Ecological Medicine - Ref164

SPEAKERS

Sarah Myhill, Steven Bruce

Steven Bruce
My guest is Dr. Sarah Myhill, who is an independent practitioner down in Wales where she practices ecological medicine about which we'll learn quite a bit more later on in the show. She has an approach to medicine, which I think will find favor with you and with many of our fellow practitioners because she has a very natural Pathak attitude when it comes to practicing. She is in fact a naturopath. And she has deregistered from the General Medical Council after 20 years as a GP, and I suspect we will get to hear the reasons for that in a short while. One of our particular interests is myalgic encephalomyelitis, me chronic fatigue syndrome. She's written a number of research papers on that topic, as well as six books about lifestyle, diabetes, of course, me and other things. And all this information is available on her website. So while we may talk about a lot of things, which are on that website, much of the value of this evening is going to come from the questions that you and others ask us because we can go down any particular avenues or rabbit holes that you particularly want us to. And Sarah, I know has so much to share with us. She is no friend of Big Pharma. And I imagine that she's raised the hackles of a few people in the General Medical Council as well as some of her fellow practitioners. And I suspect that she will share that information with us shortly. Sarah, great to have you with us. Good evening, and welcome to Nancy as well sitting on the back of your chair there.

Sarah Myhill
He's my best friend accompaniment and we do everything together.

Steven Bruce
I don't think I can possibly have done justice to what I've read about you in that little introduction, because I'm gonna say something which might sound I hope not condescending or patronizing because he's not meant in any way. But you are lady with some serious balls. You have a letter publicly posted on your website accusing the authors of the PISA study of fraud, three counts of fraud, you've been to the Information Commissioner's Office, you've taken the GMC to task and I think very recently, you kind of won your case on this, haven't you, which will tell us about in a minute. And you know, it takes it takes some guts to do that. And just in case people are wondering what the pace study is, this is the study into pacing, cognitive, cognitive behavioral therapy, graded exercise and specialist medical treatment for me chronic fatigue syndrome, which dictates what is the current theory policy on best practice, I believe, for treating me. So I know, I know, we want to talk about groundhogs particularly, but could play Can you give us a bit of background into this into the pace study and your approach to it and so on?

Sarah Myhill

Oh gosh, well, I've been working with patients with chronic fatigue syndrome and me since the early 1980s. And it became very obvious to me very early on that this is a physical problem with physical treatments, and physical interventions to allow these people to heal and get well. And when the PE study was published in 2011, the essence of that was that they produced inflammation, which they said, cured 22% of patients, you know, massively improved up to 70% of patients through graded exercise and cognitive behavior therapy. Practitioners like me, and I'm sure many who are listening knew that could not be right. Because a condition that is defined by exercise intolerance is hardly going to be amenable to that as a treatment. It's an oxymoron. It's a nonsense. And this all started not with me but with another group who asked the authors the pace study for the raw material, that underpinned that study, you know, what, what are the figures? Where's the data? We want to have a look at that, and guess what they refuse. So that was the first trip the Information Commissioner. And the Information Commissioner said, Well, this is a public study is being publicly funded to the tune of 5 million pounds. Of course, the data can be anonymized. And yes, it should be analyzed by third party. And at that point, that was taken up by a doctor who's also a statistician, and he number crunch the data and essentially said, this is a fraudulent study. The goalposts have been changed. The numbers have been tweaked the parameters by which which determines a improvement otherwise, you know, do not conform and so on and so forth. Now that the study was then sent back the pace authors for commentary and those three pieces of correspondence, were taken by the Journal of psychological medicine and sent to 40 academics all over the world, independent academics, and the commentary was published in the August, Journal of health psychology August 19, August 2017. having read that through very clearly It was quite obvious that yes, the paste it was scientifically fraudulent, and by implication financially fraudulent because 5 million pounds of public money had been misused.

Steven Bruce
Was was that fraud deliberate? Or was it just a failure to apply the correct statistical modeling or something?

Well, that's a very, very good question. And that's not for me to answer that. The fact is, it was fraudulent, the scientists or the IT department, the psychiatrists who did deciding, were essentially using public money to support their own ideas, their support their own model of chronic fatigue syndrome and me psychological conditions. And in doing so, they twisted the data in order to make it fit their own beliefs. So in January 2018, I reported all those authors that study to the General Medical Council for research fraud, and by implication, of course, financial fraud. Now, the General Medical Council sat on this for six months, they couldn't make up their mind which way to jump. And in fact, I subsequently the freedom of information, act center GMC, and it's very clear, that was enormous internal debate within the GMC about, you know, how they should proceed. Anyway, they wrote me in July 2018 said, No, we're not going to investigate these doctors, no case to answer. So in response to that, I said to them, Well, in that case, I want you to give me the evidence base on which you made that decision, because I supplied to the General Medical Council with a huge evidence base and a fast academicians, scientists, clinical doctors and scientists saying this is a fraudulent study. And, and by contrast, the GMC could not give me one study that supported their view. So I said, Please give me the evidence base, and they refused. So I said, Okay, I'll take you to the information commission, which I did. And that whole process took some years. Now, the first response I got back from Information

Commissioner was Yes, doctor, my he's right, this decision of September 30 2020. Yes, stock market is right. The GMC should supply her with that scientific basis of that scientific basis. And the GMC appealed that decision. And their argument was, if we release that evidence base to not to my Hill, then the rest of the world can infer that she has reported on the GMC for fraud. And that is a slur on their professional, upstanding. That's that's the that's information that I am not entitled to because it might impugn their reputation, which the completely circular argument. Anyway, we have a hearing with the Information Commissioner in March, and there was a split decision. And on the stripped facts of the law, the GMC are arguably correct. But because the public interest is so massive, one member of the committee, all of the panel, Robert supported my view. So we're now in the throes of appealing that decision, because you're going to run and run and run. But the bottom line is, if the GMC do not give you the evidence base, or their refusal to investigate the resources, that means that they can investigate any doctor they like, they can come to any decision they like, and not provide the evidence base for that. I mean, that's called a dictatorship. And actually, there is a dictatorship of medical thinking currently going on. And this case illustrates that perfectly.

Steven Bruce
This could also almost be a textbook case for people who want to analyze medical research and statistics, couldn't it? Because, you know, all the things that you said that seem they seem to bring up all the well known flaws in many research papers, and then the biases and so on. But what is the usually there's a financial vested interest in this and of course, we think of Big Pharma for these people. It was just that they wanted to reinforce their own preconceptions, was it

there is that but but again, you see, you're probably wherever, a document in America called the Diagnostic and Statistical Manual, which is how psychiatrists treat disease. And they have about 300 different diagnoses which includes things like bereavement unit stammer these root psychiatric conditions, and guess what every single diagnosis ends up with a drug therapy and, and psychiatry in America. And if they don't follow that paradigm, then they can be struck off sued in a complaint about and what it means is, you know, this country's going down that route. So we no longer diagnose diagnosing. We're just having clinical pictures are all which really lead to a symptom suppressing drug route, and guess what, it's all driven by Big Pharma. So the GMC essentially are acting as the puppet in the mouthpiece of Big Pharma

Steven Bruce
which is quite depressing isn't it? And I take it this is why you are no longer registered with the GMC.

And now I no longer face with a GMC for another reason. I am the most investigated doctor in the history of the General Medical Council. By last

Steven Bruce
September, your popularity rating has now just soared amongst our viewers.

By last September, the score was my Hill 36 GMC nil. They then took me to a hearing, which was this was investigation number 37, which is one against all the odds, I want it. So that was a great excitement. Since that hearing, they've now put in another five new complaints you can put And believe me, none of these complaints come from patients. All these come from doctors are often the GMC itself. So for example, somebody who I suspect in the internet troll does not approve of my advocacy of using vitamin D to rent COVID-19 infections. And the GMC have upheld that as a complaint. Ditto for iding. Ditto for vitamin C. Ditto for paleo ketogenic diets. So the bottom line is, I can't be bothered anymore. Yeah, these GMC battles are massively demanding of time and energy. I have I can't afford to pay a lawyer. So I've defended myself throughout. And I just can't be bothered. I'd much rather spend time with good people like you good people are listening to me to help patients rather because this has got to be a grassroots revolution. This is not an income from the top down, it's got to come from the bottom up. And it needs good clinicians, good therapists who are asking the question why who are looking for disease causation, so they can best help their patients?

