

A Special Interview with Dr. Natasha Campbell-McBride By Dr. Mercola

DM: Dr. Joseph Mercola

DC: Dr. Natasha Campbell-McBride

Introduction:

DM: Welcome everyone. This is Dr. Mercola. I'm here today with Dr. Natasha Campbell-McBride who is going to enlighten us about an interesting topic which is gut and psychology syndrome. It really is a natural treatment for autism, ADHD, dyslexia, dyspraxia, depression and schizophrenia.

Welcome Dr. Campbell.

DC: Thank you. I'm delighted to be here.

DM: We're delighted to have you. Could you tell me a little bit about what your training is clinically and academically and how you acquired your expertise in this area?

DC: I'm a medical doctor. I got my first postgraduate degree when I was young doctor in neurology. I worked as a neurologist and a neurosurgeon for several years. Then I started my family.

My first born son was diagnosed autistic at the age of three which threw me into a huge learning curve because I had to find a solution to his problem because my own profession had nothing to offer which was a bit of a shock for me.

Having found all those solutions, I went back to the university. I completed a second postgraduate degree in human nutrition and learned many more other things. As a result, my son fully recovered. He is not autistic anymore. He is living a normal life.

I have a clinic in Cambridge in England, in the UK which is very busy with children and adults with learning disabilities, neurological disorders, psychiatric disorders and children and adults with immune disorders and digestive problems.

DM: What country did you receive your medical training in?

DC: I'm Russian. I was trained as a doctor in Russia. I practiced as a doctor, as a neurologist, in Russia. Then I started my family and moved to the UK. So the whole disaster with my first child happened in the UK.

DM: Was your child born in the UK?

DC: Yes. He was born in the UK. Now I have lived in the UK for the last 20 years and have practiced there.

DM: How long did it take you to acquire the expertise and understanding to be able to nurture your child through the autism challenge and back into a normal functioning child?

DC: Well, many parents understood and I understood the same thing that children are given to us to teach us lessons. The learning curve is very fast and very steep usually particularly with a child with autism because the younger the child is when you start the treatment, the better the results are. The longer you let the child sit in that autistic form the more difficult it is to pull them out of it and the less impressive the results are.

When we start the treatment, GAPS treatment I'm talking about now, at the age of 2, 3, 4 up to 5, you give your child a real chance to completely recover from autism, from ADHD, from ADD, and dyslexia and dyspraxia, and that larger group of children who do not fit into any diagnostic box.

They may have a little bit of autism and a little bit of ADHD and a little bit of dyslexia and a little bit of dyspraxia and a little bit of something else but none of it is conclusive enough to fit that child into a diagnostic box.

These are the children with whom doctors usually procrastinate. They ask the parents to bring the child in six months and again in six months to observe the child in order to just give the child a diagnosis and a very precious, very valuable time gets wasted that way while the child could have been helped.

DM: When did you graduate medical school? What year?

DC: I graduated in 1984.

DM: So about the same time I did. Do you recall the incidence of autism around then? Was it about 1 in 100,000 or so? What is your current estimate as to the incidence today in the UK?

DC: It was 1 in 10,000 when I graduated. It was a very rare disorder. Even I as a medical graduate have never seen an autistic patient. By the time I graduated from my medical school I have never seen an autistic individual. I have seen other psychiatric conditions through my course in psychiatry but have never seen an autistic child. To be honest, the first autistic child that I have encountered was my own.

As I said, 20 years ago in the Western world and certainly in the English-speaking world, we were diagnosing one child in 10,000. Fifteen years ago, we were diagnosing and five years ago we were diagnosing one child in 150 which is almost a 40-fold increase in incidence. Now in Britain and some countries, we are diagnosing one child in 66.

As I understand that the numbers are similar in some states in America, in some areas of the states in America; the same in Australia and the same in New Zealand.

I have just come back from Hungary, the incidence there is not as high but it is getting close to one child in 150.

DM: That's a dramatic increase. Basically a 50-fold increase from the time you and I started practicing. Have you come to any conclusions as to what your understanding your beliefs are as to what are the primary contributing factors to this dramatic increase?

DC: Absolutely, I have no doubt whatsoever that these children are born with perfectly normal brain and perfectly normal sensory organs and they are supposed to function normally. What happens to this children and that's my absolute belief and that's what GAPS (Gut and Psychology Syndrome) describes. The very name establishes a connection between the functioning of the digestive system and the functioning of the brain.

What happens in these children, they do not develop normal gut flora from birth, from the beginning of their life. Gut flora is a hugely important part of our human physiology. Recently research in Scandinavia has demonstrated that 90% of all cells and all genetic material in a human body is our own gut flora. We are just a shell. We are only 10%. We are a habitat for this mass of microbes inside us. We ignore them at our peril.

What happens in these children they develop very abnormal gut flora from the beginning of their lives. So as a result their digestive system instead of being a source of nourishment for these children becomes a major source of toxicity. These pathogenic microbes inside their digestive tract damage the integrity of the gut wall.

So all sort of toxins and microbes flood into the bloodstream of the child and get into the brain of the child. That usually happens in the second year of life in children who were breast fed because breastfeeding provides a protection against this abnormal gut flora.

In children who were not breastfed I see the symptoms of autism developing in the first year of life. So breastfeeding is crucial to protect these children.

What happens in these children, they are born with normal brains, normal eyes, normal ears, normal tactile sensitivity, and normal taste buds. All these sensory organs are given to us to collect information from the environment.

If you look at little babies, they look at everything. They listen to everything. They touch everything. They mouth everything. They taste everything. What are they doing? They are collecting information from the environment and then that information from their sensory organs is passed to the brain to be processed. As the brain processes this information the child learns.

This is mommy and this is daddy. This is a toy. I'll play with this toy like this. I don't do anything else with this toy. I don't destroy it. I don't throw it. I don't line it up. This is a spoon. I eat with it. These people around me, I communicate with them in this way.

But what happens in GAPS children? Because of this river of toxicity coming out of the gut and flooding into the brain of the child, the brain is clogged with toxicity and it cannot process the sensory information. Sensory information turns into this mush, into a noise in the child's brain and from this noise the child cannot learn. They cannot decipher anything useful.

That's why they don't learn how to communicate. They don't learn how to understand language, how to use language, how to develop all the natural instinctive behaviors and coping behaviors that normal children develop.

The second year of life is crucial in the maturation of the brain of the baby. That's when communication skills develop and how instinctive behaviors develop and play skills develop in children and coping behaviors develop.

