# Why Your Doctor Isn't Telling You This About Your Labs Transcript

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## Intro and how to review your blood work

Hey there everybody. Wanted to do something a little different today and grab your recent blood work. We'll go over it together on what it all means, what the intricacies are of each of these markers and how you can use that information for your own health.

So take a moment, pause the video, go grab you recent flood work and we'll through this together. I'm gonna share my screen so we can go through line by line.

Okay, now this is my own blood work. So HIPAA safe, but there is a program that I love to use where you put your bloodwork into the program and it will show you optimal.

What's optimal versus what's just normal. Some of the blood markers that you have on your test might be a little bit different than what I ran for myself, But we can go through them all together anyways.

So first one, I did a D-dimer because this is a blood clot test. Blood clots are something that you never wanna mess with. If you suspect you have a block clot, you should get a d-timer.

Thankfully, it didn't have blood clot, but I was wondering if I didn.

## D-dimer and vitamin D basics

So I do a test, D dimer is great test for looking for a blot clot. Thankfully, everything was normal. Hey, let's get into the more normal ones, more things that might have on your blood panel.

Vitamin D now vitamin D there. This is a controversial thing. Some people and most blood tests will say if you have less than 30, that's not good. But if You have 30 that fine.

That's perfect. I disagree. Optimal vitamin d is between 50 and 80. So that 50 and 80 is when the body can use vitamin D as a signaler for healthy immune system, healthy heart, and also keeping the immune systems balanced, especially with autoimmune.

Lipids, also known as cholesterol. This is a little bit vulnerable for me because you're seeing some of my things that I need to work on, but this is good.

So this a good learning place. So cholesterol panel, first thing you look for is total cholesterol. Total cholesterol is the big marker for heart health and making sure that you are staying healthy from strokes.

Optimal is below 200. It's the first place to look. Now total cholesterol is a combination of the different types of cholesterol. The math isn't going to add up perfectly, but it's looking for the types different of densities.

So we've got low density cholesterol, very low-density cholesterol and high- density.

## Cholesterol panel and triglycerides

Low-Density Cholesterol is also called LDL and I like to remember that as the quote-unquote lousy cholesterol so L-lousie. It's not completely lousy, we definitely need it, it's very good for hormones, but we don't want it to be too high.

So ideally, this is less than 100. Now, if this was over 100, you can see minus 107, If this over a 100 this can mean one of two things that you could do lifestyle wise.

Increasing fiber and increasing higher intensity exercise. Uh, please consult with your doctor before you take on any of these for yourself. This is more of an education piece and then ask your Dr.

About these things, if they would help. I'm also happy to help too. With the fiber and high intensity, higher intensity exercise, this helps to bind the excess cholesterol and help it leave the body.

That's what the Fiber does. Fibre binds the cholesterol. And then you, it leaves through the bowel movement. You poop it out. Higher intensity exercise depends on, of course, your own unique history.

But a general thought is 20 minutes of higher intensity exercises three times per week. Now, this doesn't necessarily mean a HIIT workout, but it can be in cardio where your heart rate gets up to a certain point.

The general calculation is 80% of your max heartrate. calculation there we're getting really nerdy in this video the calculation is 220 minus your age so however old you are in years 220, minus, your, age then take that number Take 80% of that.

80 percent of number is considered 80 of your maximum heart rate. 20 minutes, three times a week at that heart is very helpful for heart health and it's helpful higher cholesterol numbers.

Again, please consult with your doctor on if that's a good move for you. The via LDL, the very low density cholesterol, this is also considered things that we want to be quite low.

It's not optimal for this to high. So lower, lower the better, but at least five is good. HDL, the high density cholesterol, also known as the happy cholesterol.

So the H happy, cholesterol this is the good cholesterol the higher density means that the liver doesn't have to work so hard for it to pass through high-density cholesterol is considered a marker, a good marker of heart health.

Now to note, Some lab tests on the generic labs will have this as the high being 50. And if it's over 50, they say that's bad. That's not necessarily true.

We want to look at the whole picture. But typically, the HDL cholesterol higher is good for carb health. Last piece on cholesterol is triglycerides. Now, triglicerides are a marker for How much sugar you're eating can also be how much alcohol you are eating.

So this is kind of a test to see, okay, how is this person really doing with their food scene? Now, less than 150 is considered ideal. But when you're looking at this, you do have to be fasting for this number to accurate.

Most of these cholesterol numbers best with fasting, but especially triglycerides. So if you had even just a granola bar before your blood draw, this will probably be high.

Or if he didn't have a full fast before you blood, draw this probably high as well. Take that with a grain of salt. But ideally, this number is less than 150. If it's higher than one 50, that typically means you might be having more sugar than your body's needing.

And it is getting converted into these fats, into this triglycerides. Okay, let's go into thyroid. This one, oftentimes people don't run the full panel.

I am super picky about thyroid and I like to see at least five markers. There are more than five that we can do, but atleast five. Most conventional blood scenes only do two, maybe only one.