Steven Bruce
This is slightly off topic. I know because we're into the realms of the the hearing of the GSG, or GMC, or the the GLS cgcc. I've seen the effects of those hearings on people. And I mean, they were incredibly stressful, just a single hearing. And I suspect that many of the people watching us this evening will will want to advocate the sorts of things which I know you advocate and we're looking for the evidence on which they can do it. And it's actually reassuring to hear that you have won your battle because if someone were to complain that we were advocating vitamin D or something else, and we were taken to a hearing, we was like well hang on GMC. There's precedent for this, because I think our councils go after us even harder than the GMC because they're so desperate to prove themselves to be up there with the big boys. And as you see the legal expenses are phenomenal. But they will always have a QC prosecuting the case, which means that Yeah, it's a difficult program. First question has come in. They want to know whether that's a lurcher behind you? Someone said it's a slow? I think you said it was a Patterdale Terrier.

So this is a Patterdale Terrier. Yes, she's a. She's my chief pest control officer at my farm. So she's very rats, my squirrels and rabbits.

Steven Bruce
Brilliant. Okay, so let's talk about what we said we were gonna talk about, can we start with ecological medicine? You're a member of the British society of ecological medicine. British ecological medicine sounds great. So what is it? Okay.

It is simply that we modern conventional medicine, no longer diagnosis. Modern conventional medicine has symptom symptoms threatening drug Off you go with a prescription. There's the analysis has gone no longer they asking why does this patient have arthritis? Why does this patient have me gray now why this patient have chronic fatigue syndrome, and ecological medicine is all about are looking at the mechanisms by which people have symptoms. Because if you can establish what those mechanisms are, then that has very obvious implications for management, because you can identify what those

mechanisms on there for apply the treatment and this treatment is good old fashioned naturopathic medicine. That's where it all starts, and very often all finishes. But because we live in a complex world is getting increasingly complex. So let's just very briefly, let's look at chronic fatigue syndrome. Now fatigue is the symptom that you experience. When energy delivery doesn't Manny doesn't match energy demand. And the way I explain that to people is that we have a certain bucket of energy that we can spend in the day. And let's say that that block of energy is that big, that if we spend more than that bucket of energy, then you will die because you don't have the energy for the brain to work at the heart to work, the immune systems work and so on. So what that means is that energy gap narrows between the bucket of energy available and the energy that we are spending if that gets narrow, then the body starts to give you symptoms and it gives you such severe symptoms to stop you overspending because if you do that to spend, you would die. So symptoms are there for very good reason and the symptom is Chronic Fatigue is there for a very good reason.

Steven Bruce
So why the buckets not full when?

Correct.

So there's obviously there's a two pronged approach to this. First of all, we have to look at the mechanisms by which the body generates energy, I, as you say, Get that bucket as large as possible. And then we have to look at how energy is being wasted. If it's being spent wasted money. Now, two thirds of all energy just goes on staying alive, just based on metabolism. And what we have left, we then spend mentally, you know, working physically working emotionally, you know, looking after our families and friends, and so on. And if we've got excess energy, then we can go out and have a lot of fun with that, whether we're digging in our garden or walking our dogs or riding our ponies or whatever. But people with chronic teacher have got a small energy bucket, most of their energy is used up just in staying alive, just in basal metabolism. And they have got no gap, they've got no where to spend their energy, and therefore they've got no energy for mental work. And so they have foggy brain to pour short term memory, can't multitask, can't get things, they have a calling physical energy, turn them down. But all activities have been carefully paced. And you know, and they just don't have the energy to have for emotional stuff. So it's a it's a horrible condition. And to say the starting point is to make that energy bucket as large as possible.

Steven Bruce
If I may interrupt, I'm guessing that someone with me who goes to see, I won't say GP is but you know, any medical practitioner of any sort, as a strong chance of being told to just get a grip and pull themselves together and get out there and do something.

That's the terrifying thing. And this is what's so bad also about the the pace trial because they recommended graded exercise, what happens is great exercise, you just use the exercise and narrow

that energy gap even more and make the symptoms 50 times worse. And what's more, they then had don't have the energy, you know, to feed themselves or to heal and repair or to even think about,

you know,

Steven Bruce
I don't know if it's a petition or whatever, it's the or is it the medical abuse of people with with Emmys, and it's called Mames, which is a fantastic acronym for it. Is there evidence of harm occurring because of conventional medical protocols?

salutely Yes. And when I submitted my complaint, to the General Medical Council, that was followed up by a petition of over 10,000 signatures of people who've been harmed, together with 2000 letters to the GMC, from patients who had been harmed by great excise therapy, ie they'd have been made worse. And for some people, that worsening has persisted for years.

Steven Bruce
The paper had four elements to it, it had pacing CBT, cognitive behavioral therapy, graded graded exercise and specialist medical therapy. What are those other elements, we know what CBT is, but what's pacing what's special

pacing is simply about managing your energy. And when people are very ill, of course, they have to pace. In fact, when you think about it, we all have to pace our lives, you know, we you know, we'd all like to be there working, doing things all night, all day, all night all day. But you know, you would very quickly to come and die. So we all have to pace activities to a certain extent. The point here being is if you push yourself too much, then you go into an energy deficit of situation, which results in delayed fatigue. So let's take an example. Steven Redgrave and wonderful athlete, you know, he would have trained every day within his energy envelope. But when he was competing for his gold medal, he would have pushed himself into near death situation, he'll use up every drop of energy in his body. In fact, a friend of mines a row and who tells me, if you're really competing at the point at which you cross the wind finishing line, you should be almost unconscious, because you have no energy left in for the brain to work. Now in that event, not pacing, he will pay for it the next day, he will be fatigued and exhausted will take him a few days to recover because he's pushed himself to his limit. And for many patients with chronic fatigue syndrome, they're doing this all the time, just the business of existing, they're already push themselves their limit and they pay for it the next day. And that gives us the difference between normal fatigue because I'm normally fatigued at the end of the day, have a good night's sleep, wake up next day I can go again. Whereas the chronic fatigue syndrome patients, you know, they're getting delayed fatigue, if they overdo things one day, they pay for it the next day, and that is pathological fatigue. And they may take two or three days to recover and that's called post exertional malaise. And that gives the gives us the difference to normal fatigue. And as I say, pathological fatigue.

Steven Bruce

Is it a stupid question to ask whether the the piece of paper is still the thing that dictates the nice guidelines?

Well, interestingly In the last few months, the nice guidelines have thrown out grade exercise as a treatment and that is now no longer valid. They haven't given the reasons why, though, of course. But for example, for long COVID, I noticed there was a ball seven came out about four months ago, do not exercise, if you have long COVID exercise will make you worse do not exercise.

Steven Bruce
Right? We're sorry, we got off the topic there because you were telling us about ecological medicine. But you started talking about me again. So. Okay, so the idea that we're actually looking for a cause will appeal to everybody who's watching us this evening, without a doubt. I mean, it kind of surprises me. I mean, I have huge respect for all doctors, because you guys cram into your heads more than I can possibly imagine. And recall is at the drop of a hat. But surely most of your colleagues are also trying to find the cause. Why? Are they just prevented because of the time they spend with patients? Or

is it No, I did 20 years in NHS general practice. And since then, I've done another 20 years as an independent general practitioner.

And throughout that time, I have been trying to persuade my medical colleagues, my GP Friends of the worth of ecological medicine. The trouble is, medical training is no longer about causation. It's no longer about looking at the root causes. So if a patient comes in with migraine, unless it let's say a patient comes with asthma, so the standard medical treatment for asthma is first the blue inhaler, then the brown inhaler, and then the blue and blue and the brown inhaler. But that gives us tells us nothing about why that person has asked me in the first place, we need to ask, you know, are they allergic? Is that of course in the Bronx, as we know, much ask me is allergy, do they? Are they hyperventilating? Do they have a magnesium deficiency? What about b 12? There are lots of ways we can create asthma very effectively using simple naturopathic ecological techniques. But you have to ask the question, why. And unfortunately, our doctors are not trained to do that. And part of the reason why I have deregister, from the GMC and become a naturopathic physician, is because you guys are listening, you guys are asking the right questions, you know, you are asking the question, why now, I don't pretend to know all the answers. As as I discovered them, I write books about them, and I put them on my website. So what I discover is out there, but GPS are not even asking the question why? And and, you know, you can blame it on time, but I don't because, you know, I spent 20 years in NHS general practice, and I treated all my patients like this. In fact, by the way, one of the reasons I left the NHS general practice is because I got my wrist slap because my prescribing budget was so low, she's not prescribing drugs, she must be a bad doctor. Yeah, naughty girl. And many my colleagues who have come out of NHS medicine have been similarly treated.

Steven Bruce

We had we had another speaker along quite a long time ago now. But one of the comments that he made was that he calls himself the I think the pill avoiding doctor I think it is, but he was saying that the money that the NHS could save if they cut down on the polypharmacy and other prescribing habits is amazing. interesting comments here. We've had a lot of people in our Vimeo team, the two groups of people watch us, there's the Facebook team and the Vimeo team. Apparently, lots of people in the Vimeo team have said that if you've got a case to take to the GMC, they will contribute. So we will, we will drive them to your page to help you

out. That's a blessing.

