Base Hits 2021 Session One: *Changing the Direction of your Nervous System from Fight, Flight and Fright to Calm, Regenerative Healing*

Week Four: ACTH and Cortisol: Why this is a game change *with* Dr. Tom Transcript

Mary Agnes:

Well, good evening everyone. This is Mary Agnes Antonopoulos. I'm Dr. O'Bryan's marketing director and be a backup producer for Base Hits. So I'll be here on this call for the next four weeks with you all. So welcome. And thank you so much for participating in this program. We think it's one of the premier programs that Dr. O'Bryan offers his community.

Dr. Tom:

Thank you MA, Hello? Hello everyone. I just realized I didn't put a dress shirt on, sorry. I've been working. We just found out that the internet is not working too good. And if I start to freeze on you, please let me know, make a comment in the Q and A, or M.A will let me know on the chat. And if that happens, I'm going to have to go downstairs to where they have fiber optics. I didn't know, in advance that we were going to have a problem. So I'm going to try here. We're in a condo in San Jose. We had to come into town here for a couple of days. And so I didn't know we had a problem, so sorry. If we have wireless problems, I'll go to another location, but let's start here.

So let me plug in my power. So you don't lose me because of power problems. There we go. And today's topic is kind of a bonus one. We've been talking about sympathetic parasympathetic and the necessity of building more parasympathetic dominance. And I can't overemphasize finding the tools that in your life will help you to touch parasympathetic dominance more often in your day. For some people it'll be breathing, and in the midst of the craziness of your day, you're just going to pause my friend, Dr. Pedram Shojai one of his books, he had exercises for everyday of the year. So 365 exercises. That was his book. And the first one I tried it and I was really impressed. And what he suggested is take five deep breaths. So it's... One... Two. Do that five times set your...

Mary Agnes:

Well, I don't hate us all having attempts to finish the deep breaths. But I will text him to let him know he's...

Dr. Tom:

... What you're doing. If you're talking then you have to wait, take a pause in the conversation, but the idea of taking five deep breaths, every waking hour. So, yes, okay. So I'm going to disconnect and I'm

going downstairs. It'll take me five minutes to set up down there and I will be right back with everyone with better internet, sorry for the disruption. So I was laughing as I walked down the hall, we're on the seventh floor and I get to the elevator and I say, all right, so I'm in sympathetic dominance right now. So what am I going to do? So I did five deep breaths. And at first it's like... One, Oh, I'm not into this man. I've just got to get down. And I got to get the job. My mind starts going. I just started laughing and laughing is that's exactly why. Go to two, take a breath... Two. Okay.

And when the elevator came down to the ground floor, I was at four breaths. And then I came here and here's a nice room. And so we're good to go now. But that idea of parasympathetic tools to get you into parasympathetic dominance a little more often it's ridiculous to think that we can live in parasympathetic dominance. And I use that language, we're supposed to live in, but it's silly. Our lives are too stressful for that. But the more that you can bring some moments of quiet into your being during your crazy day, the more often you can do that, the more your system calms down, the more of the parasympathetic dominant hormones you produce.

My son was born three months ago and he's three months old now. And it was a very traumatic birth, very traumatic unfortunately, and we'd planned for beautiful home birth and all that. And it didn't happen. But he came into this world with a lot of trauma, like many of us have. And so he has a pretty strong startle reflex. You know, if there's a noise in the background, somebody drops a fork in the sink. His body will do this, and it's a startle reflex. And so what Marcy and I do anytime we see a startle reflex is we go, "Hi. Hey, it's okay. It's really okay. It's really okay." And then he smiles. And when he smiles, he's producing the parasympathetic dominant hormones, which offset the cortisol, which lasts five hours in your system, when you get stressed, the stress has gone in a moment, but the effects of that are there for five hours.

But one of my primary tasks is to help my son integrate the trauma of his birth into his being so that he's not run by being hyper and on alert all the time. That's one of my paths now, because most of us have been raised hyper and alert to some degree, some more than others, but to some degree. So this idea that as an adult for yourself and for your family, you can create environments of parasympathetic dominance, which includes things like instead of the usual dessert that you would make at a holiday, Passover just occurred, or for Christmas or Easter is coming whatever holiday it is or some dessert, I really shouldn't eat that, but it's only once a year. Make a new dessert and it, hopefully it'll taste good if it doesn't, you'll work on it for next year or for another time.

But if it tastes good and people feel satisfied, your family feels satisfied. You've reduced the sympathetic stress from food that your family was about to get. And all those little things, all those little base hits is what wins the ball game consistently base hits, win the ball game. So it's all the little things you do in the moment that may feel as this is good, this isn't going to help at all. You know, your brain can do the Abby, Abby, I bet easily, your brain can do that. But it's the little things you do that are accumulative to round you out as a more balanced, a more well-rounded person, as opposed to just a hyper person all the time. Okay. Let's go to some of the questions and see what we've got here.

"I bought the book on castor oil, love it! Way to go. It's a great little book. It's like you're listening to Marcus Welby. The guy was in practice for 50 years and Frey Vineyards in California is gluten free. They make the wine in stainless barrels and use no fining process on the red wine. The red and white wines by Frey that's F-R-E-Y are all organic biodynamic and gluten-free not their port, which is still aged in Oak barrels with sealant. They use wheat and the glue that may contain gluten."

Well, thank you for sharing that, and I'm glad you enjoy. The book is called the oil that heals. It's a little paperback on Amazon, and it's a great read. You'll appreciate castor oil after that. What is a good goal in our fast paced lives to live parasympathetics since 95 to 98% is unattainable except in the eighth day of vacation without kids. That's true. Another duck say 80% parasympathetic in the world we live in now.

