Dr. Drew Sinatra: Your gut has a massive impact on your overall health — mental, spiritual, and physical. This is something we've talked about many times, in different ways, on this podcast. Today, we're going to do a deep dive into understanding what happens when your gut microbiome is out of balance.

Dr. Drew Sinatra: I'm joined by my good friend, Dr. Adam Rinde, who treats patients for all kinds of gut issues. He and I will explain gut dysbiosis, SIBO — or small intestine bacterial overgrowth — and how you can diagnose and treat these conditions. We'll give you real tools you can use on a daily basis to improve your gut health, and through that, your overall health. All that and more on today's **Be HEALTHistic.**

Narrator: Welcome to **Be HEALTHistic**, the podcast that's more than just health and wellness information — it's here to help you explore your options across traditional and natural medicine, so that you can make informed decisions for you and your family. This podcast illuminates the whole story about holistic health by providing access to the expertise of Drs. Steve and Drew Sinatra, who together have decades of integrative health experience. **Be HEALTHistic** is powered by our friends at Healthy Directions. Now, let's join our hosts.

Dr. Drew Sinatra: Hi folks…if you like what you hear today and you want to listen to future conversations on all things integrative and holistic health, subscribe to our podcast at **BeHealthisticPodcast.com**. Also, check out and subscribe to the Healthy Directions' YouTube channel, which features video versions of our episodes, plus extra videos you won't want to miss. Finally, we have more with me, Dr. Drew Sinatra, my dad, Dr. Steve Sinatra, and other health experts at HealthyDirections.com.

Dr. Drew Sinatra: Hey everyone, welcome to another episode of **Be HEALTHistic**. Today on the show we're welcoming a fellow naturopathic physician, who is also a personal friend and colleague of mine — Dr. Adam Rinde. Dr. Rinde specializes in restoring balance between digestive health, metabolic health, and mental health with an approach known as naturopathic gastroenterology. Over the course of his career, he has seen how optimizing gut function leads to a balanced metabolism and better mental health.

Dr. Drew Sinatra: Dr. Rinde sometimes uses old-fashioned medicines, but he also employs sophisticated approaches, like microbiome testing and balancing. For many of the gastrointestinal disorders that he treats, Dr. Rinde uses the GI-MAP test, Leap MRT testing, and SIBO breath testing often in his evaluations, which we're going to talk about today. We're also going to discuss gut dysbiosis, specifically a condition called SIBO — or small intestine bacterial overgrowth — that both of us regularly encounter in our practices. He was kind enough to invite me on his

podcast, *The One Thing*, over the summer to discuss red light therapy. And now we're happy to reciprocate and welcome him to our show. Adam, thanks for joining me today.

Dr. Adam Rinde: Thank you so much for having me, Drew. It's great to be here.

Dr. Drew Sinatra: Well, you are really one of the experts on SIBO, and that's why we want to have you on the show here today. And I remember back in September of 2014, you put on a webinar for the California Naturopathic Association on SIBO. And that was actually one of my first real introductions to it, so I thank you for setting the stage there and really paving the way for all the great information out there about SIBO.

Dr. Adam Rinde: You're welcome, thank you. I really enjoyed that webinar. It was a lot of work…

Dr. Drew Sinatra: I bet it was.

Dr. Adam Rinde: It was a really good way to learn, to get out and teach.

Dr. Drew Sinatra: In fact, I actually looked at it last night, and I was just blown away by how up-to-date it even was back in 2014. I mean, all that stuff applies today, and a lot has changed within SIBO, which we'll talk about. So for our audience, let's really dive into dysbiosis, and talk about what that is, and also, really, how SIBO falls under that category.

Dr. Adam Rinde: Okay. I mean, dysbiosis is a term that blankets any imbalance in the digestive track that involves the microbiome. I think the best way to understand dysbiosis is to understand the opposite of dysbiosis, which is eubiosis. And eubiosis is a state where the microbiome is in balance. And so, that's usually defined as a microbiome that has diversity, it has balance, it has species that are cooperating together. So in a microbiome, even though there are some bacteria that are larger in population, and there's others that are smaller in population — in a harmony state in ecology, these bacteria are working together to help each other thrive and help the host thrive. Now, dysbiosis is when that system gets thrown out of balance. And so we'll see different subsets of dysbiosis. There can be a dysbiosis where you have undergrowth of bacteria, where the commensal communities, or the normal bacterial communities, are undergrown.