Well, I mean, I mean, I have never asked paid patients or anybody for money to buy legal, legal advice, because I do it all myself. It's cheap. And you know, I've seen lawyers make such a pig's ear of various cases for other people. But I determined I was going to do it all myself in so far. It served me well.

Steven Bruce
There's an old saying isn't anyone who represents himself in court as a fool for a lawyer, but I think that depends on just how bright you are. And clearly it's as you say, It served you well. Just supporting what you're saying here. Jonathan Lawrence says that he's had a patient who went on graded exercise therapy and went from fatigued to bedridden. So maybe he ought to support that means petition. Daniela has asked what is an example of graded exercise?

Well, very simple, you just do a bit more in a bit more in a bit more every day. So the first day you walk, you know, 20 meters, the next day you walk 30 meters, the next day you walk 40 meters and so on. It's as simple it's as simple as that you grow up gradually increase the amount of exercise you do, but the point here is, if you haven't got the energy to do that, you just deplete your energy bucket make things much worse. As I said earlier, a condition which is defined by exercise intolerance, that's hardly going to be the treatment is it you know? Yeah,

Steven Bruce
Extra set. I'm sure you'll come to this but in me Why is a Pete? Why? Yeah, absolutely. Why is a patient's energy so depleted and I think all three of your papers have centered on mitochondria.

That's part of the story. Now there are two, the chronic fatigue syndrome is not the same as me that chronic fatigue syndrome is when energy delivery mechanisms are at fault. Me, you have energy delivery mechanisms at fault and inflammation. And inflammation means the immune system is busy. And if the immune system is busy, that's using up even more energy and giving you symptoms of inflammation, heat, pain, swelling, redness, loss of function to inflammation kicks an enormous hole in the energy bucket. And that inflammation may be chronic infection, it may be allergy, it may be autoimmunity. So we're all my patients, I always start with energy delivery mechanisms. And there are four big players. And the analogy I like to use is the car analogy. So if your car to work, you've got to

have the right fuel in the tank, you've got to have a good engine, you've got an accelerator pedal that works and, and a gearbox that works and all four of those have to be working together, get a result. So but the fuel in the tank, the fuel in the tank, we have to do a paleo ketogenic diet. That is the starting point. And if people listening to us tonight, you're nothing other than go away and do a paleo ketogenic diet, they will be doing themselves a very big favor. And the reason for that is that the preferred fuel of our mitochondrial engines are eaten. That's how they function best they'd like to been on keto.

Steven Bruce
I've certainly seen this. touted on the internet, the brain cannot function on fat, it has to function on carbohydrates, glucose,

up to loot rubbish. That's a well developed myth. The brain works perfectly on ketones. In fact, you can reverse dementia by putting people on a ketogenic diet, not my work. Dale Bredesen, consultant, neurologist, California reverses dementia with the ketogenic diet.

Steven Bruce
And I think, you know, when we spoke the other day, I mentioned, Greg talks, Gary top, sorry, who I interviewed a little while ago, purely about the keto diet, and he was very hot on the fact that it's the only one of the 70 diet that has any real research behind it. And it has been quite reliably shown to reverse type two diabetes.

But I mean, the best piece of research is two and a half million years of evolution. Yeah, this is the dark that we have evolved to live over that duration of time. This is the one that perfectly fits our gut function, our body function and our brain function. I know at this point, people turn around say, oh, what, you know, I can eat, you know, primitive man, you would have had fruit it would have had nuts would have had season with whole grains? And the answer is, yes, he would, but only for a very brief duration of time during the autumn. And that ability to run on two fuels, to swap to carbohydrates, where we take advantage of that free windfall, that free harvest that free food that comes along in the autumn, and get addicted to it, to eat it in an addictive way and get fat. And getting fat is survival value for the winter keeps us warm, and it's a fuel supply. So you know we are we have this amazing ability to run on two fuels, which not many animals have me, my dog can only run on meat and fat and my horse can only run on grass. But you know, we have these two fields we can run, which has afforded enormous survival value. And that's part of the reason why we are so numerous in the world today. But we eat carbohydrates in the autumn in an addictive way as winter survival value and we eat them because we get addicted to them. Now the problem now with modern food supply is we have this amazing system of agriculture and food delivery, we can eat those foods all year round. And we because we get addicted to them, we don't want to stop eating them. And so we end up with constant autumn mode constant metabolic syndrome with an inevitable progression to diabetes to obesity, heart disease to cancer and to dementia. So the Paleo ketogenic diet is as a starting point, a to treat chronic fatigue syndrome, but B to prevent all those other diseases of Westerners, those degenerative conditions. cancers, say heart disease, dementia, it stops all those from developing so in IT people listening to that, who may not have chronic fatigue syndrome, but we all want to live to our full potential for as long as

we possibly can because you know, having life as farm or should be and to do that you need to do a paleo ketogenic diet.

Steven Bruce
I suspect there were a lot of questions about that because The the Paleo diet, the keto diet, the the Atkins diet, they've they've come in for a lot of stick from people who probably have an interest in other means of supporting life. But so well, let's wait for these questions to come in here because there are lots of I've already, I've never had so many questions so early in a discussion. So I can see that this is going to go very quickly this evening. Just a minute ago, you mentioned you highlighted the difference between me and chronic fatigue syndrome. Does that mean is that recognized in general practice? Do people treat them differently? Do they add in anti inflammatories or?

No, no, no, it inflammatory is is symptom suppression. In the last,

Steven Bruce
in your practice, that means in general practice, what are people getting? If they go with me as opposed to chronic fatigue?

They just get symptom suppressing medication.

Steven Bruce
Right. Okay,

which which is not addressing the root cause. And the problem is symptom suppressing medication is the underlying pathology is accelerated. Now, I'll give you an example here of a doctor who did research work at bath into and he was using that person. And he was looking at what happens when he gives naps in patients who have hip pain? And the answer is, they come to their surgery sooner, they have to have the hip replacements much more sooner than those who tough it out to try glucosamine ultra who tried other things. And he was about published this research, when he got found out by the boss of naprosyn, who said, you publish that certain research, I will stop funding your professorial chair and that will be the end of your job. So guess what that study never got published. It illustrates the point that we have symptoms for very good reasons. Symptoms protect us from ourselves. And if you prevent those symptoms from happening, then you go on causing damage, whether that's chronic fatigue, chronic pain, whether that's inflammation. I mean, I think part of the reason we have so much post viral fatigue these days is the standard doctor's advice for treating any viral infection is symptom suppress, yeah, take aspirin, take paracetamol, take antihistamines, cough suppressants. But they suppress the very mechanisms that we need to get rid of that infection. You know, why do we run a fever? Because all these viruses all these bacteria are heat sensitive and running a fever? felpham? Why do we cough and sneeze to get rid of them to reduce the viral load to expel them? Why do we have a runny nose? The same thing? Why do we feel exhausted, because then we go to bed and we wrap up warm so we can run a fever. And we leave the immune system with the energy that it needs to

fight. If you symptoms press that fight on carry on at work, you take energy away from the immune system, and the microbe wins. And you then you risk permanent, long standing infection which drives so much authority later on in life.

Steven Bruce
Okay, thank you. That was going to lead me on to another question about resale now just last on my list, but there's plenty there's plenty to look at. Victoria asked if there was a link between epstein barr virus and chronic fatigue.

Well, epstein barr virus causes me It causes inflammation. And it's a really nasty little shit of a virus. I can tell you. And I think that's responsible for the majority of patients with post viral chronic fatigue syndrome. Post viral chronic fatigue, yes. And chronic inflammation that runs with it. And epstein barr virus we know it's a carcinogenic virus. We know it drives many cancers. We know it caught it switched on many pieces of autoimmunity. I suspected it drives many pain syndromes. And in fact, the heart for example thing at heart problems with chronic epstein barr virus, in fact, it's a really nasty little infection and must always be taken seriously. And a very common sequence event is the young person who is dairy allergic throughout childhood. And you can diagnose dairy allergy very easily because the babies have colic. Then they move on to toddler diarrhea. Then they graph that and they get potaro conditions with blue ears. And then you get recurrent tonsillitis and then headaches. And then they go to university and they get their epstein barr virus, diseases, saliva, and then they have any, you know, foot sometimes decades after.

Steven Bruce
Probably that answers yes, there is a link or at least with me Roland CFS. We got a question from Claire minshall. Claire, I didn't know you were watching. It's great to have you with us. Claire has done several broadcasts with us in the past about rehabbing away and things like that. Claire says it's fantastic broadcast. And she wants to have where she's braised the obvious point. She says clearly paleo keto diets don't work for vegetarians and vegans. She didn't say that I'm paraphrasing. Sorry, Claire. So tell us you can do this. If you're a vegan or a vegetarian.

