A Special Interview with Caroline Barringer

By Dr. Joseph Mercola

DM: Dr. Joseph Mercola
CB: Caroline Barringer

Introduction:

DM: Welcome, everyone. This is Dr. Mercola, and today we are fortunate to be with Caroline Barringer, who is an expert in the preparation of the foods one requires to implement the program for Dr. Natasha Campbell-McBride. She has a very interesting journey. I first met her relatively recently at the November 2011 Weston Price Wise Traditionsevent, where I sat at the same table with her the first night and we had the opportunity to enjoy some really amazing fermented vegetables, which we will be discussing shortly. I’m now a strong advocate of that.

But Caroline has an interesting journey; she’s been involved with this passion of implementing nutrition to optimize health challenges for about 20 years or so. And then she eventually connected with Dr. McBride and now is one of her primary and chief training partners for helping people really understand this type of food preparation process. She’s created some resources, which we’ll talk about later.

Welcome, Caroline, and I’m wondering if you can share with us your journey on how you came to be doing what you’re doing now.

CB: Well, thank you so much for having me on the program. I would love to share my journey. First and foremost, I’m a professional singer and voice-over artist. In my younger years, when I first moved to New York (I’m originally from Florida), I had a rigorous performance schedule, and this schedule really took a toll on my health. I noticed severe energy issues and chronic fatigue, acne, and a lot of reflux, a lot of digestive issues. So, I was searching for food to be my medicine.

I was a vegetarian for a while, so I first started out with Ann Wigmore’s Living Foods Lifestyle. And of course, she’s mostly vegan, but she’s into the whole enzyme-rich foods, the probiotic-rich foods. And that was really pivotal for me, even though I was still a vegetarian and I did not realize the importance of animal fats and animal products in my diet. It was the beginning of the journey to health for me.

I was in Queens, New York, in my basement apartment, and I started growing wheatgrass on cafeteria trays, and you name it, I cultured it. Everything. I noticed that that was the change for me. It brought energy back, it cleared up my skin, it helped me to eliminate and detoxify properly, and I knew there was something to this. I knew that probiotic organisms were going to... Well, they definitely did help me, but they were going to help me get well, even on a much deeper level, to reach my highest health potential.
So, through the years I discovered Weston A. Price and Body Ecology and all these wonderful programs that I was able to learn to incorporate animal fats and foods back into my diet and, of course, I found GAPS, too, Gut and Psychology Syndrome. It made all the difference for me, and I knew that even though I was in the music industry, I had a passion for music but I developed a deep passion for food as your medicine.

And so I went to school, and I studied at the Nutritional Therapy Association. I’m an NTP, a Nutritional Therapy Practitioner, and now I help others take that journey that I did and help them get real food back into their diet. But the most central, I think, focal point for me is getting those probiotic-rich foods, which are an essential part of the GAPS diet, too.

**DM:** When you first started, it was with Ann Wigmore, and she really does not incorporate any animal foods. I was wondering if you can tell us how you made the transition and what your journey was that led you to that shift.

**CB:** I believe it was my purchase or a gift – I’m not sure – of the book Nourishing Traditions by Sally Fallon. The first 88 to 100 pages of that book brought truth to me. And even though being a vegetarian and starting to incorporate animal foods into your diet, it can be quite difficult at first, because there’s a whole emotional connection to that. But I knew my physical body, I mean honestly, I would walk by a steak, and I would just go “(Gasps) I need that but I’m not going to eat it.” And I knew, my intelligence was telling me, “You need to incorporate these things.”

And so, I think part of that awareness came about by healing through probiotic foods first for me. That was my journey. It brought an awareness to me that I need to look deeper into the nutrition that I needed to feed my body.

And I also found your site, Dr. Mercola. With metabolic typing and understanding, I was a Protein Type! Who knew? And here I am on a vegetarian diet and killing myself, basically. So I thank you for that as well.

**DM:** Well, I recently interviewed Dr. McBride and she – I’m sure you’ll echo – brought a perspective on vegetables that I didn’t really fully appreciate. Vegetables are really healthy for you, of course we need them, but she strongly believes that they don’t nourish you in the deepest sense of the word. Their primary purpose is for metabolic detoxification, and some people are critically in need of that type of process and we all need some of it, but some need that far more than the nourishment and actually have to go off of nourishing foods for a while. But if you want to be nourished, really the only way you can do that is with animal foods, at least from her perspective.

**CB:** I share that. I do echo that, and it was that next level of healing that was necessary for me, so I started incorporating eggs and even – thanks to you – raw eggs. I was always scared to eat raw eggs, and when I learned that you eat raw eggs all the time, I said “Why am I scared?” you know. So, I started incorporating raw eggs and fermented meat and fish dishes as well. And I think that was my first introduction.
I’m not a fish lover at all. But on the GAPS diet, we’ll teach you how to make [06:25] and fermented fish. We use mackerel in the video, the Cooking with GAPS video. And those were my first animal foods.

DM: Before we go into some more of the specifics, I’d like to really address this raw concept, because that was another area that’s somewhat of a surprise in my discussions with Dr. Natasha. The raw may not be all it’s cracked up to be. Certainly we need raw foods, I’m convinced of that, but the challenge with raw – I just want to share a personal story that many people might find amusing that relates back to when I was in college.

I remember one of my friends at the time, we wanted to go to medical school (he’s a physician at this time). He worked at a local grocery store and introduced me to the concept of having a raw pepper. I think it was a red bell pepper or maybe green. And he was eating it raw. I just found it so profoundly shocking and surprising because my parents had never prepared those types of raw vegetables. If we have peppers, we already had them cooked. I thought you would get sick or die from them.

CB: [Laughs]

DM: I was alarmed that he was eating them that way. But that was a plant food, which is very rarely ever going to cause any problem unless you contaminate it with some factory farming challenges. But there’s a whole other exponential level up when you go eating raw animal foods. So, it’s interesting that you would have to use my site to encourage you to try the raw egg yolks.

But I guess the challenge that surprises Dr. Natasha is that there’s this underlying supposition that raw foods are going to generally be better for you. But when it comes to vegetables, clearly we don’t have the metabolic machinery to digest many of these foods. We can’t purely utilize calories efficiently, unless they’re sort of pre-digested with the fermentation process. Even when you get into animal-based proteins, like the meats and such, she’s helped me understand and appreciate that there’s a long, slow-cooking, not certainly over high temperatures like in barbecues and such, but this long, slow-cooking helps draw out many of the nutrients, which will actually nourish us.

So, I’m wondering if you can comment on that distinction, because I think there is a lot of confusion about raw. Maybe, from your perspective, help share your feelings about raw food versus cooked food.

CB: Certainly. Raw food, as Dr. Natasha states, they are cleansers. They go into the body. They help us detoxify. They’re our healthkeepers, just like our probiotics are. They also provide that enzymatic quality as well, that enzymatic need for us to not tap into our metabolic enzymes, which run our bodies. Because a lot of time, what will happen is if we don’t have some raw food into our diet – and this is what I always tell my students – we’ve got to have some. But if we live on a completely raw diet, we’re in a constant state of cleansing and detoxifying.

They’re not nourishing us. But we do need them, they are a component. We need to cook foods, too. But the two together are a powerhouse, because as Dr. Natasha says,
we’ve got the enzymatic quality, the probiotic qualities (if you ferment those raw foods), and you have the nutrients that slowly cook out of the cooked foods.

That’s why on the GAPS diet, when you prepare a soup and you’ve cooked it, you’re going to add in raw egg yolk. You’re going to add in raw, cultured yogurt. You’re going to add in raw, cultured sauerkraut juice or raw cultured vegetables to bring that enzyme quality back, because what destroys enzymes? Heat.

DM: Absolutely.

CB: So we need enzymes in the diet, but we need nourishing foods as well.

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And the two together are the powerhouse. Then to take it to the next level, then you bring in the cultured or fermented foods.

DM: Yeah, well, thank you for sharing that, because it really is a relatively new concept for me, this marriage of the raw and the cooked foods. I guess there’s this belief that most or all of your foods should be raw. It’s difficult for me to shift from that viewpoint, because I’ve long advocated as one of my general food principles that you try to get as much of your food raw, maybe up to 85 percent.

It’s interesting how life is a journey, but you’re always finding new information that challenges those previously-held beliefs that I felt were so crucial in helping people improve their health. It makes perfect sense. Thankfully, we have people who are pushing the limits in other areas so we can get that information and further improve people’s health with these great principles.

CB: Absolutely.

DM: I’d like to talk now about the fermented foods. I haven’t had the opportunity to view your video yet, even though I’ve had it for quite some time. I’m planning to do it over the holidays. The instructions for fermenting the vegetables are in the video, I assume?

CB: Yes, they are.

DM: Okay. Clearly, we can use it there, but let’s go over that now because I just want to give my perspective on this fermentation. I think you’ve mentioned it earlier, but it seems to me like one of the missing links. I don’t believe many people would argue that we need fermented foods in our diet. We need these cultures, I mean, these probiotics because they’re partners with our physiology.

We have about somewhere between one and 10 trillion human cells in our body. That seems like a lot, but really, there are 10 times as many bacteria in our body, somewhere between 10 and a hundred trillion cells. So, they outnumber us 10 to one, and there’s this phenomenal symbiosis if you have the beneficial bacteria growing in an optimized population. But most of us don’t, thanks to the processed foods, sugars, and the whole variety of toxins and stresses. A large percentage of us have very imbalanced levels of pathogenic bacteria, which cause disease. So really, the challenge is to optimize it.
The key is that many people understand the right types of food. There are more people that are beginning to appreciate that and are starting to implement it. But the big issue is that even though they acknowledge that fermented foods and good bacteria are useful, most people at best seem to just swallow a few probiotic pills, and that’s really not going to do it. To take your health to the next level, from my perspective, you need to regularly incorporate these fermented foods.

