

Interview hosted by Dr Christine Shaffner of the Sophia Health Institute.

Please find the link to the original interview <u>here</u>



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Guest: Dr Marco Ruggiero, MD, PhD, October 2018

Dr Christine Shaffner: Okay, so that is working. Okay, great! Well, welcome everyone. We're so excited to have Dr Marco Ruggiero on our call today. This will be recorded, and I appreciate excited to learn more from Dr Marco. About the evolution of our Sofia Flow cream., we are going to have a lecture and then towards the end of the call we're going to save about 10 minutes for questions, so if you have any burning questions just please enter them in the chat box that you see, and I'll do my best to go through those. So, thank you Marco. We're really excited to learn again from you, and I appreciate your time this morning.

Marco Ruggiero:

Thankyou Christine and let me thank the hundred and fourteen participants that I see, that are online right now, and I hope it will not disappoint everybody and today we'll be presenting some new and old results. That hopefully will improve our understanding of how these wonderful products are working. So, let me start by sharing my screen. So hopefully now you will be seeing in mind. First slide let's put it on full screen and I hope Christine will confirm that you're looking at the first slide of mine today. Everything looks great Marco - Wonderful. So, let's start with this evolution of the Sofia cream. Now. As you know, before we start, we always like to thank the organizers in this case, Dr Christine Shaffner and of course for this great opportunity to share this latest research of mine that will describe the role of the brain microbiota as it relates to the immune system function and the genesis and evolution of the Sofia Flow cream and of course I wish to thank all the attendees.

Marco Ruggiero: An important thing that we always have to remember that these presentations are only for informational purposes. They are not intended to be substitute for





professional medical advice, diagnosis, or treatment. And since you're connected with the Sophia Health Institute, I think that there is no better place to go to ask for medical advice, but don't take anything on what I'm saying as a medical advice. Please. And also, since I don't know where you are looking at me from, whether you are located in the United States of America or maybe north or the South Pole, so always a police check with your national estate or regional health authorities for the current legal situation because selling the applications or the approaches that will be described in this store. As you may know, I think it's always honest to disclose the conflict of interest and because I am the founder and CEO of Silver Spring or the Swiss company that is dedicated to research development and production of probiotics that are based on microbiome medicine.

Marco Ruggiero:

As you may know, I'm the inventor of <u>Bravo</u> and all its derivatives as well and have a number of other supplements around medicine protocols including the Ruggiero Klinghardt protocol that will be mentioned later on and of course the Sofia flow microbiome advanced formula, that will be the topic of today's talk. Today's talk, as a matter of fact, will focus on the role of the gut and the brain microbiota as it relates to the brain and immune system function. And the genesis and evolution of Sophia Flow. I think you may know by now, that Sophia Flow was invented by following, a specific request by Dr Klinghardt who was looking for a way to restore the flow of lymph from the brain. That's where the name come from, the flow of lymph, however, to be honest the genesis of the concept related to Sophia Flow is rooted in research that we began in 2013 when together with the late the Dr Jeff Bradstreet,

Marco Ruggiero:

We developed a novel method to study the lesions in the brain, of some autistic children, and later on we will see how these will apply to chronic Lyme disease and many other neurodegenerative conditions. In those years, together with Dr Bradstreet we demonstrated that the rate of the lesions has correlated with the clinical severity of the disease. Autism in that case, and we demonstrated that there was accumulation of fluid in the meninges as well as inside of the brain cortex and what is commonly referred to as a neuroinflammation. Now it was something that we could observe, measure and monitor, and these results were described in the most cited, scientific journal in psychology that is called Frontiers in Human Neuroscience, and this is the paper you can download it for free. It is in the open access and in this paper, we describe in novel technique to observe and measure and monitor the lesions in the brains of autistic children in particular in this area of the brain, that was studied by ultrasonography. These are the lesions so that in those days we observed that sort of black holes inside of the brain cortex. Here you see another of those lesions and this was the accumulation of an EAF which stands for 'extra axial fluid' that is like a lean fat accumulating inside the brain.

Marco Ruggiero: We demonstrated that there was a linear correlation between the grade or the severity of the lesions, between the accumulation of fluid and the severity of the symptoms in the same way as they were assessed by the Childhood Autism Rating Scale (CARS), which is a commonly used scale to evaluate the severity of the disease in that case Autism. So, to make it short, we were able to demonstrate that the symptoms of autism,





were closely associated with the presence of lesions in the brain as well as with the accumulation of fluid. Now we know it is was lymph that led to the accumulation of fluid - that was a symptom or the so called neuroinflammation.