You of course you can. It's not easy. But it is perfectly possible to get into into ketosis. I mean, this is not a high protein diet. This diet is where you power the body with fat and with fiber. And if you can get vegetarian fats like coconut oil, palm oil, and I know you Throw your hands in horrors and say, Well, part one has terrible ecological problems. But the point I try to make to my patient is that person sitting in front of me when I'm, I'm trying to get them well. I'm not trying to treat the world, you know, I've got to do whatever I think is best for that person in front of me. Now, the point about vegetarian and vegan diets is they are not ecologically correct. They are primitive man was not a vegetarian, and he certainly was not a vegan. And what I do know is that being a vegetarian or vegan is a major risk factor for chronic Dieter and me for all sorts of reasons. So I'm not a fan of vegetarian and vegan dance. I am a complete fan of animal welfare. I live I'm in a very privileged position, I have my own farm, I'm self sufficient in eggs, in chickens, and in meat. So you know, I make sure that all my animals have a jolly

good life and a jolly good death. So I sympathize entirely with the ideals of vegetarianism and veganism, but they are not desirable if you want to avoid chronic fatigue from me.

Steven Bruce
Okay, thank you. Hope that helps Claire. Jen, Jen always asked the question when we mentioned diabetes, and I think this is a really, really good one. Because she's asked how a keto diet can help to reverse type two diabetes. Now there's a good physiological reason for this isn't there, it's not sort of hippie thought or anything like that.

If you want to, there's a very excellent book on this written by Jason form, called The Complete Guide to fasting. But people who are running their bodies on sugars and carbohydrates constantly overwhelm the ability of the body to deal with that. Now we have in our liver, what I call a glycogen spawn. So when we have a meal, and of course, all males will have some carbohydrates, even to eat cabbage is going to have some carbohydrate in them. But very often, people eat high carbohydrate, grains, you know, pulses, root vegetables, sugar, and so on, so forth. And when that happens, as they have a meal, there is a tsunami of sugars that pour from the Godfather portal vein into the liver. As I described, the liver has what I call a glycogen sponge, which should be squeezed dry, mops up that Sugar Rush, and then release it little north and in between meals to supply the body with sugars, because those people are running their, their, their boys on sugars. But if they overwhelm that glycans fund, and if they overwhelm the muscle glycogen bond, and if they overwhelm, you know, all that, eventually, sugar is going to spill over directly into the bloodstream, and you'll run a high blood sugar, and you will have pre diabetes, and then diabetes with all the problems that go with that. Now, the point about doing a ketogenic diet is if it is available, the body will always burn sugar first. So you start you get into a ketogenic diet, and the first thing it does is it squeezes drives glycogen sponges till they're empty. And then it squeezes dry their muscle glycogen spines until they're in. And that will take maybe a week, maybe some for some people two weeks of doing a ketogenic diet. And at that point, the body then switches to that to ketones and fat burning. And at that point, then if average blood sugar starts to come down and down and found glycosylated, hemoglobin is full, and blood sugars end up completely nevile. There's no wobble whatsoever. So I can guarantee reverse type two diabetes by doing a ketogenic diet every single time it worked. In type one diabetes, it's an incredibly useful intervention, you may not get rid of all your insulin completely, because we all need a little bit of insulin. A one example of this is as GP down in the south could have improved, who is a type one diabetic. And he did a five day fast. And he's keto adapted. He's been on a ketogenic diet for some time. He did a five day fast, during which time he ran 20 miles every day. And so did another four of his friends. Five day fast 20 miles every day, during which time his blood sugar was absolutely level, it never went up. It never went down. He didn't have to change those insulin, he stay completely fit and completely well. So type two diabetes is is is committed as a guarantee, reverse it ketogenic diet.

Steven Bruce
Sorry, I was just struck by a question that just came in while you were saying that. What I wanted to go on to as well is Gary talks I mentioned before he wrote a book called The Case for keto, which I've thoroughly recommend along and we'll make sure people have a link to the one you just mentioned as well. But he also points out that eating carbohydrates stimulates insulin production, but also it blocks

the use of fat as a as an energy source and it also drives fat into the fat cells. So it has a sort of a double whammy effect. And that there is a threshold of carbohydrates after which that insulin production becomes a problem. And the fat suppression becomes a problem if you like. So I mean, it might be worth again, I thoroughly recommend Gary's book. And as I say, this one as well to to learn about why it works. But I don't think, Jan, just to put your mind at rest, I don't think there's any doubt in the evidence that it has a very beneficial effect. I would say certainly with type two diabetes, and I'm not sure whether the evidence is strong for type one, Sarah?

Well, you can certainly reduce your insulin dose, right. And that's the key. So you just baseline, you have a baseline. And very often as with time, very often, the insulin dependent diabetics develop insulin resistance and have to increase the dose and increase those and then they get brittle diabetes, when their blood sugars are all over the place. And that can be massively improved with the ketogenic diet. Now, the only rider to this is that if you're using any medications that lower your blood sugar, like Metformin, like sulphonamides, like insulin, then you must monitor the budget was very very, very closely. And I recommend any patient who does that uses something like what's the device called my head. But continuous blood sugar monitoring dexcom is the device. And that tells you what your blood sugar is from minute to minute, and you see exactly where it's going. And you can track it. Because as you get into ketosis, and as you squeeze your gluts and sponges dry, your need for those drugs will fall dramatically, and you have to reduce the dose of them. Otherwise, you risk the blood sugar going very, very low getting hyperglycemia. And they and there are serious problems associated with that, because you can't blood sugar from gluconeogenesis, you know, with those with those drugs, when they're playing. So, so you know, if you're if you are on diabetic drugs, drugs do monitor very closely indeed.

Steven Bruce
Well, here's one for you the other the other effect of a keto diet, which I think is pretty well researched is that it raises your bad cholesterol. And it also drops your blood pressure. Are there negative consequences to either of those?

Okay, well, it, it doesn't raise your bad cholesterol, it raises your good cholesterol. And I know that because I've collected figures for patients over the last 20 years. I stopped collecting them now because the results are so reliable. When it comes to cholesterol. It's not the total cholesterol, which is the problem. I like people to run a total cholesterol of six or seven maybe because I can show you studies where the higher your cholesterol is longer that you live. We're talking about HDL cholesterol here. Now, the point here is that cholesterol is not a cause of arterial disease. It's a symptom of arterial disease. HDL cholesterol is used up in the business of healing and repairing arteries. So people are running on sugars and carbohydrates. If they're running on sugars, that sugary sticky stuff, it sticks to arteries and damages them. And HDL cholesterol is used up in the business of healing repair. So they often have very low HDL, sometimes, you know, 1314 15% of total cholesterol. As soon as you have a ketogenic diet, you're no longer damaging your arteries with sugar. In fact, ketones have an anti inflammatory effect. And therefore there's not so much healing or repair going on, and that the HDL level rises. And the two centenarians in my practice, have both have HDL of over 50% and that sharpest tax very bright very with it. And and they both do a ketogenic diet. So keto ketogenic diet has

a marvelously beneficial effect on cholesterol. But bear in mind, cholesterol is, you know, is not the cause of arterial disease. We have been fed this fallacy that high fat diets cause high cholesterol which damages artists. No, no, no wrong all the way through

Steven Bruce
my name Dr. Malcolm Kendrick don't do indeed we've been I've interviewed him I think three times and he's a treat to listen to you on the subject of cholesterol and heart disease and, and he doesn't mince his words either about just how wrong the theory is. Gosh, it was start. A couple of people have apparently asked you mentioned four sources of energy or four players in engine energy delivery. We've had one did we miss the