Dr. Adam Rinde: And then you can have a dysbiosis where something called pathobionts will develop, which are normal bacteria that can eventually overgrow and potentially become harmful in the right setting. And there's other dysbiosis where you actually have a pathogen that people be familiar…like something, for example, like salmonella can create a dysbiosis scenario. Then you have

situations with dysbiosis where bacteria is actually misplaced. Like small intestinal bacterial overgrowth, bacteria is overgrown or displaced in the wrong region of the intestine. So we're getting more granular with our understanding of dysbiosis, because it's connected to so many different disease states. So those are my understanding of the different types of dysbiosis at this time.

Dr. Drew Sinatra: When we talk about dysbiosis, and SIBO in particular, obviously we're going to have symptoms that arise in the gastrointestinal tract — like bloating or constipation, diarrhea, alternating constipation and diarrhea. I want you to talk about how we can also experience symptoms systemically in the body, too. How does that happen?

Dr. Adam Rinde: Yeah, so the important thing to understand about this is that the lumen of the intestine is actually somewhat the outside world. It's a tube that runs through us, starting at our mouth and going down to the rectum. And then dividing that tube from our inside world is essentially a mucus layer and tissue, epithelial layer. And there's a lot that goes on to protect this outside world from influencing this inside world — a lot. I mean, to breakdown that system is a exercise in pretty much every system of medicine. There's physical, and biochemical, and immunologic properties that keep this layer intact, and keep this layer defending us. It's quite fascinating. And so, when dysbiosis becomes a problem systemically, then there's a breach in that mucus layer and the immune system that's on the other side of that mucus layer, which is in our inside world, is now being triggered.

Dr. Adam Rinde: So systemically, the inside world is on alert. And so there can be various signaling and release of bacterial components that eventually activate the immune system, and activate inflammation inside our body. So that's the connection. And that inflammation can affect many different organ systems, including the brain, the heart, the liver, the kidney, the lungs. I mean, if you look up “gut” and fill-in-the-blank-axis, right now you can pretty much pick an organ and Google gut-brain axis, gut-liver axis, gut-kidney axis. The connection starts with that breach.

Dr. Drew Sinatra: For those listening, they might be saying to themselves, “Well, I've never really even heard of this term dysbiosis, or SIBO. Maybe I've got some symptoms like the bloating, the diarrhea, the constipation, maybe some nausea.” How common, though, would you say this is in our general population? I mean, do a lot of people suffer from this?

Dr. Adam Rinde: There's different ways to look at SIBO as a primary condition and a secondary condition, so it's really hard to quantify. The general person with no chronic health condition that's doing well, there's likely a very low likelihood that they

have SIBO. Probably 10 to 15% of the people in the general population that are walking around with no other chronic health conditions. But if you have other health conditions, such as irritable bowel syndrome, you could have SIBO up to, there's been predictions up to 60 to 80% of irritable bowel syndrome patients also have SIBO. Someone who has fibromyalgia, it's been predicted by Pimentel's group that 100% of those patients may have SIBO. And so, it really kind of hooks on to other conditions. So the general person who's feeling well and they have a little bloat, and they're having some digestive gas problems, and maybe it's a small deal, not necessarily a big deal — that's probably around 10% of our population.

Dr. Drew Sinatra: I mean, that's significant, right? I think.

Dr. Adam Rinde: It is significant, and I think the degree of what we have to do about it also depends on how out-of-balance the rest of the body is.

Dr. Drew Sinatra: OK, so our listeners are saying to themselves, “Well, maybe I've got some of these symptoms, I also have some systemic things happening in my body, too. Maybe I have some brain fog, maybe I have some joint pain, maybe some depression, some anxiety.” The wheels are spinning in people's minds right now. If they went to their doctor and talked about SIBO, what would be the next step that a doctor might do in terms of testing, to help them understand if they truly do have this condition?

Dr. Adam Rinde: Sure. So when they go to their doctor, I think it really is important to bring information to the doctor about what your concern is. Because if someone feels or suspects that they have SIBO, they might be given answers like, “Well, everybody gets a little bit of digestive gas as you get older” or “everybody deals with this, just eat slower…or what have you.” And so it's important to bring up that you want to be tested — or can I have a referral to someone who might have the ability to test me. So when you cross that hurdle, because it is difficult sometimes to get other healthcare providers on board, is that you can then get what's called a breath test. Up until about two weeks ago, I would say that there was a breath test that was going to test you for hydrogen, or methane gas in your small intestine. Now, thankfully after many, many years, there's a test out called the Trio Smart Test, which will test for hydrogen sulfide, hydrogen gas, and methane gas.