And I am a novice. I am a neophyte in this. I’m one of those people who’s intellectually appreciated the benefit of fermented foods, but for whatever reason – primarily ignorance, I would imagine, and just not enough commitment and dedication, or conviction that this was a useful strategy to incorporate in my diet.

But I’m so grateful for Caroline, who really introduced me to the practical way to do it. And not only introduced me, but helped train our staff to use these fermented vegetables. At the time that we’re recording this, I’ve been using them for about six weeks or so. And from a personal health perspective, I’ve had a lifelong challenge of being burdened with particularly aggressive bacteria in my mouth that builds up this incredible plaque that requires me to keep it under control, to be seeing a dental hygienist once a month.

CB: Wow.

DM: Which is kind of a shocking frequency, considering that some people, I believe, like you, go for years without needing – not by negligence, but not needing – to see a hygienist because there’s no plaque or tartar buildup. But that wasn’t the case for me.

I’ve been going every month for most of this year and some part of last year, and it’s working out well. But I just got back from my visit – like two days ago, my most recent visit – and after having been on fermented vegetables for six weeks. And it really is probably closer to a month, because for the first week or two, you want to gradually build up the process. You can certainly discuss that.

Before, I was having a healthy dose of the fermented vegetables. The feedback I got is that this was the first time ever the amount of plaque was noticeably reduced by about 50 percent and the intensity of the plaque was actually different. It was much softer and easier to remove. I mean, it had a dramatic influence on something that’s been a personal health challenge for a long time. And I think that it’s an inconvenience to having to go to a hygienist, but it’s probably a marker, a biomarker for some other things that are going on in your body. And if that improves, other more important areas of your health will improve also, that are more difficult to assess, especially in a long-term perspective.

Thank you for that, and thank you for the improvements. Naturally, we have discussed this previously and you mentioned about [15:18] and actually, I have started doing that for the last few days and excited to see how that works on my next dental hygienist appointment.
I’m wondering if you could share with us some of the general principles about fermented foods. We'll first, of course, we'll focus on the vegetables, and we can talk about how you can apply this to other foods.

**CB:** Well, with cultured vegetables – really, any cultured food, but particularly the vegetables – I noticed they have a way of changing your inner microbiota balance. For some reason, this principle of replenishment, like you said, some people are taking these probiotics, they're just capsules and you just swallow them, and they're hoping for a change, a shift in their microbial partners. But just as Natasha says, it all begins in the gut. By bringing these cultured foods in, that's why you’ve seen such a profound change in your oral health, because you’re changing the ecology of the gut. And that's where it all starts.

Eighty percent or more of your immune system is located in there, and your microbial partners are the integral part of that function in your gut. Basically, when you bring cultured foods into your body, what you're doing is you're practicing the principle of replenishment, and you're wanting to do this on a continual basis.

Cultured foods, they’re kind of prophylactic in nature. You take them on a consistent basis, they go in, they do their job, and a lot of the bacteria – not all of it, but a major part of it – will end up in your stool. And that's why when we look at the stool analysis, we're looking at the Bifidobacteria, we're looking at the Lactobacilli, and the healthy, more beneficial form of the E. coli. But the thing is that we have native microbes and we have transient microbes.

**DM:** Well, let me just stop you there for a moment, because someone might hear this and say, “Why am I going to take this?” Well, that isn't necessarily a bad thing. Even though there’s this rapid turnover, which would require a regular use of them, these bacteria – when they’re excreted in your stool – are loaded with things that you don’t want in your body.

**CB:** Absolutely.

**DM:** They’re magnificent detoxifiers, and they pull out these alloys, these BPAs, these heavy metals, and other contaminants that you are invariably exposed to from living in a modern-day, 21st century, industrial environment that get stuck in your body. This is the way to get it out.

**CB:** Yes. They’re the best chelators on the face of the planet. Absolute detoxifiers. Bring in these foods to your diet each day, and you don’t have to have a lot, Dr. Mercola. Maybe a half a cup or quarter cup of cultured vegetables, let’s say some yogurt, raw yogurt, in the morning, and maybe some kombucha during the day.

Kombucha’s an elixir. It is a fermented tea beverage. If you’ve never had it, I highly suggest you try it. It’s a delicious beverage, and it aids in digestion and brings in those probiotic organisms as well as the yogurt and the cultured vegetables. You’ve got these different profiles of bacteria that go into your body, the different species and strains that have particular jobs.
It's important to incorporate these each day into your diet. And it's good to keep your gut guessing. You want replenish or practice that principle of replenishment by taking in many different kinds of cultured foods. You're still going to see benefit by having some yogurt every day, but really, your immune system, to be healthy, needs a bit of a challenge. It needs to flex its muscle.

So, this principle of replenishment that you practice each and every day could be three times a day, two times a day, whatever fits into your lifestyle. And the good thing is that either a GAPS practitioner, an NTP (a nutritional therapy practitioner), or a certified human food specialist is going to be able to bring you to the source. If you don't have time to make these foods, they will bring you to that source. You'll be able to have that on hand all the time.

But you're going to see major deficits if you start slowly and you bring these foods in and you replenish and you build up to a certain serving size per day and you have that two or three times per day. You're going to notice that you're eliminating better, your acne may clear up. It's bio-individual, everybody has a different set of toxins and nutritional deficiencies and things like that. But you're going to see a general shift in your health, and you might even sleep better. Some people experience sugar craving reductions, drastic sugar craving reductions. There are all these different benefits, but if you keep an eye out you'll start connecting with your body and you incorporate these foods each day.

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You do this for the rest of your life; it's what our ancestors did. If you study Weston A. Price, he did not find one. He was a dentist, and at his 20s and 30s, he's travelled the world by steam ship, and he studied isolated societies and groups of individuals that were eating totally traditional diets. One thing he found in common, among many other things: the animal foods and animal fats were prized, that was one, and organ meats. But he also knew that they all had fermented food dishes that they consumed on a continual basis. It was a staple in their diets. We don't have that now. It's a huge missing piece, like you just stated.

Incorporating these every day and learning how to make them, it's a lot of fun. It can be a family activity. It can be a church activity. There are so many wonderful social aspects of connecting with food and culturing food.

What did Sally Fallon say? I love her quote, “Culture does not begin at the opera house; it begins in the kitchen.” It's fermentation and culture that brings you culture. So, being cultured isn't just something about being educated as well. It's also being inoculated on a consistent basis with probiotic organisms that makes you cultured as well.

DM: Sure. I'd like to comment about a personal experience about the yogurt you mentioned, which, of course, can be a cultured food. But the challenge is that you almost never want to purchase this commercially because, first of all, it's not raw milk. It's pasteurized milk. Many of them have dead organisms. It's not really a cultured
food from that perspective. Then it’s loaded with, typically, sugar. You want to either make it yourself or buy from someone who has raw organic dairy.

I did that personally prior to the fermented vegetables, and we have a good source of local raw milk. I was consuming three to four quarts of yogurt a week – a fairly significant amount. This is the right type of yogurt, and it never produced those types of benefits for my oral health that fermented vegetables did.

I’m going to start exploring the kombucha. I’ve had it intermittently but never on a regular basis. I’m wondering if you can comment on that and your experience with respect to the potency of the different types of fermented, cultured products you can eat. Because from my personal experience, it seems fermented vegetables are on the top of the list, but I’ve only tried two different types on a regular basis.

**CB:** Scientifically, if you look at this, yogurt is a bacterial culture. It doesn’t have any beneficial yeast. It is a primary bacteria culture. Lactobacillus bulgaricus very abundant, as a species of probiotics, that the Bulgarians are noted for longevity, living over a hundred years. They ate tons of yogurt. So it’s kind of like saying, “I’m just going to eat one food and be nourished by that one food.” No. You need a massive profile of microbes, and that is why you need to vary and keep your gut guessing again with cultured foods.

So, kombucha. Maybe you needed some natto, some fermented soybeans, which is fine. Soybeans are fine if they are non-GMO and they’re fermented. Yogurt. Kefir. Kefir is a symbiotic relationship of bacteria and yeast. Now you’re bringing in Saccharomyces boulardii – S. boulardii for short – and those beneficial yeasts that are not in yogurt make kefir a different therapeutic cultured food. Then you’ve got cultured vegetables that have a different profile and a different action in the gut. And then you would have something like fermented grains that may have a different action in the gut, or you might have coconut water that you have fermented. That’s going to be mineral-rich. That’s an electrolyte, probiotic beverage.

So, you have to have a myriad of different foods that are cultured, but then you’re going to have meats that are cultured. You’re going to bring in those proteins that are broken down by those organisms.

It really is about varying it up, changing it up, and thinking of the broadest spectrum that you can, because they’re all beneficial. Doing just yogurt like you did, you obviously did have some health benefits from the yogurt, no doubt about that. But now that you’ve brought in something different with the cultured vegetables, you’re bringing in a different profile of organisms that take action on augmenting and modulating your gut to a healthier place.

The more you can incorporate – I’m not talking about more servings, I’m talking about more varieties – the more you’re going to inoculate your gut with different organisms and keep your gut guessing. That’s the trick.

**DM:** Excellent. You’ve mentioned cultured grains. I’m particularly curious. It’s going to, of course, make it more digestible, that’s what the bacteria do, but do they also metabolize
some of the negative components associated with grains? In the case of wheat, of course, there’s the gluten or the gliadin molecule that’s particularly pernicious for so many people. So, are you familiar or aware of any influence on those aspects?

CB: Well, I can use my own health. I don’t respond to grains very well at all, but when I ferment them, I’m absolutely fine. It almost makes them more digestible, kind of like a cultured vegetable would be digestible. And I know that it does help to neutralize a lot of the “preservatives” that are on grains, nuts, and seeds. I did the same thing with nuts and seeds as well. All you have to do to make a grain more digestible is soak it. It’s a hydrophilic process that draws more water into the nut, seed, or grain. And then add in something like some whey or cultured vegetable juice, or coconut kefir, a spoonful of yogurt.