Well, you know anatomically it's 95 to 98% anatomically, but we aren't living as our ancestors lived. So realistically you're asking what's a good goal in our fast paced lives. If you have moments every day that you can say, you know what, that 15 minutes that was just for me. And that was great. Oh, I feel refreshed. I feel... Hot yoga does that for me. And I did hot yoga three, four times a week. When I lived in Encinitas in Southern California, the studio is just down the hill from where I live, two block walk and it just knocks you for a loop in a good way as long as you're careful, but afterwards, I would just sit outside, people we'd sit outside and talk for a while. As we're cooling off, then people would leave.

And I just sit there, that's often sit there 20 minutes, 30 minutes, I was in a parasympathetic dominant state. I wasn't fatigued and just can't move, but rather just calm and relax. And I really liked that state. I really enjoy it. So you'll find something that works for you. Maybe it's a walk around the block every day. You walk the dog at five o'clock or, whatever it should be, but something that you can do daily, we all should have daily recognition of parasympathetic dominance.

And as you have that, what occurs over time, you're more aware of other moments in your day, and you're bringing more parasympathetic dominance into it. So you allocate five minutes to 15 minutes a day to do something that will calm you down. It can be prayer, it can be meditation, it can be yoga, can be a walk in the park whatever works for you, it can be talking to your infant, just letting... sitting there googling. They're smiling. Little eyes at such unfiltered on a Bashford love that. It's very empowering.

"What are the effects of weakened methylation on the nervous system and how does one improve methylation function?"

Well, good question. Methylation is a primary detoxification pathway. That means, and you all now know it's 247 pounds of chemicals per person per day, that are manufactured or imported in the United States, 247 pounds per person per day. So if that were a hundred people on this call, just us, that would be, let's see, 247. 24,700 pounds of chemicals every day for a hundred people, 24,000, almost 25,000 pounds every day. And that is in your bloodstream. Those chemicals are in your bloodstream. Those chemicals are in your brain. Those chemicals are in newborn blood. It's 283 is the most current study I've seen, different chemicals identified in the umbilical cord blood at birth that aren't supposed to be in the bloodstream.

They're non-human, these chemicals are non-human 283 of them. And then we wonder why our brains going. We have a whole thing coming up about the brain. There'll be like this four part series to walk people through that. But it's all of these chemicals. So why am I telling you that? Because that's, you're all exposed to that. We're all exposed to this. And what do you do about it? You got to have great methylation. You have to have great histolation. You have to have great glutathione levels. The master antioxidant, that the concept of detox is no longer a once every quarter or once a year first, 20 years

ago, you were pretty healthy if you were doing a detox program, once a year, it doesn't work anymore like that.

Detox has to be a part of our everyday life, which means methylation has to be a part of our everyday life. Histone acetylation has to be a part of our everyday life. Methylation has just gotten a lot of press because the genes were identified early for that and they could carry it out. Homocysteine problems are associated with poor methylation. There's was a lot of different problems that can associate. So any cell of your body, that accumulates chemicals, toxic chemicals, aren't supposed to be there, and they may not be toxic in small amounts like chlorine in your tooth or in your water or fluoride in your toothpaste. There's no evidence that the amount of fluoride you get when you brush your teeth is toxic to humans, but this stuff is a cumulative in your body.

Give me 20, 30 years of putting a little fluoride in your mouth. And if you can detox it and get it out of there, and it accumulates in your body. Now you got a problem with fluoride, which can manifest as thyroid problems, thyroid auto-immune disease, calcification of the pineal gland. There's many, many compromise of the immune system, and this is just fluoride, but you do the same with chlorine. You can do the same with bromine in terms of impacts on thyroid. So we have to be able to break down all of these chemicals that we're being exposed to. We're having a whole detox thing that we're doing, four sessions on that, because once you understand it, it becomes part of your everyday life. So what are the effects of a weakened methylation, any brain dysfunction, any nervous system dysfunction, any cardiac dysfunction. Poor methylation and you can get elevated homocysteine levels called the silent killer.

So it killed my father, was undiagnosed elevated homocysteine level comes from poor methylation. So when you have poor methylation, you run the risk of having homocysteine levels go up and elevated homocysteine level associated with Alzheimer's, Parkinson's, kidney disease, liver disease, diabetes, fatal first heart attacks, strokes, miscarriages from elevated homocysteine, which could be from poor methylation. So the concept of methylation is important, but it's junior to the concept of detoxification. That's the big kahuna in this discussion about methylation is you don't want to focus just on methylation. You want to focus on detoxification, which includes making sure methylation is working well, which means taking the B vitamins, taking the nutrients necessary for methylation, let me see if I get comfortable here, I'm sitting in their bar, which is closed here tonight, and I'm looking at their wines hang up there, but none of them are open. So we'll just keep going.

"Hi, Dr. Tom, thank you for sharing so much knowledge with us. Thank you. I could listen to you for hours, is there any news on opening up a wait list to work with clinical services?"

Yes, I think so. I don't really know. I don't follow that, but Mary Agnes will get a message to you. And I don't think there's a problem getting on the wait list. But please coordinate with Mary Agnes in the chat room. Give her your email address and we'll follow up on that for you.

"Hi, I'm confused."

Well, welcome. We're so used to being raised thinking there's a one pill answer to whatever symptom you've got. So it was pretty confusing in general, but let's see what your question is.

"I just had an endoscopy done and it came back normal, but failed Wheat Zoomer is my gluten-free lifestyle success or not. I've been 100% gluten-free for over a year."

Oh, congratulations. Well, first question. What have you noticed being gluten free for over a year? Have you noticed anything? So, when the Wheat Zoomer comes back positive, which it does for almost everyone, even the gluten free people, because very few people are doing gluten-free correctly. It's a terrible thing to learn that every human has transient intestinal, permeability, and increased inflammation in the gut. When they eat wheat, it's a terrible thing to learn that every human, all humans who consume wheat have this mechanism going on inside of them, that's a terrible thing. So, when you do the Wheat Zoomer and you've been gluten free for a year, it means one of a couple of things, either. There is hidden contamination you're being exposed to. And personally, I think everyone whose gluten free should be taking either E3 Advanced Plus. Mary Agnes will put the link in there for you. Then there's videos you can watch about it or WheatRescue, E3 Advanced Plus, how do you know which one to take?

