[00:00:00:00 - 00:00:19:01]
I'm really excited to be here with Rebecca Coombs to be talking all things SIBO. So without further ado, I will introduce Rebecca. So the lovely Rebecca Coombs is a nutritionist, author, podcast host, entrepreneur, and passionate foodie.

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She has transformed her health after a lifetime of chronic illness and today guides others on their own path to wellness. She's the founder of The Healthy Gut, a platform where people can learn about gut health and how it is important for a healthy mind and body and consults with people on how to live well with SIBO.

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Rebecca is the author of the world's first cookbooks for people treating small intestinal bacterial overgrowth and the host of the SIBO cooking show and Healthy Gut podcast.

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So I'm going to welcome Rebecca to join us. Lovely. Thanks for that. So today we're going to be talking about how to manage SIBO in clinical practice. I've got quite a lot of information on the slides and thank you to those of you who did pre-submit questions. I have hopefully answered a lot of them for you in this slide, but as Amy said, please do pop your questions in the question box as we go through and we'll try to get through as many as we can.

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And then for anyone that might not be a practitioner that somehow ended up in here who is a patient, please just note that this is for educational purposes only. And if you do suspect SIBO, please work with a qualified practitioner.

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So as Amy said, so I've transformed my health for decades, was told I had IBS or that there was actually nothing wrong with me because my blood work looked perfect. Yet I was just crippled with really debilitating and worsening digestive symptoms. And when I'd lived in London for a long time and when I came back to Australia, I had been self restricting my diet. I was cutting out more and more and more and more foods because I was reactive to so many different foods. And I found a naturopath here in Melbourne who said, I think you've got SIBO. And this is 10 or 11 years ago now. So we know so much more about it than we did then. But she treated me, my life, literally transformed. And it was at that moment that I realised I really wanted to help others to feel as good as I did. So I went back to university, went to Deakin and studied nutrition.

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And these days now help people to understand what's going on in their gut and support them to change their health and make those much improved recoveries from where they've been. And I'm really passionate about advocating for SIBO patients and raising awareness on this

condition so more people can have a shorter time to identifying what's going on and resolving their issues.

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So we've got a lot to cover today and I'm sure you'll have questions as well. But really, what is SIBO? How you identify it, test for it, treat it. Where do you as a clinician start? And maybe there are some patients or clients that you work with perhaps that need some preliminary work before you could even commence SIBO treatment protocol. What role does diet have with SIBO? And what might you do as a clinician in terms of how you approach this? And then how I use gut directed hypnotherapy like NERVA and other gut brain work to help support my clients on reducing symptoms and just helping them to feel better.

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So what is SIBO? So the original definition was that it was a syndrome of GI symptoms and that it was caused by an excessive number of bacteria in the small intestine. So really symptoms plus a bacterial overgrowth. Now the team at C. DeSinai headed up by Dr. Mark Pimentel and the states are doing the reimagine study. And this study is giving us such greater insight into the mechanics of how it's caused and which players are causing it. So we know that if we do a culture that is a specific load of bacteria that the threshold needs to hit.

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But also now, thanks to reimagined study, that we can see that there is a reduction in microbial diversity and that there are some key players present to diagnose SIBO. Now SIBO has also undergone quite a transformation in terms of its naming convention. For the purposes of today's presentation, I'm just going to refer to the whole cluster as SIBO. But you'll see in a forthcoming slide that we've actually got three conditions now, which once was all called SIBO and now we have three naming conventions for them.

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So what might you see in clinic?

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So generally they are highly symptomatic and often they have been dealing with this for months, if not years. Sometimes you will have a client or a patient say to you, I've never been the same since. And it might be since food poisoning, since Trucklers diarrhea, since a major stressor in their life. So there's often a major event that they feel was the triggering point. That might not necessarily have been the causation, but it often is the tipping point in the body.

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They may have gone through multiple clinicians looking for answers. They may well have been either self-restricting their nutrition or have been put on a restricted protocol and have been stuck on it for often months, if not years. I see clinically more women than men. And I think it's just that women, it's not that it's a female condition, it's just I think women are generally more

proactive. And the males who I see often wait till it's really severe until they get help, whereas the women are often a bit more proactive in looking for answers earlier in the picture.

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They can often be extremely frightened and fearful of food because food equals symptoms for them. And they are really nervous around what to do. And then the people that present with diarrhea then have a lot of anxiety around leaving the house. And some of these people, when it's really bad, can be quite agraphobic because they can get caught out. And that's a horrible thing.

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So for you as the clinician, you might be looking at them thinking, gosh, there's a lot of overlapping

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presentation points here. What is it exactly? What tests should I do? Where do I even start with this?

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And what is this condition? If it is SIBO or one of its counterparts, what is it doing to their health?

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And many clinicians, particularly those of you that perhaps are coming into this into the gut health space or SIBO space, are often unsure where to start and what to do.