Those probiotic organisms take action on the nut, seed, or grain, just like the organisms in the soil would to make this little dormant nut, seed, or grain actually bioavailable, and to allow it to sprout or germinate. When in its nut state, it is much more bioavailable, much more digestible.

But some people still can’t handle grains like this at all. They just have to keep them out, especially on the GAPS diet. There are people that will never be able to incorporate grains after Stage 6 on the diet. It just is the nature of the [27:11]. It’s who you are and what you can and can’t handle.

But when you soak and sprout and germinate a nut, seed, or grain, it will neutralize the phytic acid and it will help the glutens and they’re predigested, so you don’t have to do the work. And then, your immune system does not have to recognize something that it does not find familiar and then you have an allergic reaction. Again, grains are not a central part of my diet, and I think that if you are going to be able to incorporate them into your diet, you’re going to need to prepare them properly.

DM: Sure. There’s a whole realm of experts or community who follow what’s called the Paleo approach. I’m particularly fond of that, too. I think there’s a lot of truth to it, so for those who aren’t familiar with it, two of the more important components of that are grains and legumes are considered “avoid” foods.

CB: Yes.

DM: Those are foods we wouldn’t want to eat, and it seems a reasonable approach. But if you choose to eat those for a particular reason, it would certainly seem very reasonable to ferment them before you consume them.

CB: Yeah. Well, I know the Paleo approach is something that’s very popular right now, and I believe in it mostly as well. But I also believe that if you look at our ancestors— I’m talking, as much as, you know, 400, 500, 600, 700 to 1,000 years ago – they knew how to prepare these foods properly, and they consumed them in smaller portions.

So, I believe that there are people out there who do okay having some grains in their diet – prepared properly, of course. But you know, I don’t like to broad-brush, because I believe in complete bio-individuality. But if you look at where we all came from,
agriculture did not come into play until maybe 12,000 or 14,000 years ago, which, in evolutionary terms, is a blink.

DM: Sure.

CB: There’s a merit to that, too.

DM: Well, if we also examine historical records, the pre-industrial ages specifically, the use of fermented foods was absolutely required for those who were living in less or more harsh conditions, especially in the winters that we have in most of the United States. Because you cannot grow vegetables in the winter, so the only way you’re going to do that is to ferment them, like a sauerkraut, and store them over the winter. This is the way you can get these foods.

CB: Yes you have your root cellar. Everybody had their root cellars, they had their crocks, jars, and fermented foods growing all winter.

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They had the vitamin C content, because cabbage is very high in vitamin C. It’s much more bioavailable when you ferment foods. You know, when we had infectious diseases and we didn’t have proper sanitation, the infectious disease was rampant. A lot of people were saved because they were eating these fermented foods.

DM: Yes, okay, so that’s the useful components. And actually, those who aren’t familiar with fermented vegetables, it worked for them. The most common one, of course, is sauerkraut, and it’s interesting because if you decide to prepare your own, you’ll find that 75 percent of the vegetable source in most of the foods should be shredded green cabbage. I guess the benefits – but also the usefulness of that – is helping facilitate the fermenting process.

So, I was wondering if you can just broadly discuss the fermented vegetables and then go into some of these other foods that you mentioned. What seems to be interesting is how one would culture meat or coconut water.

CB: Okay. Well, you’ve got all different kinds of inoculants, and I’ll explain those in a moment. But if you ask me to speak a little bit about the cultured vegetables, well, the way we prepare them – it’s a little different, and everybody’s got their own spin on how they like their cultured vegetables.

And by the way, I just want to interject that the culturing process is really forgiving. If you don’t do it exactly right, it’s okay. The microbes know what to do. Really, you just have to prepare them in a way that the microbes can grow and do their job well, and that’s not difficult.

But with cultured vegetables, what we usually tell our students is, we say, “Okay, if you think of making a soup, the base of your soup is your stock, and then you’ll throw in a couple stalks of celery and a couple of carrots and a couple of things here and there, and that would make your soup hardy. But you still have your broth as your base.”
Whenever we make cultured vegetables or we teach people how to do that, we say, “Okay, you want probably about 70 to 80 percent cabbage, although you can culture just beets or just carrots or just daikon radish.” It’s okay. I sort of call that monoculturing. But I believe that it’s a better approach to incorporate as many things as you can.

Think of the cabbage as your soup base, and then you’re going to add a couple of carrots, maybe a couple of daikon, half a bunch of cilantro, and half a bunch of parsley. And then you’re going to fleck that through the cabbage to where it almost looks like a coleslaw consistency and sort of a balance of ingredients. And then you’re going to pack that tightly and – this is shown on the GAPS video – pack it very tightly into glass, is best, the best container. Let that seal. You can add an inoculant. You can add in whey. You can add in a commercial culture starter. You could let it do it naturally, which is natural wild fermentation, like Sandor Katz as shown for many years.

Wild fermentation is allowing whatever is on the vegetable or even fruit that you’re culturing to just naturally take hold and culture the food. That takes a little while, though, because the natural approach takes a good two to four weeks, depending on what medium you’re using, especially with cultured vegetables, sauerkraut, or cabbage.

Basically, what we tell you to do is, you know, if you’re going to inoculate it with something, that speeds up the process. You can render some whey – you know, that kind of clear, yellowy liquid that’s on the top of the yogurt. Quarantine that and pour that into the jar. Maybe two or three tablespoons into the jar, pack it firmly, and let that sit for five to seven days. It expedites the process. So, with cultured vegetables in particular, I think the best approach is to mix it up because it just makes it more nutritious in general. But you can do monoculturing as well.

**DM:** If you have a variety of vegetables, does that increase the variety of species of organisms that are being produced?

**CB:** It may, because if you think about it, there are many different crops you’re probably pulling these vegetables from. You know, you might have some from your CSA, a state away, and then some from your backyard. Try to keep it as local as possible. So, yes, you’re going to be pulling in different nutrients and different probiotic strains into that culture. And I think that it’s the best way to go.

**DM:** Okay. And it’s important to have organic, ideally, to improve the nutrition and make sure you’re optimized and obviously we decrease the pesticide use. But for whatever reason, some pesticide did wind up into this fermentation process, I think it’s important to understand and appreciate that that is what these buggers do. They are designed to degrade and break down those types of chemicals. It will be far less toxic if you fermented something.

**CB:** Certainly, and if you have a container that might be plastic, or, you know, whatever you have on hand that you can afford. Glass is best, but if you don’t have the most ideal container, don’t worry about it. Like you said, the probiotic organisms, that is their job. They are cleansers, and they are detoxifiers.
DM: When I first communicated with you about being excited about this process and seeking to implement it into my business where we have a number of employees (so that they can enjoy the benefits too), I immediately thought that I had to purchase a fermentation pot, a crock pot or some sort. And I believe many people listening to this are onto the same piece of misinformation. I was just so excited to learn that you simplified this process, and I don't know if you learned it from someone or you picked it up yourself, but you simplified it radically to make it very efficient, far less intrusive, and far more convenient. So, I'm wondering if you can just briefly outline your process, because I think that many people will be surprised how simple it can be.

CB: Certainly. Traditionally, they did use the crocks. And there's the harsch – H-A-R-S-C-H – the harsch crocks are a traditional way to prepare your kraut. The one thing that I found out for myself was that they are really heavy and not easy to clean, and they produce a different-tasting vegetable. I found that they have a cheesier taste to my kraut. What I realized was we were having large amounts of…

This may not be in the environment of any person, culture, and kraut. But in my immediate environment, because some of the environmental microbes that you have in your immediate house and your home will get into your batch of sauerkraut, it's just a natural thing. It's a natural inoculation, even though you may be adding in something to speed up the process, like a cultured powder, a liquid or whatnot. But the whole idea here is that these crocks, we found in our environment, made too much yeast. We got a very cheesy-tasting sauerkraut, which I did not like at all. Some might like that. So I was like, “How do we avoid this? Can we do it in a bowl? What are we going to do to do this in?” So I started putting my thinking cap on.

Now, to digress back to 1992, I was using the candy-store bubble gum jars. You know, with the little knobby lid that you lift up off the top? I was making my Ann Wigmore Living Food Lifestyle veggie kraut, which was a natural process. I didn't use any kind of inoculant or probiotics to get that going. It took two to four weeks. It was a natural process.

Those were great – the little crocks. They were easy to use. If you do have a restaurant supply store, go get one of the crocks that's kind of clear and looks like it would hold bubblegum balls or something or Milk Duds in big candy stores. They have those in Manhattan. That's how I got the idea.

You can use that, and you can use a harsch crock, but know that they are just very awkward to lift and they're very heavy. If you want to do this the simple way, just do it right in the jar. It's perfect. It's the perfect little ecosystem inside each jar. You'll be able to go to your mom and pop or an AceHardware or some hardware store out there.

DM: Amazon.com.

CB: Amazon.com, absolutely. Get a case of wide-mouthed mason jars.

DM: Sorry, I just want to stop you there to emphasize something. Because it's real easy to miss the fact that you said “wide-mouthed.” Wide-mouthed, let me just emphasize that; bold it. Because you do not want the traditional small mouth. It's going to become
very, very difficult. It’s just a minor distinction, but it has a profound influence if you pick the wrong type. Make sure it’s a wide mouth.

**CB:** Yes. There are wide-mou**thed** pints. There are wide-mou**thed** quarts, and quarts seem to do the best. That’s a 32ounce-sized jar. And we do show this in the GAPS video, the Cooking with GAPS. The wide-mou**thed** allows you to get your hand down in the jar, because it’s very important that you pack the jar very firmly with vegetables.

[----- 40:00 -----]

You want to squeeze all the oxygen out, and you want your cultured veggies or whatever you’re culturing to be anaerobic, meaning oxygen-free. Underneath water is the best way to do that, or underneath the liquid in the jar. And that wide-mou**thed** allows you to keep pressing down. I believe I sent you a kraut pounder; it looks like a tiny baseball bat. You can go to krautpounder.com, I believe, and you can buy a little kraut pounder, and you just use that to press down on your jar and get all the oxygen out. That way, when you seal up this jar, you have this perfect, anaerobic environment within that vessel for it to culture.

