An Interview with Dr. Natasha Campbell-McBride

By Dr. Joseph Mercola

DM: Dr. Joseph Mercola

Dr. Natasha Campbell-McBride

Introduction:

DM: Welcome, everyone. This is Dr. Mercola. Today we are honored to be joined by Dr. Natasha Campbell-McBride, who is a trained neurologist in Russia and who now practices in the United Kingdom, particularly in England. She lives with her husband, who is from England. I was first introduced to her work through the Weston A. Price Foundation and through an article she wrote in the summer of 2011. Then I had the tremendous opportunity to meet her in person when we both lectured at the Weston A. Price's Wise Traditions Annual Fall event, where we both spoke at. I got a chance to connect with her personally, which was really delightful.

Let me just explain to you why I'm so excited to present this information. I think we all recognize the importance of the gut flora and their influence on your health. It's profound. We know that the gut serves as our second brain. It produces serotonin. They outnumber us cellwise by at least 10 to one. If we have one to 10 trillion number of human cells, we get 10 times of that amount of bacterial cells. The real challenge here is to identify strategies to optimize that bacterial population, so that we can live in a friendly, symbiotic relationship and they can nourish us, help us fight disease, and optimize our health.

The practical challenge, though, is it's not an easy thing to do. I have been a strong advocate of nutrition principles for many, many decades. That certainly gets you to a level of health, but the actual introduction of some of the fermented vegetables and this heal and seal process that Dr. McBride has developed over the years has just really performed these phenomenal benefits to human health. I'm just so excited to have her work here.

Initially, she got into this because she had a son who was born with autism. She was challenged and recognized that the traditional approaches didn't work. Even as a neurologist, those techniques were pretty, fairly flawed. Then she came upon these approaches that seem to apply the benefits. It's largely based upon her intuitive wisdom and the common sense she had growing up in her home country of Russia where this is second nature but is so foreign to many of us who are raised in Western cultures. She integrated the medical approach with traditional wisdom. That marriage is just so profoundly beneficial. It provides a really incredible set of tools that we can use.

I'm so excited to have this entire series that were going to do together. I'm firmly convinced –with just a little doubt in my mind – that if we can share this information with enough people and have pretty much every community in the country growing well, utilizing these principles, and helping people reeducate them about the basic processes

that have been abandoned over the years, we can start to recapture our health. We don't have to rely on drugs and surgery. We can prevent disease far more effectively.

I know it's a long introduction, but I'm just so passionate about the work that you're doing, and I'm really just delighted that you're here. So, welcome!

NC: Thank you very much. Thank you, Dr. Mercola.

DM: What I'd like to do with this specific interview is to establish a set of your recommendations that you provide for the people that you see.

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You can clarify this, but I think most of the people that you benefit are either through a long-term consultation over the Internet, indirectly through the lectures that you provide, and all the people that you have trained and provided information. What we want to do for future interviews, we're going to do a lot of specific conditions, a lot of pediatric, and a lot of general ones for adults. In those interviews, I want to include this set of instructions that people can use to really take your information – once they understand that your strategies are useful – and apply it. So, this will be the therapy video on how one is able to implement the GAPS program.

The GAPS stands for Gut and Psychology Syndrome. In some ways, I think it's somewhat limited, because I know that your initial approach was targeted for autism, but this just affects all of human health. It's just profoundly effective.

NC: Absolutely. We're not just talking about Gut and Psychology Syndrome, but we are also talking about Gut and Physiology Syndrome.

DM: Okay.

NC: Luckily, both abbreviate you the same thing, GAPS.

DM: Okay, great! [Laughs]

NC: Yes. *[Laughs]* They could both begin with "P". In terms of Gut and Psychology Syndrome, we are talking about the functioning of the brain of the person . Any dysfunction of the brain is usually connected to what's going on in the digestive system. In Gut and Physiology Syndrome, we're talking about the functioning of the rest of the body.

Hippocrates – although thousands of years ago – made a statement that all diseases begin in the gut. The more we learn now with all our modern scientific tools, the more we realize just how correct he was. Many other Grecians through the centuries after Hippocrates made the same statement and came to the same conclusion that every disease begins in the gut.

In terms of Gut and Physiology Syndrome, we're talking about autoimmunity. We're talking about multiple sclerosis, Type 1 diabetes, rheumatoid arthritis, lupus,

osteoarthritis, and all other autoimmune conditions. Of course, we are talking about inflammatory bowel conditions such as Crohn's disease, ulcerative colitis, and other inflammatory bowel conditions, because they also belong to the autoimmune group of conditions. We're talking about arthritis – all sorts, and all different forms of arthritis, including gout, migratory arthritis, and different types of [inaudible 12:37].

DM: Would you suggest that it's not only arthritis, but almost all inflammatory conditions also?

NC: Exactly. All the inflammatory conditions, various chronic skin conditions, various chronic kidney problems, urinary conditions, various allergic and atopic conditions, and various degenerative conditions. One group that has risen in the last few decades and that are growing are the other conditions, which are characterized by fatigue. Those are the chronic fatigue syndrome, fibromyalgia, myalgic encephalomyelitis (ME). These also belong to the Gut and Physiology Syndrome group of conditions.

DM: Terrific. If someone is suffering from the many conditions that you have mentioned or has any health challenge, it would seem as a wise and practical approach to implement your program. I'm wondering if you can recommend what you have found over the years to be a useful way to start the GAPS approach.

NC: Absolutely. I know that my book is called *Gut and Psychology Syndrome*. A person with multiple sclerosis is not necessarily going to pick it up and read it. What I'd like to tell these people is that I'm working on the second book, *Gut and Physiology Syndrome*. I'm not sure when it's going to come out. I want it to be properly written. I hope it will come out next year, but please don't wait for it. Still read *The Gut and Psychology Syndrome* – people with physiological conditions – because the nutritional protocol or the treatment protocol described in the book is also appropriate for your condition. Entirely appropriate, a hundred percent.

So, people with multiple sclerosis, rheumatoid arthritis, children with Type 1 diabetes, various inflammatory bowel conditions, psoriasis, chronic eczema, chronic cystitis, [inaudible 14:42] neuropathies, various chronic neurological conditions, and other degenerative conditions, please look at the functioning of your digestive system and please consider doing the GAPS Nutritional Protocol. Because once you heal and seal your gut lining and once you make your digestive system healthy and working properly again, you'll be surprised how many various symptoms in the body [inaudible 15:07] from your digestive system. Most start disappearing, because the health and the disease are usually born inside your digestive system. That's where they originate from.

You know that you need to heal something from the roots of disorder. You know that you need to address the real root cause of your disorder. You have to focus on your digestive system.

DM: Sure. I like your term "heal and seal." I think that may actually be a better term for your approach than GAPS, which is sort of in composite with the disease. The heal and seal for the treatment phase, at least I think, is really a profoundly simple and very

terrific metaphor as to what you're seeking to achieve. So how would someone start the program to heal and seal their gut?

NC: Okay. The GAPS Nutritional Protocol is designed to restore the integrity of the gut lining. Our digestive system is lined by very specialized cells, which are called enterocytes. These little cells only live for a few days. They work very hard. They live for two or three days. Then they get too old, too worn out, and the body shuts them off. They die and they get shed off. They get replaced by newly born, healthy baby enterocytes. The cell regeneration process in your gut lining is very, very active. It's a very active process.

DM: Yeah. Is it true that these cells are actually reproduced quicker than any other cells in the human body?

NC: Absolutely. They reproduce as quickly as our immune cells. Our immune cells are also very actively reproducing, because they are very hardworking cells in the body as well. We have a real chance to heal and seal our damaged gut lining, thanks to this wonderful process of cell regeneration.

But here's the catch: in order for the body to give birth to healthy functioning baby enterocytes, it needs two factors. It needs building blocks for them, because they're made out of certain nutrients. They're made out of proteins, out of certain fats, vitamins, enzymes, and other active molecules. All these building blocks need to be provided for the gut lining to give birth to the cells. That's one. Second, it needs the whole process to be orchestrated by the beneficial microbes in our digestive system, by the beneficial healthy gut flora.

In people that we're talking about – GAPS people – they don't have either of those. They run out of building blocks. They don't have enough to actually give birth to healthy enterocytes. Secondly, their gut lining is populated by pathogens or pathogenic bacteria, virus, fungi, worms, protozoa, and other pathogenic microbes. The beneficial flora is now dead. The beneficial microbes are now dead.

In animal experiments which were conducted by scientists in laboratories, when they sterilized the digestive tract of the animals, they found that the whole cell regeneration process in the gut lining goes completely wrong. The travel time of the baby enterocytes doubles. It turns them cancerous. Enterocytes are born already mutated, and some of them turn cancerous. They are unable to fulfill their functions: breaking down the food and absorbing the food appropriately.

We have to provide those two factors for the gut lining to heal and seal. We need drive our pathogens and replace them with beneficial flora. We need to provide all the building blocks for the gut lining to give birth to baby enterocytes.

That's what GAPS Nutritional Protocol does. They feed the person with the very foods that build the gut lining, that allow the gut lining to give birth to baby enterocytes, and at the same time provides all the probiotic beneficial bacteria in the form of the supplement and fermented foods for the person.

DM: Terrific. That's a good start. Thank you for sharing the physiologic basis of optimizing these enterocytes. It really provided the foundation for our nutritional status. What are the first steps that one does to initiate this heal and seal program?

NC: Absolutely. The GAPS Nutritional Protocol contains three factors in it. One is diet, and that is the most important intervention, because the digestive system is a long tube, and what you fill that tube with has a direct effect on its well-being. You want to remove all the foods which challenge the gut and which are difficult to digest.

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You need to provide it with lots of foods, which feed the cell regeneration process and allow the gut lining to rebuild healthy layers of enterocytes.

The second part of it are the supplements, which we talked about in my previous interview. The third group is detoxification and making some lifestyle changes, which we'll talk about at some point in these years.

Let's focus on the diet. The GAPS Diet is structured in three stages: GAPS Introduction Diet, GAPS Full Diet, and coming off the GAPS Diet. These are the three steps, but it doesn't mean that you have to follow it in that order. There are people who start from the GAPS Introduction Diet and go through all the steps, because GAPS Introduction Diet is structured in six stages. The foods are introduced gradually in the GAPS Introduction Diet. It takes a lot of perseverance, patience, and time.

The Full GAPS Diet provides a much wider range of foods for the person to eat. That's the diet that you reach, and you stay in it for about a year or sometimes longer, until all your digestive problems have gone and all the other problems in the body and in the brain have gone. When you have achieved full health, then you can move into the third stage of coming off the GAPS Diet, where you can gradually start introducing foods which are not allowed within the GAPS Nutritional Protocol.

Some people start from the GAPS Introduction Diet and follow through the stages. Some people start from the GAPS Full Diet. They follow that for a while. Then they try the GAPS Introduction diet later, if they feel that there's more healing to achieve in their body and they're now organized to do that.

Some people go through the whole procedure of the introduction diet, full diet, and then find that something happens in their life. They acquire an infection. There has been a particular stressful period of time in their lives, which causes their aggression in their symptoms. They have to backtrack to the introduction diet. So, it is up to you which diet you want to choose. I will just give you some brief guidelines on what kind of diet would be more appropriate to start with.

If you or your child is predominantly prone to diarrhea, then GAPS Introduction Diet is something that you should start from. This diet will clear diarrhea very quickly. It will firm up your stools very quickly, and it will remove many other digestive symptoms quickly. If you have other pronounced digestive symptoms such as flatulence, pain, aching, diarrhea, mixed stools, burping, or reflux, again it is best to start from the introduction diet and forward step by step, because the introduction diet has an ability to clear those symptoms quite quickly and to clear your digestive discomfort quite quickly.

DM: Is the introduction diet the one that's the most severe and restrictive?

NC: It is the most restrictive, and it is more difficult to follow than the Full GAPS Diet. If you have severe food allergies and food intolerances, that is a group of people in our modern world that is growing and growing. It's quite a large group of people now. What's happening here with these people is that there's nothing wrong with the food they eat. What's wrong is that you're gut lining is like a [inaudible 23:47]. It is damaged. It is coarse. Foods don't get the chance to be broken down properly before they're absorbed into the bloodstream.

DM: This is the traditional leaky gut syndrome?

NC: Exactly. They're absorbed in their partially broken down form. When the immune system finds these maldigested foods in the bloodstream, it looks at them and says, "You're not food. I don't recognize you as food. You look foreign to me," and the immune system attacks them. As a result, you get all the symptoms associated with food intolerance.

These symptoms are not the traditional allergy. They are not the IgE type allergy where you get an immediate reaction. The reaction can be immediate. It can be delayed for an hour. It can be delayed for a couple of hours. It can be delayed for a couple of days or for a couple of weeks.