we've got the the diet and gut function which the fuel in the tank. And then we have the mitochondrial engine. And this is my special area of interest in this is what I published papers and documents on McLaren how demonstrating that those patients who have the most severe fatigue have the worst mitochondria function and vice versa. Then we had the thyroid accelerator pedal and hyperthyroidism is incredibly common in patients with chronic teacher and me incredibly badly treated, that the doctors don't know how to diagnose it. They don't have to treat it and most people end up being under treated as in consequence, and then we have the adrenal gearbox and it's the adrenal gland. That allows us to gear up in response to demand Dino, in response to talking to you guys this evening, you know my adrenal glands swing into action produce the drain so that I can perform. And say I think that is the gearbox the car. But the mitochondrial engine is very, very, very important. And when I was in medical school in the 1970s, obviously, we had to do biochemistry, and it was a subject that you can't do, didn't attend the lectures because they're so boring, muddied up the night before, all the coffee and chocolate to get you the answers out onto the exam paper makes money in hopes that you passed. But we learned about mitochondria event, and the reason they didn't seem important is because they had no clinical application. No clinician was talking about mitochondria. We now know that mitochondria are implicated in almost any disease process you care to mention. We know they have a role to play in diabetes, for example, certainly in dementia, certainly in cancer, and of course, in heart disease and heart failure and heart dysrhythmias. I almost cannot think of a pathology in which mitochondria don't play an important part. Why, because they're the energy delivers is mitochondria, which take fuel from the bloodstream, hopefully in the form of ketones. Burn is in the presence of oxygen to generate the energy molecule, which is called ATP. And with ATP, you can do any job in the body, you can contract a muscle you can conduct a nerve, you can make a hormone, you can digest food, or whatever is the essential fuel and mitochondria are, are common to all living things. So you know, like my Nancy, she has the same mitochondria as I as those sheep as the grass out there. They have mitochondria. Jen Rohingya is the trees, you look around. It's a common biological unit, from which all life generates energy, except you cells, they get energy and fermentation. But that's a rarity, that's a minute compared to the greater whole. So we have to have mitochondria in a fit state to work. And for mitochondria to go well, they have to have the raw materials to go well, they have to have the right fuel, they have to be freedom from blocking. And they have to have the right control mechanisms that we talked about the fuel they like to be run on the tanks. And then there are five common nuclide common rate limiting steps, and we ascertain those through the research that I did with john, McCarran Howard. And the common deficiencies that come up time and time and time again that make my conduct go slow are

magnesium turns on cutin determine B threes now synonymized astral l carnitine and D ribose. You know there the five nutrients that come up time and time again. It's important for mitochondria.

Steven Bruce
We had a question about coenzyme Q 10. That came in while you were speaking. So I think I think you answered that one came in from somebody who's calling themselves 00 5.6. I don't know what that means, but they're definitely not statistically significant. So I'll get rid of the question. So okay, so sorry, I interrupted you there were you about to say more?

Well, what of course, and then my contract can go wrong, because they've been blocked by something. And in my early days, you know, of seeing patients with chronic fatigue from me, I was seeing patients with shaped it fluid. We've been poisoned by organophosphates, Gulf War, veterans who've been poisoned by organophosphate and nine level farmers who've been poisoned, poisoned by organic loins from burning plastics. And all these poisoned people, their mitochondria are going slow. Why? Because those nasty toxic chemicals thrown into the body are like throwing a handful of sand into a finely tuned engine. They inhibit the engine in lots of different ways. Now, if I do fat biopsies on people, which are very easy to do, stick the needle and pull the needle out. And the fat contained within the bore of the needle is sufficient for analysis. I have never found a normal result. We are all carrying a chemical burden polybrominated by females from fire retardants, organophosphate residues, organic fluorine residues following compounds, benzene compounds, all these things because of the modern world in which we live, which is polluted. And they all have the potential to inhibit mitochondria and cause fatigue. And sometimes the sweating regimes are very helpful for any. Any process that makes you hot, will allow these chemicals to evaporate from the lipid layer under the skin on the liquid layer, the surface of the skin from whence they can be washed off. So very simple way to get rid of them obviously avoid them as much as is reasonably possible. But any heating issue so hot baths with Epsom salts are perfect. sunbathing even better. At saunas, wet saunas, dry saunas. It doesn't matter, heating regime, boiled off these chemicals and then wash them off the skin. And again, I've done fat biopsies now on about 30 patients before and after these heating regimes and in every single case The toxic load has come down. So these regimes do work really well. And my I'm coming to you that because we live in such a toxic world, you know, because these things that aren't avoidable, we should all be doing some sort of heating regime all the time, doesn't matter, they sunbathing Epsom salts in the bar slaughtering, it's a very important part of us all just saying, Well, does this

Steven Bruce
mean the region colleagues are much more healthy than the rest of us,

and they probably Aren't they so I mean, saying that those saunas are absolutely delightful and, and the effect is going to improve by Masada course, because then you're physically mobilizing the chemicals out. And that the key thing is to Wash, wash off after you got a shower off afterwards, because you mobilize the chemicals from the fat on the skin, the fat on the surface of the skin, and then you wash them off. Again, going for a run, if you've got the energy to go for a run, then that's a great way of detoxing because you get hot, you sweat,

and you wash it off in the shower afterwards.

Steven Bruce
Has anyone ever done a an analysis of the sweat and found the toxins in it?

They're not in the sweat. Sweating is just symptomatic fat, you've got hot there in the fat sweat is the lipid soluble product. And we talked about fat soluble chemicals, which gets stuck in the fat. So I say sweating just tells us that you know you've got hot, but the actual movement is through the skin, literally a boiling off the subcutaneous fat to the liquid down the surface of the skin, and then you wash it off from the surface of the skin.

Steven Bruce
Okay, sorry, I got it wrong. But I mean, if you were to swab with the skin after somebody had got hot, Has that ever been done and proven that the the toxins are there?

And no, it hasn't been done? It hasn't been proved. But it doesn't make it does make perfect sense. Yes. I've done that. I've done this the fat boxes before and after. So somewhere, it's got to go somewhere. Yes. And the bottom line is, we see clinical benefits from that the patients get better. So it's that part of a package of getting, but I'm quite sure it is a really important part of

Steven Bruce
we had all the questions about the diet. Sally has raised the issue of The China Study and says, Well, what about this evidence that says that high protein diets were carcinogenic and bad for cardiovascular health?

The PK diet is not a high protein diet, your protein intake is normal, it's exactly the same as in any Western diet. And in fact, what's so fascinating is that the body knows how to get the right amount of protein, we have a protein appetite. There's a wonderful book that was published recently called eat like the animals. And the written by two evolutionary biologist who asked this very question, how do we know what to eat and how much of and what they demonstrated very clearly is that we have a protein appetite. And they did many experiments, our same principle experiment on different animals. But essentially, it started off with locusts. And they made some of them a low protein diet, some of the normal protein diet and suddenly the high protein diet. And what was so interesting is that those animals are eating a high protein diet, they satisfied their protein appetite very early on, and they ended up losing weight. Those who had the right amount of protein get near to the fat in their diet stayed the same. And those animals that had a low protein diet, ate and ate and ate and ate until they satisfied their protein requirement. But in doing so they over ate, and they got fat and obese. The PK diet is not a high protein diet that not matapos you have is normal. It's a it's a dark, which is high in fiber and in fat. And fat, of course, is very energy dense. So you don't have to eat a lot of it. But it is and then fiber is

what gives us you know, aren't these good frag that is good for our bowel movements, allows it gets fermented to short chain fatty acids, and that's what fuels the lining of the of the bowel. So it's not a high protein diet.

Steven Bruce
Do you find that's a hard sell with patients because there is an instinctive reaction. I think when you say to someone you eat need to eat fat, they will say if I eat fat, I'll get fat.

I know I hear that time and time and time again. But there is not a scrap of evidence to support that fat and fiber and during satisfies the appetite. And what we know is that you know that people just don't need to eat so much. The key point to remember that carbohydrates and sugars is that they are highly addictive. And people eat them and eat them and eat and and they can't stop eating because they get an addictive high from them. And my guess is many of the rationales maybe the reasons that people give me for not eating a keto diet are rooted in addiction. They rationalize their addiction. We've always done it like this. Yeah. Oh, I can't manage without you. Oh, I get fatigued if I didn't have a shirt on cover. Oh, I have to have a pudding. Oh, I don't feel satisfied after my middle and believing me. I have heard all the excuses in the world. And the joy about keto is, is once you're on a keto diet, and your weight remains absolutely constant, you know, you eat your appetite you don't want anymore, you're perfectly satisfied with what you've got. Of course, you'd have the treat. And guess what, I'm no paragon of virtue. And of course, I feast sometimes. And of course, I got weekends haven't gone in my friends. But it's easy to get back on the wagon and get back on the wagon. I do. And I want all my patients to be you know, as well as I feel. And you know, you will, again, one of the things I tell all my run various mentoring groups, and I talked to naturopathic doctors and others.

One thing is I tell them all this, you must do the diet, because there's no way you can convince your patients of the importance

of doing that diet, you know, unless you do it yourself. And then you learn all the ups and downs, all the wrinkles, all the problem is waived by the foods, and you can answer any question that gets thrown at you.

Steven Bruce
Certainly the keto diet, Sara, again, it is more difficult for vegetarians vegans. But what struck me about it is it's actually not a difficult diet to stick to. Whereas if you tell people to go and run around a lot more and eat less, eat fewer calories, then that is very difficult to stick to and nobody ever does.

Correct. And that's right.

