Dr. Allison Siebecker: Paleo Digestive Troubleshooting

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Sean: Allison Siebecker, ND, MSOM, LAC, has a 22-year career in the nutritional field and is a 2005 graduate of The National College of Natural Medicine (NCNM) where she earned her Doctorate in Naturopathic Medicine and her Masters in Oriental Medicine. In 2005, she also received the Best in Naturopathy award from the Townsend Letter for her article Traditional Bone Broth in Modern Health and Disease.

After practicing primary care, functional endocrinology, and facial rejuvenation acupuncture, she took a sabbatical to study small intestinal bacterial overgrowth, otherwise known as SIBO. Currently, Dr. Siebecker specializes in the treatment of SIBO at the NCNM clinic in Portland, Oregon, and is writing a book synthesizing all the data into one comprehensive source. You can learn more about here at www.siboinfo.com.

Dr. Siebecker, welcome to The Paleo Summit!

Dr. Siebecker: Hi, Sean!

Sean: How are you today?

Dr. Siebecker: I’m feelin’ good!

Sean: Right on! We’re going to learn all about digestion today. I’m really pumped! This is one of my favorite topics to talk about. And our topic here Paleo Digestive Troubleshooting that we’re going to discuss today, can you tell us a little bit more about the topic?

Dr. Siebecker: I was thinking about all the people who suffer from digestive troubles. And then they go on the Paleo diet, and they get a lot better. But many people don’t get complete resolution when they go on Paleo. And Paleo, and low carb diets in general, are really famous for decreasing digestive symptoms, especially the symptoms of IBS. And that’s really my area of specialty. But, then other people, they never even had any problems, and then they go on Paleo, and while they’re transitioning, they develop some problems like constipation.

So, I thought what I could do is troubleshoot through all the different versions of Paleo diets for the people who are suffering from IBS symptoms because so many people suffer from IBS symptoms. It’s really common. And those symptoms are constipation, diarrhea, or maybe both, abdominal bloating, and abdominal pain or discomfort. And there are, of course, many other digestive problems that people on Paleo may still be suffering from. But I just want to focus on those symptoms today.

And the thing about people who have digestive symptoms of IBS and diet -- what we notice is that protein is very well-tolerated, usually. And this is one of the reasons why Paleo is so good for them. And fat is moderately tolerated. But, carbohydrates are
usually poorly tolerated by people with IBS. So, that means the key food group that we need to troubleshoot is the carbohydrates. And you may be thinking, “Paleo is a low-carb diet. What are we going to have to talk about?” But in fact, there’s still plenty of room for trouble, especially based on all these different versions of Paleo.

For instance, there are people on Paleo who eat dairy. A friend of mine calls those people “The Swiss Paleo.” Then there’s the slow carbers based off Timothy Ferris’ wonderful book, which I love, who eat beans. Then, a lot of the athletes will eat starches like sweet potato. And most everybody on Paleo emphasizes a lot of vegetables. And some eat fruit, and others eat quite a bit of nuts or seeds and indulge in nut flour baking, which I myself love to do.

So when we look at all those versions, we’ve got dairy, which has lactose. That’s really the carb there. There’s dairy, beans, starchy tubers, vegetables, fruit, nuts and seeds, and then there might be the sweeteners used in nut flour baking. And all of those are carbohydrates. So, there’s actually still a lot of places we can troubleshoot.

**Sean:** I bump into a lot of people who’ve had really long-term digestive issues. Before we start doing the troubleshooting, do you have any general recommendations for them?

**Dr. Siebecker:** I do. I really think testing is very, very important. A lot of people who had digestive problems have had a lot of testing done. And they may roll their eyes when they hear me say this because they’ll say, “Oh, my God. I’ve tested everything. Nobody has found anything.”

But let me just go through some of the options for testing. And one of the main reasons you want to get tested is because if you do have a particular condition, many conditions need treatment beyond just diet. And today, we’re just going to be talking about diet. So it’s a good idea to find out what you have if you can.

One of the first tests I’d recommend is going to be a test for SIBO, which is my specialty. And I’ll explain all about SIBO in just a minute. But, small intestinal bacterial overgrowth can be tested with a breath test. So consider that. Find out if you have it. I think it’s a good idea.

Breath tests can also help you identify if you are actually having trouble digesting lactose and fructose. So, for lactose and fructose intolerance, you can get a breath test. Another thing a breath test can be used for is to tell you if you have H. Pylori. And that’s the bacteria that usually lives in the stomach that can cause ulcers. It can also reduce our level of hydrochloric acid in the stomach, which causes all kinds of problems when we have too little acid.

And one of the problems that comes from too little acid is GERD or acid reflux. And if you’ve been suffering from acid reflux for a long time, it’s probably a good idea to get an endoscopy. That’s a test where they send a tube through the esophagus, stomach, and
a little bit of the upper part of the small intestine to see if there are any complications there.

That endoscopy test can also help diagnose Celiac disease. And also, if you’ve had acid reflux or if you think you have any problem with the acid levels in your stomach, my favorite test is the Heidelberg test. It’s not a very popular test. People don’t know a lot about it. But it’s an excellent way to actually find out how much stomach acid you’re making when you eat a meal. So it’s a functional test, which is really what we want to see.

And another thing that can happen related to low stomach acid levels, if you do have that, is you can have delayed stomach emptying. That’s called gastroparesis. Symptoms of that are a lot of nausea or feeling full early on when you begin eating. Or maybe the food just sits in your stomach. Or you might even actually regurgitate food, not so much acid. I happen to see a lot of patients with gastroparesis and with GERD or acid reflux because my specialty is SIBO and those go together quite a lot.