The one that you'll likely see is this one your TSH, thyroid stimulating hormone. Now this is actually a marker in your brain. Your brain signals down to your thyroid and says either make more or make less.

So ideally the brain stimulating hormones, the T SH is between 1.8 and three.

## Thyroid markers and optimal ranges

There are different schools of thought on this one. And I think that they all have their merit. It's all individualized. The 1.8 to three is what we'll use for today.

1.8 to three. And if the TSH is a little low, like mine's a bit low right here, that means the brain is telling the thyroid, hey, pump the brakes, slow down, we don't need that anymore.

If the TSH is high, it's giving the opposite signal. It's saying, Hey, pick up production, and we need a lit bit more hormone here. So this T SH marker is actually in your brain.

it is not measuring your thyroid output at all, only measuring brain The thyroid output is with these numbers, these free T4, free, T3, and then T 4 and T 3. Sometimes T four is the other one that can be run in conventional medical scene.

Ideally, we have all five. These are the actual thyroid outputs. So T-4 ideally between 6.8 to 11.5 is nice. You could even bump it up to between 6 and 12 as a general optimal.

This is exactly how much thyroid hormone of the T4 type that we want. Now, T3 is actually the most active type of thyroid. And T 3 is the one that's not measured very much unless you're going to a functional medicine provider.

T3, being that it's the most active, it is really important to see what's going on here. The range is a bit wider for this one. For today's purposes, we can say between 83 and 116, but you could even let it go up a little bit higher to 180 because it so active.

Oh, T3 and T4 are good to see on their own because that's the full hormone amount. But then the free T three and free to four means that they're unbound.

They're not bound to any hormone. So they are also really good see. The range for these is much more narrow. Free T four, ideally it's between one and 1.5, a very small window.

This is how much hormone your body is producing and then how is circulating. Free T3 being this is the active form of T-3 and how much of that is actively circulating between three and four is considered optimal for that.

The other markers that I didn't run on myself, but that you can run or can ask your provider to run are TPO, which is a thyroid antibody, TSI, Which is another thyroid, antibody.

Those are really good if you have autoimmune thyroid conditions. So I think Hashimoto's or Graves' disease. Let me go a little bit further into the metabolism.

So hemoglobin A1c is a measure of your blood sugar over a 90 day period. This is an average of bloodsugar over three months. 5.2 is my number, and this is considered optimal.

Anything below 5,6 is consider very healthy. anything above 5.,6, is pre-diabetes or diabetes once it gets into the higher numbers above 6.4. So always good to look at and keep in mind that usually you only want to run these three months at a time because it's an average of three month.

So you can do every three to see how you're scaling and projecting if that is part of your process. And something that we offer at the clinic is more continuous glucose monitoring, which is honestly one of the best things because you see your numbers on a day to day basis.

Ferritin is the storage form of iron. We'll see some iron markers and you can do an iron panel, but ferritine is storage. So this is how much extra iron do you have in the tank?

This is really good to see for athletes, especially female athletes and then people who are having periods because

your body loses iron with every monthly bleed.

So if you have ferritin in the tank and gas, iron storage and the gas tank, that can be really helpful for keeping energy levels high, keeping oxygen levels, high as well and healthy.

So ideally similar with vitamin D, you will see on regular panels that about 30 is considered normal. I completely disagree with that. If you're having periods up to a hundred is considered healthy.

## Blood sugar, ferritin, and metabolic overview

And ideally I'd like to see it over 50 between 70 and a 100 is excellent for people who are having. Now take a pause, take your breath because we're about to get into the meat here.

So a comprehensive metabolic panel looking at metabolism and then immune system. On your blood panel, this will be called CMP, a complete metabolic, you might also have a BNP, basic metabolic.

This will probably be in a different order for you. On this program, it puts the things that are out of range first and then the rest of the thing's in subsequent order.

So you might have to bump around a little bit. Feel free to pause and find your markers as you need to. So alkaline phosphatase, this is an interesting marker because most of the time it's an inflammatory marker, and it will show if you're having inflammation in your liver, your kidneys, you gut, or your bones.

It doesn't specify which one unless you do a fractionated alkalin phosphates, but alkalines phosphate generally is inflammatory. Now, if it's high, that means you have too much inflammation.

If it is low, like mine is, it means something totally different. It can mean that you're not getting enough of an inflammation signal. And this can be one of two things.

Either your immune system is a little depleted, or you are not mounting enough an inflammatory response and enough immune response when you need it. So with mine being a little low, this is something that I actually started after I got this blood work, is I started taking vitamin C and zinc.

Vitamin C, and Zinc are one of the things that can help the immune system most. And when the alkaline phosphatase is low it can bolster the system so that you have a more appropriate inflammatory response.

When you're looking at these numbers, I like to see this one less than 90. So between 44 and 90 is considered ideal. For a couple of these we're going to cluster them together because they tell a story.

A story that I look for with protein is find your albumin, your total protein, and your globulin, which you'll see on the next page. So these are all protein byproducts or protein markers.