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So we now know, thanks to the reimagined study, that we have three key players and it's actually three types of this condition. So the original naming convention was SIBO, Small Intestinal Bacterial Overgrowth, S-I-B-O. We now know that SIBO, we actually call that hydrogen dominance, and that there are two key players. There are others, but there are two key players in terms of who creates this, and that is E. Coli and Klebsiella. The more predominant symptom is diarrhea, but I was always hydrogen dominant and had a chronic constipation history. So this is where we need to look beyond what the breath test says to us or the lab results say to us and look what else is happening in the body. So symptoms alone do not always equal the gas type or the underlying infection that is causing this, although overgrowth that is causing this. Hydrogen SIBO is more predominantly caused by a food poisoning episode. So we've now been able to track that and I'll talk through the pathways of that in a moment.

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So that is a really common one, and it's often where we started in back 10 years ago. We saw a lot of hydrogen. Now we also know that we've got methane and it has been renamed as intestinal methanogen overgrowth because we can now see that it is not just small intestine. There's often a large intestine involvement and it's actually not caused by bacteria. It's caused

by archaea. So the main culprit there is M. Smithii. And this is where we needed to call it something else because if it's not bacteria and it's not just small intestine, how can we call it SIBO? So hence why it's called emo or IMO. And then we also now know we've got a third culprit that is causing major issues and that is hydrogen sulfide. Now our main breath testing, well, the only way we can test in Australia is we can only test for hydrogen and methane. If you're in the States or the UK, you do have a facility to test for hydrogen sulfide. So the majority of the world is unable to test with this gas type at the moment.

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There are additional manufacturers who are looking at how they can produce adequate testing for hydrogen sulfide. But because it is such a small sensitive gas than hydrogen or methane, it's why it has been quite difficult to get a in home test kit available. And it may be that it just needs to be in clinic that we can test once it is rolled out further. And so there are specific species that are involved with hydrogen sulfide. Now in Australia, as clinicians, we often have to look at the bigger picture because we can't test for it. And the person with hydrogen sulfide is often they can have they can have diarrhea and or constipation.

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They can be reactive to sulfur rich foods, but not always. But that can often be a real telltale sign that if you give them a temporary reduction of sulfur rich foods, that they can often feel almost immediately better. But not all the time.

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They can have a lot of hypersensitivity. They can have a lot of pain. They can feel toxic. They can have UTI type symptoms. So there can be a real cluster of symptoms that is present with this category of people that's not so present with hydrogen or methane. The methane category of people are more prone to constipation. And we do see clinically that if somebody's methane levels are higher, their constipation is generally worse. And I also say within my practice that people with higher methane can have issues with undesired weight gain and a real challenge at losing weight. Whereas the hydrogen folk often are losing weight and can often become quite have lost too much weight. And that can be a real issue.

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But I have seen all sorts of presentations for all of these gas types. So these are generalised views on what you might see with these gas presentations. But everybody is unique.

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So how do you test for this? So the gold standard has been glucose because it is able to be more specific in terms of capturing the organisms that create these overgrowth. However, the major downside of it is that the small intestine absorbs glucose within the first three feet. So we are missing a lot of the overgrowth if it is further down the distal SIBO. And that is a big downside of using glucose. So Lactulose is the most common testing substrate these days. And we do that with a three hour breath test. And the issue with Lactulose is that it has full transit across the small intestine, but it is also used as a laxative. And so you do need to look at the

patient that you're working with and determine do they have very rapid transit time? And are you seeing gas that is coming through from the small intestine or has the substrate actually moved into the large intestine? And the activity that you're seeing on the test result is actually large intestine. And this is where there may be commentary that you might have heard around false positives. In Australia in particular, we are using fructose as a testing substrate more and more. Dr. Jason Horolek, who is a leading naturopathic physician here in Australia and a real specialist in the microbiota, says that he will generally test with all three sugars, but that he's able to pick up more from in terms of gas production. And the species seem to enjoy fructose more than the other substrates. And he's able to often get a clearer diagnostic picture when he uses fructose.

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So it's important to look at what testing is available to you, what substrates are available to you. And also, Dr. Jason Horolek talks of when there is a claim that you can get a false negative on a test, that it might actually be substrate. And so if you've used glucose and it's come up negative and you think, but I really have a suspicion this person does have an overgrowth, then trying lactulose or fructose. And Dr. Horolek says that he will often, if he can only use two, he will use lactulose and fructose. And if he can only use one, he'll aim for fructose. So see what's available to you in your location. I know that in the states, fructose isn't as popular as a testing substrate. Lactulose is the number one that is used. So you also just need to see what's available with the laboratories. Sometimes you can use a fructose sample, even though the laboratory might have sent you lactulose and then use a clinician, have guided your patient on how to use fructose. And you use 25 grams of it rather than say 10 grams of lactulose. And when you're analyzing the results, you know you're looking at a fructose sample.

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Now, there are many symptoms, associated conditions and comorbidities with SIBO. This is not an exhaustive list, but it gives you an idea of the types of things you might see present with your patients and what to look for. The most common is bloating and distension and also abdominal pain.

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And that people are generally quite gassy. So they're either they've either got a lot of burping or a lot of flatulence or both.

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And most of the people I work with are reacting to foods. Now, some are down to five foods. Some are able to eat a lot and just push through their symptoms. But it's very rare in my practice to see people that have no reactions to foods.