So, if somebody’s having the symptoms of slowed stomach emptying, they can go and have a gastric emptying study. That’s something I recommend to quite a lot of people. And then, some other testing you could consider is Celiac testing or gluten sensitivity testing. Now, this may be a moot point for most people on Paleo since Paleo is gluten-free. But one thing that can be helpful is the cross-reactive testing that Cyrex Labs offers. And this is an idea where food that you might be eating on the Paleo diet might actually be causing the same sort of problems that gluten is going to cause.

And then, the last two tests that I recommend people think about are a colonoscopy. A lot of people who have IBS have had a colonoscopy. If you haven’t, it’s a good idea because it can help rule out or rule in Inflammatory Bowel Disease, which is Crohn’s disease or ulcerative colitis. And it [can also help rule out or rule in] cancer. And if you’re a person who’s had diarrhea for a long time, and you haven’t investigated it, it’s a really good idea, particularly if you’re having blood. Colonoscopies are really recommended.

Another thing that would be recommended, particularly if you have blood, but really for any sort of trouble like this, is stool testing. This is good for ruling out or in parasitic infections and also yeast overgrowth in the large intestine. So, that’s the basic rundown of the tests that you can consider. And, like I said, a lot of people have done all the tests and they’re rolling their eyes. But hopefully I’ve mentioned a few tests that you might not have thought about, like maybe the SIBO test.

Now, before I go on, I want to answer an important question here so that we can troubleshoot all these carbs. And that question would be “Why are carbs a problem in people who have symptoms of IBS?” And, to answer that, I have to give a little background. First of all, there’s two main areas in our bodies where the symptoms of IBS can be generated. And that’s the small intestine and the large intestine.
In the small intestine, the key problem is going to be small intestine bacterial overgrowth, or SIBO. And there are several diet that is focused on treating that problem, and that’s the Specific Carbohydrate Diet and the GAPS diet. And many people are likely familiar with either or at least the GAPS Diet. The GAPS Diet is based on the Specific Carbohydrate Diet. But it also includes the principles of the Weston Price Association. And it’s an excellent diet. And these are really forms of Paleo.

And then there’s the large intestine. And the problems that go on in the large intestine really follow the same principles that explain SIBO. So, I’m going to go ahead and explain SIBO so you can have an understanding of both of these areas of problems, which generally have to do with bacteria generating symptoms in our intestines. The diet that’s really been developed to treat the problems in the large intestine is the Low FODMAP Diet, which is really quite similar to the Specific Carbohydrate Diet and the GAPS with just a few exceptions.

So, let me explain some of the key concepts of SIBO or IBS. First of all, the small intestine is not meant to house a lot of bacteria. That’s actually the job of the large intestine. And in SIBO, what happens is the normal bacteria that live in the gastrointestinal tract, whether up in the mouth and the throat or down in the large intestine, they overgrow in the small intestine. And this causes a chronic bacterial infection of the small intestine. And the reason that we’re talking about this is because it’s very common in IBS. Up to 84% of people that have IBS have SIBO. So, because of that high association, it has been theorized to be the underlying problem of IBS.

What happens here is that the bacteria are not supposed to be there in the small intestine. And when they are, they damage the small intestine so that our food can’t be digested and absorbed properly. In particular, they destroy the disaccharide enzymes along the lining of the small intestine that digest and break apart disaccharide sugars. Disaccharide sugars are just when we eat carbohydrates, they all get broken down into smaller and smaller molecules. Eventually, they wind up as two sugars hooked together. Double sugars. That’s a disaccharide. And the ones that are common in our diet are lactose, which comes from dairy products, sucrose, which is table sugar, and maltose or isomaltose, which comes from starch that we get from tubers and grains.

So, what this means is when we don’t have these digestive enzymes or these disaccharide enzymes, it means that the carbohydrates we eat can’t be finished being digested. What happens then is that the bacteria eat those disaccharides that were not properly digested. Those are carbohydrates, and they’re food for them. They actually make enzymes themselves. So just like we would normally have enzymes on the lining of our small intestines, they actually make those same disaccharide enzymes. So they break down our disaccharides. They eat the sugars, and then they make gas. It’s really extremely rude because they steal our food and then they fart in our intestines. [Laughs] So right off the bat, we’re not liking the situation.

Now, here’s the real problem. The gas that’s created by the intestinal bacteria causes the symptoms of IBS. The gas causes bloating, constipation and/or diarrhea, and pain.
So, the gas physically distends the abdomen, which is what bloating is. And then humans don’t actually make these gases that the bacteria do. The bacteria make hydrogen and methane, and also hydrogen sulfide. We don’t make those gases. And it turns out that those gases cause a change in the motility of our intestines. Methane gas actually causes constipation. It interacts with the nervous system of the gut wall and causes constipation. And hydrogen gas is associated with diarrhea, although the exact mechanism for how it does that is not known yet.

And then, the pain occurs as muscles contract in reaction to the gas and also because the intestines are subject to pressure. And particularly, IBS patients have been shown to have what’s called visceral hypersensitivity, which means that they feel things that other people wouldn’t feel at a lower threshold. They feel it more. So that’s one of the other reasons why pain is so prevalent in this condition.

