raising the price, because insurance kept paying more. By the time we were done and he had the surgery, they were charging insurance \$150,000 a month for this drug.

Dr. Joseph Mercola:

No way, you're out of your – Really?

Dr. Christy Sutton:

Yeah.

Dr. Joseph Mercola:

That was by 10 lifetimes of progesterone, maybe 100 lifetimes of progesterone.

Dr. Christy Sutton:

Yeah. Yeah. He was on 50 milligrams a day, and they stopped selling the 10 milligram pills. So, he had to start taking twice as many 5 milligram pills. That's when the price doubled.

Dr. Joseph Mercola:

\$300,000 a month, almost \$4 million a year to treat that. You've just described the perfect medical model, fail to avoid ever coming close to treating the cause of the disease and coming up with a hyper-expensive solution that doesn't work long-term, just as a Band-Aid.

Dr. Christy Sutton:

And had side effects.

Dr. Joseph Mercola:

It can kill you. It's the classic medical model.

Dr. Christy Sutton:

After my husband had surgery and he didn't need the drug anymore, the pharmaceutical rep called his endocrinologist and asked if they were going to put him back on it.

Dr. Joseph Mercola:

Of course, yeah. I guarantee you that rep got a percentage of that, \$4 million a year or \$300,000 a month. If he gets 5%, that's a big part of his paycheck.

Dr. Christy Sutton:

Oh, yeah. So, I thought you'd find that story interesting.

Dr. Joseph Mercola:

[crosstalk 01:17:01]. Yeah, but the take home point here is natural progesterone. It is literally miracle though. Eventually, we're going to be offering some type of simpler solution. So, you don't have to do that little apothecary thing in your kitchen, but it works. It only takes a moment. I do it every night myself, because we haven't made the product yet, but that is probably the finest way. It's the freshest. It's totally fresh. You dissolve it real time and you put it in your gums. It's like you couldn't get it any fresher.

Dr. Christy Sutton:

Yeah. I'm going to do it.

Dr. Joseph Mercola:

As I said, it's on Amazon, USP progesterone, you type it in. 10 grams is 40 bucks, I think.

Dr. Christy Sutton:

Oh, wow.

Dr. Joseph Mercola:

That's almost a year's worth of treatment. I'll send you the book and you'll delight. I predict that you will have a new passion.

Dr. Christy Sutton:

It's possible.

Dr. Joseph Mercola:

That is just the tip of the iceberg, but it is a very potent cortisol. It's actually an adrenaline blocker too. So, if you have stress, you can take that. You'll chill out. Boom. It's [an] anti-stress hormone. Cortisol, glucagon and adrenaline.

Dr. Christy Sutton:

I wish I had known that years ago. I would've been doing that with my husband years ago.

Dr. Joseph Mercola:

I know you would've. Yeah, yeah, for sure.

Dr. Christy Sutton:

Didn't know. So, thank you for that.

Dr. Joseph Mercola:

You're welcome. It is likely he would still continue to benefit from it. I would check his prolactin level.

Dr. Christy Sutton:

There has been a time in the past where it was high. I don't think they've checked it since surgery.

Dr. Joseph Mercola:

I would check it because it should be well under 10. It should be close to 6 or even 5. The progesterone will drop that because that's estrogen.

Dr. Christy Sutton:

Wow.

Dr. Joseph Mercola:

There's two things that cause cancer. Not a micro doubt in my mind. It's linoleic acid, excess omega-6 and estrogen.

Dr. Christy Sutton:

Yes.

Dr. Joseph Mercola:

Yeah. Those are the two things. They have similar mechanisms actually. They both cause water retention.

Dr. Christy Sutton:

Estrogen causes the high prolactin?

Dr. Joseph Mercola:

Yes. Measuring estrogen is really challenging because it's mostly in the tissues. A postmenopausal woman might come back at zero, but she might be hyper-estrogenic because it's in her tissues. It's not in the blood. So, the best marker I found is prolactin. It's cheap. Because there are three different estrogens you have to measure. There's probably dozens of others that

may be clinically seen. We don't even know. It would cost hundreds, maybe thousands of dollars to measure them all, but prolactin is relatively inexpensive. It's one test.

Dr. Christy Sutton:

And you want it to be less than 6?