If the child's brain is clogged with toxicity, the child misses that window of opportunity of learning and starts developing autism depending on the mixture of toxins, depending on how severe the whole condition is, depending how severely abnormal the gut flora is in the child.

The child may manifest this condition as a bunch of symptoms which would fit into a diagnostic box of autism or as another bunch of symptoms which would fit into a box of attention deficit hyperactivity disorder (ADHD) or attention deficit disorder (ADD) without hyperactivity or dyslexia or dyspraxia or obsessive-compulsive disorder or something else.

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But I say a majority of cases almost 80% of these children they have such a mixture of symptoms that they do not fit into any diagnostic box neatly. These are the children who miss out very important years at the beginning when they could have been helped.

DM: It's an interesting observation. I'm sure it provides phenomenal opportunity to have a therapeutic intervention which will make a difference.

The central question I have, I'm still a bit confused because if it's the gut flora that is triggering this, there has to be something that caused the shift in the last 30 years unless it spontaneously shifted to different flora but something is causing different organisms to contribute to this pathology. What's your speculation as to the variables and the factors that are contributing this shift that's moving patients toward this GAP syndrome?

DC: Absolutely. It's a very good question. The epidemic of autism and ADHD and dyslexia and dyspraxia – we can use the word epidemic here despite the fact that classically this is what was used for infectious disease. Now we're using it for an epidemic of autism because we indeed have an epidemic.

The underlying epidemic causing all of these conditions and causing this other epidemics is the epidemic and abnormalities in the gut flora. I will explain how it happens. As far as science knows the baby inside the mother's womb during nine months of gestation is sterile. The baby's gut is sterile.

When does the baby acquire its gut flora – at the time of birth when the baby goes through the birth canal of the mother. So whatever lives in mom's birth canal, in mom's vagina becomes the baby's gut flora.

So what lives in mom's vagina? It's a very richly populated area of a woman's body. The vaginal flora comes from the bowel. So if the mother has got abnormal gut flora she will have abnormal flora in her birth canal. Fathers are not exempt because fathers also have gut flora and that gut flora populates their groin and they share their groin flora with the mother on a regular basis.

What I find in my clinic before I talk about the child, I always collect health history from the mother, the father, and preferably even grandparents of the child. What I find that we have a growing and a deepening epidemic of abnormalities in the gut flora which began since Second World War when antibiotics were discovered.

Every course of broad spectrum antibiotics wipes out the beneficial species of microbes in the gut which leaves the pathogens in there uncontrolled. In a normal healthy digestive system with a normal healthy gut flora, the beneficial species of microbes predominate and they are called probiotics. We have probiotics bacteria, probiotic viruses and probiotic yeasts and beneficial worms, even beneficial protozoa but the broad spectrum antibiotics wipe out the beneficial bacteria.

In parallel with beneficial microbes in the healthy gut, the scientists have found now thousands of different species of downright pathogenic disease causing microbes; bacteria, viruses, fungi and other microbes. But as long as the good ones predominate in the gut, they control all the pathogens and they do not allow them to cause any trouble. They keep them in small colonies and they don't allow them to proliferate.

Every course of antibiotics wipes out the beneficial bacteria and that gives a window of opportunity for the pathogens to proliferate, to grow uncontrollably, and to occupy new niches in the gut. The beneficial flora recovers but different species of it take between two weeks to two months to recover in the gut and that's a window of opportunity for various pathogens to overgrow.

What I see in the families of autistic children in particular that the mother has got a hundred percent of mom's of autistic children have got abnormal gut flora and health

problems related to that. But then I look at grandmothers on the mother's side and I find that the grandmothers also have got abnormal gut flora but much milder.

So what I see in the families that the grandmother had abnormal gut flora but very mild due to a few courses of antibiotics which she received prior to having her daughter, then she had her daughter and passed her slightly abnormal gut flora to her daughter at birth.

Ladies who are having children now who were born in the 50s and 60s and 70s now and some youngsters - that is the time when breastfeeding went out of fashion. That is the time when formula milks came on the market and the women were told that it's not fashionable to breastfeed anymore and there is no need for it anymore.

Now we know better. We know that breastfed babies develop completely different gut flora to the bottle-fed babies. Both of their babies develop abnormal gut flora which later predisposes them to allergies, eczema and learning disabilities and various other health problems. So now many women try to breastfeed.

What I find that mothers of autistic children who born at the time when this formulas just came in, a large percent of them were not breastfed. So these women acquire slightly abnormal gut flora from their moms at birth then they were not breastfed so the abnormalities in the gut flora deepened then throughout their childhood they received many courses of antibiotics.

Ever since antibiotics were prescribed particularly from the 50s and 60s, they were prescribed a suite for every cough and sneeze. They really over prescribed antibiotics. And with every course of antibiotics, the abnormalities in the gut flora would get deeper and deeper in these girls. And then at the age of 15, 16 these ladies were put on a contraceptive pill. Contraceptive pills have a devastating effect on the gut flora. Nowadays ladies are taking it for quite a few years before they're ready to start their family.

To that you can add the junk food, all the processed carbohydrates that people are consuming nowadays. These sorts of foods are almost exclusively feed pathogens in the digestive system allowing them to proliferate.

Many of these modern factors created a whole plethora of young ladies in our modern world who have got quite deeply abnormal gut flora by the time they are ready to have their first child. This is the abnormal gut flora that they are passing through their children.

So these babies acquire abnormal gut flora from the start and while the baby is breastfed the baby is receiving protection because whatever is floating in the mother's blood will be floating in her milk. Women who have abnormal gut flora would have immune factors in their blood which they have developed against their own gut flora to protect them. These immune factors will be in their milk.

While the baby is breastfed, despite the fact that the baby has acquired abnormal gut flora from the mom, there will be some protection. But as soon as the breastfeeding stops that protection stops as well. That is the time when the abnormalities in the gut flora really flourish and the child starts sliding down into autism or ADHD or ADD or any other learning disability or physical problems such as diabetes type 1 for example and celiac disease or another autoimmune condition or some other physical condition, asthma, eczema and other physical problems. That's where this epidemic comes from.

I'm afraid, the prediction is, looking at what's happening in our modern world, all the factors which are making the gut flora abnormal in people are getting stronger. They're not getting any weaker. So the new generations of young ladies who are going to have children are going to have even worse gut flora so the proportion of GAPS children being born to these mothers is going to grow in our population. Our authorities need to understand that and they need to be ready for that.