And that is why calorie restricted diets fail every single time. Because if you if you reduce your calories, the brain says, oh, we're in starvation mode, we'll stop generating energy then. And if you don't generate energy, you put yourself in a state of qualification. you're depressed, you're miserable, you can't have fun. You have got physical and you do things you can't get the mental energy, do you think people get fed up with it go back to their wicked ways. And back comes the weight and they're back in metabolic syndrome, again, that usually illustrates the addictive nature of sugars and carbohydrates. And once you see it as an addiction, then you understand the rationales you realize the you understand the withdrawal symptoms, you know, you understand the ups and the downs, it all falls into place.

Steven Bruce
I thought this was a whole lot of nonsense when I talked to Gary talks about the keto diet, because he said, You know, he did what he calls intermittent fasting, which I call late breakfast, he says he doesn't have anything to eat before midday. And I thought, well, I could never do that. And then I started doing the keto diet, and I'm just not hungry. And I lost a huge amount of weight a lot to lose, but I lost a lot of weight on it. And yeah, I am a lot healthier. And I hope that answers the question from a number of people who asked about your views on intermittent fasting, but what do you think of it? Well,

I whenever I have a difficult question, whatever that question is, always go back to first principles. Always ask nature always ask evolution. And the bottom line is do primitive man get three meals a day. Now he didn't, you know, he feasted and He fasted. So you know, you know, he'd go out, he'd kill, and they eat a lot and sit around and have fun, and then they get hungry. And then they'd be fasting two or three days before they go out and kill again. So now he didn't get three meals a day. And the interesting thing is that fasting, you know, over the first few days, gives you better energy mentally, and better energy physically. Now, I do a fast day, once a week, which I almost look forward to because I know my brain is going to function really well. Whenever just have a lovely lady who I've been trading recently who, uh, by the time she came to me had had one round of chemotherapy for multiple myeloma, and the disease to come back. And the consultant saying, shall we, or shall we do the second round of chemotherapy or, you know, I'm not sure it's gonna work and was, you know, very worried about the whole business. Anyway, but long story short, I persuaded Philippa to fast during the day of her chemotherapy, and the day after, and to take vitamin C is about tolerance, and a few other things as well, that she got into she goes into ketosis first, obviously, because once you're in ketosis, fasting is easy. So she went on vacation and straight away. And then let's say fasted for two days on either side, every single one of her infusions they had, she had 10 of them. And she said, I felt great. During infusions, I had very few side effects. I didn't need any drugs to control my symptoms. She sailed through the chemotherapy beautifully, much to the surprise of our consultant. Her cancer marker, called the capper was over 1000 before she started that second round of chemotherapy,

because

that was bad. That's very high. And the the consultant said, if we can get it below 100, that will be a very good result. He said, If we get it below 20, I sure believe that we have cured you. And her result

came back at 23. And she felt great. So it's just an illustration of cancer cells can anyone sugar, cut out the sugar replace it vitamin C, the vitamin C kills the cancer cells, as well as the chemotherapy and you get a major cancer cell hit and that was reflected in her tumor markers at the end of the course.

Steven Bruce
Gosh, we always like to make sure that we talk about communication and consent on these these broadcasts. I suspect you need to be very cautious about telling your patients you will cure their cancer because the general counsel's will jump up and down very heavily on anyone.

only quote, I'm only quoting what that consultant told that patient,

Steven Bruce
right, thank you. I can't who Katie has asked about dairy consumption, anything wrong with that?

Yes, a dairy is one of the most dangerous milks most dangerous thing you can possibly drink. And again, this is derived from a paper written by a dear friend of mine called David fried, who wrote a paper called the cow on the coronary. And he looked at dairy consumption throughout Europe, country by country, and broke it down into the different dairy products, the cheese's, the buses, the milks, the creams, and so on. And the facts that he came up with is that the more dairy products you consume, the greater your risk of heart disease, he then broke it down into well, which bits of the dairy is a bad bit. Now the safest dairy product eat, which has no impact on heart disease is butter. So and the bus is pure fat, of course, perfect for the keto diet. There are two problems with dairy products, first of all, is the milk protein. And milk protein is growth promoting and makes for sticky blood. So if you are, if you if you want to avoid, I mean milk is obviously nature designed milk for young mammals. If your mammals don't grow very quickly, they get predated. So all they're all milk proteins are growth promoting and they make you grow faster, and that's not good if you've got a cancer, that that's bad news. Secondly, there's far too much calcium in milk. Relative to magnesium. The force of calcium magnesium is 10 parts calcium, one part magnesium, and since they're absorbed by a similar mechanism, that 18 dairy products will will induce a magnesium deficiency. And magnesium is essential for mitochondrial function. It's been dubbed nature's tranquilizing it, muscle contractions, it's switched off conductance. So you become magnesium deficient and say that's a major risk factor instantly for osteoporosis as well. And the third problem is cost the milk sugar so lactose and milk can be fermented in the gut and that gives you know, so the most dangerous milk product you could possibly drink is skimmed milk, because that's high and high in sugar. It's got a high milk protein, it's got the wrong balance of calcium, magnesium, it's got not go it's got no fat in it. The safest dairy product you can have is butter. And on top of that, milk is a very major allergen and so many people myself included, get into ecological malty medicine because they have allergies and milk comes at the top of the list of allergies as as described for infant child colic for the toddler diarrhea for snotty nose qatal conditions if recurrent tonsillitis mi gray these are all dairy allergy driven conditions

Steven Bruce

gosh I've heard that before and then something I've tried to ignore or shut out because I absolutely adore drinking milk. I have cut milk out and I switched to cream which I'm told is slightly better for my coffee and that's the only dairy I have these days other than butter butter well

before you before you fully go on it I too love dairy products, but any amount and you know and I'm ill with them, but the alternatives nowadays are fantastic. And the coconut milks vegan cheeses the vegan butters are brilliant. They have the similar taste and texture to dairy product products, and I no longer feel deprived now.

Steven Bruce
We've got to get onto groundhogs shortly, because when you're 25 minutes left, but Simon says What about people who are allergic to cruciform vegetables?

Well, you have to avoid them. It's unusual and unfortunate, but you have to avoid them. And there are interventions we can we can make to try to reduce one's allergic tendency, but in the short term, just avoid mean allergies. And then we have to ask why are we seeing so many epidemic we're seeing so much algae at them. It's so common. an allergy is switched on by vaccination, and your kids are vaccinated for health these days. And no wonder we got 70 kids with asthma and eczema and allergic disorders. It switched on by vitamin D deficiency. Now we've been told that sunshine is a dangerous commodity that gives you cancer, rubbish. So people avoid the sun shining at the at the end of the summer. Instead of having lovely brown children running around. We're all whiter sheets and sunshine is the major source of vitamin D. Apparently, we know that there are products and gluten switched on allergies, and autoimmunity. In fact, those are the risk factors for type one diabetes. Again, in children. We're seeing a lot of type one diabetes, why vaccination, vitamin D deficiency dairy products, they are the three big risks.

Steven Bruce
Thank you. Just one for my team. Claire, could you please have a look at a question that's come in from Jan. It's quite a long question. But there are some points in it that need clarification. And I want to read it out because it's quite an important one. It's again it's about Diaby Alexander says, a patient of his who used to be a GP succumb to me after a flu vaccine 18 years ago, she had a surprise, a huge semi recovery with doing the Michael Mosley 800 diet for weight loss. You don't think about that?

Well I'm with is that Michael Mosley is also an advocate occasio genic diets. So maybe I'm not sure about if that if that is 800 was a bad, but we know allergy can present with fatigue syndromes. And if you just change your diet, you might find for reasons of pure serendipity, the avoiding of food that you're allergic to was making you fatigued. So I'm not quite sure what the Michael knows that that diet is. But it's got to be either a keto diet, or maybe say through sheer luck, there's a food that's being avoided.

Steven Bruce

So we might not want to go too far down this rabbit hole, but has asked what's happening in long COVID that's causing the symptoms of chronic fatigue, fatigue.

What long COVID is me, it's a post viral syndrome. And you know, we've known for hundreds of years that there are post viral syndromes. And so it's just, it's just another chronic chronic, it's just another me that has a viral trigger. The point here is that if you have an acute infection, what should happen is you should run a fever, cough, get all the symptoms, the immune system should deal with it, get rid of it, and the story normal again. But the problem is nowadays is you know, we're immune suppressed by modern diet by micronutrient deficiencies, by maybe electromagnetic radiation by maybe poisons or toxins. We're deficient in essential nutrients like selenium, magnesium, zinc, vitamin C, vitamin D, ID, and so we don't deal with those infections adequately. And then we're symptom suppressed with drugs maybe. And so instead of the body, having that virus and getting rid of it, that virus persists and it remains in the body and remains in the body with the potential to cause biochemical habit switch on algae, switch on autoimmunity, inhibit mitochondrial function, maybe knock out the thyroid gland, maybe you know, disrupt control mechanisms in the brain. So those chronic viral infections, you know, bribe me and fatigue syndromes. And, and that happens because we make an inadequate immune response to that infection when we get it whatever that infection may be. A long COVID is the same as post epstein barr Barr syndrome. It's the same as post polio syndrome. It's the same as post flu syndrome. It's just more of the same.