Marco Ruggiero:

The results that we obtained in 2013 with Dr Bradstreet studying the brains of autistic children were later confirmed at the Sophia Health Institute, together with Dr Klinghardt and Dr Shaffner and this led us to postulate or the accumulation of fluid and the lesions in the brain are common, to a variety of neurological conditions including persistent Lyme disease and it was more specifically neuroborreliosis. So, involvement of the brain in chronic Lyme. And these results were published in the paper describing Ruggiero-Klinghardt protocol. It was published in the American Journal of immunology in 2017 and also this paper is in the open access domain, so you can download it and read it for free. But going back to the work we're doing with Dr Bradstreet in 2015, we wrote another paper that at this time was published in the most cited scientific journal in the world in Neurosciences that is called the Frontier in Neurosciences in this paper that tragically was the last one submitted by Dr Bradstreet before his untimely death.

Marco Ruggiero:

this paper has more views than 99 percent of all frontiers article, so it is in the top one percent and it is in the top five percent of our research outputs, a score by a method to measure the impact of research called Altmetric.

And in this article, we describe the role of the brain lymphatic system that was just recently discovered in those days in determining the lesions that we had observed the previously in the brains of autistic children. And now we know that those lesions and that neuroinflammation are present in a number of other neurological conditions. In that paper, we wrote that infection or inflammation of the deep cervical nodes. So, the nodes that are exactly here next, to our trachea in close proximity of the carotid arteries, jugular veins, inflammation of those nodes leads to impaired lymph drainage with consequent accumulation of lymph inside the brain. Disruption of brain connections, immune cell recirculation, and therefore disruption of the brain microbiota (question mark) is the brain microbiota have we ever heard of the brain Microbiota? When wait a minute and I would describe the role of the brain microbiota in the next slides.

Marco Ruggiero:

: Now when the lymph cannot drain, it is like if the waste disposal system of the brain doesn't work, is clogged and this results in the accumulation of metabolites, you can call them toxins, toxicants, heavy metals. All types of junk that accumulates in the brain and this leads to constant inflammation of the brain, this leads to alteration of brain development if a child and brain function if you are an adult.

Now, let me try to explain these as a sort of a plumbing problem. Now, here on top you have the brain and the lymph coming from the brain, drains into these lymph nodes and these are little circular black dots are the lymph nodes that as you see are positioned in close proximity of the arteries, the carotid artery and the jugular vein here in the neck. Now the problem is that these nodes are also draining the lymph coming from the mouth, the throat, the nose, the ears, and the salivary glands, and it is very frequent to





have infections or inflammation in these areas of the mouth and throat and salivary glands, and when the deep cervical nodes become inflamed or infected because of inflammation or infection in those areas, they become congested, engorged and clogged and therefore the lymph coming from the brain cannot drain and it accumulates inside the brain.

Marco Ruggiero:

: And these lead to the accumulation of metabolites and toxins and the waste cannot be removed and this leads to a disruption of the connections between the cells of the brain. This leads to disruption of the brain intrinsic immune system, so the defence of the brain. And this leads to disruption of the brain microbiota.

Now in 2017 as I told you together with Dr Klinghardt, we published this paper where we described a normal diagnostic and therapeutic protocol. That is based on the observation reportable, and I guess many of you are interested in persistent Lyme, which is the main topic, main focus of research on Dr Klinghardt. But please let me be clear this protocol, this, this Ruggiero-Klinghardt protocol is not only for chronic Lyme, but it is for all or many chronic conditions because as we wrote, it shows a significant potential in conditions ranging from cancer to neurodegenerative disease and autism in addition of course to its role in chronic Lyme.

Marco Ruggiero:

Now these slides were taken by ultrasonography, the Sophia Health Institute, and they represent exactly what I was talking about before. So, the lymph nodes here, these little black dots. Now they are incredibly magnified, are these things here. So, this is a blood vessel, transversal section, the coronary artery essentially here, the jugular vein essentially here. And this is a large deep cervical node. Again, this picture was taken at the Sophia Health Institute. You can even see the blood vessels inside the lymph node inside the lymph node. Now, this means that in this particular subject, and the length is not flowing freely from the brain. So, it accumulates inside the brain, causes neuroinflammation and disruption of brain connection and how do we see that disruption in the connections? This was the same subject. This is the grey matter of the subject. Can you see this as sort of an X?