DM: It's fascinating. I would imagine the introduction of high fructose corn syrup in the mid-70s by Japanese scientists which essentially allowed the food industry to produce fructose at a far less expensive rate. So essentially it's a cheap sugar and radically increase the amount of fructose in the supply of this sugar that did nothing good to benefit the gut flora and probably contributed to the increase.

DC: Absolutely.

DM: I'm also wondering too that many people who studied this autism epidemic, although it's a controversial area, they seemed to have found an association between the use of vaccines in an increase in the epidemic. I'm wondering how you tie the two together.

DC: Babies are born not only with a sterile gut but they are born with immature immune systems. They come into this world like aliens. Their immune system needs educating. Establishment of normal gut flora in the first 20 or so days of life plays a crucial role in appropriate maturation of the baby's immune system. Babies who develop abnormal gut flora are left immune compromised.

Vaccinations have been developed originally for children with a perfectly healthy immune system. GAPS children are not fit to be vaccinated with the standard vaccination protocol.

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In my book *Gut and Psychology Syndrome*, I wrote a whole chapter what I described a proposal to the authorities of what they should do with our vaccination strategy because the standard vaccination protocol is damaging these babies. They're not fit to be vaccinated this way.

Seeing that the proportion of GAPS children in the population is growing, nobody has calculated how many children today are born GAPS. I would love for somebody to do that study to actually ascertain how many children and what proportion of the population are GAPS children. But this proportion is going to grow and grow and grow. These children are not fit to be vaccinated with the standard vaccination protocol.

Another problem is that vaccinations are commercial products and the number of them is growing and growing because they are highly profitable for the pharmaceutical industry, for the governments in the West and for those who administer vaccines, for the medical industry as well. It's become a profit making industry (vaccination).

I see that with every year we have new vaccines coming in so children who 10 years ago receive 14, 15 vaccines altogether by the age of five are now receiving 20-22 vaccines. Where is it going to stop?

What we also have to understand the pharmaceutical industry cannot patent natural viruses, natural bacteria or any microbe that nature has created. They have to genetically modify them before they can patent them. So these vaccines contain genetically modified viruses, genetically modified microbes. We still haven't got enough data to know what exactly they're doing to the human body and what exactly these genes are doing to our gut flora in these children. I see many children in my clinic who have been damaged by vaccinations. It doesn't have to be MMR. Some children are damaged by MMR. Some children are damaged by DPTs. Some children are damaged by the first vaccines that they receive as soon as they are born.

In the Eastern Bloc, they are still doing vaccines for TB. There are some other vaccines for chicken pox, I have seen children damaged. It all depends on how poorly is the immune system of the child.

These children are already immune compromised because they have acquired abnormal gut flora. Every course of antibiotics damages the gut flora further. Every antibiotic has a direct damaging effect on the immunity because they damage the various fractions of immune cells, various parts of the immunity.

So the child becomes more immune compromised with every course of antibiotics. It's a matter of the last straw breaking the camel's back. So if the child is damaged enough, the vaccine can provide that last straw. But if it doesn't provide that last straw in a particular child then it will get the child closer to the breaking point.

So the child may not be damaged by vaccination immediately and develop autism straight after vaccination but a year later they may develop diabetes type 1. Who is to say that there is no connection between vaccines and this condition?

DM: Absolutely. There is a number of researchers who pointed that out. (indiscernible 23:27) is one who has done some very good epidemiological evidence to show that association.

I thank you for that explanation. It really brings up the consideration that I had never heard before that there is actually this group, a subgroup of the normal population who is at serious risk for developing vaccine injury and that you can identify this group based on their gut flora.

Is there a simple test or assay that you can use or know that you can identify this group to effectively exclude them from the vaccination schedule?

DC: Absolutely. I say I've got a whole chapter in my book describing the whole thing. The first thing that has to be one are non-invasive things. First, we need to collect the health history of the parents. We need to know whether the parents have got normal gut flora and what they are going to pass to their child.

Then the stool of the child can be analyzed for the gut flora in the first few days of life. Then the immune system, the urine of the child can be analyzed which is again a non-invasive test for metabolites of the gut flora. Now we have excellent tests which find chemicals which are produced by various species of microbes in the gut. These chemicals then get across the gut lining into the blood stream, circulate around the body, and leave the body in urine.

So by analyzing urine, indirectly we can say what kind of species of microbes are sitting in the gut of the child or what kind of chemicals they are producing. Because the profile of these chemicals of a healthy urine should look in a certain way; wherein in a GAPS child this profile is very, very different. We see certain chemicals in there which should not be there.

So by doing simply these non-invasive things we can pretty much say that the child has abnormal gut flora. If the child has abnormal gut flora we can assume that the child has a compromised immunity and these children must not be vaccinated with the standard vaccination protocol because they simply get damaged by it. They should not be vaccinated.

Another group of patients are siblings of these children. Siblings of autistic children, siblings of severe hyperactive children, obsessive compulsive children and children with diabetes type 1 and other severe physical and mental conditions in children.

Despite the fact that these siblings, this brothers and sisters may not have autism and maybe developing perfectly normally but what I find in these siblings that they suffer from eczema and they suffer from asthma and they have digestive problems and they may have a little bit of hyperactivity or a little bit of dyslexia or a little bit clumsy which is dyspraxia or have emotional instability or something else.

These children are not autistic but they have inherited the same gut flora from the same mom. Due to the fact that there is genetic difference and there is a different pregnancy. It might have been cleaner, less toxic pregnancy, less stressful pregnancy so this child

has got a stronger constitution and this abnormal gut flora didn't make the child autistic but the child is still vulnerable. These children also react to vaccinations.

Younger siblings of autistic children and younger siblings of children with all these disabilities and all these problems should not be vaccinated with the standard vaccination protocol.

The immune tests that I was talking about can be repeated every six months or every year for these children or whenever the child is considered to be perfectly healthy and the immune system shows itself to be perfectly well and well functioning only then a vaccination can be considered for these children because we simply cannot take the risk.

DM: I really find this fascinating and really an elegant description and approach of how to circumvent this autism epidemic which has really been a perplexing puzzle for most of us.

These tests and assays that you're describing that it's in your book, are they readily available? Do most clinicians have access to them or are they specialty labs? How costly is it?

DC: They are available in most laboratories around the world. The test was first developed in the Great Plains Laboratory in the States. That happened 25 years ago now. Now this test is available in Europe, in Eastern Europe, all over the States, in Asia. As far as I know, it's available in Hong Kong. It's available in Australia. Many laboratories have picked it up and they're doing it.