Dr. Joseph Mercola:

Less than 6, certainly less than 10. But if it's like 15, 20 or higher, you got to lower that, because it only goes up with estrogen.

Dr. Christy Sutton:

Wow, that's good to know.

Dr. Joseph Mercola:

Yeah, you should check it yourself too.

Dr. Christy Sutton:

I will.

Dr. Joseph Mercola:

Prolactin. Yeah. I just learned that within the last year or so since I've been playing with progesterone, because mine was high. I put one of the progesterone, boom, it dropped down to 6.

Dr. Christy Sutton:

That's awesome. Yeah, no, I just started taking progesterone. So, I'm glad we had this conversation because now I'm going to refine what I'm doing.

Dr. Joseph Mercola:

Yeah. Now you know the best way to take the progesterone.

Dr. Christy Sutton:

Yes. I didn't understand that before.

Dr. Joseph Mercola:

It's an important thing. Your eyes will be open when you get this book. I will send it to you soon as we finish.

Dr. Christy Sutton:

Thank you. I appreciate it. I will read it from cover to cover.

Dr. Joseph Mercola:

Well, you're an anomaly. You should have went to med school. Not to disparage chiropractors, but the medical profession needs brilliance like yours, because you're so handicapped without that medical license.

Dr. Christy Sutton:

I know.

Dr. Joseph Mercola:

It sucks because we need more people like you. There's so much wackiness out there to be combated. Even with a degree, it's going to be hard. If you had a job with a clinic, they would've fired you because you wouldn't have taken the job for sure. So, in some ways, it's good you have your own business, so you're insulated from the craziness.

Dr. Christy Sutton:

It was a chiropractor that helped me, so that's why I became a chiropractor.

Dr. Joseph Mercola:

I know. Yeah. You're doing a great job. And I really appreciate your diligence on this and your fortitude, and helping people understand this and doing a lot of good, and helping me understand, too. I thought that Morley was off and it just didn't seem right that many people that – But here's another point for you to consider, that I don't believe your statement. What you stated, you'll find many references for that statement that iron is the most common nutritional deficiency. I don't think it is because you have a whole population where iron is high, and I think there may be even more people where it's high than low.

Then you've got the whole population, which you know because you're nutritionally oriented, that 80% of the population is deficient in magnesium. So, I mean, in my book, magnesium exceeds iron deficiency by far. Maybe even zinc too, and maybe even copper, because the iron was stated because that's what they know. I think that is in the literature out of ignorance, not because of [the] truth. That's my speculation.

Dr. Christy Sutton:

Also because they're looking for it.

Dr. Joseph Mercola:

Yeah. Who's looking for magnesium deficiency? No one. Almost everyone needs to be on magnesium. Almost everyone. I haven't found a person yet that is a magnesium-replete. It's so

safe because it's got a self-protective mechanism. If you get too much, you have loose stools and you excrete it. So, it's hard to overdose with magnesium unless you take an IV, you could potentially, but that would be the only case.

Dr. Christy Sutton:

Go to the chapter in "The Iron Curse," page 272.

Dr. Joseph Mercola:

Put your book up so people can see it.

Dr. Christy Sutton:

Go to page 272 and look at the chart of all the supplements and how they lower and affect iron and play around with some of those to see if you can-

Dr. Joseph Mercola:

No, I really appreciate it. I wasn't particularly looking for personal recommendations, but it makes perfect sense that curcumin and quercetin – I don't eat much meat, maybe 3 ounces a day, but I could easily essentially bind up all that iron in there, because that's a concern. I think that's why it continues to climb. I don't eat too much iron otherwise. I mean, I have very little iron on my diet other than meat. 3 ounces is not a lot of meat.

Dr. Christy Sutton:

Oh, I thought you ate more.

Dr. Joseph Mercola:

No, I used to, but not much. No. Just 3 ounces a day. That's it. My dog eats a lot more. My dog eats a pound of meat.

Dr. Christy Sutton:

Lucky dog.

Dr. Joseph Mercola:

I'm not.

Dr. Christy Sutton:

Well, thank you so much for your time.

Dr. Joseph Mercola:

Yeah, you're welcome. Thank you for what you're doing. You keep up the good work and I'll send you Ray Peat's book.

Dr. Christy Sutton:

Okay.

Dr. Joseph Mercola:

All right.

Dr. Christy Sutton:

Okay.