E3 Advanced Plus would be more aligned with, if you have GI symptoms, gut symptoms, if you don't have gut symptoms, but you know you have a problem with wheat it's affecting your joints or affecting your brain. WheatRescue would likely be a more effective product. That's a general way of looking at the two, but everyone gluten-free should be taking these digestive enzymes because contamination is so common. In the American journal of gastroenterology. They published a study in March of 2019, Peter Green at Columbia, one of the big kahunas in celiac disease research and his team published this study. They looked at 5,624 different foods, gluten free. They sent 804 people with testing equipment into restaurants.

People sat down, ordered off the gluten-free menu. When the waiter or waitress walked away, they pulled out their testing equipment. When the food came, they took a sample and put it in the testing equipment immediately. 34% of everything was not gluten-free on a gluten free menu. 52% of gluten-free pizzas were not gluten-free. 54% of gluten-free pasta was not gluten-free. We feel so good about finding some great gluten-free pasta or Italian restaurant, this guy great pasta. And they also do a gluten-free. We feel great. "Oh, good. I got my path." And I'm Italian so I'm going to eat pasta once every once in a while. But when you learn that 54% of all of them are not gluten-free. And it activates that small amount of contamination in the food activates Toll like receptor 4, the century standing guard inside the first part of your intestine and that activation.

That's what turns on the transient intestinal permeability and the NF-kappa B the major amplifier of inflammation. Toll Like receptor 4 gets activated by the contamination. And how much does it take? Nanomolar amounts. Okay. What does that mean? That doesn't mean anything to anybody. What's a, nanomolar? 1000000000th of a gram. I'm not exaggerating. 1000000000Th of a gram is all it takes to add activate toll like receptor 4 when wheat is in the food, that's why you have to change out the toaster in your house.

You have to get rid of the toaster. You have to like, and that's why, if you go out to eat, you've got to take the enzymes E3 Advanced Plus, or WheatRescue. You got to take them to protect yourself. So that's the first reason why your Wheat Zoomer is positive. The second reason is called cross-reactivity. Cross-reactivity means when you eat corn, you've got the genetic vulnerability that your body fights corn, but when it makes the antibodies to fight corn, it still makes the antibodies to wheat. So your Wheat Zoomer is positive or dairy. We know 50% of all celiacs are dairy sensitive.

They still have their antibodies elevated to celiac. So that's the second one. First one's contamination. Second one is cross-reactivity. And that's a mosquito that just flew by my hand. The third one is

molecular mimicry. You eat something that your body doesn't like, and it fights it. Let's take the example of, I'm not remembering the name of the chemical that is in suntan lotion, but there's a chemical in suntan lotion that if your immune system makes antibodies to that suntan lotion chemical, the way the antibodies know where to fire their high powered rifle, fire their bullets is by the protein structure that they're trained to go after you go after gluten. And so they're looking for the protein structure of gluten or dairy or whatever it should be, or chemicals. And there are certain chemicals that the protein structure, when the antibodies have been directed to go after that chemical, the protein structure of that chemical looks a whole lot like the protein structure of gluten.

And so the antibodies can, they're looking in... remember your bloodstream's just a highway, and there's no lanes of traffic. It's like bumper cars in there. Everything's bouncing around all the time into each other. They're all going the same direction, but it's bumper cars in there. I mean, you have to think about it this way to understand that the antibodies are bumping around everywhere. And they're looking for this protein signature. I call it orange vests. They're looking for the orange vests to fire their chemical bullet, high powered rifle to fire their chemical bullet at the orange vest. Well, the protein structure of some chemicals that the antibodies are going after looks a whole lot like the protein structure of gluten. And so you still make the antibodies to gluten. If you've got this chemical in your body, that's molecular mimicry. So there's seven different mechanisms, but those are the top three.

So it's not unusual at all. My comment is congratulations to you way to go, to do the Wheat Zoomer and way to go, that you had an endoscopy. You must have had a previous diagnosis of celiac. I'm assuming. That's why he did the endoscopy because you don't do an endoscopy for wheat. In general, you do an endoscopy if you suspect celiac disease and celiac disease, to keep it in perspective, doctors were taught 20 years ago. If you don't have celiac disease, you don't have a problem with wheat. Now we know that's a historical misconception.

I wanted to say other nonsense, but I'll be polite. It's a historical misconception. That's what they believed 20 years ago. Now we know there are 36 centers in Italy that are gluten related disorder centers, and they're designated by the government. And if you get a diagnosis from one of these 36 centers, 26 or 28 are gastroenterology, there's a couple of neurology some pediatric, if you get a diagnosis from one of those centers, your gluten-free foods, a tax deduction, right? So doctors, if they suspect a wheat problem, they'll send them to one of these specialty clinics for the diagnosis. Okay? So they looked at the 36 centers and they looked at, I think it was 15,000. I think there was a number somewhere around 15,000 patients who had been sent to the specialty centers, suspected of having a problem with wheat. Most of them suspected they had celiac disease, the family doctor, or the pediatrician thought they had celiac.

And they published a study about the 15,000 people. What did they find? They found that 7% of them had celiac disease. 93% had a wheat related disorder. There was justice serious, but it wasn't celiac. Maybe it was dermatitis herpetiformis in the skin, maybe it was thyroid problems. Maybe it was chronic fatigue. Maybe it was joint problems, but it wasn't celiac. So celiac is important to consider, but only one out of 10, seven out of a hundred will have celiac disease. The rest of them have a wheat related problem that they have to get wheat out of their diet forever, but it's not celiac.