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Quite often we're seeing undesired or unintended weight loss. And the flip side when methane is present, not always, but you know, sometimes it can happen with hydrogen, but it's an undesired weight gain. And people might say to you, I could eat a lettuce leaf and I will put on a

kilo. So they're the types of people where there's a lot of obviously inflammation going on as well. But we also see nutrient deficiencies. It's common for people to be low in iron, low in B12.

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And that, you know, when you're looking at a nutritional profile, often they're not absorbing their nutrients well, but often they're under eating.

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And then associated conditions. So IBS and SIBO often go hand in hand and more often than not, people have been told they've got IBS before they discover they've got something like SIBO. But we also see things like rosacea, restless leg syndrome, psoriasis, endometriosis. So there's a whole range of conditions that might be comorbidities to having SIBO.

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So what is SIBO? Well, in simple terms, it's a failure of a natural mechanism or mechanisms that are in place to protect the small intestine. And the two major ones are the function and the structure of the small intestine. So we have our migration motor complex, that natural muscular wave that sweeps everything from the top to the bottom of the small intestine. And that is often impaired when SIBO is present and or they can have a structural issue. So that's where there may be adhesions, blind loops, kinks and twists in the intestine. And that is allowing bacteria to overgrow. You can also have decreased secretions. So looking at that broader digestive piece, so what is happening with the stomach, what is happening with pancreatic enzymes, etc. So what is going on in the whole digestive function?

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And are there any other factors at play like immune deficiencies or other major diseases or illnesses that they have that could be impairing their digestive function?

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But the number one way that we can develop SIBO is through food poisoning or gastrointestinal infection. And that is where the reimagined study has really mapped this whole pathway from how do we get it? What causes it? What is happening in the small intestine for it to fail and to not work correctly to allow the overgrowth to occur? So in a very simplistic manner. And if you'd like to look at more of this, please do look up the reimagined study because they've got a lot of detailed information on this pathway. But we have an infection. That infection then creates some autoimmunity and we can now do a blood test looking for these two key markers in the blood to determine is that a post-infectious IBS picture. This infection then impairs the migrating motor complex nerve cells and that is the failure piece around motility and function. And then it is moving into what we call classify as post-infectious IBS. And then if we see that there is an overgrowth of one or more of those species that I had on my previous slide, that's where we can then say it's SIBO, EMO or ISO.

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And

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the unfortunately the IBS blood test isn't available in every country. We did have it in Australia for a period of time. It is no longer available. If you are in the States, it's available there. So you can do this blood work to determine is that one of the pathways for your patient to have developed this condition. And why it's important to know is if that has come up positive. A) the person is more likely to relapse.

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They are working on a cure for this. So they are currently underway looking at how do we change the antivinculin so that the healing can occur. So that will be exciting in the future, but unfortunately they're not yet available.

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But this is where supporting the motility of the small intestine then becomes a critical piece in your treatment protocol with your patient. Because we know that that is not working correctly because this blood work is showing us that there is that autoimmunity and therefore there will be a failing in the function of the migrating motor complex.

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So let's talk about the correlation and connection between SIBO and IBS. In earlier studies, it used to be claimed that up to 80% of IBS patients had SIBO. And those studies, the studies that were done when IBS patients were given a SIBO breath test up to 80% would come back positive. But the reimagined study is really helping us to understand this picture. So some tests show that it's lower. Some tests might come up at about 80%. But I think it's where you as clinicians need to take that history and really look at what has happened in this person's life. Where are those particular events that could have led to it? And if you can test to the IBS

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blood check, then I would encourage you to do it. The main clinical difference is that when you have ruled out all other factors that could be causing gastrointestinal symptoms, and it's very important that we as clinicians are looking beyond SIBO and IBS, but we are ruling out anything that's more significant. You know, things like cancer, irritable bowel, inflammatory bowel disease, etc. But then the classification really is if you have done a breath test and you have perhaps looked at all three testing substrates and you are still getting a negative test, then you would call that IBS.

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That is in very simplistic terms how we would now define the difference between them. So where do you start? Like I said, exclude any red flags. Please do a really thorough history. Do not go into this blink of thinking this is just SIBO.

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Because so many other conditions do have similar symptom presentations and it's important that we rule them out or we rule them in. And many people that I work with have multiple conditions at play. A very common one amongst my female population is endometriosis. And there's a lot of cross over between endosymptoms and SIBO symptoms. So it's important to identify exactly what's going on. But particularly, I really like having things like endoscopies and colonoscopies performed to rule out anything more significant and then to look at whether this is just purely a functional issue. Take a deep and detailed history, really tracking back, often from birth, what has happened in their life. More often than not, my clients will say to me, I have had gut issues since I remember, since I was a child. I've always had a funny tummy. So really tracking back, you know, how were they born? Were they breastfed? How much antibiotic use have they been exposed to? How many food poisoning episodes do they remember? If you're like me and you can't currently do the blood test for IBS, post-infectious IBS, then taking that clinical history can often be a good identifier. I often have clients say to me, oh my gosh, Rebecca, I remember I've had three food poisoning episodes that were so horrific, I don't think I'll ever forget them. So to me, that presents that, you know, it's very likely they have that post-infectious IBS piece and therefore we need to really work on their migrating motor complex.

