Diet and Cancer Prevention – Prevention Would Be Better – Ref 294

with Shireen Kassam

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TRANSCRIPT

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Steven Bruce
Hi there, thank you for joining me this lunchtime. I hope you've had a lovely weekend. I spent mine in the company of Laurie Hartman and his wife Susan. They were running a minimal leverage masterclass here at the Academy. Absolutely fantastic as always. And they're back again in June, the course is already booked solid, but not surprisingly. Laurie tells me that we're now the only organisation in the world where he runs any courses, which I have to say is pretty damn flattering given how famous he is. We haven't set any dates for courses with him later this year. So if you're interested in coming along to one of those, just drop us a line, send Ellie an email, the email address should be on the screen at the moment and let us know. Personally, I don't think you can attend enough of his courses, there's always a degree of finesse that you pick up over the two days. So just get in touch and we'll schedule something if there are enough people showing interest. Looking at today's show, this is a bit of an edgy topic, I think. We're going to be talking about advice that you can give to patients regarding cancer prevention. And I say it's edgy because, we're constantly being told to keep within our professional remit, and ensure that everything we do is evidence based. And we want to avoid the complaints of course that might arise if we do otherwise. Well, my guest today is Dr. Shireen Kasam, who is a consultant haematologist at King's College Hospital in London, and she specialises in lymphoma, and has a particular interest in the prevention and reversal of chronic diseases through nutrition. She's also one of those relatively rare beasts, she's a certified lifestyle medical practitioner. So obviously in her position, like us, she's got to be perhaps even more careful to ensure that the evidence supports what she says to her patients. So you can really trust that the information she gives us today is safe, it's well founded and it means that you're going to be able to share it with your own patients. So Shireen, it's lovely to have you with us today. Thank you for joining us.

Steven Bruce
Thanks very much for the invitation.

Steven Bruce
I've had a couple of your colleagues on the show before people that you know, Drs Nitu Bajekal and her husband, Rajiv Bajekal, both of whom are also board-certified lifestyle medical practitioners. But I suspect the people watching might not have seen those shows. Can you just remind me, tell us all a little bit more about what it means to be lifestyle medical practitioner trained?

Shireen Kassam
Yeah, thanks for asking. So it is actually the fastest growing medical specialty globally. It was born out of the American College of Lifestyle Medicine that formed in 2004. But something happened in 2015, where it went global and we had the forming of the British Society of Lifestyle Medicine and since about that date, globally, there's been a certification programme. Now, just to go back to your question, lifestyle medicine pays attention to what is considered the root cause of the majority of chronic conditions we face here, certainly in high income countries, where it's estimated that 80% of what we see in the National Health Service, for example, could be prevented or significantly delayed if we paid attention to healthy lifestyle habits. So lifestyle medicine practitioners make use of behaviour change to embed healthy lifestyle habits such as healthy diet, regular physical activity, restorative sleep, healthy relationships, avoiding toxins, and now I've forgotten one. What's the sixth one? It's going to be mental health and wellness. So psychological wellbeing.

Shireen Kassam
Yes, I think it is. I think in terms of what we're writing and policy and what people want to do, improving public health, it is very much accepted. We hear about how unhealthy diets and physical inactivity is causing so much ill health. I think the trouble we're facing is that what we talk about, what we put in policy is not supported in the actions we take, and very much the NHS, the medical curriculum, is very focused on sort of sticking plaster approaches, treating diseases that have already occurred, when we know something like cancer will have started decades before it becomes a clinical problem. And as you rightly say, this is an evidence-based approach. It's a commonsense approach. But actually, we've moved so far away from this commonsense approach to healthcare, that it's required a brand new specialty.

Steven Bruce
So this is what we would probably think, I mean, for years, we've talked about ourselves being holistic practitioners, a term which I don't like because I think it's it's one of those abused terms where everybody calls themselves holistic. But we try to do that, we try to apply that biopsychosocial model to care. It ought not to be new in conventional medicine, did it, but it would seem that maybe it is a bit new. Is it accepted, more and more accepted across the NHS? That it's a good way to go?

Steven Bruce
Yeah. And common sense sometimes doesn't actually bear out what the evidence shows us I suspect, because lots of people think instinctively that things are good for them. And anyway, at the beginning of the show, I said that talking about this sort of topic is quite edgy, the only complaint I've had made against me in my medical career is because I recommended people read a book by Professor Peter Gøtzsche about breast cancer screening. And an osteopath, who was also a medical GP, complained that I was putting women's lives at risk by recommending that people read the evidence. Because it is counterintuitive, it goes in the face of evidence. So the other thing I read in one of the articles about you that I looked at online that also your PhD, which seems a bit greedy, you're a medical doctor and you've got a PhD, but your PhD was about looking into the role of selenium in sensitising ourselves to chemotherapy? I didn't see the outcome of that study, so what was your finding?