And many doctors still think, well, "You don't have celiac disease. You don't have a problem with wheat. Go ahead and eat wheat. See you don't have celiac. See, here's the endoscopy report. You don't have celiac." If your doctor says that to you, you may use that doctor for some aspects of their expertise, but

not for that. You find a younger doctor, who's been reading more current textbooks, right. Excuse me. But it's your life.

"In May I wanted to buy the strips that test the food for wheat, but I didn't find it. Can you tell me where? Thanks."

Dr. Tom it looks like she sold the company to Medline and they've shelved this for the time being. So it looks like NIMO is temporarily at least out of business. I'm so sad to see that Sherin sold it.

Dr. Tom:

Yeah. I knew she sold it, but I didn't know that they put it on the side that they haven't continued the operations.

Mary Agnes:

The pandemic hit everybody in weird ways. And it was like Medline. Isn't doing so well, but hopefully they bounce back because this is an important product.

Dr. Tom:

It really is. It's such a useful tool. And that's what they use for the 804 users. 5,624 orders in gluten-free restaurants, they use the NIMO equipment there. So hopefully it'll come back.

"I just went for a consultation with a biological dentist to explore having my root canals removed. I've explored so many triggers that might be keeping me from healing. And this is the one I have been avoiding." Isn't that a bears out of. I do that. And you do everything else first, and then you guys, all right, I guess I'll go check this out. "What is your clinical experience with health outcomes after removal of root canals?"

Substantial but if you're going to a biological dentist, they should be able to test you to see if you're, if you have cavitations or if you're having some electrical conductivity problems because of the root canals, cavitations are holes in your bones, in your jaw that happen usually as a result of a root canal. And those bored out areas have bacteria in them that fester, and they can cause problems throughout your body.

"Do you have any suggestions in how to determine if a root canal is a contributing factor in one's health?" I send them to a biological dentist. I've had three Cone Beams done in the last two years, and there is no definite finding. This is extremely expensive. So I'm proceeding slowly in my decision. I cannot thank you enough for your guidance and compassion, participating in your classes. And the LPS study has been the main reasons. I finally made progress in my health." All right! High five girl. I think it's a woman. It sounds like, but high five to you, whoever you are. Thank you so much.

My friend, John Clein, who fellow faculty to IFM for many years, John is in British Columbia on Vancouver Island in British Columbia, beautiful area, such a kindhearted soul, extremely knowledgeable. He wrote a book called Detox for Life in there he talks about biological dentistry and he has a biological dentist in his office who I'm told is a master at what he does. And John Clein is C-L-I-N-E, You'll find his

book on Amazon. And in his book, he talks about that, about biological dentistry and when do you consider it? And I don't have a checklist for that. I would look to John's book and biological dentists who've written books on the topic. I'm sorry. I just don't know more about the biomarkers of when to take out root canals. I just don't know. "If possibly have HLA-DQ2 and eight gene should one get tested for H-I-D-D-R mold genes. Are you more susceptible to being sensitive to mold if you have high DQ genes?"

Yeah, there are some genes for mold. I don't know what they are, but if you carry those genes, you tend to not deal with mold very well. My friend, Dr. Jill Carnahan, she know just talking about this, recently she interviewed me for an event that she's doing and she just made a quick reference to that. So her website is Dr. jillcarnahan.com and she has a whole section on mold. So you can look through Jill's stuff. She's got lots of handouts, and she talks about the genetic contribution to mold susceptibility.

Mary Agnes:

We also have the Mold Summit coming up from Margaret Christensen. So I'll put that in here as well.

Dr. Tom:

Marvelous, marvelous. "Dr. Tom, I've had two stool tests done. June of last year, and I had an elastase of 85 and one last month, it was 129. And I was told it should be above 200, my functional medicine doc"... So you're heading in the right direction. Good. So let's see. "One was in June of last year and then the recent one." So the year, if you're talking like eight months later and you've gone up by almost 50%, no, it is 50%. You've gone up by 50%.

"My functional medicine doc has me on digestive enzymes that accounts for the increase from June to last month. But my GI doc says, I might consider taking either more of what I'm taking or an RX prescription called Creon that costs $2,000 a year. And he wants me to get an MRI with, and without contrast in my abdomen, specifically, my pancreas, I also have low secretory IgA, failed the Wheat Zoomer despite being totally gluten free." So there's another one and, you didn't fail. You did, but I understand why you think that way. "What is your assault?"

You absolutely need to be on WheatRescue and because you have GI problems, probably E3 Advanced Plus would be better for you. Mary Agnes, we'll put the link in there. And with every meal you take E3 Advanced Plus for at least six months. "What is your take on this as neither doc can tell me what causes low last haze and how serious is this. I appreciate you. Thank you so much." So the concept of your pancreas being out of balance, well, it is, it's not making enough elastase. So the question is why? Is there a family history of cancers? If so I would do an MRI. I would certainly consider that. If that's likely a component of the line of thinking that you're a gastroenterologist is going down, depends on family history.

But you have low secretory IgA that now that's telltale. What does it tell us? It tells us your immune system and your gut is worn out. And that it's been battling something for a long, long time. And you needed to work on building up your secretory IgA. I would suspect that the things you've been doing since last June may have had a beneficial impact on the secretory IgA also, but I certainly would work with my team. Michelle would want us to knows a lot about secretory IgA because she's had low

secretory IgA herself, and she is just a hound dog and finding answers to questions. This chair is not really that comfortable, but see if I can make it work.

Low secretory IGA, it means that your immune system most likely could be just genetic and you've always had it, but it likely means that your immune system has been working really hard for a long time. Secretory IgA is your first responder. One of the first responders. There are a few first responders, but secretory IgA is the most famous one in the largest volume of first responder. Its job is to deal with whatever comes in through the oral cavity, whatever it is, if it's a threat secretory IgA grabs it won't let go. So it can't be absorbed through the gut, into the bloodstream and it gets escorted out in the stool.