Steven Bruce
So what I'm trying to get Sebastian rushworth on the show, I haven't actually wanted to get through to him just yet, but he's somebody I came to through Malcolm Kendrick, I don't know if you've read any of his material. But he's written he's written a brilliant book. It's very, very thin. But it covers it covers post viral fatigue. And he does a very careful analysis of the statistics which say, well, there is no such thing as long COVID it's just post viral fatigue much the same as any other post viral fatigue, exactly as you've been seeing there. So, right now Jen's question has been clarified, Jen's clearly upset about this idea that you heard about fasting and running with your diabetic. She says, the idea that a type one diabetic fasting for five days and running every day is just mind blowing. She goes to her allotment for a couple of hours. It's very easy to have a hypo. She says she then needs to take carbs. What Sarah said about type one, fasting and exercising doesn't make sense at all.

JOHN hasn't listened to what I said first, before you even consider doing that. You must get keto adapted first. Dr. Ian fruit GP in the south. He's been a keto adapted athlete for years. And his type one diabetic and his insulin requirements are very low, because he is running on fat all the time. When he needs more energy he does burns his own body fat. Now I quite agree with john, if you are a type one diabetic, Ronnie on carbohydrates, then it's a very difficult balancing act, you know, eating the right amount of carbohydrate, right amount of insulin right amount of carbohydrate, and you're continually getting up and down as, as soon as you get into ketosis. Your blood sugar's iron out your insulin requirements, I'm out, and you can get on with life and do what you like. How do you know you're in ketosis? Can

Steven Bruce
you can you buy things to measure it?

Yeah, very easy. I use ketone breffni. Now there are three measurements you can do. There are three types of ketones. The best would be to measure your blood acid or blood, these hydroxy butyric acid. But the only problem with that is you have to prick your finger to do it. And guess what I'm wearing. I don't like doing that and the testing stick cost pound each and guess what I mean? The other thing is to measure ketones in your urine and you pay out acetoacetate so you get dipsticks called ketostix. And peeing on that will tell you if you're in ketosis because the sticks go purple. I like the ketone breath meters, which you blow into and that measures acid Time in your breath. And now that they are very sensitive, they need to be handled well some people say that they're not accurate. If they're done. If it's done properly, and it's done well, then they are super accurate. And the point is, any amount of ketones will do. As mentioned beforehand, the body will always burn sugar and carbohydrates first in preference. But when you run out of those, when the glycogen sponges squeeze dry, when you didn't have sugars and carbohydrates in the gut, the body will have your own ketones, and you can measure that in the breath. So that's a very useful way to know that you're in ketosis.

Steven Bruce
What was the blood test measuring you said?

beta hydroxy butyric acid. And what I'll do is I've updated my information about, you know, fine tuning the PK data, which I will send to you, and please send that on to any of your listeners. They're most welcome.

Steven Bruce
Thank you right groundhogs.

All Yes. Now, groundhogs, I keep talking about groundhogs and, and the word comes from the film that comic on Groundhog Day, when our hero goes back to his he's in a time when he goes back to the beginning of the day, and starts all over again, see if you can get it right. And Grandpa, for me is a source of time, because I keep coming back to it over and over and over again. And groundhog is simply a package of treatment. And there are three layers of groundhog and we should all be doing groundhog basic. Groundhog basic is what we need to do all the time, from birth, to live to our full potential and live a wonderful life. But guess what, and that includes a paleo ketogenic diet, a patch of surplus, the right amount of exercise, the right amount of sleep, you know, my for us is sunshine, and so on and so forth. And that's groundhog basic. And then we have what I call groundhog, acute and groundhog acute, that the interventions we put in place in the event of an acute infection, like COVID-19, like influenza, like a urinary tract infection, or like a skin infection or whatever. And that's groundhog basic either diet plus, vitamin C is about current and maybe using it maybe using Herbes to deal with infections. It's another package of treatment to deal with acute infection. Because most disease gets into us via an acute infection, whether it's a post viral syndrome, whether it's cancer, whether it's heart

disease, you know, whether it's dementia, they are all infection driven conditions. So dealing with acute infection efficiently is really, really important. And then we have what I call groundhog chronic. And that is the patch of treatment. For those people who already have pathology in their country with dementia in their country with cancer, they come to me with heart disease or chronic fatigue, or me or whatever. And and that agitation is all that's gone before. Plus detox regimes, you know, plus maybe techniques to retrain in the immune system like micro immunotherapy, like epd, or whatever, whatever, where it gets a bit more complicated. But the point is, we have got used to having one symptom, you know, one drug away, you get, and that's the end of it. And it's not like that with ecological medicine. It's complicated. But it's not so complicated that nobody can understand it is complicated, but it's the same thing over and over and over again. So as I say, That's why I talk about grand operations, because that simplifies the treatments into packages that we can discuss in a very easily separate details, those packages that are all on my website. If you go to that and put in groundhog, then you will get them up and how they work and what each package entails. Yeah, and

Steven Bruce
there was a hell of a lot of information on your website, isn't there, sir. And then I'd recommend that you could spend a happy half hour wandering through the different links on the on the website. Lawrence says he recalls in biochemistry that B oxidation was something that happened if there wasn't any carbohydrate left is that the keto diet?

Correct. Beta oxidation is all about fat burning. And when the body runs out of glucose or sugar from the gut, when it runs out to close from the glycogen spawns, it will switch into fat burning off the patient. And if you want to lose fat, you want to lose weight. You got to use that piece of oxidation to do that.

Steven Bruce
Thank you. Jonathan says what do you think about libre Sumo with mincy

I think it's a con. I really do. When I got into when when like the investments he came into the market. I asked them you know well where's the study to show that it's more effective than good old bog standard cheapest score because oh, this is one study we did. And we gave one person 36 pounds and lives and witness and one person 36 grams of vitamin of all deficiency and of course at that dose, they had diarrhea as you would expect. And person who had like his own business he had slightly higher blood levels and the other that's not good enough. So I got back Did you must have been looking you've got a better evidence base on that. And which point they cut off communication. formic acid org standard school with acid or magnesium ascorbate. If you if you do Because yes, it works perfectly well. It works brilliantly well. It's what nature produces. It's what's being used by, you know, Robert Cathcart by Frederick and all these vitamin C pioneers. decades, and it's fabulous. That's all you need.

Steven Bruce
Super. W 5.6 is back in the question Shane here and says, Is there any way of ameliorating the brain fog during the transition from carbs to keto? No,

it's it's, it's, it's just the phase you have to go through. And I call it the metabolic hinterland. And that's what, that's what stops a lot of people during the dark because, you know, they can't bear the withdrawal symptoms. And if you think of sugars and carbohydrates as an addiction, which they are, and what happens when you give up an addiction, you get you get withdrawal, some very fat you're getting foggy brain or fatigue and feeling awful tells me you're a carbohydrate addict. And you then that increases, the imperative increases the need to do the diet.

Steven Bruce
It's interesting, though, how quickly you cease to crave carbohydrates. I think after you've made this transition, at least that's my own experience.

Yeah, that's one of the biggest problems I run into is something which I call keto genic. hypoglycemia. Now, normally, if when you get when you switch from running on carbohydrates running on fat, you fat burn with thyroid hormones, but hyperthyroidism is incredibly common. It's very common in patients with fatigue syndrome. And if you are undirected with the thyroid, and you don't have the thyroid hormones to factor then you fat burn with adrenaline instead. Now the symptoms are low blood sugar are not symptoms, low blood sugar, that adrenalin symptoms. And so people feel like they've got low blood sugar because they're using a dreaded fat burn. And that's a very good clue that there's a thyroid problem that is present as a

separate issue.

Steven Bruce
Could you I don't know who said this in some, you need to show and tell us the evidence behind your assertion here, Sarah, why do we have to have Epsom salts in our bath?

Oh, you don't have to.

But it's a very well firstly, it's very cheap. You know, you can get 20 kilograms Epsom salts about 30 quid and that gives you 40 bars. But there's some lovely work done by Rosemary Waring at Birmingham, who looks at Epsom salt baths and had 19 volunteers who were students. And she asked them to soak in that salt bath every night for for two weeks. And she measured their blood magnesium and blood sulfates and their urine magnesium and their urine sulfate before and after. Every single case magnesium came up in the sulfate and of course sulfate is essential for detoxing. And then of course it came up in the urine as well. So it was passing through them and doing good as it passed through. And through of the volunteers that work. Were were mature students who had arthritis and they both said, and my arthritis cleared up to so and so it's a very good treatment. You get magnesium sulfate in and also to warm up the body and pull the toxins out. So it's a it's a great all rounder, cheap, easy anybody can get. And for those people who don't have a bath but have a shower, I discovered on

Amazon you can get sort of a bucket that you can put in your shower that fills up from the shower and you can sit in it. So you can have a very good Epsom salts you know wash even if you've only got all Epsom salt bath soak rather, even if you've only got a shower,

Steven Bruce
sitting in a bucket of water sounds to me like very much what I would have called a bath but

yeah, it's a little pop in that fits into your shower.