Shireen Kassam
Yes, and we've had a couple of papers published. But you're right, it didn't get to the stage of sort of clinical trials for a number of reasons that probably needs another interview. But basically, the premise of my PhD project was that selenium at supranutritional doses, so this isn't what we get from Brazil nuts, it's sort of five times the dose, or concentration, can sensitise cancer cells to chemotherapy whilst protecting normal cells from the toxic side effects. So it all sounds a bit too good to be true. And certainly in the laboratory setting with cell lines, I was looking at lymphoma cell lines, other researchers in America had been showing exactly the same in colorectal cancer, it seemed to really do that. We know selenium as being an antioxidant, but somehow it was creating toxicity in cancer cells whilst protecting normal cells from this same toxicity. But when it came to putting it into clinical practice, it's really hard to get nutraceuticals into the clinical trial space for reasons that I'm sure you'll recognise. It's big pharma that's funding all these studies and nutraceutical companies don't have the budget. And it's a shame but to be honest, it started me off on my journey of nutrition and understanding how fundamental it is. And ultimately, I do think that our focus on nutrition should be getting our nutrients from food wherever possible and leaving this up for when it's not possible for whatever reason.

Steven Bruce
Yeah, I mean, that does sound very disappointing, actually, that if you can enhance the effect of chemotherapy, I don't know whether that means you just get a better outcome or whether you can reduce the doses of drugs that people have to take, but either way, it sounds as though it'd be good for patients and it will be worth doing the proper full trial on it.

Shireen Kassam
Yeah, no, absolutely. And to be honest, the story is very similar with something like curcumin. So if in your PubMed search you substituted selenium for curcumin, they'd be all those same lab based studies. But we're never going to get a study of curcumin in combination with chemotherapy. It's the sad state of affairs really.

Steven Bruce
Yes, and I have a couple of friends, colleagues, who only recently have gone through chemotherapy and given the distress it causes, you'd think we'd be trying very hard to find ways to minimise that stress. Anyway, I often feel that just because we're osteopaths, chiropractors, and so on, that we are instinctively inclined to blame Big Pharma for everything. So it's quite nice to hear somebody from the conventional side of the world also acknowledging that. You're a haematologist, your specialisation is lymphoma, but we chatted a week or so ago, and obviously a lot of what you know, is related to other forms of cancer. Tell us what it is that you found, the sort of stuff that we might be able to pass on to our own patients in terms of advice.

Shireen Kassam
Yes, I mean, I think what brought me to focusing in on sort of prevention, and improving survivorship for my patients was that more and more I'm seeing my patients with lymphoma, who often do very well from the cancer itself, have other comorbidities that are hampering the treatments I can give them, and therefore the doses they can receive and their future survival, essentially, because they're at increased risk, from some of the treatments that we're giving them, but also because of their preconditions that they have, of cardiovascular disease, second cancers, type two diabetes, and we know this in general. But going back to your question, I mean, it's embedded in guidelines for decades now, but the most recent guideline on cancer prevention comes from the World Cancer Research Fund in 2018, which really has nine recommendations for cancer prevention. And if we were to all adhere to these recommendations, it's thought that four out of 10 cancers could be prevented, which is pretty huge given that cancer incidents particularly in low- and middle-income countries are on the rise. And of course, smoking unfortunately still remains the top cause of cancer globally, and in the UK, but it's soon being caught up with carrying excess weight, which is a problem we're facing in all our practices, not eating enough healthy plant foods and not enough fibre and fruits and vegetables, physical inactivity, unsafe exposure to the sun, and unsafe alcohol consumption. And I would say that there's zero safe level of alcohol consumption when it comes to preventing cancer. So all in all, if we were to put this into practice in our populations, in our communities, for ourselves, then you would significantly reduce the risk of cancer. And this has been borne out in long term, prospective studies. So that's what I talk about. And because I'm particularly interested in nutrition, and everyone asks me, what can I do? What should I eat? What about supplements? And it's nice to be able to give an evidence-based answer to this. And the prevention guidelines really do recommend a diet that's predominantly centred around fruits, vegetables, whole

grains, beans, nuts and seeds. So all the healthy plant foods that we're familiar with being healthy, that are full of nutrients that protect us against cancer and support us to recover better from chemotherapy, radiotherapy and prevent those other chronic conditions that are so common in people who've had a diagnosis of cancer.

