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Why You Should Measure Your Iron Before And During Pregnancy

SUMMARY KEYWORDS

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Hello, everyone. I am Dr. Debby Hamilton. I'm an integrated pediatrician without 25 years experience. I'm co leader of this pregnancy summit, and I'm really happy to be here. I'm also a member of the science advisory board for the Neurological Health Foundation, and today I'm interviewing Dr. Jim Adams. He's a professor at Arizona State University. He's also a co leader of the pregnancy summit. And he's also a chair of the science advisory board for the neurological Health Foundation. Welcome. happy to speak with you today. How are you doing?

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Just great, Debby. Thanks.

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So today we're going to talk this is our first topic. We're going to talk about iron today. So first of all, why is iron so important in pregnancy?

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Well, iron is important for many reasons, but the primary one is that iron is in the hemoglobin in every red blood cell and that's what carries oxygen throughout your body and you need that Oxygen throughout your entire body and especially your brain for energy



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might not make sense. So in terms of pregnancy, what do I know? Oh, iron is very important pregnancy. So why is iron that? You know why in pregnancy? Do you have to really concentrate an iron as opposed to just in generally?

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Yeah, so for men iron is not very, very common deficiency, but for women, it's a very common problem. Women consume only about half of the required daily allowance of iron. And also because of their monthly cycle, they lose iron every month. And so it turns out that about nine to 14% of women, depending on their age, have a full iron deficiency, and quite a few more have marginal iron status. So this means that they're just not being able to carry enough oxygen throughout their body and throughout the to their brain. So it causes physical fatigue, it causes mental fatigue leads to anemia. So low iron is a big problem, even before pregnancy starts.

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And would most women know they were low in iron? Or is it something that if you don't check, you might not know. In terms of blood test,

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some women do know that they've had a history of anemia. But for some women, they don't know. It's something that doctors should check for it every annual physical, but sadly, some physicians don't bother to do that. So it's very important for women to have their iron check if they're thinking of becoming pregnant, and especially important to test at the start of their pregnancy.

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Okay, and terms of pregnancy, what is the function of the extra iron.

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So women need extra iron during their pregnancy because they produce a lot more red blood cells for both the infant and their placenta. And so especially halfway through the pregnancy when the growth of the baby really begins to be more rapid. they're producing just a tremendous amount of new blood. And so they really need a lot more iron. So that's why Unfortunately, many women start pregnancy with low iron and becomes even worse as pregnancy goes on unless they're taking enough iron supplement.

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And so in terms of pregnancy, how much iron would they need? Yeah,



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so most of the prenats out there contain about 20 to 30 milligrams of iron. But the research shows that probably about 60 milligrams is best. And that's may sound like a lot. But

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as a pediatrician, that sounds like a lot of iron. That's a high dose of iron.

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It is a high dose of iron. But iron is so important, especially for the infant's developing brain that we know that low iron during pregnancy is a leading cause of intellectual disability. We know that low iron during pregnancy doubles the risk of having a child with autism. It's just so important to the developing infants brain gets enough oxygen. And iron is the only way to get that oxygen into the brain. So, on average, it seems that 60 milligrams is best. There are some women who need even more even up to 180 milligrams for some women.

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That's a really high dose.

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Yeah, it's it's unusual, but there are some women who need that much, and some may need a little less. So that's why we really recommend at least 30 milligram 60 is better, but testing, especially testing before pregnancy starts, and then testing again, halfway through pregnancy even more frequently if you have a history of anemia, or if one of the test shows low iron.

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So it sounds like your iron needs increase as you go through pregnancy. So it does make sense to check. But so it also sounds like you might have to adjust how much iron you take. So you might not need the same amount throughout. They really have to follow that.

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That's right. Baby. That's right, it's so important to adjust your iron intake as the pregnancy increases, as the pregnancy progresses, that usually it's about the halfway point when your body begins making a lot more red blood cells for the infant and the placenta, and that's when you really do need a lot of extra iron on board. It's so important. We want those infants brains to be well developing what their body to have all the oxygen all the energy it needs for normal development.

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Okay, and what about any side effects? Do any women have any side effects from iron? Or is



there any special kinds of irony? What recommend?

