How Vitamin D Impact Crohns & Colitis Transcript

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Why Vitamin D Matters in Crohnu2019s and Colitis

Your doctor is probably checking your Your doctor is probably checking your iron, your red blood cells, your white iron, your red blood cells, your white blood cells, basic CBC, but rarely is blood cells, basic CBC, but rarely is your doctor checking your vitamin D your doctor checking your vitamin D levels. And in Crohn's and Colitis, that levels. And in Crohn's and Colitis, that might be the one blood test you actually might be the one blood test you actually need to ask for. Here's why it's tied need to ask for. Here's why it's tied directly to your gut health, directly to your gut health, inflammation, ability to fight inflammation, ability to fight infections, and your risk of having infections, and your risk of having another IBD flare.

another IBD flare. I'm an IBD specialist and a licensed I'm an IBD specialist and a licensed nutritionist, and I've spent the last 12 nutritionist, and I've spent the last 12 years digging through gut health years digging through gut health research both for my own recovery and by research both for my own recovery and by helping thousands of people with IBD.

helping thousands of people with IBD. And when we look at vitamin D, it keeps And when we look at vitamin D, it keeps showing up in the Crohn's and Colitis showing up in the Crohn's and Colitis data. It's not just a healthy bones data. It's not just a healthy bones vitamin. This is something we need to be vitamin. This is something we need to be able to look at with IBD, and here's able to look at with IBD, and here's why. In today's training, we're covering why. In today's training, we're covering why deficiencies is so common, how why deficiencies is so common, how vitamin D holds your gut lining vitamin D holds your gut lining together, and how it calms an overactive together, and how it calms an overactive immune system, plus one unique number immune system, plus one unique number worth asking your GI doctor for. So, worth asking your GI doctor for. So, let's start with a common blind spot we let's start with a common blind spot we have. Vitamin D testing almost never have.

Why Vitamin D Deficiency Is Common in IBD

Vitamin D testing almost never makes it into a standard IBD blood work makes it into a standard IBD blood work panel. Most GI doctors follow up, check panel. Most GI doctors follow up, check iron, B12, maybe Calprotectin, but iron, B12, maybe Calprotectin, but vitamin D rarely gets ordered on its own vitamin D rarely gets ordered on its own from the clients I've worked with from from the clients I've worked with from around the world. It usually has to be around the world. It usually has to be requested specifically. So, the burden requested specifically. So, the burden generally falls on you and I to make generally falls on you and I to make sure this is done properly and confirm sure this is done properly and confirm desired vitamin D levels for desired vitamin D levels for inflammatory bowel disease. Now, a 2019 inflammatory bowel disease. Now, a 2019 meta-analysis pulled 55 studies and more meta-analysis pulled 55 studies and more than 8,000 people all diagnosed with than 8,000 people all diagnosed with Crohn's and Ulcerative Colitis. And what Crohn's and Ulcerative Colitis. And what was seemingly correlated was they all was seemingly correlated was they all ran low on vitamin D than healthy people ran low on vitamin D than healthy people in the same research. The gap was large in the same research. The gap was large enough that researchers flagged the enough that researchers flagged the deficiency as close to the norm in deficiency as close to the norm in inflammatory bowel disease, not the inflammatory bowel disease, not the exception. You see, active inflammation exception. You see, active inflammation reduces absorption in the small reduces absorption in the small intestine. Steroid use like Prednisone intestine. Steroid use like Prednisone or Budesonide may potentially deplete or Budesonide may potentially deplete vitamin D stores, and flares in winter vitamin D stores, and flares in winter keep people indoors and away from the keep people indoors and away from the sun. So much so that a large US Nurses' sun. So much so that a large US Nurses' Health Study also showed significantly Health Study also showed significantly low IBD risk in southern latitude versus low IBD risk in southern latitude versus northern latitude ones because the northern latitude ones because the farther away people are from the farther away people are from the equator, the more likely a person is to equator, the more likely a person is to develop IBD. Interesting. So, deficiency develop IBD. Interesting. So, deficiency is more common. The real question is, is more common. The real question is, why does this matter so much? And that why does this matter so much? And that comes down