Marco Ruggiero:

Well, this X indicates that the neurons here are not in parallel layers as they are supposed to be. Neurons in the brain, they are arranged in parallel layers and these structures, these architecture was describing more than hundred years ago by neurologists, so we're looking at the human brain and hear the linear arrangement is lost. You can see like these big X, this is due to the fact that the lymph was not flowing to these clogged lymph nodes and therefore it accumulated in the brain and of course it causes the disruption that I was talking about. As we have already said infection or inflammation of the deep cervical nodes. Leads too impaired lymph drainage and this leads to disruption of the brain microbiota. And now let me clarify what is the brain microbiota. Because we knew about the Gut Microbiota, we knew about the skin Microbiota, the microbes that are part of our bodies in all tissues and organs, but we know also how the gut microbiota relates to a number of conditions including neurologic disease.





Marco Ruggiero:

But what about microbes in the brain? Do we have microbes in the brain? Yes, we do. And so, let me introduce the concept of the brain microbiota as it relates to neurological and Neuro-developmental diseases. I feel entitled to introduce this concept because I was the very first one in the world to coin these words 'brain microbiota' in a paper that was published in the Journal of Clinical Endoscopy in 2016 and also this paper can be downloaded for free. However, I'll be honest and say that I am not the first one. I was not the first one to describe the presence of microbes in the brains. Now these supremacy goes to a Canadian scientists who published in 2013 observations. They had made it a year before where they studied the brains of people with HIV and AID's. So you may think, well, what does HIV and AIDS, have to do with Lyme disease and autism or other neurological conditions, well, , it may have to do, but in particular in this paper, those researchers were looking for microbes responsible for infections in the brains of people with severe immune deficiency and this made full sense and because they should have a severe immune deficiency, you may be the target of infections in particular by microbes that usually are fought off by the immune system, but if the immune system doesn't work. These, microbes, can become a source of infection.

So, they were looking for microbes in the brain. So, people who had died of AIDS point was or the problem arose let's say the observation arose when they were asked to look at the brains of people who had died of other diseases who were otherwise healthy as far as the immune system was concerned. To their great surprise, they found that also in the brain. So, people are going to die with a perfectly functioning immune system. They found microbes.

Marco Ruggiero:

So they came to the conclusion that let's read it together in an Organ, which is the brain 'widely assumed that to be free of infectious agents in the absence of a specific disease process, like an encephalitis or meningitis, autopsied and surgically-derived human brain specimens show that restricted, but this thing, the bacterial population, the present status which was compulsive bacteria classes, chiefly recognized in the physical environment that is soil and water. The source of these agents might include oral consumption or inhalation'. So essentially, they wrote that inside our brains, even if our immune system is perfectly functioning or let's say we shall see later just because the immune system is functioning, we have bacterial population we have microbes the same microbes that we find in soil and water and these microbes come to the brain because we breathe them, we eat them. We drink them.

So essentially there is a balance between the microbes and environments and the microbes inside our brains. Now these microbes arrived at the brain because they are carried by leukocytes. White blood cells in particular activated lymphocytes and macrophages, and we will talk about macrophages later on in my talk. So, to summarize, we all have microbes inside our brain, not only inside our gut, not only on our skins, but also inside our brains and these microbes that they come from, an environment we eat them, we drink them, we breath them in.

These microbes are carried into the brain by cells of the immune system, more specifically lymphocytes and macrophages. Now the presence of microbes in the brain is





not irrelevant. And as these Canadian authors are rightfully wrote, they wrote since bacteria express multiple molecules, their capacity for influencing in brain function is immense.

Marco Ruggiero:

: So, they realize that now the presence of microbes inside of brains together with neurons and glial cells, will completely modify our understanding of neurology because now we know that those cells, they exert a profound and immense influence in all the function of our brains, of our minds.

But there is a problem more to this microbes or better the consumption of probiotic foods containing microbes may have been instrumental in the evolution of the human brain. And we have described these concepts in a recent paper, we described this description of a novel probiotic concept and also this paper understand the <u>American journal of immunology</u> can be downloaded for free. Why did they hypothesize that microbes were instrumental in the evolution of the human brain - for very simple reason? They could not find microbes in the brains of other mammals, so the microbes are found only in the brains of primates like a gorilla or chimpanzee orangutan and human, but not in the brains of cats and dogs and other mammals.

Marco Ruggiero:

So, this will lead to the assumption that they Microbes were instrumental in the evolution of the human brain and what could have been the role of the microbes in the evolution of the human brain. Why were they instrumental? Which type of advantage, did the microbes bring to the evolution of the brain? Well, first of all, it has to be clarified that the microbes inside the brain are different from the microbes in the gut. So are not the same population and these makes sense because we now know that each organ has its own individual Microbiota so the microbes in the gut are specific for the git or those in the airways are specific, and now we know that those in the brain are specific for the brain called alphaproteobacterial.

Now the α -Proteobacteria exert a number of functions, but probably the most important for the evolution of the brain and for the maintenance of the health of the brain is their detoxifying properties, so as they.