Steven Bruce
You talked about prospective studies there. And of course, we're very used to seeing randomised controlled trials, placebos, randomised placebo-controlled trials and so on over a specific intervention, given that there are lots of different sorts of cancer and given that cancer develops, potentially over many, many, many years, just how good are those trials? And how much of it is an observational thing rather than actual, meaningful evidence?

Shireen Kassam
Yeah, it's a good question to discuss, really. I think with any nutrition study, we have to look at the complete body of evidence to really come to the kind of consensus guidelines. And we have all of that, from the large prospective, observational studies and then by definition, these randomised studies are going to have to be small, because you have to very much control what people are eating and make sure there's no other differences between people, and have the resources and the finances to keep such a study going for a long time. But we do have these small, randomised studies, and maybe we'll talk about this in the context of early cancer. And then we have mechanistic data, in the laboratory, that shows us why a diet centred around healthy plant foods is good for us. And then we have numerous studies to bring together in systematic reviews and meta-analyses. And that's exactly what the World Health Organisation, and the International Agency for Cancer Research did with regards to red and processed meat. It looked at the whole body of evidence, more than 500 studies, to come to the conclusion that processed red meat is a cause of cancer. And red meat is a probable cause of cancer. And that's the kind of way we analyse data in all aspects of healthcare really.

Steven Bruce
Yeah, I'm assuming that they've addressed the confounding factors in that, that red meat eaters will probably have lots of other lifestyle characteristics in common besides just the food.

Shireen Kassam
Yeah, absolutely. And that's what the statistical analysis is there for. And once you keep getting the same result over and over again, you can have some level of confidence in that. You could say the same about smoking and lung cancer. I think everyone's quite comfortable with telling patients that smoking causes lung cancer, but actually, there's no single randomised study and it would no longer be ethical to do so. But it took over 500 studies before the Surgeon General announced in 1964, that smoking causes cancer. So, it's a similar story, and so we shouldn't reject these well conducted observational studies where we've learned a lot. The same can be said for trans fats, for example, it wasn't a randomised study that showed us that, it was the accumulation of observational data and good mechanistic corroboration.

Steven Bruce
I suspect that a lot of people in your profession will share my slight lack of sympathy with people who deliberately put nicotine into their lungs and then develop diseases. Obviously I wouldn't wish those

diseases on them but nobody is in any doubt that smoking is likely to cause some nasty disease. Is the linkage between, let's say red meats and cancer, as strong as it is between smoking and cancer?

Shireen Kassam
So the strength of evidence is just as strong, it's just the individual risk is less. So smoking gives you a 20 fold increase in your risk of developing lung cancer, whereas eating processed red meat will probably increase your risk over a lifetime by about 18%. So, these are all relative risks, it doesn't really mean anything, but if you think about the fact that it means that one extra person per 100 will get bowel cancer. So in a population of 1000, we'll get 10 extra cases. And then you can multiply that so much so that in the UK 13% of colorectal cancers are estimated to be due to the consumption of processed red meat, which is around 5500 cases. If you add red meat to that, that increases it to 20% of all cancers. And that's sort of in the 8000 cases per year. So not insignificant, but yes, your individual risk is not quite the same, but the strength of evidence in the studies is just as strong for the WHO to declare it a class one or group one carcinogen.

Steven Bruce
Okay. Jason has already sent in a question. He's asking whether sugars, and I suppose by that also carbohydrates, are a fuel for cancers? Are they a problem?

Shireen Kassam
So I think this is a common question and commonly discussed online and what have you. So sugar doesn't cause cancer, from my review of the evidence. Every cell in the body requires glucose for fuel. So, yes, cancer cells also require glucose for fuel. I think the trouble comes when we have sugar mainly in ultra processed foods or drinks, that contribute to weight gain and other chronic conditions such as cardiovascular disease and type two diabetes. And these chronic conditions themselves because of the shared underlying mechanism of inflammation, and gut dysbiosis, and so forth, all also give rise to increased levels of cancer. So the studies that have occurred in the last sort of four or five years, we're getting a sense from observational data that the consumption of ultra processed foods, which are obviously heavy in sugar, but also salt and saturated fat, increase the risk of cancer for a number of reasons. So for me, sugar doesn't cause cancer, but it is contributing to increased comorbidities. And because it's in ultra processed foods, they may well be a direct cause of cancer.