These tests are completely non-invasive. So you don't have to stick any needles into the child to ascertain the child's gut flora. Test the stool, test the urine and get a proper health history of the child and of the parents.

DM: What is the typical cost to run these tests?

DC: The organic acid test that I'm talking about, the urine test is around \$100. The stool analysis is around 80-90 dollars.

DM: So very reasonable considering the tens or hundreds of thousands of dollars of expenses, in some cases, even more that results from having a child with one of these disorders.

DC: Absolutely. When the authorities, when the State, take the responsibility upon itself to look after this individuals, autistic people live a normal lifespan. They should live into their 70s. These are severely disabled people who have to be looked after all their lives. That runs into millions, hundreds of millions, the cost to look after a person like that for 70 years. Surely to do a couple of tests when the baby is born to prevent the damage is worthwhile.

DM: I must say that really is a phenomenal recommendation and relatively simple and inexpensive. Certainly affordable by the vast majority of the population who are having children because there is an expense to having children but this is a relatively minor one as a set of insurance if you're choosing to deploy the vaccine regimen. It would seem almost malpractice not to have this process done for your child.

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DC: Our children are being used as a market for selling vaccines. The children are vaccinated in our Western world I'm afraid not for the sake of saving the child but for the sake of making money. I'm afraid the situation came to that. It's an extremely sad and worrying situation.

DM: I have always and certainly most people would agree that the best strategy is prevention. An ounce of prevention is worth a pound of cure. It's the standard old adage but it's probably even an order or two of magnitude higher than that.

Now that we have identified how to prevent this which is really the crucial key, most of the people listening to this are not going to be in that situation. They are listening because they either know or have someone who suffers from this disorder. As you mentioned earlier the sooner you implement this process the better because the more likely that it will be effective.

I'm wondering if you could outline the strategies and the process of restoring someone back to health who suffered this damage and actually had the vaccines and they were at risk for developing this because of the immune dysfunction that they had developed from the gut flora imbalances.

DC: There is a very effective treatment for this condition which is called GAPS Nutritional Protocol. It is described in great detail in my book called *Gut and Psychology Syndrome*. It's a yellow colored book. Thousands of people, probably tens of thousands of people now around the world are saving their children with this program. The book is a self-help book. Majority of these people just bought the book and read the book and followed the program in the book and got fantastic results.

I absolutely love these people. They mail to me from all over the world with their stories and their wonderful results and they never ask for any consultation, never asked for any guidance.

I have an information website. It's a non-commercial website. It's full of information called www.gaps.me as you mentioned.

There are many other websites on GAPS on the internet and there are several discussion groups where parents and patients are trying to heal themselves,

exchanging recipes and helping each other to get further protocol and the protocol works.

The protocol consists of three elements. The first and the most important is the diet. These essentially are digestive disorders. Autism is a digestive disorder essentially. ADHD is a digestive disorder essentially. Dyslexia, dyspraxia, other learning disabilities and psychological problems in children and adults are digestive disorders.

I will expand towards the psychiatric disorders and (indiscernible 33:02) such eating disorders. Anorexia nervosa and bulimia and other eating disorders are digestive disorders. Bipolar disorder is a digestive disorder. Depression, obsessive-compulsive disorder, schizophrenia and epilepsy in majority of cases are also GAPS conditions.

The digestive tract is a long tube. What you fill that tube with has a direct effect on its well being. That is why diet is the most important treatment.

GAPS diet is based on a (indiscernible 33:36) a specific carbohydrate diet but I had to make quite a few modifications and expand the diet in order to adapt it for my patients for my clinic. It's my patients who named it GAPS diet.

What GAPS diet does, it removes all the foods which are difficult to digest. It provides foods which are easy to digest and which are very dense in nutrition. Because these patients are not able to digest and absorb food properly they have got multiple nutritional deficiencies. Their brains are starving. Their immune systems are starving. The rest of their body is starving.

We have to give them foods which are very rich in nutrition and which are easy to digest for this people who have damaged digestive systems. All the foods which are difficult to digest are removed from the diet. The beauty of the diet is that you don't have to adhere to it for the rest of your life.

On average, people adhere to the diet a couple of years. It takes two years to drive out the pathogenic flora, to reestablish normal flora in the gut, to heal and seal the damaged gut lining in these people and turn the gut back to being a major source of nourishment for the person instead of being a source of toxicity.

Once that happens people can start introducing foods which they could not eat on the diet and gradually they return to a much wider variety of foods. They will never return to the terrible Western junk diet because the Western diet is absolutely terrible. What people are eating on a daily basis is appalling.

Having been through the GAPS diet, they will continue eating very healthily. They will continue to homemade wholesome meals which will nourish them and sustain them for the rest of their lives and prevent all sorts of health problems later on in their lives.

The diet is the major part of the GAPS nutritional protocol. Second part is a few supplements, well chosen supplements. They're not really supplements, they're foods. One of them is a probiotic. These patients need an effective probiotic because we need to introduce beneficial bacteria into their gut that should kill the parasites, drive them out, and to replace them with beneficial flora.

Probiotics are an important part of the treatment. I have got a whole chapter on my book explaining the whole concept on probiotics. What kind of probiotics to choose and what dosages to use for different ages of the patient.

The second supplement that is important for these people are vitamin A and vitamin D in a nutshell form. I recommend cod liver oil for these patients. The major source of vitamin A in the GAPS nutritional protocol is the diet itself. It's also quite rich in vitamin D because it provides all the foods which are rich in these vitamins. Sunlight is an important part in providing vitamin D for these patients. That's why I recommend sunbathing as much as possible without using any sunscreens or any other toxic creams on the skin.

Cod liver oil is an important part of the treatment. That's a temporary intervention because as the diet is fully implemented the patient will be getting all the vitamin A and D necessary from the diet.

For quite a large percent of patients, fish oils and omega-6 oils from plants are helpful for a period of time as well. For a group of patients also digestive enzymes particularly stomach acid supplement can be helpful as well. Not for everybody particularly in children. We usually don't need digestive enzymes but in levels that can be helpful. That's the supplements.

I don't recommend any more supplements particularly at the beginning of the program because you don't want to put a lot of effort into the diet and then spoil the whole process with a pill. As all supplements contain fillers and binders and other ingredients which can damage your challenged gut lining that are trying to heal the gut lining in these people. It's already irritated and sore in these people.