Dr. Adam Rinde: So this is a breath test that you can perform at home, and we can detect if someone has SIBO based on levels of gas production after swallowing a solution called lactulose. And so, this solution tracks actually the intestinal path of gas and so we can predict if there's excess gas production. That excess gas production means that there's fermentation taking place in the small intestine

at a level that is much higher. Fermentation is produced when the bacteria is munching on the carbohydrates and starches that are more difficult to break down. So this test will detect if that's excessive in a particular person.

Dr. Drew Sinatra: That's fantastic, because I actually wasn't aware of that. I was going to ask you that question about…is the hydrogen sulfide testing available now? And, well, we know.

Dr. Adam Rinde: In fact, I just ordered my first two tests because people should know this, that SIBO presents in different ways. It can present as constipation subtypes, diarrhea subtypes, mixed subtypes. And so a lot of people are frustrated because in the past, the breath test would come back negative and they could swear they have symptoms of SIBO. And we didn't have a test that would detect for this third type of gas that is involved with SIBO called hydrogen sulfide. Well now we do, thanks to, again, Dr. Pimentel, who is one of the key people in this field.

Dr. Drew Sinatra: Yeah. Let's say for our patients that have gone out there, they've gotten a test done, it comes back with positive. And they're showing whether there is a predominance of methane, or hydrogen, or now this hydrogen sulfide gas that's there. What do we do next for treatment, what are the treatment options, including conventional, antibiotic, and also natural — looking at antimicrobials and all the different other forms of supplements that we can use.

Dr. Adam Rinde: I mean, there's some standard treatments that you would expect if you went to a gastroenterologist. And there's other different treatments that you would expect if you went to an integrative, or functional, or naturopathic type doctor. I mean, I'm talking to you…you're also a digestive health expert, so we could probably talk for hours about how we want to approach a particular case. Because we think somewhat deeply about each patient, and how they present, and what would be right for them. If you're in a gastroenterologist office — which is, in my opinion, a perfectly viable option — is that you would get probably a prescription for something called Xifaxan, which is a non-absorbable antibiotic that targets these gram-positive, gram-negative overgrowth organisms in the small intestine. It seems to spare the rest of your microbiome, according to the research, from too much harm.

Dr. Adam Rinde: And they usually put the patients on a low FODMAP diet. There's one double-blinded natural product regimen that was put head-to-head against Xifaxan that a lot of gastroenterologists in my community will recommend this combination. It's a combination of herbal bacteria. You can Google that study, it's from John Hopkins University. So sometimes they'll be given alternatives to take, like an herbal antimicrobial. Now, it just depends on your view of this — like Pasteur

view, which is like, the germ is the disease. Versus Bechamp, who…it's more of the terrain. I know you're a terrain guy, I think.

Dr. Drew Sinatra: I am, I am. Primarily.

Dr. Adam Rinde: So the difference in how you approach it is like, as a naturopath who is terrain-focused, you look at traveling into the gut like a Marine would go in — instead of bombing the gut from the sky.

Dr. Drew Sinatra: Right.

Dr. Adam Rinde: You're going to look around. Does the person have…

Dr. Drew Sinatra: Indiscriminately.

Dr. Adam Rinde: Yeah, exactly. As a Marine, you go in and you survey the scene from the ground floor. Is the person chewing their food enough? Is their mouth dry? Is their stomach acid low? Is the patient having problems with gallbladder release? Is the patient having problems with motility? You have to think about the digestive track on a very deep level, about how the person got here in the first place. And so, functional/integrative might look at things like, well, I think we're going to start you off with some enzymes to help break down some food, improve your stomach acid, stimulate the gallbladder a little bit. Let's see how you do there. Maybe we'll see an improvement enough for this is no longer symptomatic, we don't need to wipe out this bacteria.