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Yeah, so there are some types of iron that can cause some women increased constipation. And I think because, you know, Pregnancy already is a risk factor for constipation, it's already a problem. And so we don't want a supplement that's going to worsen that. And so iron glycinate forms that this ciclesonide form is probably one of the best forms because Well absorb, but also seems to minimize risk of constipation. But if one form isn't working, you can certainly change to another form.

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Right? And it sounds like you need to test to what about food sources? Like what's the best food sources for iron,

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their food, a lot of different foods do have iron in them. They're basically plant based iron is not very well absorbed. So really, the best iron that you get is from animal and fish sources, and it's actually in the blood of the animal. And so eating any type of animal meat, so it could be meat, chicken, lamb, any type of meat or any type of fish. Again, it's the blood in those animals that has the iron, and that's consuming that is what is really the best absorbed type of iron. So having said that, it's especially important for vegetarians they're at higher risk. Yeah, so vegetarians are at higher risk of iron because even though they may be eating some foods that are higher and iron, that type of iron in plants is not as well absorbed. So vegetarians, even at more risk, so they should test and they should probably supplement with at least, our recommendations and possibly even more.

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Right, so if you're a vegetarian or a vegan say, it would definitely make sense. You really should probably check before just to make sure you don't go into pregnancy with to low iron stores. I mean, that seems to make sense. And what about terms of iron? Is there any risk? I know in pediatrics, you can also worry about too much iron. You know, that people I know that the iron supplements can be a risk, gotta be really careful with the supplements. In terms of exposure, any comments on that?

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That's right, there is a risk especially for men. So about 5% of men have too much iron and they need to To give blood regularly or change their diet to deal with that. But for women, it's just the opposite, that it's there, it's nine to 14% of women have low iron. And it's extremely rare for women to have too much iron, because of their monthly cycle. And then during pregnancy, so



much more iron is needed. So the studies that we've seen 60 milligrams seems to be safe and optimal for most women, and some may need even more. But you're right that it is possible in very rare cases, for women to get too much iron. It's probably in less than 1% of cases for women, unless you go over that 60 milligram recommendation. On the other hand, there is a danger for young infants, they're going to few cases of infants and getting into a bottle of iron capsules and consuming the whole bottle of iron capsules and that can be very dangerous. That's why all iron supplements that are sold Today have childproof caps on them. And it's also just important to keep it out of the reach of them a toddler. Some forms of iron have a sweet taste. So the kids just chew them like candy. It's important to keep them away from from infants. But really the risk for women is extremely small, the real risk for women is not getting enough iron. That How would you know if your child has lost five or 10 IQ points due to low iron, you wouldn't know it. And that's what's happening today is too many infants are having loss of IQ loss of intellectual development because they their brain just wasn't getting enough oxygen during the pregnancy until it is so important for that to happen.

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Well, I know in pediatrics, we check for iron, because early in life, too, we have to make sure that they have adequate stores. And if they don't get adequate storage from the mom, then they can go in and they don't have adequate stores and they're much more at risk even first year, so of life. So pediatrics you definitely know the importance of iron.

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Absolutely. Those young children very high risk of low iron leading to restless leg syndrome intellectual development problems. Absolutely.

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So, so in summary, do you have any kind of kind of key points or anything else for women to know about iron?

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I think the key thing to know is that it's so important to test for iron, prior to pregnancy, and if it's slow to treat it, and if you are already pregnant, get that iron test done as quick as you can. It's a cheap test \$10 or so it'll be covered by your insurance. And it's so important. Your doctors will know what sort of test to do. And then it's such an easy thing to treat. So it's this is one of the most common problems 20 to 40% of women in the US. Developed low iron during pregnancy is probably the number one nutritional problem for women during pregnancy. foot so important that they boost their iron intake and test before pregnancy starts. test again halfway through. And most doctors, unfortunately are still not testing for iron even though they know how



common a problem it is. So we just need to ask those doctors to be a little more proactive if we need to.

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Well, it seems to make sense that any woman in childbearing age, even if she's not thinking about pregnancy, some pregnancies aren't planned to really check iron is kind of a normal screening as part of a normal exam. I mean, that seems to make a lot of sense.

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Oh, absolutely. Absolutely. Well, thank you so much, Debby.

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All right. Thank you very much.