to vitamin D is actually comes down to vitamin D is actually doing more than we know inside your gut doing more than we know inside your gut wall. If this is connecting some dots wall. If this is connecting some dots for you, hit subscribe, like this video for you, hit subscribe, like this video because I put out gut health trainings because I put out gut health trainings every single week and I put together the every single week and I put together the real research behind what's happening real research behind what's happening with inflammatory bowel disease so we with inflammatory bowel disease so we can get empowered as a community. So, can get empowered as a community. So, please like, please subscribe. It please like, please subscribe. It greatly helps the channel. Now, let's greatly helps the channel.

Vitamin D and the Gut Barrier

Now, let's get back to the training. So, let's call get back to the training. So, let's call vitamin D what it actually is here, the vitamin D what it actually is here, the leaky gut protector. Most people know it leaky gut protector. Most people know it as the sunshine vitamin, but inside your as the sunshine vitamin, but inside your gut it works more like a protector and a gut it works more like a protector and a supporter. Your gut lining is held supporter. Your gut lining is held together by tight junction proteins.

together by tight junction proteins. Think of them as the seals between floor Think of them as the seals between floor tiles, keeping what belongs inside your tiles, keeping what belongs inside your gut from leaking into your bloodstream.

gut from leaking into your bloodstream. Vitamin D works through a receptor in Vitamin D works through a receptor in the gut lining called the VDR, vitamin D the gut lining called the VDR, vitamin D receptor. In inflamed colon tissue from receptor. In inflamed colon tissue from IBD patients, VDR actively runs at IBD patients, VDR actively runs at roughly half of a normal person's. Lower roughly half of a normal person's. Lower VDR actively means lower levels of VDR actively means lower levels of what's called claudin 15, one of the key what's called claudin 15, one of the key tile seal proteins. Less claudin 15 tile seal proteins. Less claudin 15 weakens the seals and more likely to weakens the seals and more likely to have leaky gut. When these seals weaken, have leaky gut. When these seals weaken, bacterial fragments and other gut bacterial fragments and other gut content that should stay in the gut get content that should stay in the gut get more access to the immune system tissue more access to the immune system tissue sitting right underneath the lining.

sitting right underneath the lining. That may potentially exacerbate the That may potentially exacerbate the inflammatory cycle that's active in inflammatory cycle that's active in Crohn's disease and ulcerative colitis.

Crohn's disease and ulcerative colitis. Now, in my studies, boosting the VDR Now, in my studies, boosting the VDR activity in the gut lining increased activity in the gut lining increased claudin 15 and protected the colon from claudin 15 and protected the colon from inflammation. It helped create longer inflammation. It helped create longer colon. It increased length. It lowered colon. It increased length. It lowered inflammation scores, which is exactly inflammation scores, which is exactly what you and I need with IBD. So, this what you and I need with IBD. So, this isn't a vague vitamin D supports isn't a vague vitamin D supports immunity claim, it's structural. The immunity claim, it's structural. The lining itself depends on this pathway lining itself depends on this pathway staying active, and a low vitamin D staying active, and a low vitamin D level may leave that structure weaker level may leave that structure weaker than it needs to be. That's the gut than it needs to be.