The third part of the GAPS nutritional protocol is detoxification. We all have got a so-called detoxification system in our bodies with the headquarters in the liver and departments in every cell. This is a cleaning system in our bodies. It's a highly sophisticated system. It keeps us clean. Because the digestive process itself produces a lot of toxic substances which are absorbed. Our metabolism produces a lot of substances which need to be recycled and which can be toxic if they're not recycled appropriately. So that's what detoxification system does.

In these patients, because there is a river of toxicity coming from the gut to the liver, detoxification system gets clogged up. There is a backlog there, a traffic jam builds up and it just cannot cope. As a result, these patients accumulate toxins. They do not

process them properly. They do not eliminate them properly. They just accumulate in various tissues of their bodies.

That is why when we test these children for mercury we find mercury. We test them for lead, we find lead. We test them for arsenic, we find arsenic. We test them for phenols we find phenols. Formaldehyde, we find formaldehyde and hundreds of other toxic chemicals which we're all exposed to in the environment – in our air, in our water, in our food, through our skin. As long as the detoxification system works properly it processes these things and we are not aware of them. But in these children the detoxification is not working. So they accumulate these things.

GAPS nutritional protocol will naturally clear these things out, unload these things by switching on the detoxification system in the person, by restoring it and allowing it to work again, just start processing these things normally and removing them normally.

I do not use any drugs or any chemicals for removing toxins out of the body. I do not believe in that intervention. I think it's far too drastic and far too severe and it produces a lot of damaging side effects.

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I recommend juicing which is a very old and a very effective and gentle way of removing all sort of toxins out of the body. It has been around for many decades now and has been used by millions of people around the world. I recommend baths with Epson salt and sea salt and seaweed powder and cider vinegar and bicarbonate of soda. These are very gentle interventions but can be incredibly effective in detoxifying the patient and supplementing the patient with certain elements which are needed for detoxification.

I recommend fermented foods which are part of the diet anyway. Fermented foods provide the patient with a lot of probiotic bacteria. Probiotics are the major cleansers in the body because of their solubles. They have both elements which chelate heavy metals and which grab hold of all sorts of cancer causing chemicals and other chemicals. If they cannot neutralize them, they will hold them until they take them out of your body because most of our stool is bacteria. So they take them out in your stool.

Providing a lot of probiotics in the form of fermented food and supplemental probiotic is one of the most powerful ways of removing all sorts of toxins from the body. So detoxification is a third part of the GAPS nutritional protocol.

The whole program is a lifestyle change. Not just for the child or the adult because there are many GAPS (indiscernible 41:35) around but for the whole family. I recommend usually that the whole family goes on the diet and goes on the protocol because we have a mom with abnormal gut flora. In more than 50% of cases dads have got abnormal gut flora and the siblings acquire the same gut flora from the same mom.

They may not be autistic but they have other symptoms which are related to abnormalities in the gut flora.

So it's a good idea to put the whole family on the program, on the diet and as a result the parents recover and they have no stamina or energy to look after their children and the siblings recover because the siblings quite often have symptoms of ulcer, are nagging and unpleasant and challenging for the parents but the family recovers as a whole altogether.

DM: Are there any particular fermented foods that are more useful with respect to the probiotic recommendations? Are there specific strains that you find useful? I would think that bifidobacteria might be more useful in a young child as opposed to the lactobacillus.

DC: They are all useful. They are all very important. It's important to introduce beneficial yeasts as well as bacteria and hopefully beneficial viruses too. We haven't got much research on probiotic viruses yet but we've got a few papers coming in now.

DM: Do you do that as a supplement and what type of yeast, like saccharomyces?

DC: As fermented foods. Fermented foods can be of two groups; dairy fermented foods and vegetable and fruit fermented foods. I find that the majority cases in my clinic dairy fermented foods are tolerated perfectly well in these children. I know that parents are quite shocked when I talk about dairy particularly those who tried gluten and casein free diet.

Majority of children particularly if they go through the GAPS introduction diet – GAPS diet is structured in three stages, introduction diet, whole diet and coming off the GAPS diet. Particularly if you're doing the introduction diet, fermented dairy can be introduced from the beginning and usually we introduce yoghurt. Yoghurt is fermented with lactobacilli. These are much milder than yeasts. It produces much milder die off reaction. I'll talk about die off in a minute.

Once the yoghurt is well tolerated by the child, by the adult, then we start introducing kefir. Kefir is a group of yeasts and bacteria and some viruses in there as well as we're discovering now. Here we're introducing a far more aggressive group of probiotic microbes into the digestive tract. That's why kefir usually produces more severe die off reaction, a much stronger reaction. That's why we go through the die off first with yoghurt and then we introduce kefir.

If there is any problem with dairy, then we can introduce vegetables fermented with the same cultures. We can ferment them by adding yoghurt culture or kefir culture to the vegetables.

The basis of all vegetable fermentation is cabbage. There you can add carrot and onion and beetroot and garlic and (indiscernible 44:54) and many other vegetables. It can be fermented together. There are many good recipes available from fermentation of

vegetables on the internet and in my book. My book has a large recipe section where I describe all the recipes and how to ferment your own foods at home.

So these things can be introduced; fermented cabbage, sauerkraut. That's a traditional recipe where no culture is added because vegetables particularly organic vegetables have natural bacteria living on them. So you don't need to add any culture to them. Sauerkraut is made simply by shredding the cabbage, pounding the cabbage so that the juices are released. It's just salt and cabbage nothing else added. You might add some carrot to it or some juniper berries and that makes a beautiful sauerkraut. These are the foods that people introduce.

What people have to understand that probiotics is not something optional because humankind have consumed probiotics forever, for as long as we existed. Why? Because for millennia we didn't have refrigeration. We didn't have freezers. We didn't have refrigerators. How did people preserve their food for millennia, for thousands of years, possibly for millions of years? People fermented foods.

When your cabbages are ripe in September, if you don't do something with them they would rot away and (indiscernible 46:21) at once and you would be left without cabbage for the rest of the year. So people made sauerkraut. They fermented the cabbage. Sauerkraut can keep for five years without spoiling. For the rest of the year people ate fermented cabbage and with every mouthful of that sauerkraut they consumed millions and millions possibly billions of probiotic bacteria into their digestive system.

When they would kill an animal they couldn't eat all the meat at once and if you don't do something with that meat it would spoil so people made hams, traditional hams, prosciutto in Italy and prosciutto in Croatia and other varieties of hams. They all liked fermented meats.

People around the world if you look at traditional diets fermented everything. They fermented meats and fish and vegetables and dairy and fruit and grains. Anything can be fermented. Most of the year people have consumed their foods in a fermented state. So they consumed large amounts of probiotic bacteria.