So that’s the basic setup. Now that I’ve given you that background, let’s get back to the question of “Why are carbohydrates a problem?” It’s because bacteria eat carbohydrates. It’s their favorite food. So, in the situation of SIBO, the bacteria will eat our carbs. They’ll make their kinds of bacterial gases, and those gases are going to cause the symptoms of bloating, diarrhea, constipation and pain.

Okay, now, let me move on to the large intestine, because the principle is pretty much the same here even without SIBO. Some carbs can cause problems even in healthy people. And this will be much worse in IBS. Some carbs are poorly absorbed in the small intestine, even if you didn’t have the destruction of enzymes on the lining. And then, those carbohydrates can get to the large intestine bacteria. And then the large intestine bacteria can create gas which can create symptoms of IBS.

So, some examples of this are primary lactose intolerance, which is a genetic deficiency in lactase, the enzyme that digests lactose. And another example would be sugar alcohols like sorbitol that’s found is fruit. For example, prunes are famous for the high levels of sorbitol they have. And what a lot of people know who have eaten too many prunes is that sugar alcohols have an osmotic affect. And really all improperly digested carbohydrates can have this osmotic affect. They were already supposed to be broken down, and they’re not. And now that they’re in the large intestine, they encourage water to flow into the large intestine and that can cause diarrhea. A lot of people have that problem when they’ve eaten too many cherries or too many prunes. So, these are some of the ways that the large intestine can be affected.

So that’s my basic setup. And hopefully now we have the background to have an understanding of why we’re going to troubleshoot all these carbs.

Sean: We’ve got it now. Very, very good background. Very good setup there.

A frequent email that I get is, “Sean, I just started the Paleo diet. But I’m plugged up. I’m constipated. I haven’t gone for several days.”
Why is that, and what can they do about that?

**Dr. Siebecker:** This is really common, I think. I actually see two problems commonly when people are first starting Paleo who may not have had digestive problems in the past. First, like you say, they get constipated. And second, they have trouble digesting fat. And usually on Paleo, you’re increasing your fat, and that can be troublesome.

So, about the constipation... Really what this is about is a sudden decrease in fiber from the stopping of grains. And the best treatment for this would be two-fold. One would be, if you haven’t started Paleo yet, or you’re just beginning, slow down the transition a little bit. You may be a person who prefers to go cold turkey. I am, actually. So, that’s fine. But you could also begin to slowly cut down the amount of grains over time to give your large intestine a chance to adapt to that decrease in fiber.

Fiber actually has two components: soluble and insoluble. The soluble fiber is actually a prebiotic, which means that humans don’t make the enzymes to digest it. But bacteria do. So it is actually food for them. It’s meant to be food for them. And then there’s the insoluble fiber, which, the bacteria can work on that a little bit. But basically, it’s just considered like a bulking agent. And it just moves through us and out of us.

And that aspect of fiber, the insoluble fiber, can really be helpful for making motility of the large intestine happen. Actually, both parts of the fiber can be helpful. So, if you’re having problems and you’ve already eliminated the grains, what you can do is just increase the quantity of your vegetables so that you increase the fiber in your diet. And especially raw vegetables will be helpful, and nuts and seeds. This will increase your fiber. But the caveat here is this is for the person who does not have pre-existing digestive problems like SIBO or IBS because fiber can be quite irritating to the person with IBS.

So, if you didn’t have it before, increasing the vegetables and nuts and seeds will be very helpful. Now, over time, the large intestine should be able to adapt to the lower fiber diet. I don’t really know exactly how much time that’s going to take per person. It’s individually based. So, you can also try and wait it out. It depends on how bad the constipation is. For stubborn cases where you’re really not having any action, it’s a good idea to encourage yourself to go do something to be able to go to the bathroom everyday. And that’s also the case for the people who have IBS or SIBO constipation-type [symptoms].

And in stubborn cases for these types of people, what I recommend is magnesium, usually starting with around 1,000 milligrams at night before bed. And you can adjust that dose up or down as needed. My personal favorite forms of magnesium are oxide and citrate. But everybody has their favorite type. And this works on the same principle as the poorly digested carbohydrates that we just discussed. It’s just an osmotic agent. And it doesn’t force any kind of contractions in the intestine. It just draws water in. And when we have more water, the stools get bigger, softer, and we’re encouraged to go to the bathroom.
If we had a really lot of water come into our intestines, it just has to flow out of us. And that would be the situation a lot of people have had with runny diarrhea when they have a gastroenteritis infection. So, magnesium, if you take too much, it can do that to you. So starting with 1,000 is a pretty safe bet. By the way the brand we’re really familiar with would be Milk of Magnesia. But I just usually recommend a supplemental magnesium.

Anyway, the thing you need to know about here is that the dose is a bit finicky and it takes a day or so for any sort of action to really have it’s full [impact] in the large intestine. So you could take magnesium and maybe not go the next day, then you might say, “Oh, geez, I’d better double up on my dose.” And then you’ll really be running to the bathroom the day after. So just know ahead of time that the dose is a bit finicky. Or, you could take the 1,000 milligrams and it could have too strong of an affect. The answer here, then, is you just stop taking it. And that will go away usually within one day.

Now, let me go back to that other one I wanted to mention for those with problems when starting Paleo, and that’s the problem with the fat digestion. The way you’ll notice this will be nausea, probably. You just felt like it was just too much fat [in your meal], or you might just feel too full. And this is really common. A lot of people who switch to Paleo, it can be a pretty radical dietary transition for a lot of people. And what you need to do here is just increase your fat slowly to give your body time to adapt its production of bile and fat-digesting enzymes.