Now, the crocks kind of have the same idea. They have a sort of a moat around the outside, this little trench that the water sits in. You put the lid of the crock into that lip that holds that water, and it creates an oxygen-free seal – that is, if your crock is fully full. If your crock is only half-full, you’ve got a whole space of oxygen in there. I just find that the crocks are quite difficult to use, but some people swear by them. So again, a bio-individual approach.

**DM:** Well, it’s just so much more efficient. I can’t imagine anyone justifying the use of a crock pot when it’s so much simpler and easier and convenient to use relatively inexpens**ive** glass jars. If you break one... I mean, that’s the danger, you could break crocks. It’s a lot more dangerous to break a crock than it is to break a quart ball jar.

**CB:** Yeah. They’re not cheap either. They are made of[41:42]200 bucks. So, yes.

**DM:** And then to create this anaerobic environment, you have to fill it with the fluids. Is this by trial or error or something you came up with to actually pour the celery juice from a juicer to fill up the GAPS in the vegetables to create this anaerobic environment?

**CB:** I’m glad you brought that up, because I like salt. Sea salt is my favorite. But I don’t like it necessarily all the time in my vegetables. But I know that salt can be helpful to the process of fermentation. Some say that it crowds out the pathogenic bacteria that may be in your vegetables. I mean, there are going to be some pathogens there; it’s just natural. There’re beneficial, neutral, and pathogenic. You want the good guys on your veggies to get ahold and win the war in the jar.

Salt can be helpful to keep those more pathogenic strains back, hold them back so that the good guys – the good probiotic bacteria – can take hold and then crowd them out. I call it the quintessential crowd out. It pushes these pathogenic organisms back, so that the real fermentation process can take hold and you have a beneficial product.
I’ve found that I didn’t necessarily like having salt in my cultured vegetables all the time. I wanted the option to flavor them with different oils and maybe add my own salt. Sometimes I find that on the market – there are cultured vegetables that are really salty, and it’s too much for me, my personal liking. I said, “Hmmm…What if we use celery juice?” Because there’s organic sodium naturally occurring in celery that maybe could do the job, too.

I juiced some celery, tossed it into my cabbage with all my little colors of carrots and maybe collard in there. I packed it firmly into the jar, kept it under that celery juice, and it was a perfect ferment. It came out so delicious, and I could choose to add salt and maybe a delicious olive oil, or avocado or not. I had the options.

DM: That was your innovation?

CB: I believe so. I don’t think anybody else is doing it yet. [Laughs]

DM: Well, congratulations. It’s really amazing. And for those of you who are listening who happen to vegetable juice, you’re probably aware that the most abundant vegetable that you can extract juice from is celery. Cucumber might be close, but I think celery is a little more efficient. It’s loaded with the most water. It’s probably – of all the vegetables you can juice – the most ideal.

CB: Yes. Some people ask us, “What do you do with all that leftover pulp?” Well, you can combine it with some nuts and seeds, and you can freeze-dry them – not freeze-dry, I’m sorry. Dehydrate them, and they’re crackers for you. They’re like Paleo crackers.

DM: Yeah. Well, I’ve done it. Actually, this is my breakfast. But I would just caution to use the celery, because it’s very fibrous and it’s very difficult to chew. It might make a better mulch in your vegetable garden. But a better alternative, from my personal experience, is the pulp leftover from cucumbers. It doesn’t have as much of the fibers, and that’s actually the base that I break up into essentially cereal-sized bites. And I pour about two tablespoons of melted butter over that in the morning.

CB: [Gasps] Yum.

DM: Then I put some red onions, a whole avocado, six ounces of fermented vegetables, and four egg yolks. That’s my breakfast.

CB: I’ve got to try that. That sounds delicious.

DM: Yeah, it’s just profound. It was based on the idea of trying to get a little more fiber. That’s not going to be good if you’re profoundly or seriously challenged with certain health conditions. Vegetable fiber can make you worse, because it specifically promotes the growth of all bacteria in your gut. If you have a profoundly high influence of pathogenic bacteria, it’s going to make those grow even more.

CB: Yeah.

DM: So, you have to be careful.
**CB:** Absolutely. The good thing, though, is if you are bringing in cultured foods, those organisms in that cultured food will work on that dysbiosis and start to change the ecology within your gut. I can’t tell you how profound that was. I think back to 20 years ago, how sick and tired I was, and I’m just so grateful that I found the microbes. I mean for me, it’s all about the bacteria now. Like you said, we’re 10 microbial cells to one human cell. I’ve never looked at myself or anybody else the same since I learned that. By that one statistic. Bringing cultured foods in and using that celery juice – just to digress back to where we were – it just adds a different flavor, and a freshness also, to the cultured foods that I find other brands may not have.

We’ve got people who write us all the time at Immunitrition about our cultured vegetables, and say, “I just don’t know what it is, but when I eat your cultured food, your cultured veggies, I just feel so good.”

**DM:** Yeah. I’ll have to give you a personal testimony. I’ve tested a number of other cultured vegetables that didn’t taste anywhere as good as yours. It’s, of course, a secret recipe you’ve developed through your process. And I think this celery juice just may be one of the key components. Of course, it varies upon the culture you’re going to use. But I mean, you’ve really come up with phenomenally, great-tasting fermented vegetables. They’re just awesome.

**CB:** There were some out there that I’ve tried. Certainly I’m not going to name names, everybody likes their own blends, but I just couldn’t find out that I could eat. And I said, “Gosh, if people are going to eat this stuff, it’s got to taste better than this or they’re not going to embrace it.”

**DM:** Embrace it in volumes that are going to make a clinical difference.

**CB:** Yes.

**DM:** If you have a teaspoon here and there, it’s good, but it’s not good enough. I mean, you’re not going to go very far with that volume.

And I just want to address the volume issue, because what we are doing in our clinic is we are taking our probiotics – the Complete Probiotics, which took us probably 15 years to come up with its formulation. We went through probably dozens and dozens to come up with it over the 15 years. So, it’s a really good balance, really high-quality, good strains. And we put about three or four capsules and a quart of the fermented vegetables, and then we grow it. It grows in about five to seven days.

Since bacteria grow relatively rapidly – they grow larger and split up and divide and you get exponential growth – those three or four capsules could turn easily into 300,000 or 400,000. I don’t know. We’re actually in the process of submitting samples to an objective third-party lab to tell us what the numbers of CFUs are in these things. But it’s a tremendous way of massively increasing the volumes and the numbers of bacteria that you are inoculating your gut with.

**CB:** Certainly. I mean, I believe probiotic supplements do wonders for people. But in conjunction with the cultured foods, I believe that’s really where they kind of jump over
that health hurdle that they’re trying to get over. I noticed that with the cultured foods, too, and even with probiotic supplements. Because most of them are transient, meaning they go in the body, do their job, and leave, for the most part. Some colonize and work and fill in the gaps in the microbiota in the gut. But I find that if you don’t consistently take them, you don’t see the benefits long-term.

At least initially, you need to have cultured foods in your diet. I would say for at least the first two and a half to three years – I’ve noticed with my clients – that’s how long it take for them to really, completely turn around their gut. They see initial benefits right away just by bringing in two or three servings.

Let’s talk about the serving: what does a serving look like? Cultured vegetables, you want to ideally have a quarter to a half a cup, with at least one or two meals a day. And then have another cultured food for that third serving. But you may not want to start with that, because if you have that more pathogenic growth inside you, when the good guys come in and start crowding up those bad gut bugs, you will have a die-off – what we call a healing crisis, in such a way. In modern medicine, you know, that’s something that, “Oh, let’s suppress that.” No. We want to welcome that, but we want to take it slowly.

I always tell my clients and my customers, “If you’re going to implement any cultured food, whether it be a water-based cultured food like cultured coconut water (which we can talk about in a minute), or cultured vegetables, whatever it is, take it slow, because you will be introducing something that will be crowding up something else within you.” And what is that crowd out? It’s got to leave your body. It may be in the form of diarrhea, or if you don’t have good bowel or transit time function, it may come out through your skin. You don’t want to overwhelm the internal detox pathways of the body.

DM: Or you could have flatulence increase.

CB: Certainly. Sure, you could have intestinal gas. Absolutely. And that’s a sign, you know. As you become healthier, you start tapping into your body and understanding its signs and signals. If you’re eating a cultured food and you notice, “Gosh, I’m breaking out all over my back and chest.” Slow it down. Back up. Cut it in half. Or just take an ounce. If you drank a whole eight ounces, cut it back to just one ounce. You will improve, and your body won’t be so overwhelmed at pushing out these pathogens. It will do it in a nice, gentle fashion.

As you start to purge these toxins, you do it in a gentle way, and it’s not invasive to you. I’ve had so many people who love our cultured vegetables literally eat a jar in one sitting. I’m talking a 32-ounce jar. Now, what does that tell you? That tells you that their bodies, their innates tells them “Yes, I need this, thank you so much,” and [52:44] – meaning the taste buds talking to the lateral horn of the brain, talking to the hypothalamus, talking to the rest of the body – the body saying “Yes, we need this.”

But we don’t need that much. Start slow, and that way you won’t have a headache or you won’t have that outbreak. Some people tell me that their lips got really chapped, and they started to peel. But if they cut back, something was perching from their lip
tissue. It could have been pathogens in the gums, we don’t know. But regardless, you will start to see yourself eliminating more naturally, and the proper stool form, the shape will change, and it will be all beneficial to you.

Let your innate intelligence guide you, and if you see something or feel something that’s not so right, don’t dismiss the cultured foods and say, “Oh, that was bad for me, it caused a reaction.” That’s not what your body’s telling you. Your body’s telling you, “Slow down.”

**DM:** Terrific. Now, with respect to some of the other beneficial items that are in the fermented vegetables – other than the actual organisms and cells and the nutrients that are liberated from the fermentation process – one of the byproducts of fermentation is lactic acid and acetic acid.