In the last few decades as our food industry has developed this practice got forgotten. People stopped fermenting their foods because the food industry has changed all our recipes with their own agenda obviously of shelf life and profit and things like that. People stopped consuming fermented foods. So we are depriving our bodies of this very important part of our physiology –daily consumption of probiotic bacteria.

People who want to restore their gut flora and people who want to have healthy immune system and healthy bodies have to reclaim that practice back. They have to start consuming fermented foods again or they have to consume probiotic bacteria in a supplemented form.

When we talk about probiotics we have to talk about die off. What is die off? A more scientific name for it is Herxheimer reaction which was first discovered with antibiotics because when antibiotics were introduced into the body they start killing off the pathogens. When these pathogens die they release toxins. So temporarily the person would get worse because a large amount of toxins would be released into the system.

The same happens with probiotics. If you suddenly consume a large amount of fermented food, if you've never consumed it before and you suddenly ate a plateful of sauerkraut or another fermented food, the amount of probiotic bacteria that you put into your digestive system can cause quite a die off. They would start attacking pathogens in your gut. Those pathogens will start dying and releasing toxins.

These are the toxins which are making you autistic or dyspraxic or emotional or depressed or diabetic or gives you rheumatoid arthritis or gives you celiac disease or gives you something else. So your symptoms temporarily will get worse.

In order to control this die off reaction, I recommend that people start with a tiny amount of commercial probiotic or fermented foods. Go through the little die off that it would produce then increase the dose, again go through the little die off that it produces then continue increasing the dose in this fashion.

This dose increase is a very individual process. It depends on the severity of the condition. It depends how severe the abnormalities in the gut flora are in the person. In a mild person they can sail through the whole process and get up to the therapeutic dose of a probiotic in a couple of weeks.

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Other people have to go in absolute baby steps. They have to start with a pinch of a probiotic for a week or two then two pinches for a week or two and so on and it takes them months before they get to the therapeutic level of the probiotic.

Some die off has to be endured but you have to keep it controlled at a level that is manageable that you can live with. It's the same for children and for adults. That's about probiotics which come in two forms, in supplemental form and in fermented food form. It is a very important part of the GAPS nutrition protocol.

DM: It sure makes sense. Many times the devil is in the details. I'm wondering if you could comment on the use of the probiotics in the dairy form. I would assume that the commercial forms of fermented dairy that one would obtain in a typical grocery store would not be appropriate because first of all it's pasteurized milk. If you can comment on the raw milk versus pasteurized and all the other additives they put in there.

Would you advice people to make their own fermented foods from organic raw dairy and then how would you relate the potency of the fermented dairy products to the supplemental forms? Is it much more potent? Is it as potent? If you are really committed

and have access and availability for these high quality fermented foods, do you even need the supplemental probiotics?

DC: Absolutely. The fermented dairy has to be made at home. You can't just buy them in the store because in the store they are not fermented long enough for all the lactose to be consumed by the fermenting bacteria.

Dairy milk contains a sugar, a double sugar called lactose which is a perfect food for pathogenic microbes in the gut. If you drink milk then these pathogens will consume the lactose and proliferate and it produces lots of gas and lots of discomfort for you. When we introduce the fermenting bacteria into the milk, they eat all the lactose. That's what bacteria like eating. They like eating sugars.

Well fermented milk is lactose free. It needs to be fermented at least 24 hours in a warm place and that has to be done at home. At the same time, as the lactose is being consumed in the milk, the whole structure of the milk is being pre-digested. These bacteria will pre-digest proteins for you. They will break them down for you. They will break down parts. They will release vitamins. They will do many things to the milk so it becomes very easy for your own digestive system to handle. Even for people who are lactose intolerant or dairy intolerant they find that they can tolerate well fermented milk perfectly well.

It is best to find raw organic dairy from traditional breeds of cows on pasture. There is a growing number of farms certainly in the States and in this country where I am who provide this milk. It's a fantastic quality milk. It's wonderful. But many people haven't got access to that quality of milk. If you cannot find raw milk and raw cream to ferment don't worry, find organic pasteurized milk and ferment that.

Yes raw milk is best but fermentation will return some life back into the pasteurized milk, pre-digested and make it more suitable for the human gut.

I have many, many families in my clinic who could not obtain raw milk and who fermented organic pasteurized milk and got very good results with their children and with adults as well. That's with the milk.

Usually, as I say, we make yoghurt because it produces a milder die off reaction then we move into kefir. At the same time I recommend fermenting cream. When you're introducing yoghurt you ferment cream in parallel with yoghurt culture in a different jar and introduce that because sour cream has a beautiful profile of fatty acids in them. Perfect for the brain. Perfect for the immunity particularly if it is a raw cream.

When you introduce kefir, when you start fermenting milk with kefir culture in parallel in a different jar ferment cream with kefir culture and introduce sour cream fermented with kefir culture. You can label your jars. Once you fermented these products they keep in the fridge for months and months. They can be introduced very gradually into the patient's protocol.

DM: Thank you for expanding on that. I'm wondering if you could comment on the supplemental use of probiotics in the relative efficacy of the cultured dairy at home versus the pills that one might take as a probiotic supplement.

DC: What we have to understand, the market is full of supplemental probiotics. There are hundreds of different brands if you're going to any health food store. Majority of them are prophylactic. They are not strong enough to make a real difference. They have been designed for healthy people to stay healthy and to introduce themselves.

GAPS patients need a therapeutic strength probiotic. These are strong probiotics which contain aggressive species of probiotic bacteria preferably some soil bacteria in it as well. These kinds of therapeutic probiotics will produce a die off reaction.

What I recommend for people who start with the introduction diet to first introduce fermented foods and go through all the die off with the fermented foods. When they settled on the good amount of kefir and yoghurt and sauerkraut and there is no more die off, then they can start introducing commercial probiotic, a therapeutic strong probiotic. They have to start with a tiny dose and build the dose up gradually to a therapeutic level.

People who start with a full GAPS diet and there is a proportion of patients who do that who don't go through the introduction diet. These are usually adults who do not have severe digestive problems. They can start with a therapeutic probiotic right from the start and in parallel can introduce fermented foods.

In some patients particularly in babies and in very small children quite often I find that fermented foods are enough. They don't even need to introduce a commercial probiotic. But it all depends on the severity of the condition and the severity of the digestive symptoms in the patient.