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It's also really important to determine whether it is the right time to test, treat or do neither. Now, sometimes we have people come to us at the healthy gut who are in such an inflamed state and their nervous system is in such overdrive and they are basically on the brink of panic at all times because they have been feeling so unwell for so long and it is actually our work to help them calm a little before we commence anything. So as clinicians, sometimes the best approach is to do nothing first and to help give them confidence that we can move forward with them.

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And also setting up expectations. So if you've got someone that's saying to you, Rebecca, you know, I've been sick for my entire life, it's going to take time to make progress versus the person that said three months ago, I was traveling, I got food poisoning and my gut hasn't been the same since. Because onset is in such a shorter window of time, generally we can have a quicker resolution. Also, we know that younger people are quicker to respond than older people. Age is definitely a risk factor and we I do see in my practice that people that are older and I do work with a lot of people that are older, their condition is often a little bit slower to respond than someone who is younger.

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And then where do we put the diet? So do we throw in a SIBO diet or a low FODM diet first to help calm their symptoms or do we test and treat SIBO? And I think again, it's really important as clinicians that you work with the person in front of you. All too often I have people come to me that have been put on a restricted diet, left to their own devices, often self-restrict even further because they're still still symptomatic and they're ending up in quite a nutritional deficient state. And I'm saying wasted, wasting happening,

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frailty occurring in my older population and that is heartbreaking to see. So if the person is robust and you feel that they are able to manage some short-term dietary restriction to give them a little bit of breathing space while you commence treatment, then yes, go for it. But if you see that there is a history of eating disorders, if there is any nervousness around food, if they're already self-restricting food, further restriction may not be appropriate for that person. So really use your clinical judgment. And also knowing that a SIBO diet does not treat SIBO

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and it is only designed to help calm symptoms whilst you address the underlying causation of SIBO and the overgrowth, then that can also be a good reminder that diet is a tool that we can use as needed for a very short-term period. But it really shouldn't be something that we put someone for long-term.

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And like I said before, is this person ready to be treated? So, you know, for the people that come to us in a very reactive state, you know, they might say, this is a common one I see, I react to water. The world around me makes me reactive. So they are on such high alert. Often those people, if you put, if you commence with a full treatment protocol, will often have an overwhelming response to that and will be flooded with negative symptoms and what's called as die-off in the SIBO community. So often we will not commence with SIBO treatment firstly. We will work perhaps on their nervous system, stress reduction,

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belly breathing, use NERVA app, etc. We might use some very gentle supplements to help calm.

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We might look at what's going on in the gut and we might implement some gut lining protection work. So we might do those things for a few weeks before we then slowly titrate up to a SIBO treatment protocol.

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So again, use your judgment. What is best for the patient? Please treat them as unique and individual so that you get the best patient outcomes. Because what I do see is when people have a very strong negative reaction to treatment, they will generally stop it and become more fearful because symptoms equal fear and fear then just puts them into such a hyper-aroused state and it is just not helping them to heal at all.

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So the role of the SIBO diet, so there are multiple diets that are available to you and again this is where you work with the person and determine A) is it suitable to put them on a diet protocol? How severe are their symptoms? So remembering that a diet does not treat SIBO.

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So if somebody is not very symptomatic, I actually don't restrict their diet at all. We might make some minor modifications knowing that the overgrowth will are more likely to produce symptoms if you're feeding them, you know, simple carbohydrates, sugars,

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excess fiber. So we might have a look, I might do a diet review of what they're eating and then make some modifications just to help manage any minor symptoms they're having. If the person is coming to me with moderate to more severe symptoms, that's where we might utilize one of these diet protocols. But the education I give them in the very first consult I'm having with them around diet is that A) it doesn't treat SIBO and B) it is a short term temporary intervention whilst we get SIBO treatment underway and whilst we address the underlying causation.

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And that it is not intended to be on for a long period of time and at an absolute maximum I would be saying that I'd utilize a diet like one of these for six months at the most. But my intention is to expand the diet not to restrict it.

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So the low FODMAP diet was obviously designed for people with IBS. It can be useful for people with SIBO, but I do find that it's not always a great fit for people with SIBO. But it is so dependent on the individual. So it can be a good way to start because it's pretty flexible in the sense that it's not as restrictive as say the SIBO biphasic diet. It's good for vegetarians and vegans because there are some more options on it. The SIBO specific food guide and there for the biphasic diet. So the SIBO specific food guide was developed by Dr. Alison Seebeka and she took she combined the low FODMAP diet and the SCD diet and created a colour coded system green through to red on what you could eat if you had SIBO. And then Dr. Narala Jacobi took that and turned it into a two phase diet. And so you've got phase one, which is comprised of the restricted phase and semi-restricted phase. And the restricted phase is designed for people that are highly symptomatic and should be very short term. Although unfortunately, I do see people getting stuck here for months and years. And they then move up through it. So they've been moved to the semi-restricted phase and then they move into phase two reintroduce. It's quite restrictive and it is a very difficult diet to follow for vegetarians and vegans. And this is where I see a lot of nutrient deficiencies coming through from this population of people that are following this protocol.