That's the job of secretory IgA. And so if you have low secretory IgA, you most likely have to rebuild your microbiome, you have to find out and it sounds like you're doing about food sensitivities, chemical sensitivities, heavy metals accumulating. And you've got, there's so many things on the checklist of what might be triggering this, but the low elastase is one that has your GI doc worried or cautionary. I'm not sure, I don't know enough about your history, about the MRI of the abdomen with and without contrast. Not sure why they're thinking about that. But it depends on your family history, your health history, your age on those tests. But I would certainly understand why they're looking at the pancreas if there's a family history. Okay. "I've had High MCV on labs that range between 99 to 101 for the last several years. And it hasn't changed even when taking B12 lozenges and recently started injections myself. Was told it won't come down I need to see a hematologist. Are there any other reasons for a high MCV?" Yeah. Fully. "And other than B12 and how serious is this? And when should I see a hematologist?"

Really good question. It's hard to be specific when you're only looking at one piece of information. The MCV, is the Mean Corpuscular Volume, it's the size of your red blood cells and the larger they are, the more immature they are. And B12 is most commonly known, folate is also really important. I would certainly do an Organic Acids Profile. It's a urine test, a simple urine test. But it looks at a couple of things that tells you more accurately. If you have a B12 utilization problem or a folate utilization problem, there's a marker called methylmalonic acid MMA on the organic acids test. That is really the big kahuna. When looking at B12 levels, functionally, do you have enough? Because if B12 isn't functioning adequately, your MMA goes up, it's too high. And there's no reason to have a high MMA. Except the only reason is not enough B12 being utilized.

Now, I didn't say not enough B12 because sometimes your blood level of B12 can be really high, adequate, but MMA is low. It means your body's not using the B12 more better. And the other is Folate that test on the organic acids profile is called FIGLU, F-I-G-L-U stands for, Formiminoglutamic acid. And if either of those are high, you got a problem with that B vitamin, well, I'm taking B12. Well, it's not working. So the question is, why is it not working? Heavy metal toxicity can cause that, chemical accumulations in your body can cause that, this is not simple stuff. It takes years of studying functional medicine to just think about the checklist and well, it could be this, or it could be this, or it could be this. Most likely It's one of these two, not likely this one, it just takes years to get all this stuff, but you have to know the right questions to ask.

And my goal in these base hits programs is that you understand the big picture so that you can talk coherently with your doctor to see if they understand the big picture, because if they don't understand the big picture why you've got low elastase and okay, why do I have low elastase? Well, we don't know, but let's give you some enzymes. Okay. The enzymes can help, but why do I have low elastase? I don't

want just to get the elastase up and I don't have a deficiency of these digestive enzymes in my body, or you may, and then you have to look at, well, why is that happening? How come the pancreas isn't making enough enzyme, right? But my point is it's... I just submit my phone's ringing. I just want to make sure it's not my wife. I don't know. Let's see. Nope, that was not sorry. Okay. She's upstairs with the baby and they always have priority.

Okay. Let's see. Okay "Any other reasons for the high MCV?" Yeah, we got that. "And how serious is this?" You don't want to have high MCV. I don't think it's a critically urgent thing by itself, but once again, you can't look at just one marker on a blood test and make a determination about that person. Right. Have to look at the big picture. "I have a question regarding cortisol. I took a cortisol saliva test and it said that my cortisol is low in the morning. A blood test showed that is high in the morning. The blood level was 20 and I was told that was high. I don't know what levels you like to see and what your recommendations would be. Also, my blood test showed that my ferritin level was 15, which I was told was low. I've been taking iron supplement for the past three months. And it was only gone up by two points. I was wondering if you have any recommendations?"

Good questions. You guys, aren't going to like this. The problem with lab tests is that most laboratories are using technology from 1980, 1990, maybe even 2000, which means there are only 20 old or 30 years old. And when your doctor does a blood test to see if you're healthy or not, CBC in a chem screen, that test was designed in the 1960s it identifies if you have disease, it doesn't identify if you have dysfunction it identifies If you have disease, and it's an important test to do, but it's not a health test.

It's a disease test. And you may not like this and you shouldn't have to do it. Your doctor should do it. I did it in my practice a few times, but I would take a test, a sample from a patient. Like if I do a blood draw, I draw an extra tube of blood. And I told the patient when I did this Ms. Patient, I'm going to take an extra tube of blood, and I'm going to send both vials of this blood, to the laboratory for the same test one is in your name, but one, I'm going to make up a name.

And we're just going to see how accurate this lab is, because the test should come back the same. And most of the time they don't. The geek term is sensitivity and specificity. The sensitivity and specificity of most tests is somewhere between 60 and 80%, which means it's right. Six to eight out of 10 times, which means it's wrong two to four out of 10 times, completely wrong, but that's the... and your doctor and the hospitals, you see these hospitals, they're just overwhelmed you with the sophistication and the technology and the you're walking just below the clouds in terms of being close to God, when you walk in some of these hospitals and they think that they are the cat's meow and then they are using lab tests that are 20 and 30 years old.

And then they've got the really sophisticated MRIs and cutting edge splicers, all kinds of equipment, but their blood work is sometimes the old, most of the time, the old technology. So there's something wrong when your saliva test comes back low in the morning and the blood test comes back high in the morning, especially if it was on the same day, that just shouldn't happen. I don't an answer for you on that, other than the quality of the labs in terms of ferritin. Yeah. That's low, ferritin is your storage level of iron, like to see ferritins between 120, 180 so that you're not dependent on getting a lot of iron rich foods every day. When you have a ferritin at 15 you're dancing with anemia and has lots of potential side effects in terms of brain function, vitality, energy, many different potential problems can occur from that.