Marco Ruggiero:

So, as they wrote, the α-Proteobacteria have a number of actions including detoxifying effects in the environment. Now, according to this Canadian researchers and we fully agree with their interpretation, the acquisition of this class of microbes by the brain might represent a beneficial organ specific adaptation. So, we may hypothesize that our brains are the way they are and they're different from those of cats and dogs because those microbes help them maintaining a good environment inside our brains by removing toxins and metabolites, heavy metals, all types of toxicants that could have caused the neurologic damage. And as a matter of fact, that we have experimental evidence on the detoxifying effects of microbes. About one year ago we published this paper reporting the case of a subject or was that heavily intoxicated with a number of environmental pollutants. So let me go through this paper that right and correctly confirms the role of the microbes in detoxifying organs in general and the brain in particular. In this paper, that needless to say, it's published in a Peer Review Journal that





can be downloaded for free since it is in the in the open access we describe the clinical case of Dr Jerry Blythe, he's a medical doctor 72 years old and he is also a marathon runner who in 2012 was diagnosed with a form of cancer, chronic lymphocytic leukaemia actually most likely retrospective analysis of his results may date back the onset of the leukaemia to 2008. So essentially, he was affected by chronic lymphocytic leukaemia for a number of years. Now you may think what a cancer has to do with neurology, with autism or with persistent Lyme disease. Those are two different completely different areas. Well, they are yes and no. If you go to this paper, I just published together with my wife, Dr Pacini in the <u>Journal of Neurology and Stroke</u> that again can be downloaded for free.

Marco Ruggiero:

: You will learn that a neurology and oncology, have a lot of things in common in particular when you look at the role of genes in, the DNA and the role of the immune system and the role of the Microbiota. So, I invite you to take a look at this paper of ours.

Going back to the case of Dr Jerry Blight after careful consideration for non-toxic approaches to his condition, so he began to focus on a healthy nutrition and exercise while he was a serious marathon runner, so no program for him to run about six miles, every day, so in Sun or snow. It began avoiding refined sugars, alcohol, carbonated drinks, cookies, pies, candy or cakes, because of all this, he was able to maintain a state of nutritional ketosis. There was however a very serious problem when you perform an analysis in different high-level laboratories and in particular the Great Plains Laboratory.

Marco Ruggiero:

He discovered that he was a loaded with a number of Lipophilic toxicants, toxicants that accumulating fat cells, and it is a highly likely that those toxicants may have caused the mutations that may have been responsible for his chronic leukaemia and definitely they might have disrupted the function of the endocrine glands and depressed the immune system. This is a long list of the toxicants and so they found that difficult names to pronounce a horrible effect on the human body. Again, you can go and take a look at that paper of ours where we described in detail each toxicant and what these toxicants can do to the human body, I just abstracting the three of them. Just to give you an idea. It was loaded with phthalates. You find them in plastic. I don't know whether it is in this bottle of water. Are there are phthalates?

Marco Ruggiero:

I hope not, but they're are very, very commonly found in plastics and they do a lot of damage to the human body, both an immune system and the brain. For example, in children, they alter the sexual development and they can feminize the male brain or in other levels they can hyper-masculinize that part of the brain and they also of course affect the function of (unknown),

Perchlorate another, all the toxic and lighting was loaded with disrupts and the ability of the thyroid gland to produce hormones and even though he never served in Vietnam Now, and this is maybe even more worrisome, he was loaded with 2,4-Dicholorophenoxyacetic acid, which is the famous agent orange. So, this means that





even if we were in the jungles of Vietnam in the sixties and the seventies, nevertheless we are all exposed to the agent orange and it is very well known.

Marco Ruggiero:

Unfortunately, that exposure to Agent Orange is associated with neuritis, that is inflammation of the nerves, weakness, nausea, abdominal pain, headaches, and dizziness, peripheral neuropathy. Stupor, seizures, brain damage and impaired reflexes. A long list of very harmful effects. And of course, also effects on the endocrine system not surprising therefore, Dr Blythe had impaired the thyroid function, So the thyroid wasn't working. And this was a clearly evidenced by the elevated level of the thyroid stimulating hormone. It is an attempt by the body to stimulate and organ, the thyroid not working and not surprising. We also Dr Blythe had elevated nagalase, is an enzyme is present in the blood of cancer patients, patients with Lyme, with autism because it is an index of systemic inflammation, chronic inflammation, and in the case of the Dr Blythe, the elevated nagalase most likely it was due to the presence of intoxicants that accumulated in these fat cells and to the presence of his chronic cancer.

Quite obviously, no treatment whether conventional or not had hopes for success if all those toxicants were not removed.