So, if you’re in the middle of this transition or you’re about to start, and you’re listening to this, I would say just back off the level of fat a little bit. A good time frame for ramping up is over a month, I would say. You can do it more quickly, but that’s a good time frame. Most people will find that they can adapt to it. But it’s just that when they slammed in too much all at once, the body really didn’t have the bile capacity ready.

The other thing you can do is use lipase enzyme. Lipase is the enzyme that digests fat. That enzyme is secreted by the pancreas. And you can find this enzyme in really any full spectrum digestive enzyme formula. I know Enzymetica makes a particularly high lipase formula that’s called Lypo Gold. I’m sure other brands have their options, as well. So you could also use that enzyme. You take it anytime during the meal that you’re having with fat. It could be the beginning, the middle, or the end. And that can help quite a lot, too.

Sean: What about the slow carbers? You mentioned earlier, they eat beans, and the athletes who eat sweet potatoes.

Dr. Siebecker: Okay, yes. So, let’s get into all this troubleshooting. So, the problem with the slow carbers is that beans and athletes who eat sweet potatoes, these foods have a lot of starch in them. And starch is really a pretty big issue for people who have SIBO and IBS because the starch breaks down into maltose and isomaltose, like we mentioned a little bit earlier. Those are disaccharides. And they can be eaten by the
bacteria and then cause gas and then cause symptoms. It’s sort of the flow we talked about.

So, if you’re having digestive problems and you’re trying to rely on beans or tubers, it’s probably not going to work out that well for you. You’re probably going to need to stop eating them. It’s just a recipe for trouble, particularly in SIBO. Now, if you didn’t have SIBO, and all of your symptoms are coming from the large intestine, you might be able to get along with beans and starch because you should have the enzymes in your small intestine to properly digest the starches and absorb them. And they won’t get down to the large intestine and cause problems.

That’s a concept of the FODMAP Diet. Although, their original papers actually included the concept of distal SIBO, just a technicality here. But really their focus is on the large intestine. So they don’t eliminate starch. And that’s just not going to be far enough for most people. So many people have problems in the small intestine.

Now the other problem, particularly with beans, is they have prebiotics. We mentioned before that soluble fiber is a prebiotic. Prebiotic just means it’s food for the bacteria. Well, beans also have other prebiotics, such as stachyose and raffinose. These are galactans. And they also have fructans. Stachyose and raffinose are some of the famous culprits of what causes gas for people. This is a situation where maybe you normally wouldn’t have any digestive trouble. But the beans have this stachyose and raffinose that can get down into the large intestine. They get down into the large intestine. The bacteria in the large intestine can eat it, they make gas, and then you can fart. A lot of people fart from beans. So, what you really need to do here with the beans to take care of that is you should soak them. And most people know about this. And they really need to be soaked before they’re cooked. So they need to be soaked overnight when they’re just in their hard little bean state. And then the soaking water has to be discarded.

When you soak them, you leave them out on your counter. So it should have somewhat of an ambient room temperature. Some people recommend putting things in that water like whey or some seaweed. Those are all things you can try and do. But, if you really want to include beans, you should definitely soak them.

Now, fiber in the beans and starchy tubers is also an issue. And we mentioned before soluble fiber. That’s a prebiotic. And beans and tubers are chock full of it. So only bacteria have the enzymes to digest soluble fiber. It’s straight up food for them. And you know, fiber is always thought of by so many people as a positive thing. But when it comes to digestive symptoms, it can be not a positive thing at all. It really can make the problems worse for both constipation and diarrhea. It’s something you really just need to play around with.

And insoluble fiber, in particular, can be quite irritating to intestines that are damaged. So if the small intestine has damage, like from the bacteria, insoluble fiber is very
irritating. And it can cause pain and trouble. So we have to be really careful with the fiber that is in the beans and starches.

Now, one other thing is that if we take a look at the *Specific Carbohydrate Diet*, the wonderful author who wrote that, Elaine Gottschall, she took quite a lot of time to look at the different starches and also clinically evaluate how well people did with the different starches. And what she said that you should avoid is potato, sweet potato, yam, parsnip, and turnip. But she said that what may be more tolerable to people would be rutabaga, beets, celery root, carrots, and all squashes, including summer and winter squash.

So, this is also something you can try. The starch level is going to be lower in those foods I just mentioned. But there’s still some for the athlete who is trying to get some. It might not be enough, but we’re troubleshooting digestion here. So that’s what I recommend.

**Sean:** A lot of Paleo people eat tons of vegetables. And this is actually part of the Paleo Diet. Is there any problem with that at all?

**Dr. Siebecker:** Yes! This is the thing that is really shocking to so many people. There’s not many people in our culture who think there’s anything wrong with eating vegetables, you know? That’s like the one thing everyone agrees on!

Well, lo and behold, here is an area where we can say there’s trouble. And it’s because of what I was just mentioning with the beans, which is that vegetables are chock full of fiber, both soluble and insoluble. And they’re chock full of oligosaccharides, which are the prebiotics, like inulin and FOS and stachyose and raffinose. So, vegetables cause a lot of people with SIBO and IBS trouble. They’re very difficult for people with this condition.

So, if you have been having trouble with vegetables, I don’t want you to be shocked by that. It was quite a surprise for me when I got into this whole world. Because of course in my distant past, I was vegetarian like almost everybody. We’ve tried it out at some point. I was vegetarian for quite a while. So, it was quite shocking for me to figure this out. And then, of course, there’s the fiber, which can be very irritating.