Acetic acid is, of course, the primary acid in vinegar or acetate. But these are actually profoundly powerful nutrients for the bacteria – remember, they outnumber us from 10 to one – that are growing in your gut. They actually take this and convert it to nutrients that you can use. Your enterocytes, the cells that lie in your gut that have this rapid turnover, they only live up to a few days and gets after you renew them. They convert this lactic and acetic acid to butyrate.

**CB:** Yes.

**DM:** The butyric acid that these enterocytes absolutely require to thrive. There’s this profound mass of synergism between these cultures. Maybe you can just comment at that because that’s what you’re teaching, of course.

**CB:** Well, certainly. What would like me to comment on about that?

**DM:** The bacterial physiology. Expand on it or correct me if I’ve misunderstood the process.

**CB:** One thing I’d like to add to what you just said is lactic acid itself is called a bacteriocin. And what a lot of people don’t realize is – and if I may, I’d love to share this – it’s an exciting aspect of microbes and what they do. Microbes of the beneficial nature all have a metabolite or a bacteriocin – and lactic acid is one of them – that it produces to crowd out the more pathogenic bacteria in its own strain.

Let’s say a strain is a family, right? What people don’t realize is that bacteriocin acts as an antibiotic, meaning wiping out and keeping in control of those pathogenic species in that same strain.

**DM:** A natural self-regulating with natural feedback antibiotic, which is quite different from the ones you swallow that are generated by the chemical drug companies.

**CB:** Those are indiscriminate. They’ll go in and wipe out everything – good, bad, neutral and all. The way that probiotics work the beneficial bacteria is they make that metabolite, that bacteriocin that aids in crowding out something that could infect you. A lot of people
don’t know this. That’s how we created antibiotics in the first place. That’s what the pharmaceutical industry is pushing and putting into our feedlots.

We knew that, for example, on a stool analysis, you’ll see that E. coli as one of your beneficial strains that you should have in there in your gut. But that’s the beneficial form of E. coli that makes the bacteriocin or the metabolite that crowds out the pathogenic form of E. coli.

Every strain has this in it. Pseudomonas – we know that it’s that awful flesh-eating disease, and I can tell you a wonderful story about that of my sister and her mother (we have a different mother but we have the same father). Her mother had an accident, and she was riding a horse. She had this big gash on her leg near her shin – her tibia. It started to get infected, and her immune system wasn’t able to overcome that infection. She had the pseudomonas bacteria set in there, and it started eating the flesh.

Well, I have found a probiotic that has beneficial pseudomonas in it, and we were able to get that under control with just an oral probiotic. She was on rounds and rounds of antibiotics. It’s amazing to me that people don’t understand how important the lactic acid is and its bacteriocin. Some people say to me, Dr. Mercola, “I’m eating a highly acidic food. Aren’t I going to be acidic?”

**DM:** That’s a simplistic but obvious association that many people would have.

**CB:** Certainly. What I explain to them is just as you eat a lemon or you eat other kinds of acids that may be acid outside the body, once you bring them into the body and they're metabolized, they mobilize alkaline ash minerals. You actually have them from an acidic food – not all, but beneficial, natural acidic foods, those that actually metabolize alkaline. And they also help the gut which has... I focus on the colon in particular, because a lot of people don’t realize that the colon is not highly innervated. It doesn’t have in it a lot of blood supply, like the small intestine does. The large intestine needs that lactic acid, that butyric acid, and that acetyl acid to actually nourish itself.

I always tell my students, “How do you think the colon got its name?” Well, I’m thinking and in my own mind, “colonies,” “colon.” There’s colonies of bacteria that live in that large intestine and the small intestine, too – I’m just focusing on the large right now. Because it doesn’t have a lot of blood supply and nourishment from the blood supply of nutrients, it is dependent upon having colonies of bacteria that are beneficial in nature, thriving, teeming with activity to keep that colon healthy.

**DM:** Yes, indeed. Well, thank you for expanding on that. I’d just like to close a loop now on the actual production of the cultured, fermented vegetables. We had talked about crushing them up and using the shredder to do that, and putting them in glass ball jars and using celery juice, which is your innovation.

[---1:00:00---]

**DM:** But then once you’ve done that – you’ve got these filled ball jars with the shredded vegetables and you’ve got the cultures added – you still need to ferment them. One other little point that you’ve figured out, too, is you put this leaf of cabbage that is about
the size of the mouth of the jar. It essentially forms a seal and prevents – it's a minor tweak – the vegetables on the top from being oxidized.

**CB:** Yes. I noticed that when I was culturing my vegetables that, of course, these are living breathing organisms, so they expand in the jar. Using a mason jar, of course, you have the two-piece lid – you've got the rim, and you've got the actual lid. When you're culturing your veggies, don't tighten that so tight that air can't escape.

**DM:** Oh. That's a good point. You do it loosely. Because we started our fermentation experiment, and the person who did it actually did tighten and I noticed that when I opened it, the volume of the fermented vegetables decreased quite significantly. When I opened them up, then everything just expanded again.

**CB:** [Laughs] Yes. And they will bubble and will hiss out of the jar. They'll talk to you.

**DM:** Yes. That's true. So, don't tighten it.

**CB:** Don't tighten it. Just hand-tighten them. Just a little.

**DM:** So, air should be able to escape.

**CB:** It should. And you'll also... We'll go back to that cabbage leaf in just a moment and why I put it in there. But when you do your jar up and you just tighten it, let it naturally just stop turning. That's what I always say – just naturally where it stops turning. And then place those jars (if you made six jars or 12 jars) in something to catch the liquid. Sometimes as the organisms in the jar breathe (they're living organisms), there's carbon dioxide that builds up in the jar, you may see the top of the jar blow up, you may even see it crinkle, and it will go “pop” really loud. Don't be worried when you see that. You want that. That’s good. It means you have good action in that jar.

**DM:** It's working.

**CB:** Exactly. You know what? You also don't want your kitchen floor and counter covered with juice, especially stinky sauerkraut juice. So, you put it in something. Allow it to be caught. I put them in these big, huge, commercial-sized casserole dishes, and they’re perfect because they're quite shallow but they’re glass. They catch the juice, and we just rinse that out, and pour it off. Of course, you leave headroom in the jar. Always leave an inch and a half to two inches for expansion.

The problem is that sometimes during the fermentation process, what will happen is those veggies will literally fill up to the top of your jar. They'll be pushed up by the pressure in the jar, and the liquid will collect at the bottom. Now, those veggies at the top of the jar are not underneath the juice. They're anaerobic at that point. That's when mold can grow, like some undesirable things that are just in your immediate environment.

**DM:** Or they would be aerobic.
CB: They would be aerobic – exactly. They would be oxygen-exposed, right? What could I do? Because in the crocks, they would give you these big, stone weights to put down to keep the cabbage under the grind.

But in the jar, you’re not going to put a stone in the jar. What are you going to do? Why don’t I take a cabbage leaf? It’s amazing how it clings because cabbage is so rubbery. It clings to the side of the jar. As you press down on your vegetables, the juice should rise over your fingers. Meaning, if you press down, you should have a nice bath of juice cover your fingers and the veggies will be submerged under that juice – that celery juice. Then you take and put in the cabbage leaf. It’s usually a whole cabbage leaf.

DM: You don’t cut them in any way with a giant cookie cutter or anything.

CB: No. I smoosh it around and thentuck it. Tuck, tuck, tuck.

DM: Oh, so that’s the key. You don’t cut it out. You just take a leaf and fold it over.

CB: Yes. You’ll see it on the GAPS video, in the Cooking with GAPS. In the sauerkraut section, you’ll see me and you’ll see what it looks like after it’s cultured and how it kind of shrinks up. But it stays on top as a weight. That action of that rubbery cabbage clinging to the sides of the jars allows the juice to rise over that and push the veggies up, but they’re never exposed to oxygen. They’re underneath the leaf.

DM: Okay. Perfect. It makes sense. You had mentioned using these large casseroles just to collect the potential overflow of the sauerkraut fluids. But it would seem that most people – especially at this time of year when we’re recording this in winter – that the temperatures in their home are not going to be highly conducive to the fermentation process.

CB: Right.

DM: Well, they may be in the summer. If you can comment on the temperature you need. It seems that the strategy this time of year is to put them in these large coolers where you can fit 10, 20, or 30 of these jars, and then put a jar of hot water every day and replace it. That’s all you need to create a little warmer temperature for these to ferment.

CB: Certainly, the process of fermentation or culturing – those two words are interchangeable – is an art and a science, and there are variables involved. One of those variables is temperature. Another one would be time. Another one would be the medium which you are using, because something’s run out of a food source like a liquid would run out of a food source for the probiotics. So they stop dividing, and it’s done quicker. The fermentation process is quicker.

If you look at time and temperature as your variables, really, time is determined by temperature. Let’s say you’re fermenting in your kitchen. If your kitchen is 65 to 68 degrees, your culturing process will be slower. But if it’s 72, 75, it will be faster. Even some people say to me, “I’ll just put a heater up to 80 degrees.” No. Don’t do that. They
actually like it quite moderate. Veggies like to culture anywhere between 68 and 74, 75 degrees.

DM: Which is sort of the threshold for most people’s normal, ideal living temperature.

CB: Yes, but they think it needs to be a lot warmer. I think you would ask me at one point if you could put them in a warm bath in a crock pot. That would be too hot.

DM: What’s the danger of doing that? What would happen?

CB: Well, if it’s hot enough, which my crock pot on low is boiling (I can’t stand my crock pot), you’ll kill the microbes.

DM: They’ll actually die.

CB: Heat destroys microbes, and it destroys enzymes. So, you’re actually taking away from the beneficial, nutritional quality of the food.

DM: Stay below 80.

CB: Yes. Stay below 80, and 72 to 74 are fine. They just love that. That’s so comfortable for the microbes.

DM: That’s your Goldilocks weight range.