At any moment in your life, you can actually never be sure what exactly you're reacting to. Because you may be reacting to a piece of meat that you have eaten a few weeks ago, at the same time you're reacting to a piece of bread that you have eaten 10 minutes ago, and at the same you may be going through a reaction to a broccoli that you have eaten a couple of days ago.

These reactions overlap on top of each other. It is impossible for the person to decipher what is exactly he's allergic to, and what foods they want to remove. So, the classical approach to allergy does not work in this group of patients. You can't just remove these foods and everything will be fine – not at all.

What these people find is that they may do a test for food allergy or intolerance. The test says that you're allergic to A, B, C, D, and E. They remove these foods in their diet and find that they're continually reacting to new group of foods and then to another group of foods. Then these people fairly quickly finish up with hardly anything left to eat. Even the handfuls of foods that they can tolerate are causing some reactions. Their diet becomes more and more impoverished. The person becomes more and more malnourished, and more ill.

What's happening in your situation? Forget about the testing. Forget about removing the foods. Just focus on your gut lining. Heal and seal it. Heal all those holes in your gut

lining. Then the food will start digesting properly before it is absorbed, and your food allergies and intolerances will disappear. This is the group of patients that does very well following the GAPS Introduction Diet.

People who should definitely start from the GAPS Full Diet and who should not start from the GAPS Introduction Diet are those people with chronic constipation. People who say that "I have never had diarrhea. I have been constipated all my life. Generally speaking, I usually react with constipation" – these are the people who rely on fiber to remove their bowel at all.

The GAPS Introduction Diet removes fiber, because for people who have gluten inflammation in the gut lining, any erosions or ulcerations in the gut lining, fiber scratches, irritates, and aggravates the condition. The GAPS Introduction Diet has very little fiber in it. If a person is prone to chronic constipation, they get even more constipated.

What I recommend is that these people go on a Full GAPS Diet first and follow it for a while or a few months, get its benefits, get regular stools, and see what's happening. Then several months later down the road, if they feel that they are not achieving 100 percent benefits, they can consider the GAPS Introduction Diet at that stage. Because by then, by following the Full GAPS Diet, using fermented foods, and using probiotics, they would have changed their gut flora already. The whole milieu in the gut would have changed to the introduction diet much safer. If they find that they don't get constipated to the same degree, they can handle it.

Another group of people that I recommend to not start from the introduction diet but from the Full GAPS Diet are people who are very busy, who are travelling, and who find it hard to make time cooking or pay much attention to organizing their meals at all. The Full GAPS Diet is easier to follow altogether, because the list of foods that are allowed is much wider and much larger. You can manage that when you're busy, travelling, or working very hard. The introduction diet requires much more concentration, much more cooking, much more being at home, and paying attention to what's going on with your body. Follow the Full GAPS Diet and you will get benefits – tremendous benefits.

Later on in your life, maybe you can organize yourself. Organize your work a bit better. Perhaps you can travel a bit less. Be at home a bit more. If there is a need for you to follow the introduction diet, if you still suffer from food allergies, for example, or still have bouts of diarrhea, abdominal pain, flatulence, refluxes, and other symptoms which have not cleared on or before the Full GAPS Diet, then organize yourself for a few months, so you can be at home, cook, do a little shopping, and plan your meals, and you can follow the introduction diet. At that stage, the introduction diet will clear those remaining symptoms for you.

Also, adults with depression, attention deficit hyperactivity disorder, obsessivecompulsive disorder, some other problems perhaps, multiple sclerosis or some neurological conditions who don't seem to have particularly severe digestive problems – there is a group of patients like that who say that "Well, my stool is regular. I don't have any abdominal pain. I have no indigestion, and my digestive system seems to be okay." But when I test these people or when I put them on my GAPS Introduction Diet, I find that they do have abnormal gut flora.

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It's just that their digestive system is compensating for it. The human body has an amazing ability to compensate for the problems. The body can work around the problem for a very long time before it can start giving you signals that something's wrong, and that's the problem. The signals are the symptoms. For example, you can have cancer in your body for 20 years and there are no symptoms. Until the first symptom appears, the body compensates. It works around it.

Even with that person, their digestive system is not constitutionally their weak point. The person may have abnormal gut flora, leaky digestive system, all that's happening to GAPS patients, or toxins leaching out of the digestive system being circulated around the body and causing their disorder, but the digestive system is compensating, and it does not have abnormalities at all. They do not have flatulence. They do not have abdominal pain or any other digestive symptoms.

But when these people do follow the GAPS Nutritional Protocol, their depression, hyperactivity disappears, obsessive-compulsive disorder, and some other symptoms disappear, which means that the gut is healing, the whole pathological vicious circle is being broken down, and the person is healing. For these kinds of people, I do recommend to start from the Full GAPS Diet. It's easier to follow, and it's easier to motivate that kind of person.

If you're a parent and you have a teenager in the family with any of these conditions who don't seem to have any particular digestive symptom, start that teenager on the Full GAPS Diet. Teenagers are difficult anyway; it's difficult to change their diet anyway. Demanding teenagers to follow the introduction diet will be so much more difficult than trying put them on the Full GAPS Diet. It is easier to convince then to follow the Full GAPS Diet because of a wider range of foods that they can eat.

Not everybody has to start from the introduction diet. Just think carefully. Read both sections of the book. Read the whole section on the diet and the nutritional protocol. Listen to your inner sense. Listen to what your body is trying to tell you. You decide for yourself what would be more practical for you personally, for your personal situation. Maybe you should really start from the Full GAPS Diet, and later on – perhaps if you need to – you can consider going through a period of the introduction diet.

DM: Terrific. The first step is to actually understand what's involved in understanding your specific situation or scenario and choosing which program would be best. Once you make that, do you want to outline some of the basic principles of the Introduction and the Full GAPS program now?

NC: Absolutely. Let's start with the introduction diet. What do we do here? We have six stages in the introduction diet. Why? We start from Stage 1. What do we do in the introduction diet? We remove the fiber, because fiber is an enemy for GAPS people.

Fiber has received a lot of attention in the nutritional literature ever since there were a couple of papers that started coming out. There were studies from Africa conducted on indigenous African tribes, where a couple of nutritionists went there and researched these people. They took a very one-sided view of the diet of these people. They decided that all the health benefit that these people have were due to the fiber that they have in their diet. There were many, many other factors in their diet that contributed to the health of those indigenous African people, but they were missed by these researchers.

For whatever reason, they came back to the West and published their papers. Their idea was picked up. Fiber was pronounced as this panacea, anything that is wonderful, and that it can only be good.

That is not true. Fiber feeds microbes. Human digestive system has not been designed to break down fiber. It's indigestible for humans. How does fiber work in the human body? It finishes up undigested in the bowel. The bowel is the most populated area of the digestive system in human beings, where majority of our gut flora is.

If your gut flora is healthy, if it is predominantly dominated by beneficial probiotic species of microbes, these microbes will feed on fiber. They will grow in numbers. They will feast on it, and you will get wonderful benefits from it. But if your bowel is predominantly dominated by pathogenic microbes, pathogenic microbes will feed on fiber. They will proliferate. They will grow in numbers. Your disease will get worse. They will cause it, because the fiber equally feeds the good and the bad microbes in the digestive tract.

In GAPS people, their digestive system is predominantly populated by pathogens. That is why fiber is not good for them. That is why we want to remove it for a period of time to allow those pathogens to die out and reduce their colonies and their population, while we are trying to pour in beneficial microbes, allowing them to replace these pathogens, to drive them out and to kill them off.

That's the first thing with our introduction diet. We remove fiber. Secondly, we put the probiotic beneficial microbes into the digestive system, because without their presence, no healing can ever happen in your digestive tract. You don't even expect any healing without the presence of beneficial microbes in there. With do it in two forms. We introduce probiotic foods, fermented foods, and we introduce commercially produced therapeutic-strength probiotics. These are aggressive species of probiotic bacteria, which have an ability to kill pathogens and to drive them out and to replace them.

DM: I'm sorry for interrupting you. These aggressive strains, are these different from the strains that are actually being cultured in the fermented vegetables so there are a supplement to them rather than the same strains?

NC: There are supplements. Some of them are the same, but there are some which are a supplement and which do not colonize the human digestive system. They go through it. They transit through the microbes. But with every transit through the digestive tract, they do a lot of good work.

For example, soil bacteria. The bacteria which not really live in the soil, that's Bacillus subtilis, Bacillus licheniformus, and some other species of fungal growth. Naturally, they are not supposed to live to colonize in the digestive tract of humans. They go through us. But they have a real ability to kill pathogens, to clear them out, to stimulate the immunity, and do good work in the digestive system. That's why I like probiotics which contain some soil species of bacteria – not only Lactobacilli and Bifidobacteria, not only human strains.

DM: The bacillus actually makes the vitamin K2 also, isn't it?

NC: Absolutely. They produce B12, vitamin B6, vitamin K2, biotin, and some other useful nutrients for us. There is some research that seems to focus on this, from a couple of microbiologists in Russia. They argue that soil bacteria are supposed to be the resident bacteria in the human digestive system, but that is sort of different accounts in microbiological science. The majority of microbiologists agree that they're transitory. They're not supposed to live in the digestive tract of humans.

Coming back to the GAPS Introduction Diet, we have mentioned that we remove fiber. We have mentioned that we put a lot of probiotic microbes into the digestive system. They are the ones that orchestrate and manage the whole healing process in the digestive tract. Without them, there will be no healing.

The third factor: the GAPS Introduction Diet provides large amounts of all those building blocks for the gut lining to give birth to baby enterocytes to rebuild its integrity and to build new layers of healthy cells, which will grow, spread, and heal and seal the damage and leaky digestive lining of the person.

These three factors ensure that the gut heals much quicker if you follow the introduction diet. That is why people who follow that particular stage of GAPS Nutritional Protocol found that their food allergies disappear much quicker. We have many people who have healed themselves and have removed their food allergies and intolerances completely. Now they can eat foods which they could not even touch before.

The same happens to people with inflammatory bowel conditions and other severe digestive disorders, and to any person who got serious digestive symptoms – diarrhea, ulcer, constipation, abdominal pain, abdominal cramps, reflux, indigestion, and any other symptom coming from the digestive system and indicating and signaling to the person that the digestive system is in trouble.

What we do on the first stage of the GAPS Introduction Diet, all we use is homemade meat stock, homemade bone broth, and soups with well-cooked vegetables.

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We use vegetables which have lower amounts of fiber. We remove all the fibrous bits from the vegetables, and we cook them very well. Because when we cook vegetables, their cellular structure gets broken down, and they are much easier to digest. They become more of a feeding and nourishing food rather than a cleansing food.

Raw fruits and vegetables are indigestible for the human digestive system. They don't feed us; they cleanse us. Mother Nature gave them to us with an intention to clean our bodies and to detoxify us, but not to feed us. They do not feed.

But as we cook the vegetables and as we ferment the vegetables, we break down their cellulose structure. They become less of a cleansing detoxifying food, but more of a feeding and nourishing food. We have soups with well-cooked vegetables. We have meat and fish, which have been cooked in water for a long time so their protein structure is unraveled, soft, gelatinous, and is much, much easier to digest.

DM: Can I interrupt you here? It's an important point. There is a large group of people who are firmly convinced to the value of raw foods and its nutritional components. When you cook it or process the food, you diminish some of the value of the food. I understand that from the fiber component, you made it really clear. I'm just curious about the nutritional content, because it's an important concept that many of these vegetables in the raw state really can't be digested and their nutrients can't be utilized.

Do you believe that the benefits and the availability of nutrients are actually increased for many of them when you cook them, as opposed to eating them raw?

NC: I'm glad you asked this question, Joe, because there is a huge amount of misinformation in this area. We live in the world of nutritional misinformation. *[Laughs]* You are bombarded by it everywhere, starting from your TV, glossy magazines, books, and finishing up with the government's food pyramid.

DM: Of course. [Laughs]

NC: No wonder people are confused and bewildered by all these huge amount of misinformation everywhere. Let's clear that misinformation. Mother Nature provided us with two groups of foods, natural foods.

Obviously, we're not talking about processed foods here. Processed foods have been created by our food industry to serve the food industry. They do not serve the human body. These foods do not feed us. They do not cleanse us. They do not serve your body at all. They just pollute us, because they have been processed to increase their shelf life and to make them more possible. Let's remove those foods out of the equation altogether.

We're talking about natural foods, which Mother Nature has created, in the shape and form that Mother Nature had created them. We're talking about meat, fresh fish, fresh eggs in their shells, fresh dairy, fresh fruits and vegetables, whole grain, whole beans, whole nuts, and whatever other plant foods there are.

Mother Nature has provided us with two groups of natural foods. One is plants, and we are talking about fruits and vegetables, grains, beans, and nuts. The other group is animal products. We're talking about meat, milk, and eggs. These are the two groups.