And here comes our microbiome-based approach which is the foundation for the functioning of the Sophia Flow cream.

In order to do so, to detoxify, Dr JB adopted an original integrated protocol:

- 1. Mobilise the lipophilic toxicants accumulated in fat cells thanks to intermittent fasting. In this case it was also helped by his habit of running about 6 miles per day that helped mobilising those toxicants, but also
- 2. Eliminating those toxicants through urine, exploiting the detoxifying properties of a probiotic that are based on microbiome medicine.

Just to give you an idea based on that paper. Before he implemented the approach, the amount of toxicants naturally eliminated are these that you can read, and after you can see the dramatic increase in the elimination of the toxicants,

Marco Ruggiero:

The idea here is that if you mobilized, if you move, the toxicants from the fat cells, but you do not remove them, you can do more harm than good. That's why sometimes people lose weight because it's a relatively easy to lose weight, but they don't do what is called a clean single detoxing detoxifying., they might run into serious problems because you remove a harmful substance that have been accumulating in fat cells. They should do not eliminated them through the urine. You can expose all organs and tissues of the body to the harmful effects of those substances.





Now, how was he able to remove all these toxins and eliminate them from the urines? Well, thanks to this approach and this led to a significant decrease in nagalase. Witnessing improvement was here, and in about three months and nagalase went down to almost normal levels, TSH, an indicator of thyroid function also significantly decreased, indicating the thyroid began to work again.

Marco Ruggiero:

So fortunately, all these alterations were reversible, and the leucocyte count decreased in the number of platelets increased. So, all in all, elimination of the toxicants was associated with normalization of all parameters related to cancer and endocrine function.

How or why or how, the microbes can eliminate the toxicants through the urine? Well, they removed the microbes, they removed toxins from liquid media, including the brain, of course by physical binding, with immediate kinetics. They act like sponges. So, the microbes are certain microbes, not all of them, of course, certain microbes they act like sponges and then bind with and immediate kinetics, which means immediately, those phthalates and that agent orange of all types of toxicants. In addition, the microbes themselves and the products of their metabolite metabolism and antioxidant effects. And the microbes also decrease the level of toxicants in the liver and kidney protect against toxins and improve kidney functions. thus, contributing to the overall detoxifying effects,

New Speaker:

now you may wonder what is the relationship between the brain Microbiota, the detoxifying effects, the brain Microbiota has on the brain and the flow of lymph from the brain, and into the deep cervical nodes?

New Speaker: So, what is the relationship between the first and the second part for my talk?

New Speaker:

Well, the point is that when the flow of lymph from the brain is blocked because of inflammation in the ear, nose, throat, and therefore because of the inflammation, in the deep cervical nodes, then the brain microbiome is disrupted, becomes unbalanced, so this good balance of the brain macrobiotics lost and these inhibits, blocks the toxifying effects of the Microbiota and metabolites and the toxins accumulate all the more in the brain, so the toxicity accumulating because the links cannot drain and also because the microbes cannot work as sponge is just to remove that lymph.

Marco Ruggiero:

In addition, when the recirculation of lymph is blocked because of this block here and the level of the neck of the deep cervical nodes. Also the function of the immune system is hampered and the immune system is essential we've seen it for the balance of the brain Microbiota as we have seen before, the brain microbiota is kept in balance only if the immune system is working because the microbes, they arrive to the brain because they don't carry the by activated lymphocytes and macrophages and if the macrophages aren't working, then they cannot keep the good balance of the brain microbiota.





New Speaker:

And who helps. the immune system with particular reference to the inmate of the immune system of which macrophages are essential elements? Well, have you ever wondered why? The Sofia Flow is called M-A-F, which stands for microbiome and advanced formula, but could also be interpreted as macrophage activation factor.

New Speaker:

Well the microbes that are part of the formula of the Sofia flow are part of the research that we performed since the 2011 is a probiotic approach that is able to naturally stimulate the immune system with particular reference to the innate arm of the immune system to each macrophage belong in the same time help detoxifying. Now these effects were observed by our research group or when we were still working with University of Florence, Italy since 2010, 2011. And this is a study we presented at the International AID's Society in 2011 in Rome where we describe how our microbiome based approach, was able to help the immune system. In particular those cells of the immune system that belong to the so-called innate arm of the immune system, macrophages and natural killer cells, these are slides that they can have from that study of 2011 where you can see that, you know, in Europe, this is the seventh of May, it's not the fifth of July. So, from the seventh of May of 2011 and the 25th of July of 2011.

Marco Ruggiero:

: So, in about three months, the number of the test subjects of number one natural killer cells went up from 165, to almost 400. So more than twice as many natural killer cells. So, you could say the immune system was stimulated by a factor of two in this other subject that they went up from 51 to 340. So definite stimulation of the immune system.