Steven Bruce
Yeah, this possibly sounds like a silly question. But comorbidities, and in particular diabetes, is your risk of cancer increased because you have diabetes, do you think? Or is it just your risk of disease is high, and therefore you've got both diseases? Is there any sort of causative link?

Shireen Kassam
Yeah, I think both are true. But what we do know, again, from observational data, and there's one particular study that was published in the last couple of years from the Nurses Health Study, so the Harvard observational studies, basically showing in the first eight years after a diagnosis of type two diabetes, people were at increased risk of cancer. And this is likely because your pancreas is still working a bit, you've got insulin resistance, you're chucking out loads more insulin than you should do in order to get that same effect on your glucose levels. And we all know that insulin is a growth factor. So you will

also possibly remember studies where in type two diabetes, researchers tried to really tightly control people's glucose levels by giving higher doses of insulin, and actually, it didn't improve outcomes and increased the risk of cancer. So there is a direct link, but I think there's also a link because of those shared mechanisms of chronic conditions, which involve cellular injuries through oxidative stress and inflammation, gut dysbiosis, and, of course, you know, the changes in gene expression, so epigenetic changes.

Steven Bruce
Right, thank you. This is an interesting question from someone at the Cranbrook Osteopathic Practice. I don't have a name for whoever it was that sent the question in. But they said that they have a patient who has high B12, which is not a problem I've actually heard about before because normally the problem is low B12, they've got normal bloods, they don't supplement with B12. The eat, in inverted commas a "normal diet", which I presume means an omnivorous diet, and they've read about a link of high B12 with cancer in the long term. Do you have any information or any thoughts about that?

Shireen Kassam
Yes. So again, interesting question, which may not have an absolute answer. So, in my profession, seeing people with high B12 often occurs with myeloproliferative neoplasms. So chronic myelocytic leukaemia or the other myeloproliferative neoplasms, like polycythemia. So it's a consequence of the high cell turnover and the increased neutrophils and so forth. But if the person has a completely normal blood count, then you can pretty much exclude an underlying myeloproliferative disorder. So that's all well and good. Obviously, we store B12, for more than three years in the liver. So at one point, if you've had supplementation in the past, stored up lots, it may still be high. Of course, we don't know how much we're getting in food necessarily, you know, animals are supplemented, we eat the animals. It's various amounts. And I think there's so many factors with absorption as well, that we don't measure and are difficult to realise. But it's not uncommon to be honest, it's often because people have supplemented in the past, I appreciate if this person hasn't, then I don't think I'd be overly worried about it. There's been at least one sort of associative study or observational study suggesting that high levels of B 2 are a cause of cancer, but from memory, that study had some flaws and we're very far away from thinking this is an actual causal relationship. So I personally wouldn't worry about it too much, avoid supplementation if the full blood count is normal and there's no liver dysfunction, that would be the only other thing, then I think I would probably not worry about it too much.

Steven Bruce
I'm glad that you are familiar with all these small random studies because it's a problem we all face, isn't it, that a patient comes in and they've seen something on the internet somewhere which shows a link between this and that, and of course it will be some small, badly conducted observational study with all sorts of flaws, but the things that get picked up are controversial opinions and supposed findings aren't they? Hopefully that's helpful to Cranbrook Osteopathic Practice. Vlad has said, emphatically, nicotine releases dopamine in the brain, so a lot of people with depression are self-medicating with nicotine. It's the other chemicals that are killing us. I think nicotine does have a role though, doesn't it?

Shireen Kassam
I'm not that I'm aware of. It's not the nicotine, nicotine is addictive and the rest of it is all the carcinogen chemicals. And I guess just to say that our "lifestyle choices", in inverted commas, may not always be choices. And we know how the the tobacco industry has just essentially moved the problem from high income countries, with all this sort of legislation now, to low- and middle-income countries where rates of smoking are rising. And we all fell for it back in the 50s and 60s, women's liberation were advertising smoking, and equally it's the same with our food choices, isn't it? It's not always a choice. So yeah, but yeah, the nicotine is addictive, the rest of it's causing the cancer and hence all the other devices that are sort of tobacco free, well not tobacco free, but have the nicotine but not the other chemicals.

Steven Bruce
Well back in the 1950s, if I'd been alive then and if streaming had been available, I'd have been conducting this interview with a haematologist with a cigarette in their hand, I'd have thought.

Shireen Kassam
Well, exactly.

