The Silent Vitamin Deficiency Behind Brain Fog and Memory Loss Transcript

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B12 Deficiency Symptoms

Have you noticed? Premature graying, maybe chronic pain in your body? Lower energy levels? Do you have asthma and you have increased wheezing? Or maybe you react to different sulfates like dried fruit, for example, causes a major reaction in your body.

If that's the case, you might have a vitamin B12 deficiency. Vitamin B12 deficiencies are some of the most common in our society, and vitamin B12 plays such a critical role in nervous system function.

Liver detoxification as well as neurotransmitter production. And so we look at some of the main symptoms of a B12 deficiency. Fatigue is a really big one.

Also mental problems not being able to think sharply and quickly having chronic pain are particularly like neuralgia type pain, like where it's almost like a shooting nerve that can oftentimes be a sign of a B12 deficiency.

Also, premature graying of the hair is commonly associated with B12 deficiencies. They say 60% of the adults over 60 have a B12 deficiency. And roughly 30% of the individuals that are younger, right, have some sort of a B12 deficiency.

And in America, when we're testing B12 or serum B12, they look at they look at the levels and they don't market.

Common Lab Ranges and Hidden Deficiency

It's not flagged unless it's under 200 PG per ML picograms per milliliter. In Japan, they use a much higher number 550 picograms per milliliter. And most functional health coaches that I know, we look at it, we want to see it up over 800 picograms per milliliter.

And so for most people their B12 it may be 3 or 400. I see this all the time on labs. It's 3 or 400, which is very, very low. They're having a lot of these symptoms.

They're infertile. They are, dealing with acne. They have premature graying of their hair. They have chronic pain. They have fatigue, low energy. Right. They have trouble sleeping at night.

A lot of these common symptoms, right, that are associated B12 deficiency. And they're not being told they have it because their levels are not being flagged.

They have 3 or 400 picograms per milliliter, which is very low but not low enough to be classified as a deficiency. And so that's one of the big issues here.

So a couple of the little known symptoms one is increased wheezing and asthmatic. So if you have asthma and you have increased wheezing and an increased dependency on the steroids to help you breathe, that's a sign you may very well have a vitamin B12 deficiency.

People who have sulfite sensitivity see, B12 is really important for glutathione production and for sulfur metabolism in the liver. And so if you're deficient in B12, you're not going to be able to metabolize and break down sulfites.

When we find those in a lot of wines, a lot of baked goods, as well as things like, like dried fruits. Okay, if you're noticing that sulfite sensitivity, okay, then that's a sign that, you may have this B12 deficiency.

Health Effects and Blood Cell Changes

Acne is common with B12 deficiency allergies in general. Seasonal allergies, food based allergies can be associated with B12 deficiencies. Also on top of that, depression anxiety.

A lot of the mental health problems associated B12 deficiency infertility is a common, symptom of B12 deficiency. Also could be related to zinc deficiency as well.

So these are all things that you need to be looking at. So when we think about B12, I told you how it's really important for liver detoxification. It's also very important for nervous system function and for the production of good neurotransmitters serotonin dopamine as well as norepinephrine.

And so we need that. And it's also really important for red blood cell formation. When we don't have enough B12 the red blood cells aren't able to mature properly.

And they become very large in size, and they're not able to move oxygen and nutrients into cells effectively. And that can cause fatigue and that can cause, you know, lowered mitochondrial energy production.

So worse, fat burning can also cause issues with the brain. Right. So this is what's going to cause us to not be able to think sharply and quickly and be more prone to anxiety and depression.

Also, we're not gonna be able to get oxygen nutrients to our, reproductive areas. Right? So for the sperm for men and for, for women into the ovaries.

And so therefore infertility goes up. So really, really important that we're getting that B12 level. So the red blood cell will mature. And you'll be able to see this on a blood lab.

One of the things that we look at for a B12 deficiency is something called a megalo blast dick anemia. And this is where your MCV or mean corpuscular volume, the MCV.

If you look at your blood lab, it should be between 85 and 92. If it's up above that, let's say it's 95, 96, 97. That's a sign that the red blood cells too large.

And so it hasn't matured properly, often associated with folate or B12 deficiency is B12 being the most common. Okay. Also we're going to see the all your red blood cell counts here.

Your hematocrit hemoglobin all that very very low okay. And that's called a megalo blast stick anemia.

Homocysteine, Detox, and Neurotransmitters

When the size or the overall size of the blood vessel is large, but you don't have enough, hemoglobin that's in the blood cell, that's a B12 deficiency.

And then on top of that, another couple things that we'll look at. One is homocysteine levels. Homocysteine is a breakdown product of the amino acid methionine.

Homocysteine levels should be between 6 and 9 normally. Right. For somebody that's healthy somewhere in that range. For some functional practitioners they want to see it even lower.