CB: But I really want to say something here, because I don’t want people feeling they have to go get a thermometer, put it in the cooler, and be kind of – for lack of a better word – very anal or nervous about this process. It doesn’t have to be that way.

If it’s generally cool in your home, give it a little warmth. Put a warm water bottle in it. Don’t pour boiling water in the bottom of your cooler. I see this all the time. That’s why I’m emphasizing these points. If you were to put them in a cooler, turn your sink on and pick the hottest water out of your tap, fill a jar, and just put it in the cooler. You might want to cover the cooler with a blanket or something.

DM: Okay. That makes perfect sense. It really is a simple process once you have it. Obviously, not intuitive, and you’ve made some amazing innovations in this that really makes it far more convenient and efficient. Once you’ve understand it, it’s a pretty straightforward process.

CB: It is! It’s very, very forgiving. Also, I’d like to mention if, for some reason, your cultures or your ferments don’t turn out like you wanted them to, try a different mix of vegetables. You can even make cultured chutneys. We make a pineapple-papaya chutney that is out of the Nourishing Traditions book from Sally Fallon that will just blow your socks off. It’s so good. It’s delicious. That way, you can have some fruit, but the good thing is all the sugars are gone.

DM: Yeah. That’s what the bacteria do – they eat them up.

CB: They eat the sugars.
DM: So, you don’t have to. [Laughs]

CB: Exactly! It is a forgiving process. People get very nervous and they say, “Can I open it up? Can I look at them?” Sure! Open it up and taste it. If it tastes good and you feel that it’s ready, put it in the fridge, because at 38 or 39 degrees...Remember, bacteria divide exponentially – you and I know what that means, Dr. Mercola.

DM: What’s the normal turnaround time for bacteria so you get an idea? The frequency, the range?

CB: Every 30 minutes, I believe, they double.

DM: All right. That’s profound. Just to give you an idea of the doubling process. I think it’s…

CB: 20 or 30 minutes.

DM: Yeah. If you double 30 times, I think that’s enough to – it’s somewhere there. It starts with a penny; like have more money that exists in the world.

CB: [Laughs] It’s like compounding interests.

DM: It’s a compound itself.

CB: Yes.

DM: It’s that last step that makes a profound difference.

CB: And keep in mind that – I see this a lot – your vegetables are going to be done in 36 hours, or your coconut kefir.

[---1:10:00---]

CB: Well, no. Don’t take that to heart. That’s a guideline, so if you see something and there’s instructions for culturing and it says 12 hours or 24 hours, you need to step back and say, “Wait. That’s in ideal conditions. What are my conditions?” And you need to adjust accordingly.

DM: Excellent. The other point I’d just like to mention that you cautioned me about earlier but I think it’s important to mention here also is that once the fermentation process is complete and you have this cultured jar of fermented vegetables, it’s easy to be tempted to eat it directly out of the jar. When you do that, you’re going to introduce organisms from your mouth into the jar. You just want to take whatever you’re going to consume, put it into a bowl and eat it from the bowl and not from the jar.

CB: Yes, and I’ll add to that. Make sure you take the clean spoon that you haven’t eaten off of after you serve yourself your serving or whatever size you want. Then take the spoon, press down the veggies back. Press them down into the jar, and place that little cabbage leaf back that you’ve put on the top or whoever you buy them from may not have that cabbage leaf. We do. But always smoosh them back down under the juice as much as you can in the jar. Because as long as they stay anaerobic and they are
refrigerated at an optimal temperature of 38 or 39 degrees, they will not continue to divide. And if they do, it’s very, very slow. So, the consistency, texture, taste will be the same as you move throughout your jars, and you won’t have mushy veggies, or fermented, alcoholic chutneys.

**DM:** Terrific. Actually, that is a good point, too. At what point does the fermentation process go into alcohol, or is that only an issue if you’re using fruit?

**CB:** It usually only is when you’re using fruit.

**DM:** Okay.

**CB:** Like if you make a coconut kefir. *[Laughs]* Basically you take the young, green coconut and you remove the water in the inside, which we teach in the CHFS course. Everyone opens up their own coconuts in the CHFS course, because it’s really not an easy task. We got people banging them on the ground. It’s kind of funny.

That coconut water only has so much beneficial sugar in it. When you’re culturing a liquid, it’s not going to have a shelf life that, let’s say, a vegetable or a fruit would, but even more so a vegetable. And there’s a reason for this, because there’s a lot of fiber, which is a prebiotic in the vegetables, right? There’s all the polyphenols that lasts a long time. It takes the microbes a long time to take action completely on the vegetables. That would take months, I would say. Just so you know, I had a jar of vegetables culturing for a year. It started out completely full, and now it’s about half-full.

**DM:** Okay. This is in the 75 to 80 degrees and not in your fridge?

**CB:** Exactly. I’m talking about outside, in the room temperature, for a year. They do consume the vegetables, but it takes a long time. With liquids in particular, what happens is they run out of a food source and the bacteria die.

**DM:** Oh. And they can’t ferment and it can spoil.

**CB:** It can spoil, but let me expand upon this. It’s called a metabiotic. I know that’s a new term that most people haven’t heard of but m-e-t-a, metabiotic, well, dead good bacteria actually can aid the living good bacteria. It can aid in the crowd-out. If your liquid isn’t “living anymore,” it still becomes a metabiotic, kind of like sourdough bread would be a metabiotic because you cook it.

**DM:** Okay.

**CB:** The organisms aren’t living. So, that metabiotic can still be beneficial. Don’t throw it away. But if you leave it out and you let it culture, it will become like a moonshine. *[Laughs]* It will get an alcoholic content, and I’ve had a lot of people say, “I love my kombucha” and “I love my coconut kefir.” “What happens is I get such a high from it – my cheeks get red, my ears get red,” and I said, “You’re consuming an alcoholic beverage at that point.”

**DM:** *[Laughs]*
CB: That’s why your feel so good. So, it’s gone a little too far. [Laughs]

DM: All right. That’s good to know. So, coconut water is a profoundly useful nutrient especially. But it does have sugars, and I think that’s particularly useful if you’re using it as an energy source, a sort of an alternative to Gatorade. But those sugars for many people – especially if it has too many grains and carbs – can be a challenge. But if you’re fermenting it, those sugars are digested. How long does it take to ferment the coconut water?

CB: Well, there are, of course, your temperature variables. So I would say at or about 24 to 48 to 72 hours, depending on how warm your climate is.

DM: Okay. It would be with a different starting culture as opposed with the ones you would use for the vegetables, I assume.

CB: Yes. It is actually a kefir culture. You can take whey from kefir. You can render whey from kefir, and it’s kefir whey and not yogurt whey. You can put some of that in the coconut water. I don’t find it has as good of a taste. I wouldn’t drink that batch. I would inoculate a small amount of that starter batch into a new batch of coconut water. That way you won’t get the whey taste in your coconut water. It’s called a transfer.

DM: How does one ferment meat?

CB: Oh! Very easily. That’s imperative that you keep it anaerobic. So let’s use a fermented fish, for example. Let’s take some mackerel. You can do salmon – whatever you want to use – and you can have your butcher or you fillet it, get the bones out. And this is in the Cooking with GAPS DVD video, by the way.

Now, some people are worried about parasites with fish. The onions that you’re going to put in there, the bay leaves, the peppercorns, and the salts are going to keep those parasites at bay and neutralize them, so they’re just dead organisms and you don’t even have to worry about that.

DM: A metabiotic. [Laughs]

CB: Yeah. Absolutely. You are a hundred percent correct. All you would need to do is slice up your fish in however bite-size pieces you want. Some people choose little chunks. Some people choose a whole big strand of fish.

DM: It does have to be cut off.

CB: Well, ideally.

DM: A bigger surface area.

CB: Yes. I’d say it has better action; microbes can get in from all sides at that point. I would just cut it out into bite-sized pieces (mackerel fillets or salmon fillets), put them in a jar, put in some onions (maybe like half of a small yellow onion or red), and maybe a tablespoon of sea salt. Now, people say, “Gosh! That’s a lot.” Well, you’re going to need that in here, because remember when I said that salt can crowd out the pathogens and
keep the good guys take over? You definitely want that one when you’re using meat or fish.

Add in some bay leaves – those are antiparasitics – so maybe three or four bay leaves, some peppercorn, and you could put some dill in there or cilantro. Whatever you feel. Maybe you want a ceviche kind of style or a more of a Swedish kind of style. And you cover that mixture with whey and water.

You’re probably going to use about quarter cup to half a cup of whey, which you’ve rendered from yogurt or kefir, depends on which one you want to use. You do that by: put your yogurt, get a sieve (a fine, mesh sieve), place unbleached cheesecloth in that sieve, pour your yogurt or kefir in, and then let the whey drip. Then what you have left behind is more of a Greek-style kefir or Greek-style yogurt. You can use that as a dip, or eat it as yogurt with some honey – if you choose to, raw honey is best. That way you don’t waste anything but have an inoculant with the whey that you’ve rendered, and you’ll be able to inoculate the fish or the meat with that.

**DM:** Now, if you didn’t have this whey or you just want to make it more expedient and convenient, could you just use a starter culture?

**CB:** You could. You could use a commercial packet. Absolutely.

**DM:** Would that culture be the same type of strains you use to culture vegetables, or more of the ones for the kefir?

**CB:** Oh no, you can culture vegetables with that as well. Cultures for Health is a wonderful company, by the way, and they have great cultures. They have everything you could imagine at their store. You can use the culture starter to make butter from cream. You can use it to make vegetables. You can use it to make… not yogurt, though, because the yogurt, we won’t culture it. It has to have the bulgaricus and the thermophilus in there.

**DM:** And for the kefir, it’s also in the specific strains.

**CB:** It is. It’s got the beneficial Saccharomyces boulardiiyeast in there. But you could use the kefir starter or the culture starter with the fish or the vegetables; it doesn’t really matter.