Dr. Adam Rinde: If that doesn't work, we might work to step two, which is using herbs that are both antimicrobial, but at the same time anti-inflammatory. Because we know as naturopaths that if someone has a long-standing gastrointestinal problem, they likely have leaky gut — intestinal permeability issues. And so if we're going in with aggressive treatments, we may be further damaging the intestinal lining. So we might use things like glutamine, or serum bovine immunoglobulins to help preserve the intestinal lining and help the immune system function better. So, I like to meet the patient where they're at. Some people can't invest in a whole repair of their gut — they just want to feel better and get back to work. And sometimes we do go with more, just, antimicrobials. Now, I am really excited about thoughtful probiotics and prebiotic approaches here, too, as we progress in treatment.

Dr. Adam Rinde: Because one of the things I've learned about SIBO is that what happens...a 2020 study came out where they actually took a sample of the digestive juices and SIBO. This was a plus one study that just came out in July. They saw that basically there's 3.5 times more bacteriaceae species. This is a proteobacter

from a proteobacter phylum, and this is essentially suppressing a organism that's from the phylum firmicutes. So we see that there's this elevation of more of facultative anaerobic bacteria in SIBO patients. So we have to think about what is the environment going on in these patients where the normal species that should be living there — which are like, lactobacilli — are getting suppressed, and these more aggressive species are coming to life. And so, I'm thinking down the road of the proper time to use probiotics in SIBO. We certainly see some probiotics can help with SIBO.

Dr. Drew Sinatra: Yeah, and I want to circle back to the probiotics and prebiotics in a moment here. But I want to underline what you said about this being a comprehensive treatment. So if we just jump to the antibiotics, like the Xifaxan, maybe the Neomycin if they've got more methane-producing bacteria — we may only get so far, that the SIBO may not improve or it may come back very quickly. So I think that what you're talking about is just such an essential piece here, in that we really need to treat people, it's personalized medicine. So if they need more digestive support, whether it's the enzymes, we need to work on the barrier with more immunoglobulin supports, or it is the probiotics that we're bringing in there — I think that's just such a critical piece.

Dr. Drew Sinatra: I want you to speak to the importance of diet, and going back to carbohydrates and how those are implicated with SIBO. What are your thoughts on the low FODMAP diet? First off, what is that? And then, how does that help improve symptoms of SIBO?

Dr. Adam Rinde: The low FODMAP diet is essentially, at its core, it's taking out highly fermentable carbohydrates from the diet. What this means…highly and rapidly, meaning, as soon as they hit the small intestine. Just so people have a sense, is…the small intestine, the duodenum, is just down the road from your mouth. I mean, so once the digestion takes place in the stomach, if there are bacteria sitting in the duodenum — which is the first 12 inches of your small intestine — and it meets a highly fermentable carbohydrate, you can get increased gas production. So what the low FODMAP diet does is it reduces foods that would potentially increase that gas production at those early moments of digestion. So basically, it removes things like lactose, and high-fructose foods, and these forms of carbohydrates called galacto-oligosaccharides, and fructo-oligosaccharides, and polyols.

Dr. Adam Rinde: This diet is really useful from a public health perspective, meaning, a lot of people who don't have access to getting good care and they need something just to get by and feel well for a while, so that they can travel, they can go to work, and they can function. So this particular diet can help those people get by. It can reduce some of their symptoms and the gas. Now, does it fix SIBO?

There's not a lot of evidence that it does, and people can get stuck on that diet, and get limited. The more limited the diet we have, the less diversity we have. So there's some studies that say that you should only be on it for about three months, and then you start to see butyrate-producing species decrease and some other really important species in the digestive tract. So I think it's great for getting people to feel well, so they can focus on these other long-term repair items.

Dr. Drew Sinatra: What about the elemental diet? That's another diet we should really briefly mention to our listeners. What is that, and how does that benefit those that have SIBO?

Dr. Adam Rinde: The elemental diet, basically, is almost like a purified protein, amino acid type diet. It has very, very little sugar, very little or no fiber. Usually you go on this…it's a drink that you blend up, and then you usually will drink that for two or so weeks. The research has shown that it's used in a lot of settings. It can help with Crohn's patients and decreasing flare severity in the early stages. But in SIBO, it's been used to suppress bacteria overgrowth, as a way to heal or reduce SIBO. Again, you have to graduate from it, and how you graduate from it is key. Some people use it in combination with some of the other treatments we've already mentioned. Now, one thing that is rising in the community and in clinical practice is that it seems to give an edge to yeast organisms. If you're on an elemental diet, it seems like candida species can have a leg up, and then you might end up with candida overgrowth. So, to be thoughtful about the elemental diet is to really use it, but also have some antifungal prevention on board.