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Dr. Mark Pimentel and the team at Sea to Sinai then created the low fermentation diet. So this is a pretty relaxed diet. It does include gluten and dairy. So that is something that isn't included in the SIBO specific food guide or the biphasic diet.

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And his patient population generally want to be able to eat gluten and go out and eat at restaurants. And so he's really developed that in mind and that's looking at the fermentation load

of food. And then there's my protocol, the SIBO diet protocol, which really draws my clinical expertise and all of these diets together. And has a focus on expansion rather than restriction and just using the modes. So I've got calm, balance and expand and using the calm mode for people when they're having an acute flare or they're very reactive to food. But the goal is to sit in expand and beyond. So changing the mindset of how we think about diet and how we think about what we're eating with a SIBO presentation. We're seeing in our SIBO folk that they are A) under eating often, B) not getting enough nutritional diversity and C) not getting enough fiber. And we can really see the impact, the negative impact that's having on the larger microbiome.

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So looking at what fiber rich foods we can use in our population of people to ensure that they are feeding the microbiota. But also potentially helping to support one of the biggest complaints I see, which is constipation. And so we've got four fruits here that have been studied and shown to be clinically effective. But not all can be tolerated by SIBO people. I do find kiwi fruit is probably the most commonly tolerated fruit. So if you've got a presentation with chronic constipation, adding into green kiwi fruit a day, ideally with the skin, can be useful. But you might need to slowly titrate up to that. So they might start with a quarter of a kiwi fruit and build to the two kiwi fruit dose. Now mango is high in fructose, but can be tolerated by some SIBO folk. So again, this is where it's looking at the nuances of the person you're working with. Can they tolerate this fruit over another and incorporating what you can to improve constipation outcomes and also increase fiber? And here's just a quick reference guide of some more SIBO-friendly, higher fiber foods. And our goal is to get them to eating a lot more fiber than they are. So when I do an analysis on what people are eating, they're often sitting at maybe 10, maybe 15 grams of fiber a day. And we want to get them up to about 40 grams of fiber. Now, this is going to take time, especially for the person that's sitting at 10 grams at the moment. So we want to slowly build from there. Going from 10 to 40 in a day is just going to result in them feeling pretty miserable. So it might often just be adding one new food at a time and slowly building over weeks or months to get to this. But having a greater amount of fiber in the diet alongside your treatment protocol and addressing the underlying causations is going to give them better outcomes long term.

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So what are the risks of the people that are self-restricting or staying on a restricted diet long term? We're seeing microbial diversity shift and reduce, and that's not ideal. I'm seeing a lot of people coming in that are just completely deficient in a lot of key nutrients. Many of the SIBO diets are very low in dairy. And so when I'm particularly working with my ladies and especially as they're coming into their perimenopause and postmenopausal stages and they're just severely under consuming calcium, it's such an issue.

[00:35:58:11 - 00:37:24:00]
But men as well, we need to be very conscious of osteoporosis risk in later life. So ensuring that they're getting good balanced nutrients across the course of each week. Where also I see this commonly, almost every person I work with has developed a real anxiety and often fear around food. And for some, it's leading into disordered eating or a full blown eating disorder.

And it is a massive risk factor. So when you are taking the history of your patients, please ask those questions around their relationship with food across their lifespan. I myself sadly had an eating disorder in my teens and then had worked very hard to overcome it in my adult life. But going on to the SIBO diet and I followed the original form of the SIBO biophasic diet, which was extremely restricted, that triggered my eating disorder. And so coming back off that diet protocol once I successfully treated SIBO was very difficult with my relationship with food. And I had to work, do a lot of work around that, had to work with an eating disorder psychologist to really help work on what I had re-triggered. So please use dietary intervention cautiously and it may not be necessary or appropriate for your eating disorder or eating afraid clients and patients.

[00:37:25:16 - 00:38:11:03]
And also when people are restricting their diets, they can be hypervigilant around symptoms. And when it comes time to expand their diet, they are looking for their symptoms. This is where that gut brain work is often a really key factor in the expansion stage. It is not uncommon for me to have a client say to me, I had 20 symptoms yesterday and they are hypervigilant. And they are focused on what is happening in their body because food has equaled symptoms and has equaled feeling sick for such a long time. But the downside of restricting a diet is that when we expand, we can often have more symptoms while the body gets used to those foods again.

[00:38:13:09 - 00:38:57:13]
So I know there were questions from you pre-submitted around what do you do with someone with a history of an eating disorder? Well, the first thing is not to restrict the diet. It is to work with if they're working with a psychologist or a psychiatrist to work in tandem with them to check your wording and phrasing around how you are talking about things. And being very mindful of the language that you use because that can often be quite triggering. Food in this patient population is often known as good and bad and is used as a control. So we have to be very mindful of as clinicians that we are not inadvertently triggering and leading them into that way of thinking.