Vitamin D and Immune Regulation

That's the gut wall. But, vitamin D isn't only holding wall. But, vitamin D isn't only holding the structure together, it's also the structure together, it's also talking directly to your immune cells.

talking directly to your immune cells. And this is the part I think gets under And this is the part I think gets under communicated the most while being vital communicated the most while being vital for longevity in combating against all for longevity in combating against all disease opportunity is your immune disease opportunity is your immune system has a cell type whose job is to system has a cell type whose job is to turn inflammation down. It's called turn inflammation down. It's called regulatory T cells, or T reg. Under regulatory T cells, or T reg. Under

normal conditions, T regs help your normal conditions, T regs help your immune system tell the difference immune system tell the difference between an actual threat and your own between an actual threat and your own gut lining. But, in IBD, the distinction gut lining. But, in IBD, the distinction breaks down, and inflammation may keep breaks down, and inflammation may keep firing away, part of the autoimmune firing away, part of the autoimmune problem. In one study on ulcerative problem. In one study on ulcerative colitis patients, activating the vitamin colitis patients, activating the vitamin D receptor VDR on immune system cells D receptor VDR on immune system cells converted more than 40% of them into converted more than 40% of them into calming T reg cells. For me, I found calming T reg cells. For me, I found that to be true because during the that to be true because during the summer months or summer vacations, I was summer months or summer vacations, I was noticing I tend to feel a bit better. I noticing I tend to feel a bit better. I do better. I get less reactions. Maybe do better. I get less reactions. Maybe the sun was why. Now, the same study the sun was why. Now, the same study found ulcerative colitis patients had found ulcerative colitis patients had significantly lower VDR activity in significantly lower VDR activity in their immune cells than healthy people, their immune cells than healthy people, meaning the calming switch was already meaning the calming switch was already harder to flip. More working T reg cells harder to flip. More working T reg cells generally means more breaking power on generally means more breaking power on the inflammatory cycle, at least in the inflammatory cycle, at least in theory. This is one mechanism among theory. This is one mechanism among several that the whole explanation for a several that the whole explanation for a flare. This is a specific testable flare. This is a specific testable mechanism, not a vague boost your immune mechanism, not a vague boost your immune system type of claim. And this may help system type of claim. And this may help regulate an overreactive immune system, regulate an overreactive immune system, not just eliminate IBD or autoimmune not just eliminate IBD or autoimmune disease. So, vitamin D works on the gut disease. So, vitamin D works on the gut wall that's supposed to hold your gut wall that's supposed to hold your gut lining together, helps to fix or support lining together, helps to fix or support leaky gut. And on the immune cells that leaky gut. And on the immune cells that are supposed to be calming down that are supposed to be calming down that threat, well, it checks out on that threat, well, it checks out on that mechanism, too. The next question is mechanism, too. The next question is whether that actually shows up in real whether that actually shows up in real patients, not just petri dishes and patients, not just petri dishes and mouse models. This is where it stops mouse models.

Vitamin D Levels and IBD Disease Activity

This is where it stops being theory, and it starts getting being theory, and it starts getting really interesting for you and I with really interesting for you and I with IBD. In one cohort, patients with active IBD. In one cohort, patients with active Crohn's disease had an average vitamin D Crohn's disease had an average vitamin D level of only 9.6. Now, compared to 18.3 level of only 9.6. Now, compared to 18.3 in patients in remission, every single in patients in remission, every single patient with active disease in this patient with active disease in this study was deficient in IBD. Now, yes, study was deficient in IBD. Now, yes, that's a correlation, not proof that low that's a correlation, not proof that low vitamin D alone causes a flare, but vitamin D alone causes a flare, but disease activity itself lowers vitamin disease activity itself lowers vitamin D, too. So, both directions are probably D, too. So, both directions are probably true. In a supplementation trial, IBD true. In a supplementation trial, IBD patients given a weekly high dose of patients given a weekly high dose of vitamin D3 for 12 weeks more than vitamin D3 for 12 weeks more than quadrupled their blood levels. Now, the quadrupled their blood levels. Now, the inflammatory marker TNF-alpha trended inflammatory marker TNF-alpha trended down. Now, it didn't reach statistical down. Now, it didn't reach statistical significance at the sample size, but significance at the sample size, but this is a promising signal, not just a this is a promising signal, not just a settled result. A large 2025 study settled result. A large 2025 study following over 5,000 IBD patients found following over 5,000 IBD patients found vitamin D supplementation was associated vitamin D supplementation was associated with 34% fewer IBD-related ER visits and with 34% fewer IBD-related ER visits and a 53% fewer hospitalization rate. Now, a 53% fewer hospitalization rate. Now, this is all really exciting, but none of this is all really exciting, but none of this means vitamin D replaces your this means vitamin D replaces your treatment plan or guarantees a treatment plan or guarantees a flare-free year. It means testing your flare-free year.