There is a great distinction between these two groups of foods. The animal foods, the fish, eggs, and dairy products are the foods that Mother Nature gave us to feed our cells. They are the feeding foods. They are the building foods. They build your bones, muscles, brains, immune system, and all the other organs in your body. They are the building and the feeding foods. They feed you and build you up.

Plant foods, Mother Nature gave us as cleansers. They do not feed us. They do not nourish us. They do not build your bones. They do not build your brains. They do not build your muscles. They do not build, nourish, or feed anything. They are cleansers. They were given to us by Mother Nature to keep our bodies clean and to detoxify us.

Both are important. It is important to be fed well, and it is important to be cleansed well.

Only yesterday I had a patient in my clinic. She was a beautiful girl who is very tall – about 185 centimeters tall – but she weighs only 51 kilograms. She's severely malnourished. Her menstruations have stopped a year ago. She's a pale and a very malnourished-looking girl. This is a person that is very conscious of what she eats. She loves cooking. She excluded all the junk and all the processed foods from her diet. She was always healthy, until she changed her diet a year ago.

She listened to the government food pyramid. She listened to what the T.V. says. She listened to the glossy magazines, and to all the other misinformation in the world. She decided to be healthy. She decided to become a vegan. For a year, she lived on fruits and vegetables, grains (whole grains that she cooked at home), whole beans, nuts, and all other plant foods she prepared raw and natural. She ran into great trouble. She washed herself away.

I have explained to her, "What you have been doing for a year is that you have been cleansing yourself, because you have been eating only cleansing and detoxifying foods. You are not feeding yourself. So you cleansed yourself, and cleansed, and cleansed, and cleansed, until you became washed out. Now, it's time for you to feed yourself, because plant foods do not feed us."

The natural cultures all over the world through the millennia have understood this. That is why they developed methods to make plant foods more of a feeding food and digestible for the human digestive system. The methods that they have developed to make plants more digestible, more feeding and buildings are cooking and fermentation.

That is why grains were always fermented or they were cooked. Fruits and vegetables were fermented and cooked. When we ferment and cook plant foods, we break down their structure. They become less of a detoxifier. They clean up your body much, much less. They don't clean your body sometimes at all, but they move into the group of feeding foods. They become more of a nourishing and more of a feeding food.

DM: Where would vegetable juicing fit in that scenario? Does the processing of it convert it more to a feeding and nourishing food?

NC: No. The juices do not nourish us. Again, they cleanse us.

DM: Okay.

NC: Of course, this distinction is not 100 percent. There is some overlap. Animal foods have some cleansing ability, without a doubt. For example, raw egg white is one of the champions in chelating toxic metals in the body. It's a wonderful chelator of toxic metals, as long as you consume it raw from pastured eggs (where chickens are running around in the pasture). The same with plant foods – they have some feeding abilities and some building abilities, but it is negligible compared to the animal foods.

So, animal foods feed us; plant foods detoxify us. Why does that happens? It's because the energy on our planet comes from the sun. Everything on our beautiful planet gets recycled.

DM: Yes.

NC: The only new input of energy that comes to the planet comes from the sun. In other words, a group of things on this planet that can capture the energy of the sun and convert it into solid matter: these are plants. Plants have photosynthesis, so they are able to capture the very energy of the sun and convert it into solid matter that can be eaten.

Then Mother Nature created a group of herbivorous animals, which can consume the energy of the sun in the form of plants, consume the grasses, the plants, and the plant matter. In order for this group of animals to be able to break down the plants, digest them properly, and convert them into another form of solid matter into meat, milk, eggs, and fish, Mother Nature provided them with a very special digestive system. Herbivorous animals have got several stomachs called rumen, and these stomachs are filled with bacteria with microbes. It's not the cow that digests the grass; it's the microbes in its stomach – in the rumen – that breaks down the grass for the cow.

The interesting thing is the cow actually chooses the same mouthful of grass about 200 times. The zoologists would calculate it. She would chew one mouthful of grass for a little bit, break it down, then send it down into the rumen. The bacteria in the rumen will work on it, extract what they can out of it, and then they will send it back to the mouth. She'll regurgitate it. She'll munch it again just for a little bit, send it back into the stomach. That happens 200 times with the same mouthful of grass.

Another fascinating fact that I have discovered recently is that most carbohydrates in the plant matter, in the grasses, and in other plants that the herbivorous animals swallow are converted by the bacteria in their rum into short-chain fatty acids. They absorb all the carbohydrates largely as fat.

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Herbivorous animals – cows, elephants, zebras, giraffes, deer, and other herbivorous animals – they are on an extremely high-fat diet. That is why they are so huge. It's the bacteria inside their digestive system that break down all these plant for us.

We humans don't have a rumen. We only have one small stomach, and we have no bacteria in that stomach, if you're healthy. A healthy stomach in a healthy human is the least populated area of our digestive system. The numbers of bacteria, they're counting hundreds, which is a very meager number. In fact, human stomach produces acid and pepsin. These two things are only fit to break down one group of foods effectively, and that is animal foods. They are fit to break down meat, animal fat, fish, eggs, and milk.

They're not fit to break down plants at all. That is why the plant world is indigestible for human beings. Most of them, when we consume them in a raw state in particular – in their natural state – they go all through our digestive system, and they finish up practically undigested in the bowel where the bacteria – that's our equivalent of the rumen – work on them, break them partially down, and convert them again into soft-chain fatty acids. We absorb them as fat, and that's the boost to our human metabolism. But if you try to live entirely on these plant foods, you will run into trouble as vegans do.

In the laboratory, our nutritional scientists have been working on plants for a long time. When we break down plants in the laboratory, we find that they're full of nutrition. They have large amounts of protein, fats, carbohydrates, this and that vitamin, [inaudible 52:04]. Then this information is published in tables in the nutritional literature and popular literature. That lures the vegetarians and vegans to a full sense of security. They look at all these tables and they say, "Oh gosh, look at all these wonderful nutrition I'm getting from munching on my carrots and spinach."

But the trouble is these tables are misleading. They're downright deceptive, because in the laboratory where we use all sorts of methods and chemicals to extract nutrients from plants – methods and chemicals, which the human digestive system does not possess. A calf possesses those methods and a sheep possesses those methods because they're herbivorous animals, and they have a rumen. We humans don't possess that. The human digestive system cannot extract all the goodness out of those plants. They're indigestible for us, so they do not feed you. They were designed by Mother Nature as cleansers, as detoxifiers.

If you are a person who is overweight, very toxic, and feels overstuffed altogether, then for a period of time to follow a vegan diet is a good idea for this person, because they don't need to be fed anymore. They need to cleanse. So, for a couple of weeks, a couple of months even, just cleansing, cleansing, cleansing through a raw vegan diet is a good idea. They will wash out all these toxins from the body, they will cleanse, and they will feel great while they're doing that.

But when the body finishes with cleansing, when it's cleaned out, it will give the person a signal: "Right now I'm ready to be fed..." And that is the time when you need to start feeding yourself. In order to feed yourself, you have to consume animal products. You have to eat meat. You have to eat fat – animal fat. You have to eat fish. You have to eat

eggs. You have to good-quality dairy products, because these are the foods that Mother Nature provided us with in order to feed us.

If you look at all the traditional cultures around the world that developed their own indigenous diets for a millennia depending on where they live, there is no such thing as a vegetarian diet. It does not exist in nature, and it does not exist in the traditional tribal culture of humanity on this planet.

We human beings evolved as being omnivores. We evolved to eat everything that we can find in our immediate environment, animal foods and plant foods. People – depending on where they evolved, where they live, whether they lived in the tropics, Greenland, or Iceland – they would eat what they have locally. They would eat everything, including meat, fish, and all the plant matter.

Vegetarianism comes from a Western religious culture. It is a religious byproduct – vegetarianism and veganism. It was first explored by monks who lived in isolation in monasteries. These were usually male communities or men who have to live together. Their sexual energy became a problem for these people. They were looking for something that would reduce their sexual activity or sexual desire. They found that excluding animal products or meat and becoming vegetarians work very nicely. Indeed, in order for us to produce sex hormones, we need cholesterol, because they're made from cholesterol. We require vitamin A and vitamin D. We require a lot of protein. In order to produce sex hormones, they have to eat meat, eggs, and animal fat.

If you don't want to produce sex hormones, if you want to be infertile, and if you don't want to have any sexual desire, then the vegan diet is the right diet that you should follow.

DM: [Laughs]

NC: That's what these monks have found, and that became their practice.

Then in the 1800, there was a group of religious people. They were Puritans. At the center of that group was [56:11]. That's where the whole thing came from. He was a Puritan, quite an extreme Puritan. Puritans believe that all sexual activities or intimacy between a man and a woman is immoral and against God and should be greatly discouraged.

In order to do that and to get rid of sexual urges – the way they put it – they have studied the diets of these monks in isolated monasteries and communities and adopted that diet. They wrote some very compelling books and articles. They started evangelizing this way of life to people in order to reduce sexual urges and sexual activity. That's where the vegetarian diet was born for the first time. That was how the vegan diet was born. That is the history of vegetarianism in human society. That's where it's coming from.

So, if you want to reduce your sexual activity, if you don't want to produce children, and if you don't want to have any sexual energy at all, then perhaps the vegan diet is the

right diet for you to follow. But if you want to have a normal life, belong to this world, have a family, and have children – then do not follow that kind of diet.

Cleansing is one of the wonderful things that nutritional science has propagated and expounded on. There are many books now that are showing that a period of a vegan diet can eliminate Type 2 diabetes, and can eliminate many [inaudible 57:49] conditions, and all sorts of ailments and disorders.

Because if a person is toxic, overstuffed, and overweight, then a period of cleansing – just pure cleansing – is extremely beneficial for these people. Indeed, their blood sugar does go down, their diabetes does disappear, their blood pressure does normalize, and many other wonderful things happen to their body when the body is given a chance to cleanse and to remove toxins.

But then when the body finishes with that cleansing, it needs to be fed. Following a vegan diet or a vegetarian diet like that for a long period of time is unsustainable and should not be contemplated.

What's important for these people with all these disorders and all these degenerative conditions such as cancer, heart disease, autoimmunity, and other degenerative conditions are not caused by natural foods. They are caused by all processed foods, by the activity of our food industry. These foods will not cleanse the body. They do not feed the body. They just pollute the body and cause disease. Removing those foods forever is the best way to go if you don't want to have any disease in the body.

It is very important for people to listen to their bodies and to talk to their bodies and figure out, "What do I need right now? Do I need to cleanse right now, or do I need to feed myself right now? In what state my body is in? Maybe I need a mixture, some sort of somewhat on the middle ground between the two, depending on what's happening in my body."

If we have an anorexic, Joe, for example, or a malnourished person who follows some vegan diet or a vegetarian diet for a while, the last thing you want to do is cleansing them. They have been cleansing already for far too long. They're washed out. You need to feed the person. Feed and feed and feed, until they have restored their energy and weight, and have become far more energetic. Then they can bring more of a balance into their diet of cleansing foods and feeding foods.

But if you have an overweight, blurry person with high blood pressure and diabetes, perhaps the last thing that person needs right now is feeding.

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They need to be cleansed. Following a vegan or a cleansing diet for a couple of months is a good idea for that person. Once the cleansing is accomplished, then we bring back in the feeding foods and we find a balance and a middle ground between feeding and cleansing.

One of the oldest and most effective ways of cleansing the body and removing all sorts of degenerative problems is fasting. It is a very old European tradition to fast. It's biblical. It's actually proposed in every religion. Every religious practice has a period of fasting. Because what does fasting do? It cleanses. It allows the body to move away from feeding and building and actually attend to all that backlog that the body puts on the back burner of cleansing, of detoxifying, and of removing various toxins out of the body.

So, a period of fasting can be tremendously beneficial and tremendously healing. People have healed themselves from all sorts of incurable degenerative conditions with fasting. But of course, you can't fast forever, can you? You have to start eating at some point.

DM: I'm wondering if you could recommend periods that you'd advise for people to consider fasting. Also, maybe comment on some of what experts are recommending, which is called intermittent fasting, where the process is just not eating anything after dinner until maybe noon or late afternoon of the following day and you go into a 12 to 16 hours of fasting.

NC: What I would like to say here is that there are no prescriptive rules, and do not listen to anybody who tries to prescribe for you when you should fast and when you should eat. No scientist, no doctor in the world, and no laboratory can actually prescribe for you personally on what you should be doing. The only authority that you should listen to is your own body, because Mother Nature took billions of years into designing your body. It took an awful long time to work everything out to the finest detail in your human body.