New Speaker:

Now, in addition to the microbiome, advanced formula for the macrophage activating factor, if you prefer, Sofia Flow cream now contains. That's why the title of this presentation was called two point zero. Evolution, because now it contains innovative type of chondroitin sulfate. Sulfate is a molecule known for It's a healthy properties that range from immune stimulation to inhibition of inflammation and because of this We now have a completely novel chondroitin sulfate, that is not of it precisely request by Dr Shaffner, Dr Klinghardt, and these are completely novel chondroitin sulfate

Marco Ruggiero:

Sulfate is far superior to any other similar compounds for purity, strength, and efficacy, and this new type of sulphate and has been the object of very, extensive experimental and clinical research demonstrating its superiority. And I think it's important to say that although this research was not performed by us, so there is no bias, no conflict of interest on this point.

New Speaker:

Now this paper was published in 2016, assesses the <u>safety of these non-animal</u> <u>Chondroitin Sulfate</u> in rats and on the DNA of rats and they concluded that there are no observed adverse effect, so it's completely safe.

New Speaker:

Interestingly, it also is much purer because the purity by HPLC high pressure liquid chromatography is around 99 percent. Just to give you an idea, United States pharmacopeia accepts a purity as low as 90 percent for Chondroitin Sulfate of animal origin, so they conduct itself. It can be as pure as 90 percent.





Marco Ruggiero:

This new chondroitin sulfate, we add to the evolution of the Sofia Cream is pure up to 99 percent. So definitely its purity is far superior contains no allergens, no GMO's. Now it is Vegan, now it is vegetarian because does it not come from animals, but what is most important is that its efficacy is about three times as much as compared to the animal derived that the chondroitin sulfate. And this was assessed by these older, say in 2014 where they assessed that the efficacy in fighting the symptoms of arthritis, inflammation of the joints was 30 percent in two to three, two, two, two weeks to four weeks. Whereas the chondroitin sulfate of animal origin only eat about 11 percent of results. So, in other words, these chondroitin sulfate itself is about three times more potent in reducing inflammation as compared as to the old chondroitin sulfate. And what about humans? Is paper was published and just, I would say it's your weeks ago, 24th of July 2018 by Italian researches.

Marco Ruggiero:

And by the way, in my youth, I used to work together with a colleague, a professor Volpi, and in humans that demonstrated that this type of chondroitin sulfate and producers, a greater Chondroitin Sulfate more concentration for a more prolonged periods of time in plasma in humans. So, it is far superior and now this compound that was not available in the US when we first formulated the first batch of Sophia Flow Cream, but it is available now, just became, available in the past few months and now it is part of the new formula. So, we are close to the conclusions and we can, add these other points.

The brain microbiota plays a fundamental role in detoxifying the brain.

The immune system is instrumental in maintaining the balance of the brain Microbiota,

alterations of the brain lymphatic system, are associated with lesions that correlate with severity of symptoms in autism, chronic Lyme disease, neurodegenerative conditions,

So, the Sofia Flow MAF cream favours the flow of lymph from the brain. So essentially fixes the main problem that we have seen thus far because of this, it helps toxifying the brain. It helps, restoring the brain microbiota. And rebalances the immune system. I think I've spoken for 40 minutes straight as I promised. So, I thank you so much for your attention. I'll stop sharing my screen, so I can go on full screen and I'm ready to be set by your questions. Thank you so much.

Dr Christine Shaffner: That was excellent. That was really fascinating. You know, we're always talking about the immune system and the toxicity that we're all exposed to. So that was really, you know, to learn the science about how the brain actually can get these toxins out so that, that was fascinating. Marco., okay. So, a bunch of questions. Let me just open up here.

New Speaker:

One of the questions, you know, that it's kind of obviously is with the change of formula. When did that happen? And we want to show you that the cream that you have is absolutely affect active and great, but we just, you know, like with everything live we





can evolve things we do., and we just actually started shipping the new formula out this weekend.

New Speaker: So, if you placed an order, recently you'll be getting the new shipments., okay.

New Speaker: So then, that if you use the flow green for your brain, what happens when your lymph system is blocked Further down the chain. Can you use the cream for your whole body?

Marco Ruggiero:

the cream is very versatile. You can use it all over your body and by the way, you don't need to use much, you can use it as possible and rub or massage the body where you want them to perform this kind of lymphatic drainage. And it also has a, effect, that may lead to improvement in a number of functions. So, the answer is absolutely yes, you can use the cream in all parts of your body, only areas where I absolutely do not recommend using the cream is inside that the eyes are just like with any other treatments. So, you don't want to put any type of cream inside the eyes, but with the exception of the eyes you can use the cream all over your body.