"I've explanted D root canaled and removed wheat, dairy, soy, most sugar, but my stomach still bloats like crazy when I eat, never know why and worse, I'm having word finding problems new this year. Do H-I-I-T-H-B-O-T saunas one to two a week. Glutathione drips and can no longer tolerate vitamins, bloat like crazy. If I take pillS or Powders. I have also done parasite cleanses, yeast cleanses have my hormones, thyroid balanced." You're really working hard at this. And I'm just going to make a silly question. Have you checked for a Helicobacter infection, H. pylori Helicobacter pylori. 50 to 90% of the population have this. So there's something in your gut that's out of balance. It could be the microbiome itself. I would do BiomeFX is the test. I think Mary Agnes... No, I don't think I just talked to Michelle a few days ago and I okayed starting to do this test. But I don't know that it's on our site yet. BiomeFX, most comprehensive stool analysis to date that I've seen.

But first thing, of course, I'm sure other doctors have already checked you for Helicobacter. If not, that was a big whoopsie that they didn't check you for that. And I'd also do a Lectin Zoomer, the Lectin Zoomer. So we've done wheat, done dairy, great way to go, but I would check the Lectins Zoomer. "Dr. Tom, can you talk about the best supplements that you offer personally? Because I know bioavailability and purity are number one to you. What would help A-C-T-H and cortisol? What would help with parasympathetic versus sympathetic?" Really good questions. Yeah. I talked about the Adaptogenic herbs and Mary Agnes will put the link in there again to Sun Horse Energy.

The Adaptogenic herbs set the stage For everything. And I'll just review that because I had liked the analogy I made it up, but it works. It really works. You're building a new house, you hire a general contractor and he orders all the supplies but he doesn't show up. And so at the construction site, so the truck comes and it drops off all the supplies, all the vitamins and minerals, but where's the guy that says, "that goes to the electrician. This goes to the plumber. This goes to the carpenter. This goes to the dry wall guy." Where's the general contractor? The general foreman in your body? Every cell in your body regenerates every single cell. And the goal is to build healthier, younger, stronger cells. How does that happen? We got to take the nutrients, of course you do, but you also need the general contractor to tell the cells what to do with the nutrients that's Adaptogenic herbs.

And I would recommend everyone do a two-to-three-month trial of Sun Horse. And if you're a man, Mojo 8.5, if you're a womanThrivagen, those are the ones that have added herbs to support the hormones for your sex. And if you don't want to do the hormones things, or ultimate energy, which was our original just do a three month trial and see what you notice if you know. Oh! that, that, that is starting to work a little bit better. Great. Now humans, the only species on the planet, they find something that works and they stopped doing it. It was like, yeah, I stopped that. But you were feeling so much better. Yeah, Then I just forgot to renew it I just stopped. Well, look where you are now. You're back to where you were.

Oh yeah, you're right. I forgot about those. I was taking those herbs, right? I still take Sun Horse every day. I mean, I'm 69 and I have a three month old baby and I want to be around in 25 years when he's like in his mid-twenties. I want to be around for that. And in order to do that, I can't live on, well, I'm sure it's going to happen because I believe I'm healthy. No, you got to do the grunt work every single day. You got to do the grunt work to keep your body working well. So I went off on a tangent. What was the question? Oh you've done so many things here. But the bloating. What about the bloating? Have to check H. pylori. And if you're here, just put in the chat.

Have you checked Helicobacter pylori? And she did do H. pylori. Yes. Did Helicobacter was negative. Okay. Now what about the test? How accurate is the test? There's two ways to check H. pylori. One way is a breath test. You take some capsules or drink the solution, and then you blow into a balloon. And that test has been around since the 1980s. I think something like that, maybe the nineties. So it certainly at least 30 years old, there's better technology now. And I would do the blood test looking for antibodies, and I think the Zoomers have a test for that. If they don't that's not the Helicobacter Zoomer, but I think that laboratory Vibrant has a test for Helicobacter. Mary Agnes, wouldn't be able to look that up or maybe she can, but our clinical services team they do all that work.

And if Vibrant doesn't have a test available using that technology, I would use Cyrex. Cyrex is much better than the general labs out there. Much more sensitive than the general lab. Okay. "Dr. Tom, I'm on"... Oh, wait a minute. "What would be the best way to raise my ferritin level? My ferritin level is 246." You don't want to raise that. "And gluten-free, and I've had the Wheat Zoomer, Dairy Zoomer, Lectin Zoomer, Gut Zoomer, Neural Zoomer." Weirdly. She also asked how to lower ferritin. Maybe that was a mistake. Yeah. Your ferritin is to too high. 246 is too high.

You want to lower the ferritin not raise the ferritin. You want to beat 120, 160, maybe 180 is okay. That one's too high. And how do you do that? What do you do? Well, the first thing you do, I donate blood to the red cross. Do that right away and wait a couple of weeks to a month and then check your ferritin again. If it's still high, I donate blood once a month, until you figure out with your doctor, why is the ferritin high? And usually it's a microbiome thing. That's out of balance. But you don't want to have a ferritin of 246 and say, well, "I've started taking this nutrition. It's supposed to lower ferritin." Great donate some blood you might save somebody's life by donating the blood. And you sure as hell may save your life. Donate some blood. "That time. I'm on limited budget, but could afford maybe 150, $200 a month. What do you think are the most important two or three supplements to start off with I'm gluten-free so I have your E3 Advanced for when I eat out."

Perfect. But we don't have to count that as one of those two or three COVID right? No, one's eating out much, right? Thank you that come to your gym. Oh, thank you. And thank you to the woman who supports this. Mary Agnes. Yes. Thank you, Mary Agnes, without Mary Agnes, this wouldn't have happened. It was her idea and she's coordinated everything. So, she's as responsible as I am for all the benefits you guys are getting from this, send her some love. She could use some love today, send her some love. So where are your dollars best spent?

I don't know your health history. I don't know where the weak links are in your chain. That's the kind of thing that not for you because of your limited budget, but that people should have a session with Michelle. Let her evaluate you and then ask that question and see what she comes up with. But in general, what I would say for you is, have a smoothie every day and just put the best ingredients in there that you can. I would put bee pollen in there, colostrum in there, it's the best in the world. I'm not exaggerating. Bee pollen, OSI, berries, you know I grind up fresh flax seeds. Don't buy ground up flax seed meal. You have to grind it yourself. Well, how do I grind it? I bought two coffee grinders, like 15 bucks a piece.