Steven Bruce
Doctors virtually advertised cigarettes for the companies.

Shireen Kassam
That's right, so yeah, exactly. It's the same with processed red meat, I should point out, and it's served in our canteen every day.

Steven Bruce
Carol has asked if you can define what is meant by processed red meat?

Shireen Kassam
Yeah, it's a meat that has undergone certain chemical and heat treatments and particularly it has had preservatives such as nitrates and nitrites, which are there to prevent botulism. So it's things like bacon, sausage, any deli meat, so you know our kind of ham slices, turkey slices, those sort of things. I think in the UK it's mostly bacon, sausage, deli meats would fall under those but it's the nitrates and nitrites that particularly get converted in the gut to nitrosamines that are then the cancer causing agents. And then the follow-on question everyone asks always on my course that I run on plant based nutrition is well what about the nitrates in the vegetables? No, they don't get converted to the same compounds.

Steven Bruce
How is that? Just because they're different nitrates?

Shireen Kassam
No, just because they come packaged with nature's protectors. So it's the antioxidants, like the vitamin C, and the lower protein content compared to meat. So you'll hear some people saying "Well, it's fine if you eat your bacon with your green leafy vegetables, there's reduced production of nitrosamines." And

it's true. So, yeah it's all the other package that the healthy plant foods come in that mean that you don't form the toxic nitrate compounds.

Steven Bruce
So bacon and broccoli is better for you, but better without the bacon?

Shireen Kassam
Yes, and we know most people are going to be having it with a white bun and ketchup and what have you and chips.

Steven Bruce
Earlier on, Ben sent in an observation, he says that what you've said so far sounds very much like what Dr. Ranjan Chatterjee has been teaching or promoting for years on his Doctor in the House show and a podcast called Feel Better, Live More. If it is then this approach makes so much sense, he says, a common-sense natural approach to wellness. Are you familiar with Ranjan Chatterjee?

Shireen Kassam
Yeah, no Ranjan is fantastic, and he also promotes a predominantly plant based with all the lifestyle habits or behaviours that contribute to good health and he's been a great advocate. I guess he's been ahead of his time really, in that the qualification and the rise within the medical profession and the NHS that has taken place a bit later than his start to this. So yeah, he's a great advocate of what we're now calling lifestyle medicine.

Steven Bruce
Okay, so when I send out my follow up message, I shall put some links in to Doctor in the House and the podcast Feel Better, Live More, because that will be useful. We've had some early flattery has come in as well, Shireen, because Cranbrook Osteopathic Practice, still not telling me their name but they've said the patient, I think they're talking about the patient, who they say really knows her stuff. And we knew about the study, but not the liver, keeping it for potentially three years. But anyway, they're thanking you because they will now sound supremely knowledgeable as a result of what you've told them, which is what we want isn't it? We want to be confident and knowledgeable in front of our patients. And Chris has said that he works with a herbalist who provides fantastic support to patients undergoing chemo. I imagine that you know quite a bit about medical herbalism?

Shireen Kassam
I don't, I don't, and that's under another branch of oncology, which is really integrative oncology. And you might want to invite somebody from that field in the future, I can recommend somebody after the show.

Steven Bruce
Please do, yeah.

Shireen Kassam
Just in the last 12 months, we've had the founding of the British Society of Integrative Oncology, which brings together lifestyle medicine, complementary alternative practices that are going to support people

going through a diagnosis of cancer, but of course, spending a lot of energy on prevention, as well. And yeah, so that requires a different expertise to what I use in my clinical practice, which is very conventional, I'm afraid, and we're still stuck on all the conventional chemotherapies and immunotherapies that the NHS has to offer.

Steven Bruce
But if a patient came to you and said, I'm seeing a medical herbalist, would you say, good for you keep it up?

Shireen Kassam
Well, I mean, I would want to obviously make sure that they were also practising within the guidance of integrative oncology. And I think there are recognised bodies within the UK. I don't have a problem with it, but I think each individual case needs to be looked at because there are interactions between anti-cancer treatments and high doses of herbs and other nutrients. So just something like green tea will interfere with one of the drugs we use in myeloma, for example, and even high doses of curcumin with cyclophosphamide. So I think it does take care and we use our cancer pharmacologists to advise us on specific herbs and things.

Steven Bruce
You talking about green tea there reminded me of a particular patient that I know who has been through chemotherapy and radiotherapy and has become a green tea addict. Does green tea, outside where it might interfere with the current drugs programme, does it have a role in helping with cancer? And of course, part of your specialisation is all your interest in the reversal of chronic diseases, so to what extent can it or other things help to reverse the process?