For adults I find that they do need both. They need fermented foods and therapeutic strength probiotic. Children usually recover quicker than adults and easier than adults. It all depends on...

DM: What type of dosages would qualify as a therapeutic strength? What type of concentrations or CFUs?

DC: I have my own formulas. I've got several formulas which are being used as therapeutic probiotics. I deliberately put two billion per capsule no more. So that it can be dosed to children.

Depending on the age of the child we start with a pinch, the capsule has to be opened and the powder has to be used just starting from the pinch or a third of the capsule or half of the capsule and gradually building up.

In my book, in the chapter on probiotics, I have a whole table on dosages for various ages of children. What kind of therapeutic level you have to get up to. For an adult I recommend eight capsules. Some patients take 12 to 15 capsules per day. That's 30 billion per day. That's usually enough. If you have strong enough human species of bacteria in there and plus some soil bacteria in the formula. That's quite enough for these patients together with the diet of course.

DM: Do you find that some people are unable to tolerate the soil organisms? They seem to be particularly useful when I was using them but I had observed that there are a certain number of people who just didn't tolerate them well or maybe I was confusing that with the Herxheimer reaction?

DC: Yes, a lot of people can get confused with the die off reaction, with the Herxheimer reaction but the probiotics, as I say, the number one treatment is the diet. You can't continue eating your burgers and drinking your soft drinks and introduce probiotics and expect miracles because (indiscernible 58:58). If it's trying to work against the stream it's not going to win. 80 to 90 percent of success is the diet. That is the most important thing. Probiotic is only a little aide that helps the diet.

DM: Can you highlight some of the foods that you seem to find the most notorious for causing flare-ups or worsenings. It seemed to be related to the body's ability to digest them. I would imagine sugars are way up there on the list of offending agents. What other foods or food groups do you find that are particularly problematic.

DC: What we have to remove completely a hundred percent are all starch and all sugars out of the diet. That means all grains have to be removed whether they're gluten free or not gluten free it doesn't matter. Wheat, rye, rice, oats, millet, quinoa, (indiscernible 59:52), couscous, amaranth, buckwheat, (indiscernible 59:54), corn has to be out.

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All starchy beans which is majority of dried beans has to be out as well of the diet. Lentils and beans which are allowed are introduced much later in the diet because they're very fibrous and very difficult to digest and they have to be cooked in a very special way.

All double sugars have to be out of the diet which means sucrose, your table sugar which is a double molecule. Lactose, by fermenting milk we remove lactose out of the diet and all commercial sweeteners. Obviously corn syrup has to be out of the diet. The only sweeteners that are allowed in the diet is natural honey, preferably raw honey and dried fruits. I recommend that people use dried fruit in baking.

The diet consists of nutrient dense foods which are easy to digest for the human physiology. That is all meats (fresh or frozen) cooked at home, all fish, and shellfish

(fresh and frozen), all known starch vegetables, ripe fruit and nuts and oily seeds such as sunflower and pumpkin seeds and sesame seeds.

Despite the fact that there are no grains in the diet doesn't mean that the patient has to live without bread and biscuits and cookies and cakes and waffles and pancakes as long as you use nuts and those oily seeds ground into flour consistency instead of flour. So the ingredients in baking are very simple. It's eggs, nuts and seeds, ground into flour consistency and some source of fat.

With these three ingredients you can bake bread by adding salt. You can add sun dried tomatoes there, you can add spicy seeds in there. If you want to sweeten the mixture you sweeten it with dried fruits, dates, dried apricots, raisins, things like that. If you want to make it a bit moister and softer people love pumpkin or zucchini or carrot or ripe banana into the mixture. And from that simple mixture you can make any shape or any size baking you like.

DM: Can you use baking yeast when you're preparing those foods?

DC: No. They don't rise. We don't use yeast, not at all.

The GAPS introduction diet is different. This is the diet which produces the healing and sealing process in the gut lining much quicker than following the full GAPS diet. We remove all foods which irritate gut lining because in these people the gut lining is so inflamed and damaged so we have to remove all the foods which might be irritating. So we remove all fiber. There are no raw fruit and no raw vegetables and no nuts, no baking in that stage.

We provide the foods which provide the building blocks for the gut lining to restore itself, to rebuild itself. There is a meat stock and bone broth and soups and stews and gelatinous meats which produce collagen, provide collagen and gelatin and other good things in there, and well cooked vegetables.

At the same time we provide fermented foods so we introduce the beneficial bacteria into the digestive tract because no healing in the gut can happen without involvement of probiotic beneficial microbes.

So for people who have both food intolerances, food allergies, severe digestive problems such as ulcerative colitis and Crohn's disease and other inflammatory bowel conditions and for people who have got reflux and for people who have ulcers in the digestive tract. For people with severe symptoms particular with epilepsy, for children and adults with epilepsy, I recommend starting from the introduction diet. It will heal the gut lining quicker and allow the person to recover much quicker.

The diet is very wholesome, very nutritious. I keep my whole family on this diet despite the fact that we don't need to anymore. Eighty-ninety percent of the time we eat this way and I find that about 90% of my patients do the same thing despite the fact that

their child or adult has recovered in the family, they continue with the diet because it's a very healthy, very wholesome diet. It prevents cancer. It prevents heart disease. It prevents diabetes. It prevents all sorts of modern diseases that people develop later on.

DM: And cosmetically it prevents obesity.

DC: Absolutely, it prevents obesity.

Talking about obesity, there is a simplistic idea surprisingly amongst all medics and authorities as well as the public that fat comes fat and that's completely wrong. It can't be any further from the truth. Fats, particularly animal fats are very important part of the GAPS nutritional protocol. The bulk of fat that the child and the adult consumes has to come from animal foods.

So it has to be pork fat, lamb fat and beef fat and goose fat and duck fat and chicken fat, butter. Why? Because the composition of human fat in our own bodies, the healthy layers of fat that we have is very similar to the fatty acid composition of those animal fats particularly lamb fat. If you look at the fat composition of human breast milk it is very similar to the fatty acid composition of lamb fat and beef fat and duck fat. These are the most physiological fats for us to consume.

The polyunsaturated fatty acids, omega-6, omega-3, and omega-9, yes they are required and they are called essential fatty acids but they are required in tiny amounts for the human physiology. Less than 1% of daily fat consumption should be polyunsaturated fatty acids. They should come from fish oils and fresh vegetables and fresh fruit.

In the initial stages I recommend supplementing cold pressed good quality plant oils such as a mixture of flaxseed oil, hemp oil, avocado oil and evening primrose oil for example or something like that combined with the fish oils to provide the omega-3s for these people. But again these things should be taken as a supplement in tiny amounts.