One is for coffee beans (beep) goes for the coffee. The other one is for spices and nuts or seeds. So that's my secret ingredient. When I'm cooking is that I put the spices in the coffee grinder (beep) because you open them up, you break the walls. And so whatever oils are still in those dried oregano

and dried parsley, they start to come out a little bit more of the flavors come out, but you put flax seeds in there, grind them up and you put them in your smoothie. You don't grind up the flax seeds ahead of time. Do this trial, grind up some flax seeds, eat them, taste them. Okay, save some on the side. Four hours later, grind up some flax seeds, taste them, say, yep, that's the taste I had four hours ago, but then taste the ones that you left from this morning and taste those.

Oh, those are a little bitter. Yeah. The oils have oxidized. They're not good for you anymore. You don't want to buy ground flax seed. You want to buy flax seeds, organic and grind them yourself. It's inexpensive. And you get Omega threes by doing that. Lots of digestive enzymes. Yeah. And the other thing, that this is not expensive at all. That would be great. And nutrient dense and full of life for you is grow your own sprouts. Really simple, easy to do. You can have five different types of sprouts. All you need is a Mason jar and some cheese cloth. You put the seeds in the jar, soak them in water for 12 hours or so depends on the seeds, but usually about 12 hours, put the cheese cloth on top, put the jar in a bowl. So it's angled in the bowl.

So the water's dripping out, right? Let them sit like that. And once a day, you just turn them over, take the cheesecloth off, pour some water in there, shake up a little bit, put the cheese cloths back on, pour the water out, let it sit and drain. So they're not sitting in water, but you're watering the seeds every day. And in five days to a week, you got sprouts. I mean, it's so easy. And they're so nutrient dense broccoli sprouts are the best for the nutrients that fight cancer, they are the best for that.

I would do broccoli seeds. I would do sunflower seeds, mung beans. You can explore there's lots of handouts on the internet and sprouts and what kind of sprouts for different conditions. And you bet you buy a bag of sprawl. You don't buy a bag of alfalfa seeds, organic alfalfa seeds might cost you 20 bucks, but that bag is going to last you for two years, because you take a teaspoon of alfalfa seeds and do the same thing with it.

You have to have dense cheesecloth and you've got a whole Mason jar of alfalfa sprouts within about five days from a teaspoon. So that bag is going to last you a couple of years. So that's an inexpensive way to get the best quality nutrition. The other thing I would do would be to get Suzanne Bennett's book, Dr. Suzanne Bennett, and it's called *The Kimchi Diet*. And I wrote the forward to that book and it was really a good book I liked it a lot. But it's so simple to make kimchi and you can make different flavors. And when you read her book, you see how easy it is. But the result is when you eat fermented vegetables every day, you're inoculating your gut to build the diversity of your microbiome. And you get the strongest microbiome that keeps you vibrant in healthy for decades.

So, and that's not expensive at all to make your own kimchi. You buy a cabbage, you slice it up and then whatever the spices are and simple, but those things are so power pack so good for you. And so not expensive. So in terms of supplements I would say if you really dial down your diet to get these kinds of things going in your diet, in the supplements, I would say the GS sensitivity packs Mary Agnes will put the link in there because there's 22 different components in there. Mrs. Patient, can you take one pack a day? There's six pills in there, but it's one pack a day. Can you take one pack a day? Yeah, I can take one packet day.

Good. So you take one pack a day. There are 22 different nutrients in there, all designed to give you B vitamins, vitamin C, lots of minerals, but really designed to help create a healthy gut. So, the healthier your gut, especially if you're doing the prebiotic vegetables that we've talked about before and the

probiotic, fermented vegetables, you're doing that with colostrum, GS Sensitivity Packs and sun horse energy. That's what I do every day. And sometimes I take more stuff, but I take the GS Sensitivity Packs one a day, one pack a day. I take colostrum and I take sun horse. Those are the basics that I do every day. Okay.

Mary Agnes:

Dr Tom, tell them about your vitamin D plus K though.

Dr. Tom:

Oh, my goodness. Oh, you're so right now, but there's 5,000 units of vitamin D in the GS Sensitivity Packs and there's vitamin K and there also, but if you have a vitamin D insufficiency, then you absolutely would want to take the vitamin D with K, to build it up. But Mary Agnes is right. That's arguably you get one of the little bottles of vitamin D plus K2, and you take a drop a day, just one drop a day. The bottle will last you three months, six months, something like that. And I think it's about 40 or $50 for the bottle.

I don't know, but it'll last you for months. Just take a drop a day because you get plenty of vitamin D and adequate amounts of vitamin K in the GS Sensitivity Packs. But the added value to this D3 Plus K2 is what it does for your blood vessels, not just the blood vessels in your heart, but the blood vessels in your brain, a really substantial benefits to having abundant amounts of K2 and vitamin D. That's, that was really a question on the limited budget thing. Now, case study. About raising it, "My ferritin is 15. How can I raise it? Supplements haven't done anything" Change the microbiome. It's the microbiome that controls what your body does with ferritin, or it has a strong influence the geek term is modulates. Modulates your ferritin levels. It's your microbiome. So you have to rebuild the microbiome, the host protocol that we talk about for that. And moving up a whole four-part series on that one too.