Dr Christine Shaffner: and there's many questions. How to apply, where to apply it., you mentioned a little goes a long way. I'm Dr Klinghardt Sophia our website. He has a video on the self-lymphatic drainage massage, so you can incorporate and putting the cream on the neck with that self-lymphatic drainage massage. I found that to be very helpful., but you can't hurt yourself with it. You can really explore, we put it on scars, painful areas of the body. We've seen it, help with pain relief. These are all, you know, recommend or these are all anecdotes that people have shared with us., and then depending on how you react, you can use it once a day to a few times a day. That's what I have seen. So, a couple of specific questions, Marco.

So, can you please explain what form of intermittent fasting was used in the case? So, if you have the details on that.

Marco Ruggiero:

Yes, by the way, everything is described in detail in the paper, but he was fasting for 48 hours a week. So, two days of fasting with only liquid and very limited number of calories. The number of calories, I don't remember exactly, but I think was around that 350 calories per day. So, it was a rather drastic a treatment. But please remember this guy had a chronic cancer, plus he was loaded with all these toxicants. So, as I said, these are not recipes or a medical advice, so everyone is different. But that was the type of a 48 hours fasting. If I may add something about applying the cream since you mentioned it, a, I would say that a very effective way to apply the cream and observe effects that is to rub it or massage it until you feel a little bit of a heat because the heat will improve the absorption of the cream.

Marco Ruggiero: So the idea is to massage it and strongly enough to see a little bit of heat and when to apply it when it depends on what your purpose is, but you will discover that if you apply on the Vegus nerve but that was a topic of a previous talk of mine that is on the neck, on the anterior side of the neck before going to sleep just before going to sleep. You will improve the quality of your sleep dramatically. And for example, this has





been reported in autistic children as well. So, to improve the quality of your sleep my suggestion is a to apply a bit on the neck, on side, inside of the trachea here, just before going to sleep and you will observe in many cases that I hope in all cases in dramatic improvement is sleeping.

Dr Christine Shaffner: And, this ties in. Somebody asked, do you see increased dreaming to the probiotics or probiotics or, because of the better blood flow., I haven't heard that yet, about dreaming that makes sense that people sleep is improved.

Marco Ruggiero: That is so difficult to define what a dreaming is better or worse depending on the content of your dreams that no one can control. Definitely there is an increased production of dreaming, the famous psychologist Carl Jung somebody wrote many, many times that it is not the subject of the dream that it's important but whether they dream a lot or not So essentially there is an increase in the amount of dreaming and the increase in the number of dreams then whether they're good or bad, the way that they please you or not depends on a number of factors so that we cannot control. But definitely there is an increase in the amount of dreams

Dr Christine Shaffner: And then moving onto some other questions. One, one question is, have you seen any results with fibroid nodules? And I'm using the thyroid or the cream topically on the thyroid. I haven't run it yet, but it makes sense that it could be supportive.

Marco Ruggiero: , well first of all, letting me tell you that since I don't run a clinic and I don't see patients, rarely I have reports if not a second hand reports, but talking about second hand the reports the answer is yes. , I know a friend of mine, she's a lady with some thyroid problems will begin using the cream for her autistic child and then can say you need solely told that a shared among us. So, the cream she began on using it herself on her thyroid on she's reporting very good results. So, these are anecdotes because we are just beginning to accumulate experience. But I would say why not all the evidence is there pointing that he might help, but we are re-establishing of a good balance inside thyroid function as well.

Dr Christine Shaffner: Right. And then let me see some other questions here., some patients are asking, when you get a die off reaction or somebody can feel worse before, before we, before feeling better with the lymph cream, I can just speak to what I've seen. I, I think sometimes when people have had a really blocked system for a long time and it starts to move there, there can be some transient,, if you want to call it an increase in symptoms,, while they're resolving and the work for the doctor,, they should be able to support you so that you just start slow and you can support your other organs of elimination to minimize any,, you know, side effects. But it's very safe and I've seen it very well tolerated with a lot of sensitive patients., and then can you use the essential oils at the same time? I think so. I think that, that there's no, contraindication

Marco Ruggiero: there is no contraindication,





Dr Christine Shaffner: Could you use of the cream to help decrease inflammation after carpal tunnel operation or we can kind of broaden that question after surgery. But I, I do think any areas of injury or any surgical areas after they've gone to a healing place for topical solutions can be applied. I think that that would absolutely be supportive for healing.