Dr. Drew Sinatra: Because yeah, you could be treating the bacteria but leading to more of a SIFO, — which is small intestine fungal overgrowth — which is something that you don't want to develop.

Dr. Adam Rinde: Exactly. Yes, yes.

Dr. Drew Sinatra: Okay, so coming back to probiotics, then — you said that there's a time and a place for them. First off, when do you think about using probiotics? Secondly, what types of probiotics do you think are best for SIBO?

Dr. Adam Rinde: The more I'm learning about this, the more I understand is that the upper intestine is a very oxygen-rich environment. The bacteria, the probiotics that would work best in that environment are those that can survive oxygen, like a high oxygen status. That's the lactic acid bacteria — like lactobacillus reuteri, lactobacillus rhamnosus, lactobacillus acidophilus. These are probably going to help the patient who has small intestinal bacterial overgrowth at some stage. I

think that there's enough evidence that at least in methane population overgrowth, you can start using them really early. In hydrogen overgrowth, it may cause increased symptoms in the beginning, and so I usually bring them in when I feel like the patient is stable and on their way to prevention.

Dr. Adam Rinde: Now, dysbiosis, which we started off in this discussion, has many other applications. There's other probiotic species, especially like the bifidobacteria species and some of the spore-based probiotics that can go deeper into the intestine and more anaerobic environments. And they really have a place for helping intestinal barrier, helping with other diseases, like colitis and Crohn's and many others. But for SIBO, I usually go very gently with those lactobacillus-based organisms in the beginning, and then bring on spore-based and bifidobacteriums as I progress out. But I do think probiotics and prebiotics, especially, have an important role in SIBO.

Dr. Drew Sinatra: Speak to the prebiotic piece, because we just talked about the low FODMAP, which is restricting some of these carbohydrates that may lead to fermentation. How is it that prebiotics, which are really acting as the fuel for the probiotics, how are they not having a negative impact on SIBO?

Dr. Adam Rinde: I mean, early on they likely would, because it's like the opposite of going on a low FODMAP diet, as you're giving basically FODMAPs to the gut. But later on, you have to realize that when probiotics…for them to actually grow and thrive, they need their food. And so prebiotics, like inulin and FOS, and some of the prebiotics from food, like GOS-based foods like chickpeas, and these other really healthy prebiotics actually help our…going back to the first thing we talked about, helping the diversity, the richness of our microbiome. Helping those species that we want to really thrive — like the firmicutes phylum, and the bacteroides phylum — helping them thrive, so that these other species that are a player, but they should not become pathogenic or become pathobionts.

Dr. Adam Rinde: So, we need to get to a place in this process of healing the gut where prebiotics are on board, and we're growing the firmicutes and bacteroides phylum. I know these are big words, but basically, you can look at it like…so 60% of our gut should be made up of firmicutes and 30% should be made up of the bacteroidetes phylum, and the rest should be these other subgroup. And if we're low in these areas, we need to really enrich our gut, and prebiotics are the way, according to literature, to really enrich and grow. Essentially, this just justifies why fiber is really important in our diet.

Dr. Drew Sinatra: Well, and it goes to what you were saying previously, with the terrain. We really are supporting the terrain of the gut by adding in these prebiotics.

Dr. Drew Sinatra: My last question for you, Adam, is outcome here. What are we looking at for a timeframe here, as a general rule…for those that have SIBO, what are we looking at for time, in terms of improvement?

Dr. Adam Rinde: I think it's important to see the big picture with SIBO. One thing we didn't talk about that's really important for people to be accessing and nourishing while they're on SIBO treatment is the brain-gut axis. This is the mind-gut connection, and the role of stress, and the role of mindfulness, and the role of managing stress on and its effect on our gut symptoms. So for patients, to me, who kind of really dive in and they address stress, they address their gut, they're willing to make some of these lifestyle changes, and they're willing to really go deep into their treatment, then usually things get on track in about three months or so. When you're just treating SIBO with antibiotics and walking away each time, it just keeps roaring back if there's been no terrain changes, like you were talking about.