"What do I do about developing a vitamin capsule and powder sensitivity? Not sure how to get some of the important support got liquids. If I could I find them for a few." Oh, make smoothies, put the powders and smoothies. Healthiest thing for you is fresh organic, not fresh, but organic blueberries. I buy 10 packs at a time at the health food store. If I can get Steadman's. I like the flavor of Steadman's nice big ones. But because one cup of blueberries a day and in three years, you're thinking like you were 13 years earlier, you reverse cognitive decline, but I would make smoothies every day. And, as I said, I put my colostrum in there and I put a bee pollen in there and I put aside powder and I grind flax seeds in there. And depending on what powders I've got around, I'll throw them in there. You throw the kitchen sink in there. I mean, just put everything in there and then you just throw a bunch of blueberries in there or other potent colored fruit.

Cantaloupe doesn't quite cut it. Have never thought that's kind of a bumper sticker cantaloupe for wissys maybe. I don't know, but it doesn't have a lot of gumption to it. It's a great fruit. It's a tasty fruit, but it doesn't have a lot of the polyphenols and nutrients that the colors of the rainbow that we've talked about so many times. So for the vitamin capsule sensitivity, throw them in smoothies. "Please tell Dr. Tom that the Vibrant Gut Zoomer does show a marker for helicobacter." Oh, wow. Thank you. You so much. Fellow CGP. Thank you. "I'm doing the True Cellular Detox, three-month detox program. I'm starting the body phase, but I'm worried that I don't go to the bathroom regularly. Even though I take magnesium 300 grams every night, Plus tri fila. Do you think I should take a lax of so that I can eliminate correctly the tasks?"

Well, how much water are you drinking? It's a half ounce per pound body weight. How much do you weigh? You weigh 120? That's 60 ounces of water a day. That's eight ounce glasses a day. Are you drinking adequate amounts of water? Most people that have these kinds of concerns? Well, no, I drink a lot of water. Yeah. How much do you drink? Oh yeah, I drink a lot. Yeah. All right. Keep track. How much you drink? Well, I drink three glasses a day. That's not even half of what you need to be drinking. Well, be peeing all day. Well, that's the idea you got to flush and detox. You got to get this stuff out of you, right? So more than a laxative, make sure you're hydrated. That's critically important. After that for my patients, what I do, I send them for a colonic and we've used colonics for years and they're so valuable when you find a good colonic therapist.

It's more important. I shouldn't say it like that. As important as a good massage therapist, a good colonic therapist and you feel great and your bowels are working better. It takes a while sometimes to get there. Some of my patients, we used to send them for a colonic and I had the colonic therapist. I want to report and she's what. I want to report well, what do you want to report on? Everything about the colonic? Well, what do you mean? What's the bowels like the bowel movements? Are they solid? Are they liquidy? Are they black? Are they pale? Are they great? Is there a gas? Do you see anything else in there?

And so she got into writing the reports and within a few years we were getting the most detailed reports and learning so much that it helped us help our patients, but a good colonic therapist is a valuable part of your healthcare team, really valuable part of your healthcare team and anyone that's having constipation issues. The first thing on the checklist is always water. Make sure you're getting enough water. And after that colonic therapy is pretty close. Number one is water number two, food sensitivities, number three, colonic therapy. Nope. Correct that, number one is water. Number two, food sensitivities number three, the status of the microbiome. What kind of a microbiome do you have right now? And number four colonics. Always helps. Always helps. "Is there any value to getting scratch skin prick, allergy testing for environmental allergies?"

I don't know if it's the first approach in environmental allergies. Now I'm rocking the boat here because allergists it's what they do. But at least with foods, well, we can take wheat. For example, one out of a hundred people will develop celiac disease. Seven out of a hundred people with a wheat related disorder will have celiac, but you don't Use an IgE test. That's what the skin prick it does it looks for is IgE. IgE is not really used for sensitivities. It's one out of a thousand will have an IgE reaction with wheat related disorders. One out of a hundred will have a IGA celiac reaction.

And somewhere around it is this high, nine out of 10 will have an IgA, IgG reaction, elevated antibodies or IgM. So IgE which is what skin prick tests are. It's not the first Approach unless They're obvious symptoms like difficulty in breathing, shortness of breath, wheezing, hives. If you get hives, there are some symptoms that are more associated with an IgE response and that skin prick testing, But In general, that's not a first line of thinking. Now the vibrant tests include IgE when they're looking for wheat and I'm not sure if they do IgE for their Corn Zoomer, their Dairy Zoomer, the Soy Zoomer, sorry, just don't know, but they do it for their wheat Zoomer. And so... "Is there any value to getting scratch skin prick, allergy testing for Venmo allergies?" I'm sure there's some value, but it's not the first thing that I would do. Absolutely not. Blood tests from vibrant and Cyrex are the first thing that I would do.

"Can you give a couple of things to start to repair my gut before the class?" I think you mean before the next series begins. I think that's what you're asking. Can I have the answers now out of how to do this? Well, it's not as easy as that, unfortunately, it's about a 15 minute conversation to rebuild the microbiome, but the... I don't have 15 minutes to do it right now. You've got to eat fermented vegetables every day, root vegetables every day, print out the list of prebiotic foods, eat two from that list every day, eat fresh made applesauce every day, not commercial applesauce, bone broth, colostrum. Those are some of the things that you can get started with and you do that regularly and you will start building a much healthier gut.

Mary Agnes:

One of your fans, Emmy wrote in the chat that it's in the autoimmune fix book, which it...

Dr. Tom:

Ah, thank you so much.

Mary Agnes:

...I did put that little list in the chat, but yes, it's in the book clearly outlined.

Dr. Tom:

Great. Okay. "I missed the first three classes. The emails had gone to spam (beep). Is there a replay of those?" M.A will get that? She will let you know how to do that. And the last question, no, the last statement comes from me through M.A. First, thank you for the classes. I really enjoy doing this I'd much rather, I'd like to figure out M.A let's make a note. I saw that when Tony Robbins does an event now a virtual event, he's got like TV screens all around him computer screens to see the faces of everybody he's dealing with. And let's see if we can find a program to do that. Because I want to see people. It's kind of hard not to be able to do that, but I very much appreciate doing this, knowing that you're out there. I would just like the feedback.