Human bodies are the most marvelous designs in this world. It is a beautiful, beautiful creation. It has a very ancient built-in wisdom. It knows what it needs at every moment of your life. The nutritional composition of things that your body needs depends on what your body is doing at the time. If you're distracted, if you're under stress, if you're working to pass the exams, and if you're studying, your body will need one set of nutrients. If you're lying on the beach, you're resting – it's warm – and you have nothing to do in particular, your body will need a very different set of nutrients. Your mind cannot figure out what exactly your body need at any particular moment in your life. Only your body knows that.

How does your body tell you what it needs at every particular moment? If your body, for example, right now needs so much protein, carbohydrate, fats, B12, manganese, and zinc, how is your body going to give you all that complicated information? Even if your body had a way of telling you all that, how are you going to get that set of nutrients in order to serve your body properly?

Well, Mother Nature is kind, and it doesn't ask anything so complicated of us. Instead, it gave us senses. It gave us a sense of smell, a sense of taste, and a sense of pleasure from food.

Life has to be about pleasure and desire. These two senses – the desire for things and the pleasure – are not sinful. I know that our religious and political conditioning that we have been subjected to for centuries have pronounced these two words as sinful and as something to resist. That is very wrong. These emotions were given to us by Mother Nature with a very special purpose, because that's how the body communicates to you what it needs right now.

So, whenever the time comes to eat or you have a minute to eat something, ask yourself a simple question, "What do I desire right now? What would I love to eat right now?" The answer will pop into your brain immediately. Your body will tell you immediately, "I want this right now." That will be in complete harmony with the set of nutrients that your body needs right now depending on what it's doing, what the weather's like, what the season is like, and hundreds of other variables that the body is working with.

DM: Should there be a caution here, because for some people, especially in their disease conditions, those desires are going to be unhealthy foods.

NC: Absolutely.

DM: They might desire ice cream, pizza, or a number of different poor choices.

NC: Yes, I couldn't agree with that more. We're talking about natural foods, which Mother Nature has designed. Mother Nature has not designed pizza. Mother Nature has not designed ice cream. Mother Nature has not designed chocolate bars, and Mother Nature has not designed soft drinks. It did not.

Mother Nature has designed your body during billions of years and during the same period of time in a far world. It was designing the food on this planet.

Make no mistake. Your body knows the nutritional composition of all natural foods on this planet, but your body does not have the knowledge of what pizza is made from. It hasn't got the knowledge of what ice cream is made from, and it hasn't got the knowledge of what other things are made from.

The food industry is aware of that, so they put addictive substances into processed foods. There is a whole industry. There are thousands of chemicals specifically designed to make foods addictive. So you cannot stop eating them, and you become an addict. Many people who subsist on processed foods in our modern world, are addicts. They're addicted to pizzas. Their addicted to particular cookies, snacks, junk foods, or drinks, because they're addicted to chemicals, which are addicting to them.

These foods have no right to carry the noble name "food." They're not food. Everything in these foods are processed and mutilated. The proteins are mutilated. The carbohydrates are changed, their chemical structure. The fats have been mutilated. The vitamins and enzymes have been killed. These foods do not feed you. They do not cleanse you, and they do not serve your body in any positive way or whatsoever. They just pollute your body, and they cause disease. Nobody should be eating these foods. Nobody...

So, when I'm talking about listening to your body, I'm not talking about any of those foods. I'm talking about natural foods. Perhaps depending on what your body is doing, the answer may be right now that you want to have two fried eggs, a sausage, bacon, and a salad. Later on, perhaps your body will just say, "I just want an apple with a little bit of yogurt. I just want a handful of nuts, or I just want a salad, that's all." It depends on what your body is doing at that time.

It is a very large subject. I have written an article, which is called *One Man's Meat is Another Man's Poison*. It explains the subject in great detail. You will find it on my blog: doctor-natasha.com. That's where it's published. You can find the link on my website as well for this article, http://gaps.me. Please read that article.

Because we need use other senses as well. We need to use the sense of smell. We need to use the sense of taste, and we need to use the sense of satisfaction from food. Because if you provide your body with the right kinds of foods that it needs right now, it will give you the maximum satisfaction. You'll feel satisfied. You can forget about the food for a while, and get onto something else in your life. You'll have no cravings after that particular food, because you have satisfied your body with the nutritional content that it needs right now.

DM: Thank you for clearing it up, because it's a question I know that many would have after listening to this. It's a really important distinction, so thanks for explaining that.

NC: Exactly. I'm saying it for people to understand. Shall we come back to the GAPS Nutritional Protocol that we have been talking about? *[Laughs]*

DM: Sure!

NC: Coming to the GAPS Introduction Diet, we have the first stage. If you have a raging diarrhea, if you have a child who's producing this loose, foul-looking, foul-smelling stools, if you have a tummy bug – a child or yourself picked up a tummy bug– and you have vomiting and diarrhea, if you picked up some traveler's diarrhea or something like that, go on the first stage of introduction diet. That will clear your diarrhea in one or two days quite quickly.

If it's very severe and if your gut is being a vector in your body for clearing some toxins out, because many toxins in the body are removed through the bowel, particularly toxic metals such as mercury, lead, aluminum, and other toxic metals, which may be stored in your brain or in your bone marrow... But when your body starts clearing them out, it will pull them out of the brain, pull them out of the bone marrow, transport them into the bowel, transport them across the wall of the bowel inside the rumen of the bowel, and then expel them in your stool. When they are transported through the wall of the bowel, they cause so much irritation and so much inflammation that the natural reaction of the bowel is to pull water and salts in and cause diarrhea to expel these toxic stuff out quickly and effectively. Diarrhea is a cleansing physiological response for the body. It is not bad. It is good for you. If you have a consistent diarrhea, it means that your body is cleaning something out; it is dealing with something. Just trust the process, trust your body, and think, "What is it in my body that my body's trying to clear out? Maybe I should stop consuming something. Maybe I keep putting in some toxins that my body's clearing out through this vector, through the bowel, through the diarrhea."

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When you stop consuming that toxic substance, the diarrhea stops. In the majority of people, when they go on the first stage of introduction diet, the diarrhea clears quite effectively and quite quickly, particularly, if you introduce at the same time fermented foods.

What we introduce on the first stage of the GAPS Diet is yogurt, which is a dairy product. We ferment yogurt at home. It has to be fermented at home, because commercially produced yogurt doesn't follow the same instructions. The milk is not fermented long enough to remove all the lactose. The home-fermented yogurt is lactose-free. So, for people who cannot digest lactose, this product is lactose-free, because it's fermented for 24 hours. It has a different texture, look, and flavor – the home-fermented yogurt – so don't expect that it will look like the commercial one. I just know that this is an excellent product. It's a delicious and a beautiful product.

I do recommend that you go for organic milk to ferment, because non-organic milk contains all sorts of chemicals, which can continue causing diarrhea in your body and continue causing irritation in your digestive system. It is essential that it's organic. Going even further to the best quality of milk, I do recommend that you get raw, unpasteurized milk from a natural breed of cow such as Jersey cow, which is on organic, natural pasture – on grass, in the fresh air, and under the sunlight.

The trouble is that the majority of milk that is sold in the supermarket doesn't come from natural breeds of cows. These are not the cows that Mother Nature has designed. These are cows that were designed in the laboratories by scientists in order to produce huge, unnatural amounts of milk. The milk that they produce has a very different chemical structure than the natural milk. It's a completely different product. It causes all sorts of disorders, problems, and illnesses.

I have a stack full, at least at full height at home, of scientific studies that link commercial milk that is sold in supermarkets (from these Frankenstein cows) to the causation of cancer, heart disease, diabetes, autoimmune conditions, and all sorts of degenerative problems or childhood disorders. Indeed, all these studies have been done on these Frankenstein milks from these Frankenstein cows, which are then processed further. So the milk is wrong in the first place, and then it's processed, pasteurized, homogenized, possibly even more heat-treated, and so on.

Look for milk that's produced from natural organic pasture, and these kinds of cows, their milk does not need to be pasteurized. You can buy it raw and ferment it at home from raw. That is the best possible yogurt that you can produce.

If you haven't got enough access to raw milk, don't worry about it, buy organic – the best that you can buy – and ferment it at home. Because when we add the fermenting culture to the milk, these bacteria bring quite a lot of life back into the milk. They alter its structure and predigest the protein. They break down casein, [inaudible 1:13:33], and they predigest proteins in it. They predigest other substances in the milk, so it is much easier for our human digestive system to handle.

This is a particularly important issue for parents of autistic children to understand who will condition for the gluten-casein free diet, which bans all dairy products. I find that the majority of autistic children in my clinic do perfectly well on homemade yogurt made from organic, natural milk (like this), because the fermentation process predigests and breaks down the milk. It is an excellent way of introducing probiotic bacteria into the digestive system and many good nutrients, which were broken down and predigested for us.

DM: One of the problems with pasteurization is it damages the milk proteins that are very fragile. Would fermenting it compensate for that by predigesting these proteins, so you don't get the damaged proteins and precipitate some type of autoimmune reaction?

NC: I have a large group of patients in my clinic who have no accesses to raw milk at all. They just could not find it. It was not available, because it's not available in many countries around the world. They just buy whole organic milk in the supermarket – whatever they could access – and fermented it at home. And they got a very good recovery, so it does work.

Do your best. Find what you can – the best that you can find. I'd say that you can get a lot of healing done with simply buying organic fresh milk with full fat, of course, in your supermarket. You can do that. Because fermentation process brings back a lot of life into the milk, predigests it and breaks it down.

Another group of fermented foods that we introduce right from the beginning are fermented vegetables. I recommend making your own sauerkraut at home with the traditional fermentation method. The recipes are in my book and on my website. There are many other wonderful books now and companies that can actually make sauerkraut for you. You can buy it ready-made. What I recommend is that cabbage is quite fibrous. Fermenting cabbage predigests local fibers and breaks down a lot of it. It makes it far more digestible and much easier for the human digestive system to handle.

But for many people with diarrhea, ulcerations, and erosions in their digestive system, even that small amount of fiber is too much. I recommend that initially we just start from the juice from the sauerkraut.

For the first stage of the introduction diet, you just take juice from the sauerkraut. Start from a tiny amount of it per day and gradually increase the amounts per day. For the

first three stages of the introduction diet, you'll only be having juice from the sauerkraut. If certain amounts of healing have happened in the digestive system, the person is able to start introducing the fibrous cabbage itself from the sauerkraut.

DM: There's a number of different ways for you to create sauerkraut. If you use a commercial food processor that has a shredder that actually cuts the sauerkraut into very tiny particles, it's going to be a lot easier to digest than having the larger shreds, isn't it?

NC: Yes. You can also chew it. But nevertheless, in the first couple of stages, we do not introduce cabbage itself because it can be too much.

DM: Okay.

NC: In extreme cases of profuse, watery diarrhea, we have to start from a purely animal product diet. We do not introduce any plant matter at all. No fiber at all is introduced in the diet.

DM: Interesting.

NC: The person can only drink the meat stock – a cup of hot meat stock every hour throughout the day. They eat the meat that they made the meat stock with. The most valuable meats for GAPS people and for people with damaged digestive system are the gelatinous meats. I have heard many people who say that, "I can't eat meat, because it constipates me. I feel toxic. I feel terrible, and I feel nauseous."

What they are talking about is the meat fibers – the lean meat. Meat fibers are more difficult to digest indeed. For the majority of GAPS people, what I recommend is to go for gelatinous meats. What you want are the meat around the joints, around the bones, the skin of the chicken, and all the gelatinous parts of the meat rather than the muscle fibers themselves.

You will find that later on, you can start increasing and increasing the amounts of the muscle fibers, but you're relying more on the gelatinous meats. Because these are the meat – the gelatinous parts of the meat – that provide all those building blocks for those baby enterocytes in the gut lining. They provide collagen, elastin, glucosamine, gelatin, and other wonderful molecules in order for the gut lining to give birth to beautiful little cells, those enterocytes. Focus on those meats.

A person with a profuse, severe diarrhea will drink meat stock – a gelatinous meat stock – all day long, and they can introduce raw egg yolk into their diet.

They need to have the homemade yogurt or homemade whey. If you have any problem with yogurt or if you are reactive to them, I recommend that you drip it through cheesecloth. The yellow liquid that drips out is called whey, and that contains no casein at all. There's largely other group of proteins in it. For people who are particularly concerned about casein in the milk, they can start from whey. Because the whole process of introducing these fermented foods is to introduce probiotic bacteria into the digestive tract. Whey will introduce that very effectively as the yogurt would.

So, you have plenty of whey, plenty of meat stock, and plenty of gelatinous meat.

If a person – a child or an adult – stays on this no plant diet for one to two days or sometimes even longer until diarrhea stops, then you can start making soup with vegetables that you cook very well and deseed and peel, for example courgettes, marrows, zucchinis, and squashes.

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If you're cooking broccoli or cauliflower, remove all the stalks and all the fibrous bits away. Stay away from fibrous vegetables such as celery and those from the cabbage family usually. We use vegetables that are less fibrous. You start making some soups, and see how that goes. If diarrhea doesn't come back, you can increase on that amount, and then you can start introducing more and more vegetables into the diet.