Shireen Kassam
Well, two questions. I think green tea is really healthy. And there's so much supportive data for sort of three to four cups of tea a day. It's been used for centuries, hasn't it?

Steven Bruce
But it tastes horrible!

Shireen Kassam
Oh, yeah. Well, to be honest, I'm sort of in that camp too. I don't drink a lot of it. I think if you enjoy it that's fine. However, I think it hasn't quite made it into the cancer prevention guidelines. We've got stronger evidence for things like coffee preventing liver cancer and womb cancer. Although there's suggestive data for green tea, I think it's not quite as strong to put it into clinical recommendations. Having said that, I think it's a really great addition to any healthy diet pattern, so I wouldn't have a problem with it. Now, when it comes to reversal of chronic disease, I think we all need to take care with using that term. And I appreciate that I have used it on my website and things. So there's certain conditions like type two diabetes, where the word remission is probably better. Sometimes you've already had the damage done from years of insulin resistance and maybe you can't reverse every aspect. But the current gold standard is that if you have a diagnosis of type two diabetes, doctors should be helping you to put that into remission, meaning that you have normal glucose regulation and you no longer need medication. And so

that's kind of the approach that I think is evidence based, that uses a diet and lifestyle approach for reversing or putting things into remission. I don't believe that full blown cancer, by the time it's a clinically apparent problem can truly be reversed. But the data we have for cancer mainly comes from the prostate cancer research world and the pioneer of lifestyle medicine is an American physician and researcher called Dr. Dean Ornish, and he's done a number of randomised studies on using his lifestyle approach, which is a plant-based diet, regular physical activity, social support and stress management, so meditation and so forth. And he's randomised people with early stages of prostate cancer, nearly 100 people randomised to his lifestyle programme, and he was able to show that there was a reduction in the PSA level, so prostate specific antigen level, and after two years, that there was a positive impact on outcomes. So fewer people in the intervention group had to go on and have surgery and radiotherapy compared to the group that were just carrying on their usual lifestyle. And he's also been able to show mechanisms by which that might be occurring. So lengthening of the telomeres and also significant change in gene expression from prostate biopsy samples. So it is plausible that early stages of prostate cancer for example, where you don't need conventional treatment, where you're watch and wait should be approached with a lifestyle approach. When people get to me with lymphoma, I don't talk to them about reversing with lifestyle, I talk about the role of lifestyle medicine to improve their outcomes, such as chemo brain, that brain fog that people get, we know physical activity is really good for that, we know weight management is good, we know that having lots of anti-antioxidants from healthy plant foods is good to copewith chemo side effects.

Steven Bruce
You mentioned the term there which always gets me slightly irritated, I think. Not with the term itself, because you talked about weight management, but for so many people in so many different professions, the attitude to weight management is reduce your calories and do more exercise. And as I understand it, there is absolutely no evidence to support that approach whatsoever. Because it's actually more a question of what you eat rather than how much you eat. You're nodding so I'm guessing you agree.

Shireen Kassam
I think so. I mean, I very rarely talk about telling people to lose weight. It's all about trying to adopt healthy lifestyle behaviours that promote good health and with that will come a healthier weight. But yeah, I think it's something that all of us as doctors could do better. It's a really tough topic to broach, everyone needs an individual approach and clearly that takes time often that we don't have, we have a lot to get through and a cancer appointment and then coming down to how you're going to maintain a healthy weight just gets sort of left aside. And my patients only get to see a dietitian if they're losing weight, they're not meeting their nutrient requirements, rather than if they're kind of "malnourished", in inverted commas, because of a poor-quality diet.

Steven Bruce
Okay, thank you for that. Sally has just sent in some advice for both you and me, Shireen. She says that anchan tea or twig tea is much less bitter than green tea and it's made from the same twigs apparently, so.

Shireen Kassam
Yeah, that's good knowledge. I'll have to look that up. Thank you.

Steven Bruce
You mentioned there that a study into prostate cancer and of course, I recognise that you're a haematologist. Are we making an assumption that the same approach is equally relevant to all different types of cancer? Or is there a specific approach to different beasts?