[00:38:58:22 - 00:39:28:20]
It's about addressing the why. So why are they reacting to food? So if you've done a SIBO test and it's come up positive, then commencing a treatment protocol, knowing that diet does not treat SIBO, it is just there to help as a lever to calm symptoms when necessary. So talking to the person around how you're going to be addressing the underlying factor, the overgrowth, and then going beyond that. Why did that overgrowth occur in the first place and working on that as well?

[00:39:29:26 - 00:40:00:04]
And with my client population who are experiencing disordered eating or have been diagnosed with an eating disorder, I lean on the NERVA app a lot. So I do the NERVA app, we do breathing exercises, we'll do visualisations, we'll do affirmations, whatever it is that's right for that person alongside their therapy just to support them and improve their relationship with food.

[00:40:04:17 - 00:40:13:04]

Okay, so we've got three jobs. I mean, there's always more jobs. But the first thing is when we're thinking about how do we deal with this, it's really around reducing the overgrowth.

[00:40:14:07 - 00:41:04:13]
So the reimagined study has looked at what if we don't treat it, does it resolve? Or if we do treat it, is that better? So Pim and Tel et al have been able to look at the key players in the mix. So if we look at SIBO, as it's known now, E. coli and Klebsiella are what he calls bad actors. So they crowd out the microbial diversity that we need. And so when they're present, it is just very difficult for the small intestine to then rebalance itself. And that is why they recommend treatment is necessary to reduce those particular species and to allow a better balance to occur. So reducing the overgrowth is step one, where clinically appropriate.

[00:41:05:16 - 00:41:28:16]
There will be people that you work with that you might not be able to start at this stage. Then a very important and often overlooked step is addressing the underlying causation. Or there's often multiple factors. And this missed step, which is why I believe that we have such a high relapse rate. So that's 70 to 80 percent of people with SIBO will relapse.

[00:41:29:19 - 00:41:32:08]
I was one of them, although haven't relapsed for years now.

[00:41:33:08 - 00:43:00:00]
But if we don't address the issues to why it's developed, then it's going to come back and often quickly. So people will often come off their treatment protocol and often within days will have symptoms again. But generally within six months will have relapsed if you haven't addressed the underlying factor. So if there has been a history of food poisoning, then you and you're not able to do the IBS test, then assuming motility is impaired and addressing that through either herbal or pharmaceutical prokinetics, it could be a good step. If they have had multiple surgeries and you suspect adhesions might be at play, working with a physical therapist, an osteopath, a myotherapist, whoever it is in your local area that could support the body, sometimes we might need the adhesions are significant. There might be a cause for having adhesion removal surgery, although that has its own risks. But addressing that, for instance, if a patient has had a bowel resection or their ileocecal valve, the valve between the small and large intestine has been removed, then addressing that that is not there. And they might always have this issue with SIBOB. So really addressing the underlying factor and then supporting that gut brain access and gut directed hypnotherapy.

[00:43:01:06 - 00:43:05:19]
So I've just realized what the time is. I've been talking a little bit too long on my slides.

[00:43:07:02 - 00:43:13:03]
Amy, are we OK to go for a few more minutes? I'll try and quickly get through these. Yeah, of course, of course.

[00:43:15:11 - 00:44:03:09]
So I'll try and get through this quickly, but obviously the detail is in the slide. So here is the common treatment protocols. I've kept them reasonably generic. There are many herbal options. So for those of you who are naturopaths or used to working with herbs, you will know there are many herbs you can use. So from a hydrogen perspective, we have rifaximin. And that stays mostly within the small intestine, has been clinically studied a lot and has shown to be quite effective. So we use that for hydrogen as the key antibiotic. If you have a methane issue, then we use rifaximin and then we add in a secondary antibiotic because it is an archaea, not a bacteria. We find that rifaximin on its own is not as effective. So we combine that with Neomycin or metronidazole.

[00:44:04:11 - 00:44:11:02]
If you're using herbs for hydrogen, berberine, oregano, neem, etc.

[00:44:12:05 - 00:44:16:11]
If you've got methane, then the main one is allicin.

[00:44:17:13 - 00:44:25:22]
And we do find with some patients that do really well with artranciole. And then if you've got hydrogen sulfide, often bismuth is the way.

[00:44:27:07 - 00:44:35:11]
This is the most understudied category, and there is such conflicting reports from clinicians around what they find works best for them.

[00:44:36:13 - 00:45:36:15]
So there's not as much information. And then we've got the liquid only elemental diet, which is a pre digested liquid powder formula mixed with water that is your sole nutritional consumption for 14 to 21 days. And so the studies that have been done on this are generally done at day 14, maybe up to day 21. There isn't great clinical evidence showing that beyond 21 days provides much greater outcome for the person. We are starving the large bowel pretty much. We are feeding the person that's starving the microbiota. So you need to weigh up any longer term usage with the full patient picture. It does take a longer time to reintroduce foods after an elemental diet. It is not something to be rushed. And when food reintroduction is rushed, then I see significant symptom development occur quite quickly in patients. So supporting digestive function is critically important when you return that patient to food.