That's the first stage of the introduction diet. I genuinely recommend that people stick to it for a day or two for a maximum of three days. Be guided by the stools. If the diarrhea continues and persists, stay longer on it until diarrhea starts abating. But if the diarrhea has cleared and the person has produced his first decent-looking stool, then he can move to the second stage.

In the second stage, we'll start introducing raw egg yolks. We remove the whites and just use the yolks, because they're very nourishing and they require no digestion at all. Then we start slightly enlarging on vegetables and on other matter in their diet.

In the third stage, we'll introduce more foods, so we go from stage to stage.

Many people ask me questions, "How long do I stay on each stage? How quickly do I progress from these stages?" That is very, very individual. Some people fail through them – giving two or three days to each stage and get fantastic results. Other people give one or two days to the first stage, one to two days to the second stage, and then they get flat and stop on third stage. Because whenever they try to range it into the fourth stage, their symptoms return – the digestive symptoms or some other symptoms return.

You will find that in children with learning disabilities. On the first and second stage, the bedwetting stops; the eye contact starts coming back; the hyperactive behavior reduces automatically; the child becomes more with you; he becomes more alert, and changes completely.

But when you want to move on the third or fourth stage and you introduced a new food into the child's diet, if the child wets the bed again or the eye contact is gone again, it means that he's not ready to move into that stage. Trackback to the previous stage, and stay on it for another couple of weeks. Wait for all those benefits to come back in your child. Then try again, because the healing process takes time, and in children it happens faster than in adults. Adults usually take longer to heal than children. In children it can happen quite quickly, but depending on the toxic load of the child and various other factors.

Every person is an individual, and they take their time going through the introduction diet.

The only way to know to know whether you're ready to move on is to move on and try it, and see what happens. If any of the symptoms that have disappeared comes back, it means you're not ready for that stage yet. You backtrack to the previous stage. Get back to stability again. Get better again. Then try again.

Many people have to do this dance of step forward, step back, step forward, and step back for months and months. Some people have to follow the introduction diet for 18 months. I had patients who have to follow it for 18 months before they could actually move into the Full GAPS Diet.

DM: Would that be one of the more extreme ones, the 18 months? What are the more typical ones?

NC: That is more on the very extreme. This is usually the group of the most severe people such as those with chronic fatigue syndrome, fibromyalgia, ME, multiple sclerosis, and people with more severe degenerative conditions. In the majority of people, particularly the children, the introduction diet takes a couple of months maximum. They go quite quickly.

DM: It's really a profoundly interesting approach, because it's not necessarily intuitive until you understand the science. Because most of us believe that vegetables are healthy for us, and that the more ill you are, the more likely they would be beneficial. It's just not something obvious that you have to exclude them on severe patients, especially if they have diarrhea conditions. It's something that's wise to do.

NC: Absolutely. I have patients who have done best on a completely no-plant diet. I have people who have been on a no-plants diet at all, purely animal foods. They eat meat, fish, eggs, and yogurt. That's all. They don't eat anything else. They have no vegetables, fruits, grains, and nothing of plant origin at all for 18 months, two years, and two and a half years. They do beautifully.

These are usually people with obsessive-compulsive disorders, bipolar disorders, schizophrenics, or people with other conditions. Whatever they try, a little bit of a vegetable, a little bit of plant matter, or even one leaf of spinach, they get their manic symptoms back. They get their other psychiatric problems back. They start creeping back in. These people learn quite quickly. They listen to their body, and quite quickly they know what works for them or what doesn't.

It is perfectly safe and perfectly healthy to be on purely animal diet. It's perfectly safe; don't worry about it. I have five four-year-old children who are on no plant diet and have been on it for more than a year.

DM: Wow.

NC: Yes. These are the children who are removing something toxic through their bowels. We work on it and work on it, but they still produce diarrhea. The bowel is still clearing something out in these children.

What we see in parallel is that the child is still having diarrhea and he's still not eating any plants at all, but what we see is that the mental symptoms are disappearing. The child is starting to talk. Their eye contact is back. Their behaviors are becoming normal. Their playing skills are becoming normal. Their social skills are developing. And these are all wonderful developments, but the diarrhea would just not go away. We just have to understand that the body hasn't clear something out yet. The body's just working on it.

DM: Is it possible that this is also a transition phase for establishing the ideal gut ecology, and that it's just taking longer to do?

NC: Exactly. Everybody's different. It depends not only on your constitutional genetics, but it also depends on what kind of toxins you have stored in your body, where they're stored, what kind of mixture, what kinds of methods your body is using to clear the mouth, and various other variables.

It's possible that in that particular child that I'm talking about (who has been on a noplant diet for the last 16 months), it's possible that there is something in the environment that keeps coming into the body, which is being cleared through the bowel using diarrhea. It may be the municipal water – tap water – or it may be something else. We don't know, until the body's strong enough to handle that and compensate for that variable in the child's environment.

Many electromagnetic influences are cleared through the bowels – surprisingly many. You may have a mobile phone mark next to your house that you're not aware of. The changes that it causes in your child's body and the kind of chemicals that the body generates in response to that have to leave the body through the bowels. You have persistent diarrhea in the child, until you move or until the child becomes strong enough for the body to compensate for that continuing damaging influence.

DM: Now, many of the benefits of your approach are mediated through the optimization of the gut flora. I'm wondering if you can just briefly comment on that concept of the gut flora as a detoxification method directly, because it's a relatively interesting and novel concept. I don't think it's widely promoted. It's certainly something I didn't fully appreciate until I connected with you, how these beneficial bacteria in your gut could actually help us in the excretion of toxins and heavy metals.

NC: Absolutely. The beneficial bacteria in our gut are the strongest chelators of toxic metals that are known to humanity. One of the strongest chelators that I'm aware of on the market (which is extremely expensive; it costs somewhere 200 British pounds per two milliliters of it for tiny glass bottles or glass vials) are nanonized probiotic bacteria, just chalked up into nano particles.

Why chalked up? In order to increase the contact surface between the toxic metals and the cell membrane of these probiotic bacteria. Because in the cell membranes, in the cell wall, they have chelators, they have molecules that grab hold of mercury, lead, aluminum, arsenate, and anything else toxic. Not just the toxic metals, but also the [nitroxoline 1:29:10], formaldehyde, phenols, and all sorts of other toxic things that we get from the environment. They would hold them until they're removed through stool. Because most of human stool is bacteria – this is our gut flora dying out and being removed. All of them are holding large amount of toxins, which are removed through your stool out of your body.

I have a very interesting paper in my archives where two groups of rats were treated with organic mercury in their food and drink. One group of rats was healthy and had a healthy gut flora. Another group of rats was pre-treated with a powerful set of antibiotics in order to wipe out their gut flora. They have pretty much tear out their digestive system. Then these two groups of rats were given organic mercury in their food and their drink.

[----- 1:30:00 -----]

Then they were killed, their bodies were opened up, and analyzed in the laboratory. What the scientists found was that the healthy rats had only about one percent of mercury from their food and drink got to the bloodstream through the gut lining. The rest of it was bound by their gut flora and removed. With the rats which had their gut flora wiped out, damaged: about more than 90 percent of all that mercury flooded in the bloodstream and got distributed around the body. It was stored in the brain and everywhere else in the body.

Our gut flora is the major, the most important factor in our bodies that protect us from toxic metals and from all sorts of other toxic influences in the environment.

The trouble is that in our modern society, we live in a world where a growing proportion of the population have their gut flora damaged, because they have been exposed to repeated courses of antibiotics. Women were taking contraceptive pills, which damage the gut flora quite profoundly, or any other prescriptive long-term medication. People were taking some toxic substances through their drink, or some other things from our environmental influences that have damaged the composition of their gut flora.

As a result, when they are exposed to mercury, lead, other toxic metals, or other toxic substances in the environment, their gut flora is unable to chelate it and unable to remove it. It floods into their bloodstream, and it settles in the body. Unfortunately, toxic metals have a particular affinity for fatty tissues in the body, so they get stored in the brain, spine, and in the rest of the nervous system. They also target your bone marrow and the rest of the high fat organs in the body, such as bone marrow, spleen, thymus, and other places. Of course, when they're stored in there, they would cause leukemia, lymphoma, other immune abnormalities, and other problems in the body.

DM: Is there a process you recommend to shift them up to those compartments, so they actually move into the gut and have connection with these powerful detoxifiers? Does the body have an intuitive ability to heal itself spontaneously, or does it need some help or assistance?

NC: Our human bodies have a wonderful system. Mother Nature's absolutely marvelous. It equipped our bodies with a very complex and a wonderful system, which is called detoxification system. It is so complex, staggeringly complex. Our science has just only started studying it and coming to terms with its complexity. This system is the cleanser, the cleaner in the body. It has its headquarters in the liver and departments in every cell of your body. Every cell has an ability to clean itself up and keep itself nice and clean and detoxified.

What happens with GAPS people is that because they have a river of toxicity flowing from their guts directly into the liver, this detoxification system gets broken down in these people. It is overwhelmed, overburdened. It just gives up. It cannot cope. As a result, the toxins that go in do not get detoxified. They do not get chelated properly and removed properly. They're just stored in various tissues of the body and cause symptoms and diseases.

What GAPS Nutritional Protocol does in the majority of patients – I would say in more than 90 percent of patients – is it restores your own detoxification system. Your own detoxification system is infinitely cleverer than any doctor, any scientist, any laboratory, and anybody.

DM: [Laughs]

NC: It has some wonderful methods of clearing out all sorts of toxins out of your body safely (without causing any trouble on the way), chelating them properly, and attaching various substances to it in order to remove it safely from the body. That's what I see. I see many children in particular in my clinic who come to me with these tests that they have done without a doctor, which show that they have huge amounts of mercury, lead, and other toxic metals stored in their bodies.

Of course, the first thing that the parent wants to talk about is, "How do we remove all this out of the body? How do we clean them up?" I tell them, "Wait. Don't go for chelation protocol. Don't go for any artificial methods of removing these things. Just wait."

What they find out when we repeat these tests in about six or eight months' time is that the amounts of mercury and lead in the body of the child halt, or there's only some of it left. But we haven't done anything yet to remove it in particular. What's happened here is that the child's own detoxification system kicks in. We restored it through the GAPS Nutrition Protocol. It started working, and it started clearing out.

Then if we'll wait for another six months or so, we find that in the majority of these kinds of children – I would say, in more than 80 percent of children who come to me with the

usual heavy burden of toxic metals – that we shouldn't do anything at all. Their own bodies have cleaned it all out very nicely.

Only in the minority, after about a year and a half or two years of GAPS Nutritional Protocol, if we still see symptoms (which are stubborn and would not clear), we can repeat the test of toxic metals. And if for whatever reason they're not clearing them out as effectively as they're expected, then we can consider chelation and some other methods of removing these things that are sitting in the body. But I would say don't rush with it, because in the majority of people, their own detox system, as you restore it, will clear everything out very nicely.

DM: It's terrific. The conditions you mentioned earlier remind me of our first interview, where I was surprised to see that the profound connection that you had in identifying these risk factors for women. That if their gut flora was disturbed, it was much likely that they will have a child with some type of autism spectrum disorder. That's really a solution if a child was exposed to vaccines. But if that child has cleared up his gut flora prior to that, that's really one of the most profound interventions one could have for having a non-brain-damaged child.

NC: Absolutely. What I feel sorry for now...I feel sorry for the generation of teenage girls now that are growing up. Because when they are ready to start the family – when they are ready to have children – their generation is going to have a much higher incidence of autism and other learning disabilities in children. We are heading for a lot of grief.

Mothers of my generation who have daughters who are growing up now, now is the time to assess your daughter. See what her gut flora is like. How is she doing before she's ready to conceive or have children? Prepare them for it to avoid the huge amount of grief in the family of having a grandchild with autism, hyperactivity, obsessivecompulsive disorder, and some other disorders. This is because the proportion of girls now with damaged gut flora is growing in our modern world, and they are heading to having unhealthy children, unfortunately. It's very sad.

DM: Thank you for all the work you have done there. Now I have some specific questions. One of the tools on your GAPS Diet isn't intuitive or isn't a process that many people are already using in their normal food preparations, and that is the use of these meat broths. I'm wondering if you could comment and expound on that topic a little more, because it seems to be a powerful element of the whole process. It's not something people normally use.

NC: Absolutely. What I would like to say here, as you have mentioned the diet, is that it is very important tool as you start the introduction diet in particular for you to listen to your sense of desire, sense of smell and taste, and sense of satisfaction from food.