Shireen Kassam
No, I mean, I think from what we know and what we're going to know that even for rarer cancers like lymphoma that the best approach is going to be to adopt a healthy plant based diet and limit you know, the carcinogens in the day out as much as we can, I mean, we're only really ever going to get observational data in that setting. And actually, I've written an article of what we know about non Hodgkin lymphoma and the impact of diet, I'll send that to you afterwards for your email that goes out. And it's very much sort of observational data. But it's all along the same lines, we're never going to find a study that says eating red meat is okay for cancer. So I think the broad approach and I think it would be nice to have studies, randomised studies in each different cancer, but it's just not going to happen, really, you know, the big three: prostate, colorectal and breast cancer is where we've got the most data. And so for example, the Women's Health Initiative study, you may know about this. It's the largest nutritional intervention study and the most expensive ever conducted in postmenopausal women, about 50,000 women, followed for over a decade now. And in that cohort, people who were eating a healthier diet with more fruits, vegetables, and whole grains, as part of the intervention group, did better after a breast cancer diagnosis, they lived longer and had a longer remission compared to people who were eating less of those healthy foods. So we've got a bit of supportive data from breast cancer. And of course, colorectal cancer, when you think that more than 50% of cases could be prevented. We've got that data, you know, then it makes sense that even after a diagnosis of colorectal cancer, you want to pay attention to your gut microbiome and avoid the foods that caused, may have contributed to in the first place. So you want to concentrate on a fibre rich, plant based diet. And that's also borne out in the kind of observational studies that have followed people after a diagnosis of colorectal cancer.

Steven Bruce
Colorectal cancer you've already mentioned is reasonably common and significant. As physical therapists are there particular things that you think we might be able to pick up on very early in colorectal cancer where we think you ought to go and see somebody, not yourself because you're a haematologist but go and see a specialist. Are there warning signs that we might not have recognised otherwise?

Shireen Kassam
No, I suspect you're all familiar with the common ones. But just to say those sorts of things, you know, that really is early detection. It's like when you were talking about mammography, or you know, if we went down the route of PSA testing, that's early detection opposed to what we've spent our time talking about, which is prevention. But yeah, I mean, I think you know, colorectal cancer, it's the common things that we're all taught throughout our healthcare career. It's about changing bowel habits, it's abdominal pain or bloating, it's blood in the stool and weight loss, those sorts of things. And of course, we have a screening programme as well for age 50 and above, if I'm not mistaken.

Steven Bruce
Right. Sarah has asked whether copper rich foods pose a cancer risk.

Shireen Kassam
Hmm, that's interesting. Copper, I don't know about the association with cancer. But that might be because I haven't looked into particular studies on that. So I might have to pass on that question, the person asking the question might actually know a bit more. I don't think copper toxicity is a real genuine problem in our current, you know, dietary pattern, but again, I might be wrong.

Steven Bruce
Maybe Sara can share the source of that concern and help us. Now, I have interviewed a number of people about the keto diet. And as I understand it, the keto diet has good evidence for the fact that it is good for weight loss. And it's also good for reversing type two diabetes. So how does that sit with your plant-based approach to nutrition? Because obviously, it is much, much, much more difficult to follow a keto diet if you're vegetarian or vegan. And probably if you cut out the red meats, you can still do it fairly easily.

Shireen Kassam
Yeah, so another broad topic, really. And I think, you know, I agree with you that a low carbohydrate or if you go even further and very low carb and become ketogenic that the short-term data and most of the studies are less than two years, show that it can support weight loss, if that's required and support better glucose regulation. But longer term studies, especially if you're doing an animal based low carb or keto diet show that for all the reasons that we know, the long term health suffers increased cardiovascular disease because of the high levels of saturated fat and hence, the rise in cholesterol that happens in significant proportion of people following this pattern of eating increases your risk of cancers such as colorectal cancer and increases your risk of premature death. So it's not really a long term solution. And to be honest, I could say about any sort of diet pattern that reduces calorie intake and avoids processed foods would be able to lose weight and weight loss is required for type two diabetes reversal. So if you want to reverse or put diabetes into remission, the vast majority of people have to lose weight, the NHS has gone down the route of total replacement, of food replacement, I think that's the right term, where they give those low calorie shakes, 800 calories a day, people who lose more than 15 kilogrammes, you've got more than 80% chance putting into remission. If a low carb diet can help you lose weight, you will put your type two diabetes in remission, I would then point you to the vast amount of data supporting healthy plant-based diets which are low in calories, high in nutrients, high fibre, protect your long term health that also show the same. So it's not like one or the other when it comes to diabetes reversal. But I do think you need to think about your long-term health. And a plant-based diet is very much embedded for cancer prevention guidelines. So you know, you don't need to choose what you're trying to prevent. There is a lot of research ongoing on the ketogenic diet. But I've not seen any real human, convincing human data to suggest it's going to be a goer long term. Having said that, you can of course do a low carbohydrate, plant-based diet if that's what you want to try, David Jenkins, a professor, he was trained in the UK but works at the University of Toronto. He's the chap that created the portfolio diet and also the glycemic index. He has pioneered randomised studies on the Eco Atkins diet. So it's a plant based vegan, low carb diet. And yeah, for some people having less carbohydrates, higher fat, higher protein may work for them. But I think it's the wrong approach to be basing a diet around your macronutrients, we should just be eating foods that we know promote good health. And that's a combination of fruits, vegetables, whole grains, beans, nuts and seeds.