Dr. Adam Rinde: So in those patients, it can become a very frustrating condition and some people just decide, I'm tired of treating it, I'm just going to live with this. They're living with bloat, and gas, and feeling crummy all the time. One thing, if you've never had digestive symptoms before, like significant digestive symptoms, when you have them, you just feel crummy. You just don't feel like doing much. It can affect your mood, it can affect your desire to go out and socialize. So it's a big deal, and I think it's something that's not talked about enough, it's something that people keep to themselves.

Dr. Drew Sinatra: Well, in a way, it's embarrassing for some people to have that conversation with their doctor about, “Well, I'm gassy, and I’m bloaty, and I've got some loose stool, some diarrhea.” Once you get over that, that hurdle there of being a little bit more open to talking about it, I find that that's really helpful to get in this relationship with your doctor. That you trust them and that you can really divulge a lot of personal, sensitive information to them, because it is important like you're saying to really address these things. Because people do end up living with them for weeks and months and years of their life, and they're suffering on a pretty big level.

Dr. Adam Rinde: Yeah…and realize, everybody farts, right?

Dr. Drew Sinatra: Exactly.

Dr. Adam Rinde: The doctor is sitting across you has had gas. It's not like they're sitting there and they never have gas. To realize that they're human, and they deal with the same things. You may be helping the doctor across you realize that they can feel better.

Dr. Drew Sinatra: Yeah, exactly, exactly. This was just a fantastic introduction to our listeners about SIBO…what it is, how to diagnose it, how to treat it.

Dr. Drew Sinatra: Before we wrap up today, we're going to share some **Wellness Wisdom** with our listeners. In keeping what we've been talking about today, what is one big thing, one big thing that people can do to reduce the impact that stress has on their gut? Because you did mention stress previously, so I want to go to that.

Dr. Adam Rinde: Yeah, well…I think in this era of COVID where a lot of people are at home more, I'm really big on the slow, long meals. Like taking a good hour to eat, kind of like they do in Italy. Well, in Italy it's two hours, right?

Dr. Drew Sinatra: Yeah, a little too long.

Dr. Adam Rinde: I'm really big on that, and having the engagement — the laughter, the chewing of your food, the smelling of your food, really making eating more of a lifestyle than something we just throw down our throat. I was raised by a foodie, so I was really shown to appreciate of the gift of food, and meals, and getting together with people. When you do that, you're addressing the digestive track on so many ends. You can have bitter foods that can stimulate serotonin. You can chew your food, which stimulates salivary amylase, helps to digest and break down. If you're laughing or singing at dinner, you're stimulating the vagus nerve. I mean, eating…the process of eating, and really enjoying it, and slowing down with that, and making traditions out of dining, I think, is one thing that I really hope to foster with myself, and with my patients, and people that I interact with.

Dr. Drew Sinatra: That's so brilliant, Adam, because we had Michael Murray on the podcast at one point. He basically said one of the same things that you said, with chewing the food being one of the most important things you can do is just, like, chew your food. Right? Let's just start there, let's get the digestive process going from there. So I think as naturopaths, we're always talking about just the importance of making sure that when you sit down to have your food, take your time. There's no rush. Don't watch the news while you're shoveling food in your mouth. Be with family and friends, have some thoughtful discussion, share the love, and share the food.

Dr. Adam Rinde: Exactly, exactly. Yeah, it's such a gift…to create positive experiences around food, I think, does tremendous things for our digestive tract.

Dr. Drew Sinatra: Awesome. Well, Adam, thank you again for coming on the show today. This was fantastic.

Dr. Adam Rinde: You're welcome, thank you so much for having me. I respect you so much, and your father, and the work you're doing. And I'm really enjoying your podcast, it's really doing some great things out there.

Dr. Drew Sinatra: Thank you, Adam. You too!

Dr. Adam Rinde: Okay, thanks. All right.

Dr. Drew Sinatra: That's our show for today, folks. If you have a question or an idea for a show topic, please send us an email or share a post with us on Facebook. And remember, if you like what you heard today and you want to be an active member of the **Be HEALTHistic** community, subscribe to our podcast at **BeHealthisticPodcast.com**, or on Apple Podcasts, or wherever you download your favorites. You can also find more great content and information from us and the Healthy Directions team at HealthyDirections.com.

Dr. Drew Sinatra: I'm Dr. Drew Sinatra, and this is **Be HEALTHistic**.

Narrator: Thanks for listening to **Be HEALTHistic**, powered by our friends at Healthy Directions, with Drs. Drew and Steve Sinatra. See you next time.