So, what you really need to do with vegetables is peel them, de-seed them, and cook them. When you cook them, it helps break down the cellulose. Cellulose is one of the the insoluble aspects, actually. And don’t eat raw vegetables if you have digestive problems and you’re on Paleo. Give yourself a break from raw vegetables. That’s a big thing. A lot of Paleo folks are all about the vegetables, and all about the raw vegetables. And, in a person without digestive problems, that sounds great. But with digestive problems, you need to cook them.

And also, you need to spend some time identifying which vegetables you can even tolerate. The patients I see sometimes can only tolerate between two and five types of
vegetables. That might sound crazy if you haven’t been exposed to this before, but it’s quite normal in my world. And there’s too much fiber and too many oligosaccharides, which are prebiotics, in the vegetables. You just need to so slow and careful with vegetables.

The way to choose which vegetables you’re going to try is really up in the air. So many people react differently to different vegetables. I would say predominantly people have trouble with the cruciferous vegetables like broccoli, cauliflower, cabbage, etc. Yet, then there are people where the only vegetable that they can tolerate are the cruciferous vegetables, and nothing else! So, just don’t think that there’s any one way with this vegetable situation. What a lot of people like to do is look up the low FODMAP Diet. And you can look up widths of low FODMAP vegetables. And if you want to start there, great. But just know, you might still react to all those low FODMAP vegetables. And you might not react to the high FODMAP ones. It’s just so individual. And you’ve just gotta try it out and make your way through it.

So, that’s it on vegetables!

**Sean:** Can fruit be a problem, as well?

**Dr. Siebecker:** Yes. And this is for the same reason as vegetables. It’s because of the fiber that’s in it. Now, there are actually a few other things that are in fruit that are not so much in vegetables. Fruit has fructose in it. And fructose can be a problem for some people. This was something that was not discussed in the Specific Carbohydrate Diet, and that the FODMAP Diet is quite famous for bringing out.

They identified that some people just have inherently some kind of genetic problems with lactose. Some people genetically can’t absorb fructose very well. And additionally, a large portion of the population, even though they may not have anything genetically wrong, but when they just take in too much fructose, it overwhelms the transport molecules and proteins in our intestines, which allow us to absorb the fructose. So, it’s been very helpful because now we need to know.

Fructose is a monosaccharide, actually. So you wouldn’t think there’d be any problem with it. But, in fact, people can have problems with absorption of fructose. So fruit can be a problem for that reason. So fiber can be a problem with fruit. Fructose can be a problem with fruit.

And then, there’s the sugar alcohols which we already mentioned, like sorbitol. A lot of the stone fruits have high levels of sugar alcohol in them. And sugar alcohol is just quite hard for a lot of people to absorb similar to fructose. It has to do with the size of the sugar alcohol molecule and the size of the pores in the small intestine for passive diffusion. People have different sized pores from person to person. And the pores, whether they’re big or small, are in different places in their intestine. So, how well someone can handle sorbitol is very individual from one person to the next.
And, of course, fruit, in and of itself, depending upon its ripeness will have varying degrees of fructose and sugar alcohol. So you can have a piece of fruit one day and maybe be okay with it. And another day, depending upon the ripeness of it, you’re not okay with it. But at least you’ll understand some of the mechanisms behind it.

So, like vegetables, fruits should be peeled and de-seeded whenever possible because the seeds and the skins of vegetables and fruits have a lot of insoluble fiber particularly. And then they should be cooked, actually. In the Specific Carbohydrate Diet, they really recommend stewing your fruits before you eat them. That really helps with digestion.

But, the final caveat here is that many people can’t tolerate much, if any, fruit. In Paleo, the emphasis is always on the berries and the less sweet fruit. And that’s fine, of course. But if you have digestive problems, just take note that you may really have difficulty with even those foods.

**Sean:** People are so different. It’s a trip! It’s all biochemical individuality going on out there. You mentioned earlier that you like to use nut flour. Can nuts and seeds be an issue for some people?

**Dr. Siebecker:** Absolutely! And it’s the same old story as what we’ve been talking about. There are prebiotics in nuts and seeds. Particularly, there is a good amount of fiber and then there’s the oligosaccharide prebiotics that I’ve been mentioning. So, it’s just the same concepts here as all the other ones. Prebiotics can feed the bacteria. The bacteria can then eat it, make gas, and cause symptoms. Coconut, of course, is huge in Paleo circles. And coconut is really troublesome for a lot of people with SIBO or IBS because it’s very high in fiber.

You know, I love coconut butter. It’s just the whole coconut all processed. And people just love that stuff. And I do, too. But, boy, that is so high fiber! There are going to be so many people who have digestive trouble and they’re not going to be able to eat it. So, don’t feel bad if all your Paleo friends are chomping down on delicious coconut treats and you can’t. There’s a real reason why. And, it’s really okay to avoid it if it’s going to make your symptoms worse.

And then, for nuts and seeds, the digestion of them can be improved, like beans, by soaking overnight. The Weston Price Association recommends this. And also the removing of the skin, just like with fruits and vegetables. So, a lot of us use blanched almond flour for baking, and that’s going to be a little bit better than whole, unblanched, because unblanched [almonds] have the skin still on them.

But, once again, the caveat here is that many people just can’t tolerate nuts. Or, they can only tolerate a very small amount of nuts. It’s actually something else I wanted to mention. There’s sort of a philosophical difference between some of the approaches with the Specific Carbohydrate Diet and the FODMAP Diet. And we’re talking about the large intestine and small intestine. Although, I don’t mean to imply that the Specific Carbohydrate Diet is only for the small intestine. It absolutely treats the large intestine,
too, because anything that works on the principles of the small intestine will work on the large intestine.