**DM:** Perfect. So it will work.

**CB:** Yes, it will work. And you cover your fish with the whey. Whatever the whey doesn’t cover, you fill up with clean, filtered water.

[---1:20:00---]

**CB:** Hand-tighten the jar, let it sit for a day or two, and then you have fermented fish!

**DM:** Oh. That’s the process. So does that require cooking at all, or is the fermentation process secure?
CB: No.

DM: So you just eat it fermented?

CB: No. Microbes are cooking it. Yes.

DM: Interesting. Very interesting. That’s great. You’ve provided us with a wealth of information. And there’s a lot more, of course, to know, and you’ve taken a lot of time, effort, and energy to create your Cooking with GAPS DVD. This has been some of the highlights of the DVD, but certainly there’s more information and there’s video in there that goes into great specific detail on how you can incorporate these cultured foods into your lifestyle. An amazing resource. You also have the resources of the classes that you conduct. There’s a number of items there for people to engage with and to acquire this information and knowledge, so they can implement this into their own lifestyle.

CB: Absolutely. The Certified Healing Foods Specialist – if you really want to learn how to culture foods, if that is something that you are interested in – I would highly recommend it. Not just because it’s our course. It’s just I believe that it’s information and education that everyone should have. Because it’s such a central part of the GAPS diet, you’ll learn a lot, too, from the video.

DM: There aren’t really many places teaching this.

CB: No.

DM: I mean, you learned it at Wigmore, but that was certainly not animal-based foods. There’s some culture in it and you had these innovations that I’ve never seen anywhere other than what you’ve developed. I think it really is a profoundly important advance in implementing this on a practical basis.

CB: I think so. I think that even if you decide not to do this for yourself (this process), seek out a good source of people that are because this is an untapped market. My vision – and Sally Fallon shares this vision – is that in every town, there’ll be the culture person. There will be a fermenter. Just like there’s a cobbler or the cheesemaker.

This is something that I foresee developing over the next 10 to 20 years to becoming a mainstream staple in our diet, we’ll understand the benefits, and it will be something that we’ll wonder why it took so long to get them into our diets, and we’ll see such profound health benefits. One thing you said to me that really just blew me away on the phone, you said to me, “I have a feeling that this is a big missing link in healthcare.”

DM: I’m convinced of that. That’s why I’m so excited about this collaboration that we’re having and just want to expand on this concept, too. Because as we’re speaking, this it is a challenge to the economy in the United States and in most of the world. And I’m firmly convinced – as I had quite a bit of a review of the economic literature, too – that things are going to get worse along before they get better. A long time. Now, that could be good or that could be bad. Obviously, there are going to be some challenges. There already are, and they’re going to get worse. You could take this as an opportunity to fill in a very important niche.
If you have a passion for this – and I’m sure many of you listen to this do – you can realize that you can learn this information, share it, and create a business opportunity. We don’t have any franchise, but I’m just paying some broad strokes here. But you can learn this and start a business. You can sell these foods locally or train other people to do it. It’s not proprietary information. Once you learn it, you can spread it. From that perspective, it’s useful. Caroline has got the courses that you can do that.

Additionally, if for whatever reason you just don’t have the time, effort, energy, ambition, motivation, or discipline to do this but you understand and appreciate the value of fermented foods, Caroline has a company that sells these. I was using yours for a month before we started using our own. So, if you just want to put your toe in the water and see if you can like the taste, you can order a bottle or two, or a jar actually, and see if you like them. If someone is in that latter model and rather than go fishing and catch the fish have someone prepare it for them (like you), how would they contact you for those fermented vegetables?

CB: You can go to CulturedVegetables.net or CulturedNutrition.com. Either one will take you to the website to order. The GAPS books are there, as well as the Cooking with GAPS DVD. You’ll be able to order the materials that you need and get involved. You can read about our CHFS program, too, in the NTA program there as well. This might spark some interest in you to fill this niche in your community. That’s the mission.

Our mission at Immunitrition is to inspire lifestyle change, and we want to do that through education, nutrition, and motion. I know that you are very much for exercise, too. But I think it’s important to mention here is you can’t exercise your way out of a bad diet.

DM: No. The most adamant persons about exercise cannot dispute the fact that 80 percent of the results that you are going to achieve are related to your diet. Not to diminish the importance of exercise, but you can’t do it without the diet. The diet is crucial. It’s foundation. Exercise in addition to, not in place of a good diet.

CB: A lot of people do that, and I see it often. Yes, we have the tools to help you learn this information. We’ve got a lot of resources online, too. We have culturing recipes on Immunitrition.com that will give you an idea of how to start and what it looks like, recipes, and things like that. If you want to make salsa, go check out our website, and you’ll see a recipe there on the culturing instructions page, or kefir, or kombucha, or cultured vegetables. It’s all there, and it’s a pretty extensive resource of information for you to implement this into your life most definitely.

DM: Yes. I’m very excited about it. I really feel very strongly about what you just said, and if we can catalyze a movement to get more people in the country to implement this type of process and integrate into their lifestyle and to their normal eating patterns large amounts of fermented foods, especially the vegetables, we’re going to see a radical change in health.

It’s a profoundly important part of the equation to have a solution for these health challenges that we’re all facing. It’s going to make a massive difference. There’s just no
doubt in my mind. It’s just so obvious. I’m just sad that it’s taking me so long to understand that it’s something this simple. But fortunately, it is what it is, and we’re all on a journey and we found the process now and it’s there.

Hopefully, we’ll facilitate and catalyze this integration into the communities and across the country and the world so they start doing something on a regular basis, so that we can start enjoying the health of our ancestors.

When I was treating patients, I just really loved treating patients from Eastern Europe as opposed to the United States. I never have to argue with them. They knew this because they were doing the traditional components. Culture foods, raw foods – they are already a part of their diet for ages. They understood it, so we need to get people in the Western communities and cultures back to that area, and this is one way to do it easily. I think this is one of the central missing links to the equation.

CB: That’s such good news to my ears, because I’ve lived this for 20 years and I’ve been shouting it from the rooftops. Now, I think people are starting to listen, and I am grateful to you for helping bring this to so many people – all your subscribers and people who hit your website – because you’re out there changing the world. You really are.

DM: Well, it’s not just providing information and complaining about things. It really is important to take a leadership role, and we’re seeking to do that. The people listening to this: you can also take your leadership roles in your own community.

CB: Yes.

DM: You take the bull by the horns, do this, and learn it. It’s not that hard. I know you have a lot of things going on, but you’ve got the rest of your life. And if you want to maximize your potential, you really need to start seriously integrating some fermented foods into your diet. There’s just no doubt in my mind. We started this process in my office, so that my entire staff and family can start doing this. We’re going through dozens of jars a week and probably a lot more than that since we just started the process, and more people start to integrate these. It’s really an important part.

You’ve got to be active in your own community. Or if you’re a business owner, do it where you work. Get your people and your staff interested in this. Certainly, in your little communities. Really, one of the things I’ve really most admired about Weston Price is that they’ve developed these local chapters. I think there’s hundreds and hundreds of them, maybe thousands across the country where people get it and they get together and form this little community. That’s what we need to do. We need to form these local communities where people can communicate and support each other and these profoundly powerful tools.

CB: Well, I have a foundation that I’ve been wanting to start for years. It’s called the GROWWW Foundation or Grassroots Opportunities for Wellness and Wealth. Because in the New York state, I’m a for-profit business owner with Immunitrition with my partner Jennifer Pecot. We can’t own a non-profit and a for-profit, so I’m actually seeking someone to help me grow (no pun intended) the GROWWW Foundation because what
that is a philanthropic, I should say, approach to help people start these small cottage industries.

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**CB:** We want a grassroots movement. We want people to do well while they help others become well. It's all abundance. That's our birthright. So the GROWW Foundation is in its infancy, Dr. Mercola, but I envision having GROWW chapters. By the way, Immunitrition is a Weston A. Price chapter leader – we're very proud to say that. But if we could have GROWW chapters all around the United States of people teaching others to start businesses and also starting them themselves and creating these cottage industries, that's where we have that local movement of bringing fermented foods into the local towns. People are going to embrace this.

**DM:** How would someone start incorporating this from your perspective? Before you address that question, why don't you start to explain what you teach people in the courses that you set up and the role you serve in that capacity?

**CB:** The courses at Immunitrition or the GAPS courses?

**DM:** Both.

**CB:** The GAPS courses right now are for practitioners. These practitioners are going to be providing GAPS care, either individually with an individual client or patient or GAPS groups. If you go to GAPS.me, the website, you'll be able to find a practitioner there. What they are doing is they are sort of a little army of Natashas out there. They're helping you implement the GAPS program. If you're working privately with your GAPS practitioner, you're going to be taking it step by step at your bio-individual speed or not.

If you are working in a group, there will be a weekly meeting, and you'll work on that as a group. The group will serve as support unto itself as well.

The first thing I think that's very important is that you read the book, the GAPS book, and then watch the video, the Cooking with GAPS DVD. You've got to be educated before you take your first step. Otherwise, it will feel too overwhelming. After you've read the book, you understand the concepts. After you have viewed the video and you're looking at the way the food is prepared, then you will take it step by step. Of course, there are stages of the GAPS diet, and you'll enter the first stage.

In your GAPS group or with your GAPS practitioner, they'll give you some homework. They'll say to you, “Okay. Your first thing to do here is to find some quality animal bones that you'll be able to make a broth with.” Your homework is to go out and get a stock pot, find bones, and make your first stock. And they'll take it with you just like that – step by step – as it is outlined in the book and in the video stage by stage on the GAPS diet.

**DM:** This video is called Cooking with GAPS – this one that you’ve compiled?

**CB:** Yes. Cooking with GAPS. It was a wonderful project; I had much fun. I was able to produce it, star in it, and be involved with every aspect of producing that video. It was a
great learning experience. Plus, I got to know Peter and Natasha very, very well. Peter's her husband, and they’re just wonderful people – so humble yet so amazing. The video will help you step by step and it mirrors the book, so they’re meant to be used together. You’ll be able to find a practitioner.