[00:45:38:20 - 00:46:45:04]
And then supporting the migrating motor complex. That's probably one of your biggest pieces around how do you make that migrating motor complex work better? You've got herbal options, you've got pharmaceutical options. And I think an important point to note is the people with very chronic, stubborn, long term constipation generally need to be put on a pharmaceutical prokinetic. The herbal ones often aren't strong enough for them. And then meal spacing where appropriate. So an underweight or an eating disorder or eating challenged person meal spacing

is often not appropriate for them. And that's where I might just use the overnight fast. So from dinner to breakfast, that's where our migrating motor complex does its most work. So that is the key fasting window. And you might be very careful around your language and not call it fasting because that can be triggering. For the person that is in a better weight range, has a better relationship with food and can do this, having a break from three to five hours between meals can be supportive of the migration motor complex during the day.

[00:46:47:03 - 00:46:56:11]
So remembering we've got to address the causation and not to skip that, because if this is skipped, this is where relapse occurs and often quite quickly.

[00:46:58:09 - 00:47:12:19]
We had questions around pre-poll and post-biotics. So pre-biotic fibers generally are not implemented until we have cleared the overgrowth because they are great at generating symptoms with SIBO.

[00:47:14:07 - 00:47:18:09]
There's one exception to that rule, which is partially hydrolyzed guar gum.

[00:47:19:16 - 00:47:58:03]
Probiotics, there is really mixed clinical evidence. And the team at the reimagined study is saying that they're not seeing any major positive clinical outcomes in the use of probiotics and that it is so person specific and often we use perhaps a well studied probiotic for symptom improvement, say constipation, rather than looking at SIBO in and of itself. And then post-biotics, there really isn't any clinical evidence around using post-biotics for SIBO. So again, I encourage you as clinicians to look at the person, to look at where they might benefit from it and something that is unique to their current situation.

[00:47:59:13 - 00:48:38:13]
So partially hydrolyzed guar gum is this unique fiber that we use when people do have SIBO. It has been proven to, clinically shown to improve the effectiveness of SIBO eradication when combined with rifaximin. It also improves motility. It reduces methane gas. It improves constipation. And it also can improve diarrhea. So it can be a great fiber to use. Clinical effective dose is five grams, but I always encourage people to start at a much smaller dose and slowly titrate up to the five grams or a dose they tolerate. And that might take them for about four weeks to get to that.

[00:48:39:18 - 00:49:01:09]
And then here I've put a list of probiotics. So matched to classic SIBO symptoms that you might like to try, but remember not every person does well on probiotics when the overgrowth is present. And really to try one at a time for four weeks to see if there is any clinical improvement before trying the next one.

[00:49:03:02 - 00:49:17:13]

And then why is somebody relapsing or only partially responding? Well, the main reason is the underlying causations are not addressed or cannot be addressed. And so it might be more around longer term management.

[00:49:18:17 - 00:49:38:23]
Quite often if somebody has been put on a prokinetic, they were only put on it short term. And we can see that a longer term use of a prokinetic, maybe six to 12 months or longer, is often required for people, particularly those that have had who have that post-infectious IBS picture. And we know the migration motor complex is impaired.

[00:49:39:28 - 00:50:01:11]
I would also challenge anybody if, you know, have you determined that SIBO has actually been cleared or were you just going off symptoms? So there may still have been SIBO present when treatment concluded and therefore the overgrowth has returned rapidly. So really going through what causes it and have I addressed those pieces.

[00:50:03:01 - 00:50:19:03]
And then why we need to work on that gut brain picture as well. So I see in my patient, my client population, there is a lot of anxiety. There is a lot of fear around food. The nervous system is constantly on high alert.

[00:50:20:07 - 00:51:00:02]
There's a lot of inflammation in the body, very negative relationship with food. So really helping to calm the body and reframe the relationship is really important. And almost everybody that we work with at The Healthy Gut, we implement these types of strategies with so that we can help them improve. So obviously we know NERVA, we're all here with NERVA and that they have self-reported some really great outcomes. And I see with my client population that when they do regularly use the NERVA app, that they have really great responses and reductions in their symptoms if we've done nothing else. So it's a great tool to add to the mix.

[00:51:03:17 - 00:51:18:28]
All right. Sorry for having to go quick at those last slides, but the key things really are that let's look at SIBO through a lens, not necessarily as a blindfolded diagnosis. Let's look at the whole person, not just one diagnosis.

[00:51:21:01 - 00:51:26:08]
Let's make sure we're ruling out all of the red flags. And we set expectations.

[00:51:27:08 - 00:51:43:14]
Remember that diet control can help calm symptoms. It's not a treatment and that diet intervention isn't always necessary. And to treat it in stages. And ideally you're dealing with the overgrowth, you're addressing the underlying causations to help reduce the symptoms and make the person feel better.

[00:51:44:15 - 00:51:54:06]
And really addressing, like looking beyond, keep asking yourself why, why isn't that person responding? What might I have missed or where do I perhaps need to refer on to another specialist?

[00:51:56:01 - 00:52:16:15]
And as a little gift for everybody who's attended, if you would like to get a copy, a free copy of my SIBO diet protocol that focuses on expansion, not restriction and a bonus cookbook with 40 recipes, then there's a link in the slides where you can download for free. Please share it with your patients. It's there as a resource for you to use.