Please read my article *One Man's Meat is Another Man's Poison*. Please read it and take it to heart, because it is up to you to decide what proportions of vegetables to animal foods you are going to have in your introduction diet. How much cooked vegetables in proportion to how much meat you are having. How much yogurt you're

introducing, how much sauerkraut, and so on, because it is only your body who knows how much you need for breakfast, lunch, and dinner.

I have people who have just read my book and my website. They didn't consult with anybody. They just started the diet, and a small proportion of them, particularly people who have a very strong will and who have tried various diets already in their lives, they are used to imposing their very strong will on their body. They're used to imposing it on their body. They are so detached from their body. They're not listening to that at all. They forgot how to listen to their body.

Your body is your slave. It's your servant. It loves you very much. It will do whatever you ask or tell it to do.

Some of these people run into trouble. These people either get terribly constipated. There are one or two people who run into electrolyte abnormalities in their bodies. They got the wrong electrolyte. They run out of potassium, magnesium, or something else happens. They can get heart palpitations and some other strange symptoms, which can threaten their very survival.

It is essential for you not to impose your will on your body, but to listen to your body, because only your body knows how much cleansing it needs to do now in proportion to how much feeding.

[----- 1:40:00 -----]

Remember, feeding is done with animal foods, while cleansing is down with vegetable matters or with plant foods. So, if you feel that at the moment you are quite overstuffed and you don't need that much feeding but you need more cleansing, eat more vegetables in proportion to meat. Drink the meat stocks. Drink the bone broth. Eat more soups. Eat more vegetables and less meat.

But if you are malnourished, if you are underweight, and if you feel that you do need to be fed and built and you need to do more building in your body rather than cleansing and washing out, then have less vegetables and more animal matter. It is up to you to decide for that proportion that's very, very important to do.

It's the same with children. Parents are connected on a very deep level to their children. They can feel their children's bodies and what their children's body needs. By experimenting with different combinations of foods, what you don't introduce, and what you introduce, parents quite quickly – in my experience – learn what works for their particular child and what doesn't, and what proportion of vegetable matter to animal protein they need to give their child at any particular meal.

Also listen... When you stop the diet, the natural taste and natural sense for food in the child gets restored.

We're all born with these built-in wisdom and knowledge within our bodies – what works for us and what doesn't work for us. You should listen to that appetite. If you're child has

more appetite today, doesn't want to eat, just drinks and just takes this, that and the other, don't force your child to eat, because what if the child's body went into a cleansing mode? It wants to fast a little bit. There's no danger in it. There's nothing to worry about.

Let your child guide you in that sense. If they have no appetite, fine. They will eat tomorrow, or they will eat two days later. When the appetite returns, that's the signal coming from the child's body that says, "All right, I'm cleansed now. I'm ready to be fed. I'm ready to be built now, so let's start eating and feeding." Your child will have an appetite, and he'll devour the whole roast chicken, half a duck, or something like that. You'll be absolutely surprised how much your child will eat.

Don't try to impose your will either on your own body or on your child's body. Try to be more intuitive. Listen to the body. Because the will comes from our human mind, and the human mind only knows what is read in some book and a glossy magazine, what is heard and seen on TV, or what is heard in my interview for that matter. *[Laughs]*

DM: Sure.

NC: The mind has a very meager knowledge. It's quite a stupid part of our human nature, so don't listen to it too much. While your body, your six senses – your intuition is very ancient and very old. It knows infinitely more, because it's connected to very, very deep metabolic mechanisms going on in your body.

Listen to your body. Listen to that appetite. Listen to the desires for food and for drinking from your body. If you're not thirsty, don't drink. Don't force yourself to drink those liters of water just because some book says that you have to. You can introduce a serious electrolyte imbalance in your body. You can introduce a serious kidney disorder in your body if you drink too much water. Drink only when you're thirsty, and eat only when you're hungry.

Listen to your body. Work with it rather than imposing your will upon it. That is very, very important to understand for adults and children. Adults have to take their responsibility for their child. The child will guide you. The child's thirst, hunger, and desire for food will guide you how to progress.

DM: Thank you for that. Let's get back to the meat stock and the bone broth.

NC: Okay.

DM: I have a specific question for that. Is it okay to cook it and eat the meat around the bones, but then make a bone broth from the bones?

NC: Absolutely. There are two varieties of stock you can make. One is meat stock and the other one is the bone broth. They're all very traditional. They come from traditional cultures.

Meat stock, we make with the joint of meat or a big lump of meat and some bones added. It has to be raw meat and raw bones. If you have a leg of lamb, joint of pork, pig's trotters or pig's feet, lamb feet, pork's head – pig's head makes a beautiful meat stock – or if you have some games such as sausages, pheasants, pigeons, or any other game (now is the game season certainly in the Northern Hemisphere), whole birds and giblets (are very important as well), hearts, livers, necks, heads, feet of the bird, cook that for two to three hours.

Add salt right at the beginning, because salt helps to draw nutrition out of the meat and bone into the bouillon and into the meat stock. Add some black peppercorns. Crush them slightly with mortar and pestle, because they conceive the taste of the bouillon with some lovely substances, which stimulate the production of digestive juices in your digestive tract. With black peppercorns and salt, you don't need to add anything else. That produces a clear delicious stock. It's very, very delicious. Particularly, chicken, game, and birds produce the most delicious stock.

You can just drink that stock. That meat stock can be kept in the fridge for two weeks usually quite nicely, particularly if you keep it in the pan that you cooked it in. The pan is sterile; there's no bacteria introduced in there. You can always take a portion of it. Make a soup with it by adding vegetables and cooking them in meat stock, or just simply warming it up and drink it as a nice warming drink with your meals.

DM: How long would you cook the vegetables?

NC: For soup? It's half an hour. Half an hour is usually enough to make them really soft and well-cooked. That's the soup.

In the first few stages of the introduction diet, drinking meat stock with breakfast, lunch, and dinner is important, because these cups of hot meat stock provide all the building blocks for your enterocytes in your gut lining, which is for healing and sealing your gut lining. That is a healing and sealing food.

Then after you have eaten the meat that you have made this meat stock with and you're left with the bones, put those bones in the freezer. Just have a large bag going in your freezer, where you keep adding these cooked bones from your roasts, soups, and from making the meat stock. You don't throw away the bones, because we haven't cooked it long enough to really get much nutrition out of the bone itself. The bone is still very, very hard after that kind of cooking. Once you have accumulated a large bag of these frozen cooked bones in your freezer, put them into a slow cooker or into a large pan.

I recommend that if you have a tubular bone there, smash it in half with a hammer or some other heavy instruments, so that the bone marrow is exposed and can go into the meat stock when you're cooking it, or you can get it out later on. So open it up. When you're buying bones, ask the butcher to cut the tubular bone for you in half, so you can get access to the bone marrow. **DM:** Are there any specific bones that you'd recommend, if they'll go to the store and find them organically? I mean, what seems to be the best choice of bones to make this bone stock or bone broth with?

NC: The beautiful bones for bone marrow in particular are the beef bones of the pelvic girdle and the upper part of the animal's legs. Large tubular, plus the amount of bone marrow you get out of it is beautiful. But generally speaking, any bones are good. They all have different possession of nutrients and minerals. They will contribute differently.

DM: Are those bones available in the typical butcher? Because I don't think they sell them separately. They just throw them away normally.

NC: I know. They go for the production of pet foods.

DM: Oh, interesting.

NC: That's right, animal food, soap production, and some other industrial processes. But if you befriend the local butcher or just talk to your butcher – they're human beings – you'll be surprised with what you can find out when you talk to them.

DM: Terrific.

NC: You will find that you can get it. My local butcher, for example, when I buy some meat from him, he gives me a huge bag of bones for free.

DM: All right. [Laughs]

NC: Because they throw them away anyway. [Laughs]

DM: Sure.

NC: And quite often, he would also throw in a huge slab of inner abdominal fat from lamb, beef, or pork. That's the most valuable fat that you melt in your oven to melt the liquid fat out for cooking later on. So, you have lamb fat or beef fat from the insides of the abdomen of the animal. This is fat that cushions the kidneys, bile, and the liver. It's very valuable. It has a lovely fatty acid composition.

DM: How do you cook with it?

NC: With the fat?

DM: Yeah.

NC: You use it for frying and for roasting.

DM: Oh, okay.

NC: When you roast your vegetables, they need to be swimming in large amounts of fat. What I recommend to people with cooking fats is to collect the fat from every roast that you make. Pour it through a sieve into a glass jar. If you collect every day like that,

you will finish up with a collection of jars in your fridge with different fats – a bit of beef fat, lamb fat, pork fat, duck fat, goose fat, and chicken fat. They all have different flavor and nutritional composition.

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They're all very, very healthy and beautiful. These are the only fats that you use for frying, roasting, baking, and all your cooking purposes.

Every jar like that will have a little bit of jelly accumulating at the bottom. That's the very concentrated meat stock. It's beautiful. It has a fantastic flavor and a very good nutritional composition. So, when you roast your vegetables next time – if you have a prepared mixture already of vegetables in there – just empty one of those jars together with the jelly into the tray, and mix all your vegetables with it before roasting. The jelly will give the vegetables a beautiful flavor, while the fat will soak into the vegetables and make them delicious and far more nutritious for you and your child. It's far more satisfying.

Animal fats are the most valuable fats for us to eat on the GAPS Diet.

DM: Most likely – perhaps you can respond to this – I would also argue that they have also been the most vilified, the most evilly condemned fats, and almost all the traditional health experts have warned about avoiding saturated fats and eliminating them. My guess is that most people listening to this have previously thrown those fats away.

NC: I know. I'm sure. These are the fats that are most prized in all traditional communities. If you remember your grandmother, I'm sure that's what she was doing before we all got brainwashed by our mainstream nutrition and mainstream medicine. The idea of vilifying animal fat comes from the food industry, because they're a competition for one of the most profitable items for the food industry.

These are vegetable and cooking oils. These are extremely tremendously profitable. These are also the number one cause of cancer, heart disease, autoimmunity, malformation in babies, learning disabilities, psychiatric disorders, and neurological conditions. These are the most harmful things you can put into your mouth, because they're highly processed. All the fatty acids in them are mutilated by the processing of these oils. They just pollute your body, and they cause disease. Nobody should be eating cooking and vegetable oils. Nobody should be buying them and nobody should be cooking on those.

DM: It seems that it's mostly as dangerous as margarine. You know, there's this whole low-fat myth that started decades ago and that people are coming out of. Many people started to realize that butter is healthy compared to margarine, but they don't really understand that these processed vegetable oils are just as bad, and they really need to get back those animal fats and replace it with those.

NC: Absolutely. Margarine is made from vegetable oils by hydrogenating it, and by making it more solid. That's even more processed, even more damaging to health, and even more poisonous. Margarine is equals to poison. You must not eat it at all.

Animal fat are very stable. In their fatty acid composition, they're very similar to the fatty acid composition of our own fat in our own bodies. They're the most physiological, natural, and normal fats for us to consume.

If you look for the ultimate health food for human beings, that is the human breast milk. There is no other food parallel to human breast milk for a human baby, and not only for a human baby. If you look at Greek mythology and other ancient texts, breast milk was provided for people who were debilitated by disease, warriors severely wounded in the battles, or children who were ill.

They found that breast milk was an absolute panacea for all sorts of disorders. It restored vitality. It restored life in the person, whether it's an adult, an elderly, a child, or a baby. Because the breast milk has such a beautiful composition of nutrition, it doesn't need digesting. It goes directly and is absorbed very quickly. It just builds, nourishes, and restores you very beautifully.

If you look at the fatty acid composition of the human breast milk, it is very similar to the beef fat, lamb fat, pork fat, duck fat, and goose fat. It's very, very different from any vegetable oil, olive oil, or from any other plant oil.

Plant oils are not suitable for human physiology. In fact, they don't feed us at all, even if they're cold-pressed. They act more as cleansers and detoxifiers, just like what all the plant matter does for us.

DM: Would you expound that definition of plant oils to coconut oil and avocados?

NC: Coconut oil and avocado oil is very similar to plant oils. It is very similar to walnut oil, hemp oil, and other oils. It acts more as a cleanser and more of a detoxifier in the body rather than a builder or a feeding substance. It's the same with olive oil and all other plant oils.

Coconut oil is more saturated. In fact, it's the most saturated fat on this planet. It is far more saturated than lamb fat, beef fat, pork fat, chicken fat, goose fat, or duck fat. In fact, all fat – strictly speaking from a chemical point of view – is not a saturated fat at all. It is monounsaturated, because the majority of fatty acids in it are monounsaturated fatty acids, where the saturated fatty acids are the second in the group of fat. While coconut oil is the most saturated fat on this planet, it is a plant oil, and saturated fatty acids are good for us.

If you ever see a heart that has been removed from an animal, from a lamb, beef, or anything like that, you will see that the heart is surrounded by large layers of fat. It's a very hard fat. When they analyze that fat, it's almost entirely saturated, because the human heart almost exclusively uses saturated fatty acids as its source of energy. That's its energy store. That's why it's encased in it as an adaptive ladder. That's what it is. The heart will use it for energy production.