Having said that, the philosophical difference is the Specific Carbohydrate Diet says that you should avoid any food that could be a problem. But the FODMAP Diet diet recognizes that there are levels that people can tolerate of each of these foods, and particularly in combination. So, if you had a meal where all these different things included were to add up to a higher amount, then that would cause you trouble. So, I personally think that’s an excellent addition to the discussion, to recognize that low levels of any of these foods may be able to be tolerated.

So, you might be able to have one little nut flour baked treat a day and be okay. And you just have to experiment with that, and see what your levels are. And testing can be helpful for that. You can have the breath test for lactose intolerance. It can try and show you about how much you can tolerate. And it’s the same thing with fructose. So, that can be helpful.

**Sean:** We certainly love our treats. Every once in a while, I’ll have something that’s a little bit sweet. There’s nothing wrong with that. But, what are the best sweeteners that somebody with digestive issues can have?

**Dr. Siebecker:** For the nut flour baking, the thing here is, like we’ve been talking about, it is going to depend on the individual and what they can tolerate. But the Specific Carbohydrate Diet, which is really helpful for SIBO, recommends honey. And the reason why is because the sugars in honey are monosaccharides. They’re free. This means that no digestion is actually necessary. They’re not a disaccharide. We don’t need any enzymes. Those sugars, which are fructose and glucose, are ready to be absorbed right into our bodies. So that’s really, I think, one of the best choices.

The exception here would be for the people who do have problems with fructose. So, if you find you have problems with fructose, then honey might not be your best option. Or, only in very small amounts. And like we were saying, to know this, you could get a breath test for fructose intolerance. Or you could just try eliminating fructose and see if it makes a difference for you.

Another sweetener that you could consider is just pure glucose. That’s a good option because it absorbs very easily, and that’s the end result of all carbs that we’re really meant to be absorbing. And it also absorbs high up in the digestive tract. You’ll find this sold under the name of dextrose. But it is just usually pure glucose. It’s not the easiest thing to find. I think NOW brand sells it on Amazon. It’s not great for baking. It doesn’t have exactly the same properties. It’s powdered, so you’d think you could use it straight across like you would, say, table sugar. And you can, but glucose is less sweet than fructose. So you need to keep that in mind. Honey is a little bit sweeter than just table sugar. So these are things to keep in mind when you’re baking.
So, stevia is another option that a lot of people in Paleo like to use. It works for many. But it’s really hard to bake with. You can certainly find recipes out there in the Paleo world that do a great job, particularly for minimally sweet items. It’s famous having an aftertaste. And people find certain brands that they like or don’t like.

One thing to look out for with Stevia, particularly in the powdered forms of Stevia, is it’s often packaged with the prebiotic inulin. So, it might be that it’s in such a small amount that it doesn’t bother you. But, if you’re quite sensitive to inulin, then it’s going to bother you. So, just watch out for that.

There’s lots of debates about Stevia and whether it secretes insulin or not. I’m kind of freaked out by anything that has a sweet taste that has no calories behind it. I’ve read some studies that have proven for some of the other sweeteners like the artificial sweeteners that have that same component that it really does cause dysregulation from our brain down. So, I think a little Stevia is fine. Obviously it’s been used in Ayurvedic medicine for a long, long time. But, it’s just something to think about. Try not to overuse it.

So, then a few other options would be that you could just consider using table sugar, which is sucrose, or maple syrup. I would prefer maple syrup over sugar cane. Instead of using white table sugar, you would probably want to use one of the less refined options.

But, table sugar is a disaccharide. So you could run into trouble with digestion. Once again, it may depend on the amount. If you had a small amount, maybe for your digestion that will be okay. I’ve had lots of patients who can tolerate a little bit of sugar for their digestion. It won’t bother their digestive system. Now, what it does to other symptoms like blood sugar or addictive responses is a different matter.

The sugar in maple syrup is also sucrose. It’s the disaccharide sucrose, and it’s about 65% sucrose. So, maple syrup with sugar is another option you could think about. It’ll be a little less sweet than sugar. It’s very simple to bake with.

The last ones I want to mention are the ones I don’t recommend as much, and that would be agave. Agave, of course, is very high fructose. So for somebody who has problems digesting fructose, that’s not a good option. And also, it does have prebiotics in it of inulin and FOS. It’s not going to be the best option for somebody with digestive trouble.

And, then there’s the sugar alcohols. I know people in the Paleo world who like to use xylitol or maybe erythritol. And these are notoriously hard to digest and absorb. It’s going to be anything that ends with an “ol.” And, if you were going to resort to one of these, although I don’t recommend it, erythritol is the one that absorbs the best in our intestines.
It’s all individually based. But my first choices would be honey or maybe straight glucose or maybe stevia, maybe maple syrup. But I do want to just make a point about this. And that is that I specialize in the treatment of small intestine bacterial overgrowth. And what I see is that my patients do better with a little bit of honey in their diet. And this is a really interesting point because, depending on the strictness of the Paleo version that you’re adhering to, you may not agree with that. You may think, “No. No sweetener is the only option.”

But of course, I’m seeing people who are, for lack of a better word, sick. They have a problem, and their diets are quite limited. I mean, we’ve just gone over all the things that can cause such terrible trouble - vegetables and fruit and nuts. Oh, and we didn’t talk about dairy. We’ll have to talk about dairy next. So, they can be quite limited. And I find that a little bit of honey for these people really helps their health. And by a little bit I mean drizzling it on some yogurt or putting a little bit in some sauce. I mean, we’re having about having like a tablespoon or two a day. Not a lot.