[00:52:17:23 - 00:52:23:15]
And over for questions. And I just have some references at the back of the slide deck if you want to go and check out any of them.

[00:52:24:17 - 00:52:38:28]
Oh, fantastic. Thank you so much, Rebecca. And I will say straight away, we will be sharing the slides with everyone that's attended today. So everyone will be able to click on that link and look at the references and things if they want to as well.

[00:52:40:05 - 00:52:59:13]
And the whole session is recorded, too. So you will get emailed the link to the recording as well, because I'm sure I know even myself, I think I might need to go back and listen to that again because there's lots of detail that I'd like to go over. In terms of questions, I will ask a few.

[00:53:00:15 - 00:54:07:08]
Rebecca's actually covered most of them in the talk, but one of them is actually around from the audience is actually around age, patient age. So can a 12 month old go through the same protocol as an adult or what could be recommended for a child that age or younger patients in general? Yeah, so it's important to know that in order to test and to determine gas type, either we're doing a scope, which is highly invasive and not something I think most people would want to do to their child, or they've got a blow into a bag and take 10 samples of breath and a 12 month old. So generally we're not seeing children under the age of about three or four being able to do the breath test. So this is where looking at symptom picture, maybe, you know, yeah, symptom picture is probably the biggest one. The good news is with children that they are generally pretty rapid responders, but it would be looking at taking a clinical history, like what has happened in that child's life. Would they vaginally born breastfed? Have they been on antibiotics?

[00:54:08:08 - 00:54:16:29]
Are there any other illnesses there? You know, do they have ex-MART? So that's a common condition associated with SIBO.

[00:54:18:24 - 00:54:58:07]

And it's gentle. And I would be encouraging you to find a pediatric, maybe naturopath or specialist that does have GI experience that can guide through this. But it is going to be a very different, you know, what I've presented today is on an adult population. And so it's very different pediatric. Also, we don't know a lot about the pediatric microbiota. We are learning about it. And it is so vastly different from children to children. And so we've got to be very careful of any interventions that we make now for potential long term impact. So finding a pediatric specialist would be my number one recommendation.

[00:54:59:22 - 00:55:02:05]
Thank you so much. That makes a lot of sense.

[00:55:03:20 - 00:55:05:07]
I think we'll do another question.

[00:55:06:27 - 00:55:25:24]
If it's a break around breath testing. So in your opinion, is it a waste of time slash money to get the two gas breath test? Just considering it won't take into account the H the hydrogen or the same as the three gas tests.

[00:55:27:08 - 00:56:13:12]
Yeah, so it depends on where you are. If you're based in the US and you have access to Trio Smart, which does the three gas breath test, then I'd encourage you to use that. If you're in another or in the UK, you can do it through CoLab. If you're in Australia or another country that doesn't have it, then you just need to use the testing that you've got available to you. And if the clinical presentation of the person is leaning towards hydrogen sulfide. So some classic things may be that they have what's called a flat line test result. So if you've tested all three sugar substrates, all three of them are coming through flat line and clinically, their symptoms are ticking the boxes for hydrogen sulfide. That's where you could treat with making that assumption in mind if you're unable to test.

[00:56:15:04 - 00:56:19:09]
Fantastic. And one last question for you.

[00:56:20:14 - 00:56:31:10]
So one of our listeners has said that they see patients with recurrent SIBO episodes due to motility issues, for example, EDS or scleroderma.

[00:56:32:21 - 00:56:42:23]
And they're asking, what is the evidence for using herbal microbes to prevent relapse and other protocols different for hydrogen versus methane producing species?

[00:56:43:28 - 00:57:23:10]
Yes, so the protocols are different, as I presented. So we need to address the gas type and the underlying organisms that create that when people have other factors and hypermobility

conditions are a major risk factor for the development of SIBO. So for those populations, it's about management. And I think framing the expectation that relapse is common and likely is actually a really important picture with your patients or patients. Utilizing a variety of prokinetics. So we can use herbal prokinetics and pharmaceutical prokinetics in combination.

[00:57:24:17 - 00:57:34:26]
So you could perhaps use motegrity and like a ginger or artichoke based prokinetic to support that person.

[00:57:36:23 - 00:58:15:21]
There are some people that might use longer term, very low dose treatment protocols just to keep the overgrowth at bay. But the risk there is the broader microbiome picture. And then it's also just looking at, are we supporting that person sufficiently with nutrient diversity? Are we feeding the large bowel properly? Are we lifting all the other systems up so that they have the best chance they have at dealing with this overgrowth, knowing that the risk of developing it is much greater because of their condition?

[00:58:17:13 - 00:58:25:13]
Thank you. That's really helpful. And I'm sure a lot of, yeah, a lot of people listening today may see patients in that category. So it's great to have that advice.

[00:58:26:24 - 00:58:50:02]
So, yeah, if anyone does have any other questions or anyone that's watching the recording has questions, please feel free to email us and we can pass them on to Rebecca and get back to you. Thank you so much to Rebecca for joining us today. I certainly learned so much about SIBO and I'm sure everybody else did too.