What has to be completely out of the diet are all vegetable and cooking oils which is sold in great big plastic bottles in our supermarkets because these oils are very harmful for health for everybody and should not be consumed by anybody.

DM: They are also used in most commercially prepared processed foods or in restaurants. So you have to be really careful when you eat out.

DC: Absolutely. All processed foods contain these vegetable and cooking oils. They are extracted from plants and the plant oils are largely polyunsaturated which makes them very fragile and very vulnerable. They get easily damaged by light, by high temperature, by pressure and by other influences in the environment.

What do we do in our large factories when they extract these oils from plants? We apply high temperatures and high pressure and chemical solvents and all sorts of industrial

processes. So when these fatty acids are extracted this way when they finish off as an oil they are already damaged and chemically mutilated and they are extremely harmful for the human physiology.

And then people start cooking on them and the more you heat these oils the more you damage them. The further you damage them. But on top of that when you consume these oils you upset the balance of fatty acid composition in your food coming in to your body. Your body requires more than 50% of all fatty acids in the food should be saturated then about 30-40 percent should be monounsaturated and only a small percentage should be polyunsaturated.

But what's happening here is that people are overdosing their selves with polyunsaturated chemically mutilated, chemically damaged fats from these cooking vegetable oils and as a result they upset their balance, their metabolism in the body quite severely.

As soon as these oils were discovered for the first time and were put on the market in the 20s and 30s, a very worried research started coming in. Now we have hundreds of papers testifying and showing that these oils cause diabetes and cause heart disease and cause cancer and cause infertility and cause fetal abnormalities if a pregnant woman consumes them, cause immune abnormalities.

Any malady, any degenerative disease – a hundred percent that our population is suffering from now is caused to quite a degree by consumption of vegetable oils and cooking oils. People are using now instead animal fats. Cooking in GAPS nutritional protocol cooking is done with animal fats. Frying and roasting is done with lamb fat, pork fat, beef fat, goose fat, duck fat, butter and (indiscernible 1:09:26).

DM: What about coconut oil? That's technically a plant but it seems to be acceptable for most experts that I'm familiar with.

DC: Yes, coconut oil is very beneficial because it is saturated. It's one of the most saturated fats on this planet but I have a few problems with coconut oil. First of all it comes from tropical countries. We live in the Northern Hemisphere so we have to trust whoever brings this coconut oil to us. We have to trust them how it's been extracted, how it's been processed, what has been done to it. So that's one thing.

Another thing is that it is quite an exotic thing for the northern Hemisphere for people in Europe and for people in Northern America. There is no need for it really. It can be used as a supplement and it can be used in baking. It looks very nicely in baking but it's best to consume it raw particularly if it has been extracted raw and uncooked. It's got that beautiful delicious coconut taste, flavor and smell.

It's quite (indiscernible 1:10:30) coconut is better to mix it with a bit of honey put it in a glass jar and carry it around with you. Particularly for people who have blood sugar abnormalities I recommend that you make a mixture of that and eat two-three

tablespoons every 20 minutes. That will keep your blood sugar level. That way you will avoid cravings for sugar and carbohydrates and you will stabilize your blood sugar much quicker.

About 20 days of carrying this jar around with you and you won't need it anymore because if you follow the diet your blood sugar will normalize over time but this is a very nice measure to do as a remedy for a period of time particularly at the beginning of the program.

Another good fat to use for this mixture is raw butter. If you can find good quality organic raw butter particularly orange yellow butter. Again, mix it with honey, put it in a glass jar and carry it around with you everywhere with a spoon and consume two-three tablespoons every 20 minutes. That will keep your blood sugar level and stop all these swinging of blood sugar and as a result emotions and behaviors and other symptoms.

DM: That's about all the time we have for today. I really thank you for all the work and the time that you shared with us in helping us understand some of these foundational factors that contribute to this incredible epidemic that we've been experiencing over the last few decades that really is devastating the lives of so many people in where we live.

It's just really tragic because it's such a relatively simple and not necessarily convenient but it's inexpensive and a solution to preventing all these grief and trauma and unnecessary hardships that occur if we can do this.

DC: You're absolutely right. Can I just add one more thing?

DM: Sure.

DC: We have an absolute epidemic of GAPS – Gut and Psychology Syndrome and Gut and Physiology Syndrome and the numbers of sufferers are growing. I'm completely overwhelmed by demands for consultations and people all over the world need GAPS practitioners – people who have training in GAPS.

I am preparing a training course for medical practitioners and health practitioners. The first wave of training will be done in September-October in Seattle, Chicago, New York and Dallas. Hopefully you will train. We will cover the states of America, the U.S. with a good number of GAPS trained practitioners.

This will be the people who will be able to take you through the diet, through the whole protocol by the hand and they will run a local GAPS group where all the patients and the protocol and other GAPS people will be able to come weekly or fortnightly, exchange recipes, exchange news, help each other, give each other moral support and learn more about GAPS.

After I have done the States I'm going to do training courses for GAPS practitioners in Europe. I already got courses planned in February in French speaking countries and then we will do Eastern Europe and then we will do other parts of the world.

DM: That's great. Really the key is to provide experts.

DC: Absolutely. We need experts because for many people...

DM: Maybe not experts but coaches who are really skilled in these principles and professionals who can really guide people through the difficulties. Because even though you can give them all the specifics and the handbooks and the challenges and the recipes on how to implement this, it's been my experience that most people who are challenged with this really find the reassurance of a professional to guide them through the details because they just feel more reassured or are able to guide them through any specific complications they might encounter.

DC: GAPS people don't despair help is coming. It will be very soon.

DM: We'll make sure that we make a link to that. Anyone can also access your information through your website www.GAPS.me and then you also have a book which we'll put a link to so that people can access information that way.

DC: I have got a blog which is called www.Doctor-Natasha.com where I put out all the news as well.

DM: Thank you for all you're doing and for really making an enormous positive influence in the lives of so many people who are hurt and damaged from the industrialization of the Western lifestyles that really we have encountered over the last 50-100 years. I appreciate that.

DC: Thank you for your work.

DM: Thank you again. We'll probably be seeing you. Are you going to be in the November conference in Dallas?

DC: Uhuh.

DM: Great. So maybe I'll get a chance to meet with you there personally.

DC: Absolutely. Hopefully we'll be able to meet.

DM: Okay. Thanks again. I appreciate it.