We can look at total protein first. And if you're having too much total, protein, or let's say it's above 7.4, ideally it is between 6.9 and 7.4.

## CMP basics: alkaline phosphatase and protein markers

Then that means that your body is not getting the protein into the cells. It's circulating through the blood, but it isn't getting absorbed in. Similar with albumin.

Ideally that's between four and five. That can mean that there's too much circulating around, it's not getting absorbed in, and you could use some digestive support.

Now, when we're talking about BUN, B1 is first and foremost a kidney marker, but it can also be a measure of protein because the kidneys and protein are so intimately connected.

So BUN, ideally, I like to see it between 13 and 18. And if it's low, this can mean something similar, where either you're not getting enough protein, you might not be eating enough proteins, or the protein that you are eating is not being absorbed into the cells.

So this was a good picture for me to see where I need some more digestive supports even when I'm eating protein. Some of you might know I prefer to be vegetarian most of the time, but my body really does do well with a little bit of meat.

However, when they eat meat, I do need help digesting it. So I have some of this digest and support when i'm going to eat protein Fasting glucose, this is your blood sugar out of snapshot in time.

So it's not an average like the A1C, but a snapshot time, less than a hundred is considered ideal for fasting. But even a little bit lower than that between 80 and 89 is consider nice or below 80 is fine to a point that you don't want it to be too low.

Sodium, a lot of people think of this as, oh no, I'm eating too much sodium. This can often be an adrenal marker. Sodion and potassium can be adrenal markers because they're salts.

They're electrolytes that the body's making. And if the bodies making so much, that can mean the kid, it's giving me the adrenals are stressed out. So the adrenals being our sweet little hats that live on top of the kidneys, they fuel us for stressful situations, They wake us up in the morning.

And if you're under constant amount of stress, the kidney, excuse me, The kidneys and the adrenal can be under stress as well. So let's look a little bit more at some of kidney markers.

GFR is glomerular filtration rate. This is how well your kidneys are filtering. And ideally, it's above 60. Oh, this marker, I actually disagree with a little bit, saying that 93 is above optimal, because anything above sixty is considered really good.

Your kidneys, they're just filtering well. Below 60 is when we really want to be mindful, triggering some action. Some high ticket ones here. So we talked about the liver a little bit.

There are two markers that we want to look for on your blood work for liver. They are ALT and AST. ALD and ASD are ideally between 10 and 26. This for most people.

This is looking at how if your liver is stressed out, if you're coming into contact with things that your lover does not like, they will be irritated, and they'll be high.

## Kidney, liver, and electrolyte markers

So keep those markers in mind. We talked about globulin on the previous page and potassium. So potassium is that other adrenal marker. If it's high, that might mean your adrenals are a little bit stressed out.

And then globilin is a protein byproduct. We want it to be ideally between 1.9 and 2.8. You can even give a bit more margin for that. But if it is low, you might not be getting enough protein.

Bu and creatinine ratio. This is the final. kidney marker where we're looking at the BUN and the creatinine. So this is, the BU and creatine ratio is really a top-notch test for looking your kidneys.

And it can show if you're in kidney stress or in something called renal failure. and it could also show us if your tending towards that direction. so definitely keep that one in mind.

Ideally, it's less than 20 for these numbers. When it gets above 20, that can show how stressed the kidneys are. Creatinine, similar, BUN and creatinines, both are kidney markers, but creatine does have an extra bonus piece of what it shows for how much your body is using muscles as its own fuel.

So let's say you're not getting enough protein in your diet, the body will use muscles, as fuel instead. So creatinine is something that you can test with that number.

So it can show, are you eating enough protein or is your body starting to use fuel? I like to think of this as protein is what's available in your wallet.

And then if there's nothing available on your wall, then it will start to dip into your savings, which is you're your muscles. We don't want to deep into savings.

But getting enough, protein, making sure your creatinein is healthy and normal. It's a really good, good piece. The last piece for this video and then we'll do the immune system in the second video because there's so much in there and I want you to have the mental juice to stick with it.

So last one here, calcium. A lot of times people think, oh no, if this is too low, that means I'm not eating enough calcium, not the case because Cal, the body will prioritize calcium and the blood instead of in the bones.

The heart uses calcium so much and we need it on a day-to-day regular basis for just regular heartbeat and healthy signaling. So the buddy will always put calcium in blood before it puts it in bones, so if your calcium is low, definitely look into that a little bit more of is your, are your bones healthy doing a DEXA scan, doing Further test on parathyroid if your calcium is high.

That can be more beneficial than looking at this number. And chloride, this cycles back into stomach acid and protein digestion. So protein is digested in the stomach.

Chloride, think of the base of hydrochloric acid. Hydrochloric acid has chloride in it. So if this number is high, if it's over 106, that means the body's trying to make more stomach acid and it needs some help.

Keep that in mind when you're looking at your chloride. We'll pause right here. and then we'll do your complete blood count, your immune system in the next video.

That one also looks at your iron and B vitamins as well. So go grab your CBC, Your Complete Blood Count, and we will see you in next videos.