Saturated fatty acids are not only good for us, but they're also the main source of energy production in the human body. They're our only true cells in the human body that use glucose molecules for energy production, and that's the red blood cells and the brain. The rest of your body – your muscles, your bones, your liver, your spleen, your lungs, your digestive system, your skin, and all the rest of your organs – uses fats as a source of energy.

There is another profanity that has been propagated by the food industry in the population, and that is we derive our energy from sugar. That idea comes from the producers of energy drinks, which only do harm in the body. They don't do any good, particularly for sports people who are training.

The vast majority of all cells in the human body use fat as a source of energy. Saturated fatty acids in particular are the bulk of that fat. They are the most important sources of energy for us, and not only energy, but also structure. It is the saturated fatty acids that give a solid and firm structure to our tissues.

Without saturated fatty acids, we would be flabby like a jellyfish or something like that, because it is the saturated fat that gives this stiff structure to our tissues in the body. So, they're not only good for us, but they're also essential for us. These are the most important fatty acids for us to consume. Animal fats are the most natural fats for us to consume. They are the most compatible with human physiology and with the structure of the body.

This is such a contentious issue during my work in my clinic and every time I start talking about the fats in the diet. GAPS people have to consume large amounts of fats, particularly people with psychiatric problems, because the human brain is largely fat. About 70 percent of the dry weight of the brain is fat. It's a very high fat organ, and it's an extremely hungry organ. At least 25 percent of all nutrition floating in your blood is sponged up by the brain. It's a terribly hungry organ. It requires huge amounts of fat and protein all the time to rebuild itself and structure itself, because the cell regeneration process is very active in the brain. The brain renews itself just like the gut lining, the immune system, or like anything else in your body does.

What I see, what we see, what neurologists and other scientists see in people who go for a low-fat diet and people with psychiatric disorders – depressed people, manicdepressive, schizophrenic, and other psychiatric problems – when we do MRI scans and PET scans of their brain, we find that their brains have shrunk. Literally, the matter of their brain shrinks, because the brain is starving. It needs building blocks. It needs fat and proteins. It needs to eat meat and fat. The kind of fat that it requires are the lamb fat, beef fat, chicken fat, duck fat, and goose fat.

DM: That's really interesting. Now, from my research, I have just concluded that most people are designed to thrive on 50 to 70 percent of their diet as fat. I'm not sure if that's

a number that you'll agree with. But if you agree with that, what percentage of that fat should be derived from animal versus plant?

NC: Well, I disagree with it.

DM: Okay, all right. [Laughs] What are your recommendations?

[----- 2:00:00 -----]

NC: Again, our science is trying to prescribe to us what we should eat and in what proportions. That's completely wrong.

DM: Okay.

NC: The final authority is your own body.

DM: Interesting.

NC: If you feel you could desire to eat a large amount of fat right now, go ahead. Eat all the crackling on your pork. Eat all the fat on your lamb. Eat all the skin on your duck or goose, if that's what your body desires right now. Whenever that desire has stopped, it means your body has satisfied the nutritional need for that particular fat, so stop. But if your body is in a cleansing mode, for example, if at the moment it doesn't need feeding but it needs to clean something out, The fat will feel repulsive to you.

DM: Okay.

NC: You wouldn't even want to touch it. Even the smell of it will be repulsive to you. You would want to eat an apple, an avocado, a large low-fat salad, or something like that, because your body needs cleansers. It needs plants. It needs to clean out. But once it has cleansed that something out, which it's dealing with at the moment – and we may never know what exactly it's dealing with – tomorrow or the day after tomorrow, you might kill for a roasted duck, a lamb chop with all the fat in it or something like that.

Listen to your body. Nobody can prescribe to you how much fat you should have in proportion to protein, carbohydrate, or anything like that. It has to be your body. Your body is the final authority. It's infinitely wiser than any scientist, book, doctor, or anybody at all.

DM: I think you have to be tremendously foolish to disagree with those statements. I absolutely agree with them.

What the question becomes is that if you're not in detoxification mode, you're stable, you're not having any disease symptoms, and you're listening to your body, what do you think is the range that someone should be consuming? The reason I ask is because we have gone through this low-fat diet phase. Obviously, when you exclude fat, you have to replace it with some other macronutrient, and typically that was done with carbohydrates, which I believe is largely responsible for much of the obesity epidemic and for a lot of the chronic diseases that we're seeing.

If you're going to take the carbohydrates – the dangerous carbs, the processed foods, grains, and those types of food – out, you have to replace it with something that you're going to replace with fat. Is it your supposition that most of that fat should be animal-based, plant-based, organic, or "listening to your body" principle?

NC: Most of it – more than 95 percent– needs to be animal fats.

DM: Wow.

NC: Yes.

DM: Wow. That's what I was looking for. *[Laughs]*

NC: It's 95 percent animal fats. Yes. I recommend using olive oil, traditionally made, cold-pressed. It's important that it's cold-pressed, because plants have beautiful oils, which are very fragile. They're unsaturated, so they're very fragile, very easily damaged by oxygen, heat, light, and other influences. That is why Mother Nature locked these fats in a very complex cellulose structure of plants. When we eat a whole plant, nut, sunflower seeds, pumpkin seeds, or when we munch on a lettuce – a good quality lettuce feels oily, it's got a lot of many of unsaturated fat.

DM: Sure.

NC: We get these very fragile, very delicate, fully unsaturated fatty acids in their natural virgin state. In that state, they are very good for us, but our body needs only a tiny amount of them. It doesn't need much at all. It needs only a very tiny amount – no more than three, five, or seven percent perhaps – of this oil. Again, because they're not so much structural; they're cleansers. They detoxify us largely.

DM: That's very interesting. I guess the practical implication of that – certainly from my experience – is that these plant oils are much easier to consume. They're just more "convenient," I guess that would be the best term. So, do you have any practical recommendations on how one can more easily incorporate these animal fats into their diet, because they typically require a lot of food preparation time?

NC: If you're eating out, then ask them to cook your food in lard or in butter. Butter is always available in any restaurant. They always serve butter in the kitchen, if they don't have lard.

DM: Sure.

NC: But at home, the most practical thing to do, I say, is to collect fats from your roast. Do roast regularly and collect fat from your roasts. If not, traditional butchers usually throw duck fat, goose fat, or pork dripping. Just stock up on that, or you can stock up on coconut oil. That's a good oil to cook on as well.

DM: It doesn't fall on the 96 percent category because that's a plant oil.

NC: It is plant oil. You can use that, but again, it isn't clear how much feeding and building coconut oil actually does. It certainly cleanses and detoxifies. It has many antibacterial, antifungal, and antiviral substances in it. It's a great antiseptic as well. Since the coconut oil is saturated, I would imagine that it does a fair bit of feeding the body.

DM: Okay. I think it's very useful as a brain fuel. There is evidence that suggest it does it in Alzheimer's.

NC: Yes. But what I can recommend to many people and many patients in my clinic who say that "I can't find any goose fat or pork dripping commercially," I tell them, "Go to your butcher, and ask them for that lard of inner fat from the abdomen of the animals."

DM: That's the pearl I was looking for. That's the pearl. Okay, ask the butcher for the fat.

NC: They usually don't charge for it, if you bought some steak as well.

DM: Wow.

NC: If you pay them for something.

DM: Let's go to the process: you go to the butcher, ask for that inner fat, then you prepare just like what you've described earlier?

NC: You bring it home. Don't do anything that can't be frozen.

DM: Okay.

NC: Just put it in the roasting tray. You want a deep tray.

DM: Okay.

NC: You want a deep oven tray. Now, put it in the oven at about 120 degrees centigrade. I'm not sure that is in Fahrenheit. [Laughs]

DM: Well, 100 degrees is 212, so it would be about 250, 270, or something...

NC: It's something like that, on a fairly low heat. You don't have to put it on a very high heat. Forget about if for about four or five hours. You can even leave it overnight.

DM: Okay.

NC: Then in the morning, you will find that the slab itself turned into something very thin, crispy, and crackly that your dog will appreciate it very much.

DM: Okay.

NC: But it will be swimming in this full tray of liquid fat. You can just pour it into glass jars. Put them in the fridge. They can be kept for a year.

DM: Wow, so that's the trick. Then the way to consume that is to cook your vegetables with that.

NC: Yes. You roast your vegetables in it. You fry your eggs in it. You can do any frying or warming up. Liberal amounts or a couple of tablespoons full of this fat goes into the frying pan, and then everything else goes in. So all your cooking is done on that.

You can bake on it as well. When you do your baking, there's this easy baking made with nuts and seeds, which you'll grind into flour consistency. We use that instead of flour. Fat is always required in the mixture. You can use any of these animal fats. They will give a lovely flavor to your baking.

DM: Wow. That's what exactly I was looking for. Because the challenge that most Americans have is they're consuming these dangerous carbohydrates, so the challenge is what you'll replace it with. That way that this seems is like a magical recommendation! *[Laughs]*

NC: Absolutely!

DM: It's a great source of calories. It's got too many times as much calories as carbohydrates.

NC: Yes. Calories don't matter at all. The whole idea about calories comes from a very simplistic, silly idea from our wonderful nutritional science, where they compared the human body with a heat combustion engine. What a silly idea! How can you do such a thing? [Laughs]

DM: [Laughs]

NC: We are not a steam engine, are we?

DM: We're not.

NC: We are infinitely more complicated human beings.

DM: Sure.

NC: Tremendously more complicated. We do not use calories the way a combustion engine would use calories at all. There's no parallel or whatsoever. So, forget about calories. They have no relevance to human metabolism whatsoever.

The fats that you are consuming are structural. Animal fats are structural. They will go into your bones, teeth, muscles, heart, and brain. They will build you. They will rebuild your structure. They will get rid of your osteoporosis, low muscular tone, the inability to exercise, heart palpitations, and all sorts of other problems with your heart. They will get rid of your asthma, because lungs are very fatty organs. They love saturated fats. They require huge amounts of it to be able to expectorate, to clean themselves, and to lubricate themselves, so that you don't get dry cough, asthma, or any other colds, flu, and whatever that you get. These are structural fats.

You see, animal fat is that something that builds your body and structure. They have no relation to fat in the body, to obesity whatsoever. These fats do not go into your fat. Eating fat does not translate into becoming fat or whatsoever. In fact, you will find the more fat you consume, the thinner and leaner you become.

DM: That makes perfect sense.

NC: I would like to add one more thing here, Joe.

DM: Sure.

NC: Some people who are particularly focused on their weight and on being slim – and people who exercise a lot – find that when they stop eating the GAPS Diet and they weigh themselves religiously every day, they found, "I'm getting heavier! My scales are showing that I have put on two, three, or five kilograms." But I'm telling them, "What about the shape of your body? Has that changed?"

[----- 2:10:00 -----]

They'll say, "No. I still fit into the same clothes." I'll say, "What's happening in your body is that you have osteoporosis." Many people, including children, young people, and people in their 30s or 40s suffer from osteoporosis in our world – particularly people with damaged gut flora who are unable to digest and absorb their food properly. Their bones are thin. They're translucent on X-ray.

When you go on the right diet and you start eating fats... Your bones are made out of fats to a large degree. Your teeth are made out of fat to a large degree in their structure. What you find is that your bones are becoming heavier. They're rebuilding themselves. The osteoporosis is going away, so your bones are becoming heavier. Those kilograms that you put on and that your scales are showing are your bones healing themselves and getting rid of osteoporosis. Rejoice and be happy about it, rather than weighing yourself every day and worrying about it.

DM: Terrific. I think that's one of the most important information that you shared with us, the way that it practically increased the bone and then the information about the bone marrow. Could you just repeat that, so that we can sort of emphasize the importance of it? How you go to the butcher, have the fat that you're asking for, and the fact that you can typically get it for free if you're buying your meat there.

NC: You ask for fat from the insides of the tummy of the animal. It can be lamb, beef, or pork. Usually that fat gets either thrown away or goes to some industrial purposes, so the butchers don't get any profit from it whatsoever when they deal with an animal.

You want a butcher who actually deals with the full carcass of the animals or the gizzard thing. If they don't do it themselves, they can get it for you by ordering, so order it. That will be quite a large slab depending on what animal we're talking about. In a lamb, you're talking about two feet by one foot.

DM: How much is it going to weigh?

NC: That's about a couple of inches thick slab.

DM: How is it going to weigh? Does it weigh about 10 pounds or three kilos?

NC: That will weigh about... Yes, three or five kilos possibly, depending on the size of the animal. If you don't want that much, you can take only half of it or less than half of it. Just bring it home and put it in the oven for a few hours. Let it melt out.

DM: Okay.