But if you’re listening and you’re struggling with digestive issues, and you are strictly eliminating all these carbs, you really might find your health improves by a little bit of honey.

**Sean:** I totally skipped over dairy! I’m glad you brought that up. What about those Swiss Paleo eaters who actually consume dairy?

**Dr. Siebecker:** I love the Swiss Paleo! Okay, so the issue with dairy is going to be the lactose. And there are so many ways a person can have a reaction to dairy. But we’re just going to be focusing on the digestive aspect here. And the key thing with that is lactose.

So, once again, if lactose, which is a disaccharide, gets to the bacteria either in the small intestine or the large intestine, they can break it apart with the lactase enzyme that they make, then eat the single sugars they’ve liberated, they can make gas and cause symptoms. So, if you want to know if you have a problem with lactose, you can do what I’ve been recommending. You can have a lactose intolerance breath test. Or you can just try eliminating dairy for a minimum of 4 days. You could eliminate all dairy, and then you can try adding back in lactose-free dairy, and see how you do. That might give you a sense of whether you’re reacting to other aspects of the dairy because the lactose will be removed.

I think one of the key problems for people on the Paleo diet is store-bought yogurt. Yogurt is a fantastic food, and I highly recommend yogurt for the probiotic bacteria and also for the nutritional value that dairy can give. But it’s not lactose free. The industry standard for store-bought yogurt in terms of how long it’s fermented is about 4-6 hours, which will only break down about 30% of the lactose.

I think a lot of people who eat Paleo like and recommend greek yogurt. And that’s about the best choice for store-bought yogurt because greek yogurt is yogurt that’s been
dripped. And what you’re dripping out is the whey. And the remaining lactose in the yogurt drips away with the whey. So, Greek yogurt will have less lactose. But there are now some brands I’ve started to notice in the stores that are saying they’re lactose-free. And I assume they’re fermenting for the same amount of time that all the other yogurts are. But then they’re adding lactase enzyme to break apart the lactose further. So you could try that and see how you do.

That brings me to all the options of lactose-free dairy. Many people don’t know what their options are. So, we’ve been talking about yogurt. You can try that lactose-free yogurt. In my local store, I saw a brand called Green Valley that’s doing that. But they were also doing sour cream and some other diary products where they were using lactase enzyme to reduce the lactose.

On that same concept, you can try Lactaid Milk. This is a little controversial. I keep reading different reports about how much of the lactose is really digested in Lactaid Milk. And I see sometimes it reported that not all the lactose is broken down. So, if you try Lactaid Milk and have trouble with it, that could be why. I haven’t gotten quite to the bottom of this one yet. And that might be the case with any dairy products you by that have lactase enzyme added to it.

So, back to the yogurt. The best solution is really to make your own at home. I know a lot of people do this. But if you’ve never considered it, it’s very simple. Just Google it, and you’ll see the recipes. But the thing you want to do is just ferment your yogurt for 24 hours. That will make sure all the lactose is broken down. Ten hours I think is about 60%-65% of the lactose is broken down. I think probably by about 20 hours, you’re good. 24 is just a standard to make sure it’s all gone.

And you can make your yogurt out of milk, cream, or half and half, whatever you choose. You can choose raw milk and not heat the milk above 110 degrees, keeping it raw. You can find out about all these interesting ideas and recipes from searching on the web.

So we’ve talked about milk and yogurt or sour cream. Another lactose free dairy option is aged cheese. When cheese is made, it separates the curds from the whey. And curds is what cheese is going to be, and that’s the casein protein. The whey is the other protein, and with that goes the lactose. But, if there’s any remaining lactose in the cheese, bacterial cultures are added and they will break apart the lactose. That’s the same principle as what’s happening in yogurt. We start with a bacterial culture. And they will break apart the lactose. So as it ages, over time, the bacteria will break down all the lactose.

So you just want to look for aged cheese. And aged cheeses are the bulk of cheeses that we’re familiar with like cheddar and Havarti and monterey jack and gouda. Even brie is aged. The cheeses that you want to avoid are fresh cheeses like fresh mozzarella, fresh Chevre, the goat cheese. There are many forms of aged goat cheese. But there’s Chevre and a few others that I can’t recall right now. You want to avoid
creamed cottage cheese. But there is a very good cottage cheese that is lactose-free, and that is dry curd cottage cheese. Usually in most cities, there’s only one dairy that will provide that to stores. So you’ll usually only have one brand as an option. The dry curd cottage cheese doesn’t have lactose.

And then, moving on from cheese and dry curd cottage cheese, there are going to be two other options: ghee and butter. And you can also use a little lactase enzyme yourself to treat cream, in case you would like to have some cream in your coffee or something like that. You could use a little bit. So, you can buy liquid lactase enzyme from the internet. The recommendation is what they have on the label, you double the dose and double the time that you allow it to work to naturally break down over 90% of the lactose, I believe. And, cream has such a small amount of lactose that it’s a fairly safe option. Some people don’t want to mess with that. But, you know, it’s an option.

And of course, I’m not wanting to skip over ghee and butter. Butter has such a very small amount of lactose. It is extremely rare for someone to react to the lactose in butter. I don’t think I’ve ever had a patient who couldn’t handle butter, actually. But if you want to be totally sure, then you can clarify the butter or buy it clarified, and that’s ghee.