Marco Ruggiero:

Let me add something on this. As you may imagine, if we took care not to add the chemicals and preservatives or other strange things for the cream, and if this is good because you don't want to expose to more chemicals that we have to also, these leads to a sort of the cream being fragile. In other words, you just take a dirty finger into the cream. It may become contaminated. So, talking about open wounds or so make sure that you do not contaminate the creams. So that's why we recommended that, your, keep it in the refrigerator, not because it needs to be refrigerated, but so it wouldn't decrease the temptation to contaminate the cream and always use it like a spatula or like a disposable spoon. Something to prevent contamination of the creams that with your fingers because again, cream it does not contain, preservatives or chemicals. So be careful. You don't want to contaminate the cream. Thus far. I think that there have been very few cases out of the 2,500 jars of cream we have seen. Those are people who have succeeded in contaminating the cream. And again, please be careful.

Dr Christine Shaffner: Absolutely. And then, for headache, headaches and brain fog, you know, did we see results with the cream? And, I would say yes, I mean it's going to be individual, but if we're working on that mechanism that Marco just beautifully shared with us and that could be part of the cause of the headaches and brain fog, I wouldn't, I would suspect we would see

Marco Ruggiero: In the case of headaches or brain fog, I would say that the two areas where I would apply the cream, definitely the neck, the anterior side of the neck and as Dr Klinghardt has explained to favour the flow of the lymph. Also, these are two areas of the temples because it may help relieving the muscle tension here and it may help, but also of course you want to go inside the brain from here, but it will be absorbed by the skin and it will be targeting the lymph nodes.

Dr Christine Shaffner: One participant asked about using it with lymphoedema post-mastectomy.

Marco Ruggiero: Okay. Now if the cream has not been contaminated by dirty fingers then absolutely. So, you know, in the end it's a cream. So, it helps with that massage

Dr Christine Shaffner: and then another question is about binders when using the cream. So that ties into some of the, maybe increase in symptoms or in movement of toxins in the body. And so yes, we always recommend binders depending if they're tolerated., and that would include charcoal, zeolite, chlorella. I mean it just depends on what you tolerate, but there's an is binders as a foundational piece of our protocols.

Um, so then there is another question around a bunch of questions I'm trying to group with,, people had tonsillectomies or if they have enlarged tonsils,, you know, how the





cream place into that and I think that's an excellent application of the cream just because of the lymphatic tissue at the base of the brain., would you agree?

Marco Ruggiero: with a cream you cannot make mistakes or worst-case scenario doesn't work and you don't feel any different. So, but since it's something that stays on the outside, I would say that it's extremely unlikely to have any type of side effect.

Dr Christine Shaffner: And then I'm applying it with red light before, after, potentiate the application or the effectiveness. You can comment on the ultrasound to.

Marco Ruggiero: Yes, we have a normal. I would say that I would have to choose the ultrasound as a better candidate, but quite honestly, we have no experimental evidence for this in line with your theory, ultrasounds might further amplify the effects of the cream but again, honestly, we have no expertise on this and this maybe something we should do next time I come in Seattle.

Dr Christine Shaffner: Yeah, absolutely. Okay, and then let's do one meeting, one last question.

Anyone use a dab of this in the nostrils?

Marco Ruggiero: , one, these, this is an off-label indication that a should not be advised if not under medical supervision. In other words, the cream is classified as a cosmetic cream and this means that it has to be used the only on the skin, not on the mucosa. Because you have many mucositis exposed in the body and you know, it could become a difficult to ascertain which mucosa to target with a cream. So essentially the cream is not intended to be used if not on the skin. However, under medical supervision, you want to try some off-label use of the cream. I don't see any particular contrary indication, but of course I cannot recommend such use. But if you wanted to try under medical supervision, I think is something that should be a harmless.

Dr Christine Shaffner: Great. Well, I know that there's more questions but just to honour everyone's time today. This was excellent. Marco and I really enjoyed the presentation and I know everyone else did and I think everyone who is live on the call. We'll be sending out the recording on and there was a question about if you had to see Sophia doctor to get the cream. No, it's available., there's plenty available through our website, Sophia nutrition, so if you're interested you can learn more there and yeah. Well we'll wait till the next webinar. I know you're bobbing your ideas and so we thank you and you'll have to come visit us at Sophia, soon for sure.

Marco Ruggiero: it's always a pleasure and it's going to be a pleasure to enjoy new one, Dr Dietrich Klinghardt, whenever you would invite to me,

Dr Christine Shaffner: I think we should get that on the books very soon.

Marco Ruggiero: Good. Thank you so much Christine. Again, I would like to thank all the participants, so thank you so much for your time and attention.





Dr Christine Shaffner: Thank you everyone. Thank you, Marco. I'm going to hop off. Thank you. Bye. Bye.