Steven Bruce
Thank you. We only got a couple of minutes left. So I'll try and get through some of the questions. Here's one that actually relates to your own specialisation. Lisa says that her niece is in remission for lymphoma after a stem cell transplant and asks, do parents or grandparents' diet play a big part in this before conception of the child?

Shireen Kassam
Yeah. So I think in general, we know that the data of your grandparents, the evidence of it can be shown in your genes. So epigenetic changes do get transmitted through generations and therefore healthy lifestyles are so important, you know, for your future progeny, as it were. However, I've not seen that data for lymphoma. No, because their strength of evidence isn't there. I think for acute lymphoblastic lymphoma, that's the only one that we really have good evidence that it starts in utero. And it is a combination of sort of genetics and environmental factors that occur very early in life, if not kind of pre life as it were. But I've not seen that data for lymphoma.

Steven Bruce
Okay, we're gonna have to wind up quite shortly. But earlier on, you mentioned a course. Now, I wasn't aware that you run courses. Are your courses for all and sundry or just for medical doctors?

Shireen Kassam
Yeah. So I also work one day a week at the University of Winchester, where for the last four years, I've been running an online course, CPD accredited on plant based nutrition kind of in clinical practice, and its role in all the things that we're talking about today, which is disease prevention and reversal remission. Yeah. So yeah, I'll send a link to that. It's aimed at healthcare professionals, but as you might imagine, a lot of non-health care professionals have taken it because it's a subject of general interest at the moment in the country. And I've had great feedback from non-health professionals as well. But you know, I'm talking to health professionals at the moment. So it would be highly appropriate for you guys, if you're interested in taking that forward.

Steven Bruce
I'm not surprised you get great feedback. I'm already getting great feedback from today's talk. And it sounds to me as though you would run a really good course Shireen, really grateful for your giving up your time today. And I'm sure everybody wishes you well in your work, which is so important these days. If it wasn't before. Anyway, thank you for that. That is all we've got time for today. So I hope you found that useful, helpful and interesting. I know I certainly have. There is lots more coming up, of course through the academy, Wednesday evening this week, I'll be talking about concussion with a number of guests, one online two in the studio. It's not just pitch sign stuff we're going to be looking at this is about testing and treating patients in the clinic. 90 minutes show Wednesday evening, starting at 730 as usual. Looking ahead Wednesday of next week, we've got a lunchtime show which replaces our normal case-based discussion and we're going to be talking about how you get access to free money to help build your practice. It's all about a range of pretty well-hidden grants, which we've used to enormous effect in my own clinic and here in APM. We'll be talking about how you get to the unavoidable paperwork. But we'll also be explaining how we can help you navigate that bureaucratic quagmire. On Tuesday, the 18th I've got my old mate James Booth joining me back in the studio, we're going to be talking about the latest

guidelines in dealing with cauda equina problems and we've had lots and lots of people talking about cauda equina recently and how their patients have been not dealt with properly through conventional systems. New guidelines have come out. James was one of the spinal fellows, one of the osteopathic fellows at Queen's Medical Centre in Nottingham, he's a very, very bright guy. He's very well informed and it'll be a great show. And just finally, before we go another plug for the Simeon Niel Asher and Professor Bob Gerwin course in May, all about dry needling. And I'm gonna say it again, this is the best course on dry needling you are ever likely to go on, whether you've needled before or not. It's just brilliant and do consider it. Bob is a professor of neurology from John Hopkins medical school in Baltimore. Simeon, of course, a world expert on trigger points, and they will be demonstrating how to get your dry needling absolutely right, absolutely safely. And it really is brilliant. So that's 19th to 21st of may. I think there's probably a link on the screen to the booking page. It's well over half full, but we do have a couple of places left if you're interested but I would suggest you don't hang around. That's enough for me. Have a great week and I hope I will see you soon. Bye for now.