Steven Bruce
How do they explain to me that w 5.6 is apparently James Bond on partial furlough. Good to have you with us James. Ian wants to know if a keto diet helps with restless legs.

Oh,

it might. But restless legs is an interesting one. And I think what an awful lot restless legs is magnesium deficiency. You and you need calcium to relax muscles to attract muscles and you need magnesium to relax them. And we are magnesium deficient. And so I'd advocate a good dose of vitamin D at least 10,000 iu daily because you need this Monday to absorb magnesium and of course calcium and then at least 300 milligrams of magnesium and that will often work it can also be an allergy symptom. So again, your cut out the grains and the dairy which come up you know very commonly as driving forces and it may also be a poor energy delivery issue. So because there's a you need energy for muscles to relax for it to relax the muscles about four molecules of ATP are being funneled to contract you need four molecules of ATP. To relax you need two molecules ATP so you need energy to relax muscle to end A condition associated with poor energy delivery could present with restless legs.

Steven Bruce
You're the first of my guests to recommend a level of vitamin D, which is way above what is supposedly the standard daily intake, according to NHS websites and so on. Yeah,

but what you have to put in here, but they are set ridiculously low again, if you got a difficult question, go back to first principles, you know, ask nature, what did primitive man do? primitive man had 12 hours of full body sunshine every single day. And 10,000 iu is equivalent to one hour full body sunshine. Yeah, it's not a huge amount. It's a modest dose. And the point here is up to 10,000 iu of vitamin D, there have never been any problems, no side effects whatsoever. Some doctors will say the same for 20,000 iu of vitamin D. Some people some doctors use 50, or 100,000 iu vitamin D day,

those are

those that you have to monitor the serum calcium, vitamin D is the most important anti inflammatory in the body. So if you are in a vitamin D deprived state, you will be in a pro inflamed state. And we know inflammation, you know, can be very damaging quality autoimmunity, allergy degeneration.

Steven Bruce
Thank you. I've had a lot of questions about COVID and vitamin D, and COVID and other things. And I'm actually trying to steer clear of the COVID questions. While there are other things, and we've only got a few minutes left. So apologies if you want to know about COVID. But I'm trying to get a different speaker on to address that subject in particular,

I can address that subject to Don't worry.

Steven Bruce
Shall we get her back? Let's get her back again and talk about COVID. That would be great fun. d. I mean, you talked about dementia earlier on D has asked whether a PK diet helps with vascular dementia?

Absolutely, absolutely. Because vascular dementia is poor blood supply to the brain, and therefore not getting the oxygen, the fuel there. If you do a PK Dart, one of the good things about that is you thin the blood. And therefore it can flow more efficiently. You supply fuel in a much better base basis, which is as ketones, and my guess is you can actually improve arterial function with all these interventions. For example, one thing that I learned from john Clare and Howard is that, you know, we rather assume that the heart is entirely responsible for the blood circulation, not so the heart is just part of it, the heart generates about 60% of the circulating circulation. And the rest of circulation is carried out by the muscular arteries, which you know, pick up the pressure away, and move it on like a wiggly worm. So the muscles themselves that the art the arteries, circulate the blood. And if you've got a good magnesium delivery, which is vital for arterial function, and good energy delivery to the arteries, then you will further improve the blood supply again. So the keto diet works for all forms of dementia because it improves energy delivery.

Steven Bruce
I'm sure there's gonna be a lot of people who hugely sort of reassured by that, coming back to the business of communicating with our patients, what do you think we can legally tell them on the basis of evidence given that we are told that we must practice evidence based medicine?

Everything that I've said to you today hasn't evidence base, I can reference anything that I have said. So I'm, I'm very

Steven Bruce
much bear in mind. Sarah has done this in hearings at the GMC on a number of 39 occasions. So

absolutely. And and I mean, I've all my stuff, I've read down the book, ecological medicine, which is available, and the infection game. So if it's in that, if it's in that ecological network, there is a scientific rationale for it. I haven't put down all the references in that simply because it does make it so unwieldy. But there is not a sentence in there that I cannot evidence base.

Steven Bruce
Brilliant. So I will give you links to all of Sarah's books, we've also got a PK or a keto recipe book as well having you which is very useful for people who are struggling to find variety in their kitchen.

Yes, I have written that book for those people who don't have the time the energy or the inclination to cook. And of course, my patients don't have the energy. I didn't have the time I didn't have the inclination, but I eat very well, from the recipes in that book.

Steven Bruce
Dawn has asked whether infrared light helps to increase mitochondrial function.

Oh, absolutely. It's a wonderful thing. And to explain this fully, we have started talking about something called the fourth phase of water, which is a new idea about how water behaves when it's against the membrane, but against the membrane water form forms itself in something called easier the exclusion zone. Water, which has very fascinating physical properties. And it cannot do that without an energy source and that energy source is far infrared. So all our membrane functions where energy is generated house to control how nerves are conducted how muscles contract, it all happens on the membrane. And that is dependent on exclusion zone water. And exclusion zone water is built from the energy of far infrared. And that is why something is so good for us. By far infrared saunas are so good for us. And that's why we feel great on a sunny day because we have more energy, it's free energy. It please if you've got far infrared sauna, use it. Again. It's one of my favorite multitasking tools, it gives you energy, and it helps to detox.

Steven Bruce
Okay, last question for you, then jewel says what's the best way to test the mineral levels,

there isn't a very good test for it to tell the truth. You know, the tests just aren't that reliable, and they're rather expensive. But the bottom line is, we're all mineral deficient. And one of my favorites, I ended up making various products. And my latest one is called sunshine salts, because it's got all the minerals that we need, in decent amounts, the correct proportion and a form that soluble. And the bottom line is if you're eating a modern diet, you will be mineral deficient, simply because there's a one way cycle mineral from the soil, it plants it rattles fast the correct way. And these days, I've actually never test for minerals because I know what the result is. that by the time people are doing ketogenic diet is sorted out, they're fermenting gut, and they're taking good patches of supplements and these rule in my

groundhog regimes, there's no secret about this. You look on my website, you'll see what that entails. And your minerals will gradually stack up and correct beautifully. And I very rarely test.

Steven Bruce
Well, we we really are almost out of time. And w 5.6 says this has been brilliant, but he does think the dog is whispering the answers in your ear. About a lot of people saying could we get Nancy back again, please, especially if you would like to join her Sarah? One more question. Rebecca sent this in ages ago. So if you can give me 20 seconds on this. Rebecca says she believes gut dysbiosis and vagal nerve tone is massively important in chronic fatigue. What do you think?

I agree 100%. And, again, I could talk of a whole session on the gut function. But the bottom line is the upper gut should be a digesting sterile carnivorous diet, like my next is gut. And the lower gut should be a fermenting gut to deal with fiber. And if we eating sugars and carbohydrates, and we overwhelm our ability to deal with them, we end up with an upper fermenting gut and that gut dysbiosis is a major problem. Why? Because we might absorb minerals because we don't digest proteins because we don't sterilize microbes coming in our systems, and freezing the alpha Mantega is a major part of getting well. So I agree 100% Vegas nerve. Now there's some vagus nerve obviously is the main thoroughfare by which the brain and the gut communicate and they communicate very well they do. And we know that there are going to be promised the vagus nerve for example, patients who have very severe fatigue syndromes can present with pots, postural orthostatic tachycardia syndrome apart, has to do with poor energy delivery mechanisms. But there are some people improve their energy delivery mechanism, but still have pots. And that seems to be due to an infection of the Vegas nerve. And on my website, the most recent posts I put up has to do with how we can treat that maybe with electrical stimulation, maybe 10s machines. Another technique I'm getting interested at the moment is something called frequency specific micro currents, which are a fantastic treatment for whole range of conditions. So agree with your your questions on both in both cases, up to spot on.

Steven Bruce
Sarah has been brilliant. Thank you so much for coming on the show. Can Can we get you back again sometime?

Of course you just have to ask. I can talk. I can talk for England.

Steven Bruce
I wish you would and I wish perhaps you'd talk at some of our osteopathic and chiropractic colleges because it would be a world of reassurance to us and there are people out there who do think along lines that we like to think we think long. So we got time for this evening though. So thank you once again. So so kind of you to share all that information so freely.

My pleasure.