Is Sun Exposure Enough for Vitamin D?

It means testing your levels and correcting a deficiency that levels and correcting a deficiency that is a low risk, well-supported input is a low risk, well-supported input worth having in your corner. Now, I know worth having in your

corner. Now, I know what you're thinking. You're probably what you're thinking. You're probably wondering, well, is sun exposure enough?

wondering, well, is sun exposure enough? Can I just get in the sun not be enough. Can I just get in the sun not be enough. The problem is, if your gut isn't The problem is, if your gut isn't absorbing nutrients well to begin with, absorbing nutrients well to begin with, sun is a good baseline, but it's usually sun is a good baseline, but it's usually not reliable enough on its own to close not reliable enough on its own to close a real deficiency with vitamin D, a real deficiency with vitamin D, especially in the winter months or especially in the winter months or during a flare where you're staying during a flare where you're staying indoors. Because when you're sick, you indoors. Because when you're sick, you don't tend to go outside. High-dose don't tend to go outside. High-dose vitamin D isn't a take as much as vitamin D isn't a take as much as possible input, either. So, don't just possible input, either. So, don't just shove it down your throat. The trials shove it down your throat. The trials above monitored the blood levels the above monitored the blood levels the whole way through. Treat it as something whole way through. Treat it as something to test, supplement, and recheck, not to test, supplement, and recheck, not something to guess at. So, what can we something to guess at.

What Vitamin D Level Should You Ask About?

So, what can we do? Ask your GI doctor, check your own do? Ask your GI doctor, check your own labs for a 2508 vitamin D test. Studies labs for a 2508 vitamin D test. Studies like this generally aim for a range like this generally aim for a range around 30 ng over ml in your blood, and around 30 ng over ml in your blood, and that's considered potentially in range.

that's considered potentially in range. Now, for me personally, I've loved to Now, for me personally, I've loved to keep my ranges between 65 and 95 ng over keep my ranges between 65 and 95 ng over ml, and I will sometimes take 5,000 to ml, and I will sometimes take 5,000 to 10,000 IUs two times a week or five 10,000 IUs two times a week or five times a week. Now, that's not medical times a week. Now, that's not medical advice, and that's my pure speculation advice, and that's my pure speculation of what I've noticed has helped me in my of what I've noticed has helped me in my own journey. So, before trying anything own journey. So, before trying anything like that, speak with your doctor and like that, speak with your doctor and see what's best for you. So, vitamin D see what's best for you. So, vitamin D isn't just a bone supplement you take isn't just a bone supplement you take and forget about if you're dealing with and forget about if you're dealing with Crohn's and colitis. It's tied to your Crohn's and colitis. It's tied to your gut lining. It's tied to your immune gut lining. It's tied to your immune system response. It's tied to flares, system response. It's tied to flares, and there are studies to show that this and there are studies to show that this could help reduce hospital visits and could help reduce hospital visits and help us stay on a safer route of help us stay on a safer route of success. So, be aware of the success. So, be aware of the deficiencies, be aware of what you need deficiencies, be aware of what you need with the doctor, ask your doctor to with the doctor, ask your doctor to check it, make sure that you're in check it, make sure that you're in range, and always make sure you're range, and always make sure you're learning and growing with IBD. That's it learning and growing with IBD. That's it for this one. Please like, please for this one. Please like, please subscribe, and I'll see you on the next subscribe, and I'll see you on the next