A lot of people are self-starters, Dr. Mercola. They will go out and implement this entire program. They'll be on the GAPS diet for two years. They'll completely reverse their health issues, and some really need some support. So, you have the option. You’ve got the materials, and you can be a self-starter, become a part of a group, or have individual care with a GAPS practitioner.

**DM:** What type of courses do you offer to help people on a one-on-one or in-person training session?

**CB:** In Immunitrition, what we offer is the Certified Healing Foods Specialist training, and we affectionately call that the CHFS training. What that course is is a food education course of food and lifestyle – around food, lifestyle around your food, getting connected to food. We teach you how to prepare a good 15 cultured foods in that program. There’s a knife skill class. There is education about probiotics and microbes in general. It’s called the Super Gut Bugs lesson. We call them super gut bugs. Before you even culture the foods in our program, you’re learning about how they work, what they do in your body, the science and the art behind the culturing process.

And then you get your hands-on. Some are demo. Some are hands-on with the cultured foods. But you get to taste the food in their cultured state, so you have a reference.

Your palate actually has a reference of knowing, “This is the way yogurt is supposed to taste and look. Now let’s make it.” We have cultured grains, even though I'm not an advocate of having too many grains in the diet. If you are going to eat them, you need to prepare them properly, and fermenting them is a wonderful way to make them very digestible and to release and make all the nutrients in them bioavailable.

But we will culture dairy, coconut water, tea – we’ll make kombucha. We’ll go through a whole lesson – two days in a kitchen setting – where you’re able to learn how to implement these foods. We have a chef that we hire that serves lunches each day that were in the kitchen at least.

It is a four-day program. The first two days, you’re in there with your hands in the food. You’re learning about food and connecting with food. I’ll get to the two days that are lecture-only in a moment, but our goal for the CHFS program (Certified Healing Foods Specialist) is to inspire people to take what we teach in this program and pay it forward.

You can even start a little business with this if you wish, or you can just share it with your friends and family. It’s getting connected to food.

Being a resource in your community as a certified healing foods specialist means you know where the CSA is and how to get people connected with it. Community supported agriculture, community supported kitchen. You know where the milk clubs are or the cow shares are. You know where the resources are to help people implement whether they’re going on the GAPS diet, whether they’re doing another kind of program.
You are their go-to, and that’s what a certified healing foods specialist is. It doesn’t mean that you have to take it into a business. You can just use it for yourself and be your own resource but connect with food. It’s a food education course.

The final two days of the training are lecture-only, and we teach you, if you wish, you can take this skill and use it with your family, or in an existing practice that you may already have practicing another modality. We teach you a CHFS dietary transition system. From soup to nuts, how do you get someone to transition from eating a standard American diet (SAD) diet all the way to a nutrient-rich GAPS-style or Weston A. Price Foundation-style diet?

We have all these little tricks of the trade. We give you a flash drive that is full of hundreds of videos and handouts. That little thing itself is worth the entire course. And you get to connect with people who are like-minded, network in your area. It’s such a fun course. I love giving this course, as well as the nutritional therapy course and the GAPS course. We’re all one in this work, Dr. Mercola. It’s just a different way that we’re teaching, it but it’s all the same thing. They all work well together.

**DM:** Well, I’m really excited about this, because it’s such a phenomenal resource, precisely the one that we need if we’re going to have a massive shift in the health of the country. Ultimately, I and other people who follow this issue very carefully strongly believe that the foundation is going to be through changing your diet, in spite of all the massive pressures and media exposures we have to eat unhealthy processed foods. So we need the resources to help reeducate us to these traditional patterns of awareness of food and understanding that doesn’t exist in our current educational system.

I’m just very excited about the resources you have compiled and made available, because I think this is the catalyst that’s going to be required to inspire people to greater awareness. We really need to spread this like wildfire, from my perspective, if we’re going to see such changes. Because you can tell people and give them articles about what to do, but ultimately they need someone to mentor and guide them through the process. And that’s exactly the type of resource you’ve created, so congratulations!

**CB:** I’ve thought of this big, gaping hole out there with this kind of information, and I said, “There’s got to be something out there to help people learn about food that is not based on dietetics or any kind of medical aspect of food. It’s got to be traditional cooking.”

So many people are scared of fats. We teach you how to speak to people about fats and why they’re healthy for you.

The Nutritional Therapy Association (NTA), their program does the same thing, but it’s got a little more of a functional piece to it. So, you’ve got food education, you’ve got the GAPS program.

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And you’ve got all of these wonderful programs that marry so well together. Some are for the professional. Some are for the lay person. Half the time or more than half the
time, the lay person that enters may be the CHFS program or takes the GAPS group in their area from a GAPS practitioner that Natasha has certified.

They'll end up and keep being so inspired because they'll see such changes in their health. They'll be so inspired to help others that they'll take the NTA course, nutritional therapist training. Or they'll become a GAPS practitioner, and go to school to be qualified to enter that program. It's really exciting to see how one training can inspire people to attend another training.

**DM:** As you're speaking, it occurred to me that most likely an effective strategy to help people with this process is to have clinicians who are really oriented towards this type of healing process, to have one of their staff acquire this type of expertise. The thousands or tens of thousands of patients in their practice – they can help educate them locally with someone who has been trained in this whole system. I think, to me, it's something that we should be moving towards.

**CB:** If I may, the team approach – together everyone advances mutually – it will take a team in the community to implement this education. But I think that's the way we have to go, like you said.

**DM:** Can you tell us how frequent these trainings are? Typically where they're located? You mentioned the time and the cost for the training.

**CB:** Sure. If you are a practitioner and are interested to become a certified GAPS practitioner, we are still working on the 2012 dates. If you can bear with us and be patient with us because we've just come off of a pretty big year, it's been a banner year. We're taking a hiatus for a little bit, but I know that in early January, I'll be meeting with Peter and Natasha to discuss those dates and plans for 2012. I don't have anything concrete right now. We're planning on something in spring and fall.

**DM:** So, twice a year? Just so you know, we're creating this audio…

**CB:** Probably four times.

**DM:** …this audio video presentation to be what we call Evergreen. Even though we're recording this slightly before Christmas of 2011, most likely we will be using it throughout most of 2012, because its content is going to be useful on a long-term. But when we get to the specific dates, that is, of course, going to change. So basically, that's twice a year you're going to plan it – spring and fall?

**CB:** Most likely four trainings in the year. We did four for this year for the certified GAPS practitioner training, so we'll probably have three or four trainings next year.

**DM:** Just go to your website to find the current schedule, which is where?

**CB:** They can either go to GAPS.me or Immunitrition.com, and look in the education menu on the main menu page.

**DM:** You're going to have to spell that out – the Immunitrition.
CB: Okay. It’s I-M-M-U-N-I-T-R-I-T-I-O-N – half the word “immunity” and half the word “nutrition.”

DM: It makes sense once you hear it, but I just want to make sure people got to the right site. So, that’s the GAPS training, and you mentioned a few other trainings.

CB: Yes. There will be the Certified Healing Foods Specialist training, which is the CHFS training for short. We will have one in New York. We have one every May in Long Island, New York. We have a beautiful kitchen where we’re able to hold that there. Then we have one in…

Usually, in the summertime, everybody’s gone. It’s not a good time to have a training, so we’ll have one in September and October. In September, we’re usually in your neck of the woods. We’re in Glenview, Illinois, which is right in the suburbs of Chicago. In October, we’re usually either on the West Coast in California, Portland, or Seattle. We’re not sure this year. Those are up on the website.

DM: All right. Thanks for sharing that. Actually for those who aren’t familiar with Chicago’s weather in September, it’s probably one of the nicest in the year of Chicago.

CB: [Laughs]

DM: So it’s a good choice of dates.

CB: And the final course that I’m an instructor for the Nutritional Therapy Association and again, this is for the more functional piece. As an osteopath, Dr. Mercola, I’m sure you value the palpations on the abdomen of the body and actually palpating organs and glands, and reflexive points. That’s what the Nutritional Therapy Association teaches you – the functional piece, plus a good nutritional education as well.

But they have courses, if you go to NutritionalTherapy.com. You can see that there are classroom and distance learning courses. They’re actually too numerous for me to mention here, but you’ll be able to see all the different venues and the different locations on the NutritionalTherapy.com website.

DM: Terrific. Well, thank you for helping us understand the resources that are out there. Hopefully these will continue to expand, because this is the type of education that really needs to be, I guess, expanded or utilized widely in broadly to help people incorporate these principles. You really do need this one-on-one mentoring to guidance.

There are a lot of exciting possibilities – certainly for your own personal, for your families – but then also as an opportunity, if you’re one of the ones who are challenged with employment at this time as many people are. This is something that you might want to consider or even have your children consider doing at some point. College grads are having a no-different experience in most people and finding a job is a challenge, so why not find one that’s not only going to serve your health but the health of many others? It seems like a really good way to serve many needs.
CB: And if you think about it, what is the most central thing that brings people together? I think it is food – when you sit around the table, you're sharing your day, you're eating together, and you're nourished only not with the food but with the social aspect around food in this country.

I have friends from Europe and they all sit down, they get together, they eat and they eat – they really eat. And they enjoy that time. So it's part of being nourished not only through the nutrients of the food, but also through the social aspect, and I truly believe that if we had people making cultured vegetables, having classes, making food together, and reconnecting with food, we'll all be a lot happier on a social level as well.

DM: I agree. It's a part of enjoying life to the fullest. It's an important element that many of us tend to fail to appreciate the importance of. I've certainly fallen into that category before – lunches by myself for many, many years just to try to be efficient. But I've grown through the years to appreciate the value of the social component, and seeking to engage with others during meals is a more enjoyable way to live life.

CB: Absolutely. I agree.

DM: Okay. Thank you for all you've done. I greatly appreciate it, and we've got all the resources for people. Hopefully, they will take advantage of that.