Before I leave the final discussion here on dairy, I want to make a point similar to what I made with the honey. Coming from the naturopathic world where we see so many people have trouble with dairy - and it’s so common for us to test for people to avoid dairy - I was really surprised, like I was with honey, to find out that the vast majority of my patients can tolerate lactose-free dairy. And, in fact, their health improves when they include it.

So I would say probably 90% of my patients can tolerate lactose-free dairy. So if you’re a person listening to this whose always thought you can’t have dairy because you have digestive troubles or just because everyone says dairy causes trouble, I think it’s worth experimenting with it. And see if you can tolerate it, particularly if you’re health isn’t the best and if your diet is quite limited. Again, it depends on the type of person we’re talking about.

But, dairy is a powerhouse of nutrition. So if you can include that and it’s not opposed to your Paleo philosophy, I recommend trying it. And my only caveat here is I said maybe about 90% of my patients can handle it. But, that means 10% can’t. So if you try it and you can’t handle it, you’re not alone. And that can happen.

**Sean:** This is all such great information. I don’t want to stop. We’ve got a couple more questions for you. We’ve been talking a lot about carbohydrates, but what about fat? How does that factor in here?

**Dr. Siebecker:** I really did want to mention because fats have an affect on the large intestine motility. And therefore, they have an affect on constipation and diarrhea. So, really it’s simple. The thing you need to know is that fat stimulates bowel movements in the large intestines through the gastrocolic reflex, through other reflexes, and through
bile. It actually stimulates motility. So that means that if you are suffering from diarrhea, you may be benefitted by lowering the amount of fat in your diet.

People have different philosophies about how much fat they think people should be eating or that they should be eating. But this isn’t about that. This is just about digestion. So digestively, you may be able to help your diarrhea symptoms if you lower your fat. And, conversely, for constipation, you may be able to assist your constipation symptoms if you increase your fat. So, that’s something that you should play with.

**Sean:** Again, this is all really good stuff. Any closing remarks for our Paleo Summit audience?

**Dr. Siebecker:** Yes, I’ll just give a summary of the options you can try if you’re still having problems. Try lactose-free dairy. Avoid starchy tubers, beans and raw vegetables and fruits. You may need to avoid certain vegetables, high amounts of vegetables, or high amounts of fruit, or high amounts of nuts and seeds. And you may need to avoid them altogether. And then what we just said, adjust your level of fat accordingly. Higher fat for constipation, lower fat for diarrhea.

**Sean:** Your website is [www.siboinfo.com](http://www.siboinfo.com). You do Skype consultations, right?

**Dr. Siebecker:** Yes! I enjoy them very much!

**Sean:** So, typically, who do you work with?

**Dr. Siebecker:** I work with a lot of people who don’t have any doctors in their area who know about SIBO. It’s still a pretty new field. So, I’m glad to make myself available for people who live in those areas. And, I also work with a lot of people from very far away, in other countries. And then, I also work with people who have doctors who are excited about it, but they just don’t know a lot about it. And so, I’ll just act as a consultant. When I haven’t seen someone in person first, I can’t officially be someone’s doctor, which means I can’t officially diagnose them. I can’t order prescriptions for them. Like, the test is a prescription or prescription medicine.

But I just love being able to help people and answer their questions. I can give a good sense of how I work with it and what I would suggest for management and the step-by-step process to go through if you have SIBO. And I also work with a lot of people who just have a lot dietary questions. There are not too many people who spend all their time on this like I do. [Laughs] So, it’s just so fun.

I’m so grateful for Skype because it helps connect me with people who need help. I love that it’s free, and I love the informality of it. I tend to be a fairly informal person, so it’s helpful. I can partner with people on their health. So I love it!

**Sean:** Tell us about your class videos.
Dr. Siebecker: Oh, yeah. So, for anyone who is really into this stuff and wants to dig deep and know lots more about it, I teach continuing education classes to physicians on small intestinal bacterial overgrowth. We get into all this stuff. I get into all the pathophysiology, which is the underlying reasons we have this. I spend hours and hours going over every dietary detail.

And even though I teach physicians, I try and make the class understandable for everyone. And the last class I did was in September. It was about 7 hours long, and we were able to record it with video and audio. So I have that for sale. It’s actually for sale through the naturopathic college website as a continuing education class. So, anybody can purchase it and watch it.

And I really recommend, if you’re interested in this, go ahead and watch the video. I tried to pack in as much as I could into that class. And like I said, even if you’re not a health professional, I think you’ll be able to follow it. And I think you might enjoy it.

Sean: And what’s the website?

Dr. Siebecker: My website is www.sibinfo.com. And there is a link to the class under the heading of “Learning More.”

Sean: Gotcha. How’s your book coming along?

Dr. Siebecker: Oh, my God! It’s slow! [Laughs] I mean, I’m such a detail hound! And there’s just a lot of research to do. When I started working on the book, just for the heck of it, I did a general PubMed search to see how many papers had been written. And there’s over 1,000 papers that have been written on small intestinal bacterial overgrowth alone. And that’s not even including the papers on irritable bowel syndrome and all of the other subjects that go along with it. So, of course, I’m not going to be able to read every one of those papers, but I seem to be trying.

Sean: It will get done! That’s for sure! It certainly will!

Dr. Allison Siebecker, thank you so much for being a part of The Paleo Summit! We all really appreciate it!

Dr. Siebecker: Thanks so much for having me, Sean!

Sean: Not a problem! Great stuff!