They want to see it under seven somewhere between 4 and 7. Okay. But if it's up over nine it's a sign we're not metabolizing that well. And homocysteine is very reactive, causes major inflammation in the blood vessels and increases your risk when it's up over nine of a heart attack stroke and developing neurodegenerative conditions like Alzheimer's and dementia.

So it's a major issue when our body metabolizes homocysteine. It produces glutathione, which is our body's master antioxidant. It also produces Sammy.

And again, B12 is critical for that metabolism. And Sammy is the precursor. And it helps form, things like serotonin dopamine and or epinephrine. And so whereas glutathione is key for, for detoxification and protecting against oxidative stress.

So we need the B12 for that proper metabolism of homocysteine. So we can detox effectively produce the right neurotransmitters. That's also critical here.

Now best B12 foods are going to be animal based foods. All your grass fed meats. Best sources of B12, pasture raised eggs. Great sources of vitamin B12.

There are some things that are marketed out there for vegetarians and vegans for B12.

Food Sources and Causes of Deficiency

And you can take a B12 supplement. Okay, but there's no actual plant based food. Even algaes that have a real form of B12 that's absorbable. The vitamin B12 and algae is what we call pseudo B12, and so it doesn't actually get into the cell.

It's not a form that our body can really utilize as a B12 analog. And so it's really key from that perspective. Now we can take vegan based vitamin B12, as a supplement.

And so why would somebody. Well, first of all, we got to look at why would somebody be deficient in B12. One is a vegetarian or vegan diet or just a high processed food diet can cause, B12 deficiency.

Another is chronic stress. The more stress we're under, the more B12 we are going to to run through. On top of that, if you're taking different medications, things like statin drugs, metformin, chemotherapy drugs, steroids, oral contraceptives, birth control pills, all those things, antidepressants all deplete B12 levels.

So if you are on a, medication of any type, you should be testing your B12 levels, making sure it's up over 800 on a regular basis. Also, look at your homocysteine levels.

That's really key as well. Also, you can look at uric acid levels, uric acid levels. If they're very, very low under three. That could also be an indication of a vitamin B12 deficiency.

We want to keep our uric acid levels low somewhere under 5.5, roughly between, four and 5 or 3 and a half and five. But we don't want to drop below three.

That's a sign we're not undergoing phase two liver detox effectively. And, that's an indication of a B12 deficiency. And so making sure our B12 is, is is optimized is key for people with low stomach acid levels from, let's say, a H.

Pylori infection in their stomach oftentimes have this B12 deficiency. So low stomach acid levels you need stomach acid to produce intrinsic factor. Intrinsic factor is a protein in the stomach that cleaves B12 and allows you to absorb it.

Testing and Supplement Forms

And so if you have autoimmunity to the intrinsic factor protein, which a lot of people do, or if you have an infection in your stomach, it's not allowing you to produce enough stomach acid, then you're not going to be able to produce intrinsic factor effectively and get the B12 to absorb into your bloodstream.

For those individuals, we use a sublingual form of B12, right. Or an injection. So you can get B12 injections or if you don't want to get the injections, I would prefer not to than you would take a sublingual, which is something that will dissolve under your tongue, get right into your bloodstream, bypass the digestive system, and get your B12 levels up.

Very effective form of supplementation. When we're looking at supplements for B12, you want, methyl carbamazepine is the best form. What you don't want is cyano carbamazepine.

That is a low cost form. But it has a cyanide molecule attached to the B12. And your liver has to detoxify that. So it's not a very good form. It's very inexpensive but not a good form.

Most supplements out there have cyano carbamazepine. You want a methylated form. Methyl B12 is really the best form a lot of people are concerned about.

For gene mutations and mTOR gene mutations, they need the methylated form. That's the only way that they're going to get those methylation cycles working.

Well. Methyl koba gene is the source that you're looking for. Now there are other types. There's a hydroxy B12 that's the most common that's in an injection.

And you can you can certainly use that. But I wouldn't use that long term. The injections may be good for getting your levels up high quickly, but then turn to an oral form of methyl kabali.

And for best, for the best use, there's also adenosine, a carbon clean, and, that is the most unstable form, and it's also the most expensive form. So for some people, that seems to work really well, but it is also an expensive form in our body.

Our body is constantly circulating back and forth between methyl B12 and adeno B12. And so inside our body, our body is constantly converting back between methyl and a dino B12.

So a dental B12 is a good form, but again, it's more expensive than the methylated form. Methylated form is what you're looking for. So get your methyl B12 levels optimized.

Make sure that you're testing on a regular basis. Looking at your B12 levels, looking at your homocysteine levels, as well as your red blood cells to make sure that they're maturing properly and that you have enough B12 in your system.

Again, very common deficiency. As people are aging, the risk for a B12 deficiency increases. So very important that you're testing, especially as you get older, to make sure you're not dealing with a vitamin B12 deficiency.