NC: We haven't finished with the bone broth as well. When you have accumulated all those bones in your freezer, put them in the slow cooker. Fill it up with water. Add salt and pepper, as we have talked about before. And add some sort of acid in it, because the acid will help to draw minerals out of the bones.

If you are not allergic to fermented foods, add some vinegar. Vinegar is fine. But there are some people who are allergic to fermented food, and who cannot have any vinegar. Just squeeze half a lemon into it. Put fresh lemon, cut it in half, and squeeze half a lemon into the water. Close the lid, and put it on a low heat for about 24 hours. Let those bones cook for 24 hours, and some people even do it longer. They do it for two days. Just don't forget to check on the water, because it might boil out. Just keep tapping up the water.

When you're finished with it, the bones will be so soft. You can crush them with your hands pretty much. Your dog will appreciate it very much, or if you have chickens, they will appreciate those bones pretty much as well. They'll consume them.

The difference of these bone broths is that...

DM: Wait. So you can give those bones – because they're thoroughly cooked and soft – to your pets, or you don't want to consume those bones yourself, you throw them away if you don't have pets?

NC: You can munch it yourself if you like it.

DM: Okay.

NC: You can get all the bone marrow out. It's the spongy end of the bone where the joint is and where the bones connect with each other inside the joints. Those are very soft, succulent, and full of beautiful marrow and of beautiful fats. Just munch it. Eat it. A lot of people just eat it. You can eat it and swallow it. It will be digested very nicely, and will feed you beautifully.

It's particularly valuable for people who have lymphoma, leukemia, or any other abnormality in the immune system like that, who need to rebuild their bone marrow. Because here you're eating bone marrow from an animal, and your body knows what to

do with that. It will translate it into your bone marrow, feed your own bone marrow, and restore it.

The bouillon itself, the water itself, is very different from meat stock. Its composition is quite different. It's very rich in minerals, amino acids, and fats. The meat stock is largely amino acids without so many minerals. They feed different purposes, but they're both extremely valuable.

Also, I have to say that the meat stock that we're talking about when you cook the joint of meat is tastier. It's more delicious. So, if you're dealing with a fatty child or you have somebody who got into a fatty phase, stop with the meat stocks. Let them get use to the meat first, because it's much more delicious.

DM: What type of cuts of the meat stocks do you recommend, most likely the inexpensive ones that you can get really cheap?

NC: Absolutely. If you could get the feet, head, neck of the animals and all the different pieces that are usually cheap. They're the least expensive, but nutritionally, they are the most valuable. That's the amazing thing. The giblets of birds – duck giblets, goose giblets, or chicken giblets – they're usually cheap, because majority of the people don't know what to do with them. They make a beautiful stock, if you get a large bag of giblets.

The bone broth is very valuable nutritionally, but quite often does not taste as nice. I recommend using this for making soups, stews, and for adding things to. That way it works very nicely, if you consume it that way.

DM: It sounds like you might be able to have some of the animal fat that you have gotten from the butcher to flavor it up.

NC: Oh, yeah. When you have made a good meat stock or bone broth, it will have a lot of fat in it. Yes. When you put that meat stock into the fridge, the fat will rise to the top, and the fat is the very hard layer at the top. Every time you warm up a portion of that meat stock, take a little or break a little part of that fat and add it into that portion, so you consume the bouillon with the fat. Don't throw that fat away. You can use it, if there's too much.

For example, if you're using bone marrow bones from a beef and a lot of the bone marrow basically dissolved in the bouillon, it will have about an inch of fat at the top of that bouillon. That can be too much for some people. They might feel nauseous or feel that they may not be ready to digest that amount. Take it off. Scoop it off. Put it in a glass jar, and use it like any other animal fat for cooking. You have another variety of animal fat in your fridge for cooking purposes.

DM: Now, do you find that macrobiotic people who advocate that approach to healing and who basically advocate seasonality to their foods.... Traditionally, about things like consuming soup when it's cold or wintertime, do you find that it's important to make that

distinction, or do you just rely and listen to your body, so that you could have soups in the summer?

NC: Exactly. Just rely on your body, because your body knows the best that it wants. For example in the summer, if you are rundown from a stressful period of time, if you have picked up a virus or something like that, you wouldn't want a cold solid. You would want a hot beef stew, because that will restore you beautifully.

When a person has a virus altogether, viruses get stronger and would cause more problems for you. It particularly applies to people who have chronic herpes, genital herpes. They have cold sores on their lips too often or get other forms of that kind of infection. Stay away from cold solids, citrus fruits, and nut proteins, because they aggravate this problem. They balance your immunity in such a way that you become more vulnerable to the viruses.

What you want to focus on to bring the virus down in your body is rich hot soups, stews, animal fat, eggs, sour cream, butter, and these sorts of things. Cook vegetables in a lot of fat. Make sure they're swimming in fat. If you eat like that for a few days, your cold sore will heal very quickly, the genital herpes will disappear, and your viral infection – cold or flu – that you have picked up will disappear quite quickly.

But if you are more prone to yeast – if you feel yeasty at the moment – it's not a virus raising its ugly head in your body at the moment but yeast, then it's a good idea to have less meat stew, less meat soups, and less fat to cleanse a bit more. Have more of the raw salads, nuts, avocado, and things like that.

Just listen to your taste. Your body will give you a signal: "Right now, I'm struggling with a virus, so this is what I want," or "Right now, I'm struggling with yeast. I want something very different at the moment."

That's why even society listens to your body. Listen to your desires. Listen to your pleasure. Life is about pleasure, because pleasure has a very important role to play in your health. It isn't your enemy. It's your friend, so listen to pleasure.

DM: Terrific. We talked about the Introduction and the Full GAPS Diet, but then there's another diet, is that correct?

NC: Then there is coming off the GAPS Diet.

[----- 2:20:00 -----]

The beauty of the GAPS Nutritional Protocol is that you don't have to be on it forever. You don't have to permanently be. For example, a gluten-free diet for Celiac disease. They tell you that you that since you have Celiac disease, you have to be gluten-free for the rest of your life. That's not the case with the GAPS.

If you as a Celiac person follow the GAPS Nutritional Protocol for a couple of years, you can come off it, and you can eat pasta, bread, and plenty of gluten that you can eat and

you'll be healthy and fine, because you have healed and sealed your gut. You have restored your gut's integrity, so gluten is not a problem for you anymore. It is not an incurable condition at all.

Once the person has healed and they have been for six months (at least healthy and well), their old conditions have gone, they're feeling healthy, well, and strong, then we'll start introducing potatoes first and see what happens, because here we introduce starch.

Then we'll introduce gluten-free grains one at a time, and we'll start with buckwheat, quinoa, and then millet. We'll always start with a tiny amount of each of these foods, and watch what's happening. If you have introduced a little bit of a potato, and one of your symptoms have returned, that's the right signal for you that you are not ready. Wait for a month, then try again, and see what happens. You might find that in a month's time, you can introduce it and your symptoms don't return anymore.

Once potatoes are introduced, try a little bit of buckwheat, and then a bit more buckwheat, then a bit more buckwheat. Continue with potato, and on different nights try a bit of buckwheat. If it does go in fine, fantastic, and if you're ready, try a bit of quinoa and then add a bit of millet. Once those grains are tolerated nicely, you can try a bit of rice.

Then if rice is tolerated nicely, you can make sourdough at home. That is ordinary wheat flour, ordinary rye flour, or a mixture of rye and wheat, which you ferment at home first before cooking. You ferment it with your homemade whey, yogurt, or kefir. What the fermentation process will do is it will predigest that flour for you. You ferment that flour for 24 hours.

Once you have fermented it, add the rest of the ingredients – the eggs, salt, or any other ingredients – and you bake. You can either bake bread or you can make crepes, thin pancakes, which are the ordinary crepes. That is usually a celebratory moment for people who have been on the GAPS Nutritional Protocol for a while to have a first normal pancake. [Laughs]

DM: Sure.

NC: Their first normal crepe with some butter, jam, or something like that. See how you react to that. If your body's ready and if it's healed completely, you will find that you can sail through that, and you can introduce all these things. Then you can move on introducing commercial sourdough bread and all the other foods.

You'll find that on an occasion, you can't have anything with sugar. You can't have an ordinary commercial ice cream. You can't go on a holiday and have a bowl of pasta, pizza, or anything like that. Your body will take that abuse, and it will be fine.

DM: Terrific.

NC: What I find with GAPS people – 100 percent of them – is that once they have been through the GAPS Nutritional Protocol, it is such a huge paradigm shift for them. They can never go back to the processed junk diet that they used to live on before. They just can't do that anymore to themselves. They have developed a very healthy eating habit. They learn to cope. They find the pleasure and the joy of eating real natural foods. They can't go back to junk anymore, so they continue eating a very wholesome and healthy diet for the rest of their lives.

Now they can eat anything, and on occasion they can abuse themselves. They can go to a party and eat whatever is available. They'll be fine. Their body will take that and deal with it.

DM: Terrific. You provided us an enormous amount of information. Of course, you have follow-up resources. There's a number of them. You have your books, the initial *GAPS* book, and the forthcoming one, which is the *Gut and Physiology Syndrome*, which is not out yet but will be out at some point. Then of course, you have a DVD, which implements some of these as *Cooking with GAPS*, and we'll have a link to that, which some of your associates have put together. Then you also have courses. Do you want to discuss what those courses are?

NC: One more resource that I would like to mention and which I forgot to mention to you is the book about the heart disease, it's called *Put Your Heart in Your Mouth*. Why did I make that book, because every patient – as soon as I start talking about animal fat – is asking me the same question: "What about heart disease? I've heard that animal fat will cause you heart disease." Having explained to a hundred patients that animal fats have nothing to do with heart disease, I thought I ought to write a book about this.

DM: Yes, indeed. [Laughs]

NC: So, I have written a book, which explains that concept very well to you. Please, if you're worried about heart disease, if you're worried about atherosclerosis, please read this book, *Put Your Heart in Your Mouth,* or give it to your doctor.

DM: I think that even if you're not worried about it, I think that it's probably a good book to get, because more than likely 95 percent of the people that you interact with – your family and certainly, your healthcare professionals – are going to give you grief about this. They're going to challenge you about it, so you need some good data to refute that. This is a great source of that.

NC: Exactly. The book is fully referenced, so every statement that's made in the book is referenced. Your doctor can find all the backing of the science for all treatment and for all the explanations. That's very important.

DM: Sure.

NC: I'm training GAPS practitioners. I'll be doing training in Europe shortly. I'll be doing training in Australia and New Zealand very soon. In the USA or America, now we have

160 certified GAPS practitioners who are ready and willing to help you to go through the GAPS Nutritional Protocol.

Please, if you need help, if you're struggling with something, you might have started the program already and you just need a few issues clarified, or if you would like to start the program and the guidance of a professional, please go to my website: gaps.me. It's G-A-P-S.me. There is a button there that says, "Find a GAPS practitioner." Go there, and they're all listed by country and state. You can find the practitioner, which is in a local area closest to you.

Most of these practitioners are going to run a local GAPS group, which is a group of people who are doing the GAPS Nutritional Protocol and which can meet on a regular basis, fortnightly or weekly somewhere in a local area to share their recipes and experiences or to help each other with shopping, finding food, finding kitchen utensils, and fermentation.

If you want to find friends in the same boat, people who are doing the same thing that you're trying to do – just for the moral support and help – please go this meeting. Meet these people and practitioners. You don't have to be a patient of the practitioner to attend the meetings. You can just attend the meetings. It's up to you, but it will be a great resource for you to tap into.

DM: Terrific. Thank you for all that you have done and all that you'll continue to do. We're going to have a large number of additional interviews that will talk about these specific conditions. It's important to understand those conditions and some of the specifics. But ultimately, it comes down to implementing the GAPS Diet, which is why we had this long interview to actually help people understand and implement it at a very deep level.

I want to extend my deep appreciation for all that you have done and for me personally, too. It has just been a phenomenal change in my own life. Interestingly, I have started consuming fermented vegetables about six weeks ago now, and my dental hygiene was a bit of a challenge.

I mean I would brush my teeth twice a day, floss, I'd be really avoiding sugar, and I had a pretty good diet, but I would still have such dental plaque buildup that I had to see my hygienist once a month because of the tartar and the plaque buildup. I just got back from there yesterday, and she told me that this is the first time ever that there was a 50 percent reduction in the plaque.

NC: Perfect.

DM: So, I want to continue to do that, have some other elements, and hopefully eliminate that completely. I have always been envious of people who didn't have to see their hygienist for years. They have no plaque. It wasn't me.

NC: [Laughs]

DM: Clearly, there was something going on in my own physiology that is benefitting profoundly from your program, so I deeply appreciate it.

NC: Thank you for that. Thank you for your work.

DM: All right. We'll be in touch soon, and we'll take it from there.

NC: Absolutely.