“Nutrition and Gut Health after Cancer” (Robert Thomas, MD) [#163]

Brad Power
October 1, 2025

“The evidence now is becoming more and more convincing that it is worth helping yourself. After cancer, everybody benefits from self-help strategies, although you shouldn't blame someone or yourself if your cancer is progressing or comes back that you haven't tried hard enough. Because it's all about reducing the odds of progression and reducing the odds of your cancer coming back. The evidence that more and more trials are showing is that we can reduce these odds, so it is worth looking at your diet and lifestyle, maybe taking selective supplements, and avoiding dangerous foods, because it will impact your cancer, risk of side effects of treatments, longevity, and overall well-being.” – Robert Thomas, MD

“I am proud to have run a lifestyle and nutritional research lab for the last 30 years, looking at strategies to empower patients, to help them look after themselves during cancer treatments and afterwards, to reduce side effects and improve outcomes, mainly to produce research evidence, so we can first of all find out what to do, but also to persuade colleagues to take integrative and lifestyle medicine a bit more seriously.” – Robert Thomas, MD

Meeting Summary

Cancer patients in the middle of treatment or navigating life after it are often fighting fatigue, low mood, joint pains, weight gain, and many other troublesome side effects and want to do things that will help them improve their quality of life and length of life. Decades of clinical research confirm that structured lifestyle interventions - including personalized exercise, nutrition, and stress relief - are not “extras,” but evidence-based tools that can reduce treatment side effects, improve quality of life, and even lower the risk of recurrence. Yet if you look into complementary therapies, you face an uncertainty about what’s safe and effective. You may struggle to find trustworthy guidance to make these practices part of daily life.

Professor Robert Thomas, MD, Consultant Oncologist Bedford & Addenbrooke’s Cambridge University Hospitals, Professor of Exercise & Nutritional Science University of Bedfordshire, Oncology Lead at The Royal London Hospital for Integrative Medicine and author of How to Live, is uniquely qualified to lead a discussion on nutrition and health after a cancer diagnosis. He is a highly respected UK□based oncologist who combines expert cancer care with a strong focus on lifestyle nutrition, and integrative therapies. His clinical specialties include breast, prostate and bladder cancers, employing treatments such as chemotherapy, radiotherapy, hormone and biological therapies. He also leads a Research Unit that reported that a nutritional intervention can help menopausal symptoms in women after breast cancer and led the UK's National Covid intervention study. He recently present at ASCO Urology this year, the results of the world's largest nutritional intervention study for prostate cancer which found that boosting the diet with a phytochemical rich supplement called YourPhyto and gut health with a novel Lactobacillus probiotic, called Yourgutplus slowed prostate cancer progression, improved urinary symptoms, reduced markers of inflammation and increased grip strength.

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Why should you learn about lifestyle interventions to manage your cancer care?

Lifestyle interventions (e.g., exercise, nutrition, stress reduction) can…

- Slow your cancer progression
- Reduce inflammation
- Improve treatment response and outcomes
- Reduce side effects
- Enhance overall health and well-being and your body's natural healing processes

What lifestyle interventions should you consider?

- **Diet**: Consume a diet rich in phytochemicals from fruits, vegetables, and herbs; reduce processed and smoked meats; incorporate fermented foods like kefir and kimchi; eat whole foods instead of isolated supplements; consider targeted, evidence based supplements with phytochemicals and combinations like turmeric, pomegranate, broccoli, ginger, cranberry and green tea; and maintain balanced protein intake (3 times weekly meat, mostly plant-based proteins)
- **Gut health**: Take probiotics, especially lactobacillus; increase prebiotic fiber intake; consume foods that support healthy bacteria growth
- **Lifestyle**: Get regular exercise, maintain a healthy body weight, avoid smoking, try to manage stress

What are the connections between nutrition, gut health, and cancer?

- Gut health impacts inflammation and immune response. A "leaky gut" can allow toxins to enter the body, triggering systemic inflammation that creates an environment conducive to cancer development.
- The gut microbiome plays a crucial role in digesting phytochemicals, absorbing vitamin D, detoxifying potential carcinogens, and supporting immune system function.
- Poor gut health can negatively affect cancer treatments by reducing the effectiveness of immunotherapy by up to 40%, increasing the risk of treatment side effects, and reducing the response to chemotherapy and radiotherapy.
- A diet rich in phytochemicals, prebiotics, and probiotics can reduce inflammation, improve the gut bacteria balance, slow cancer progression, and enhance overall treatment outcomes.

What can you do to improve your nutrition and gut health?

- Eat diverse, colorful fruits and vegetables (e.g., 30 different vegetables and fruits per week)
- Eat fermented foods like kefir and kimchi

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- Avoid processed foods and excessive sugar, especially processed sugar, omega-6 rich foods, and deep-fried foods
- Incorporate fiber-rich foods to support healthy gut bacteria
- Eat medicinal mushrooms (e.g., turkey tail, lion's mane, reishi)
- Eat prebiotic fibers (e.g., chicory, beans, leeks, garlic, nuts)
- Take probiotics, particularly lactobacillus
- Eat whole foods rich in phytochemicals
- Consider supplements with inulin, Vitamin D, Phytochemical-rich ingredients
- Introduce fiber slowly to allow gut bacteria to adapt
- Include herbs and spices with meals to enhance nutrient absorption

How can you stick to a lifestyle program?

- Make gradual changes - introduce new foods slowly to avoid digestive issues
- Be patient with dietary changes, as your body needs time to adapt
- Remember that small, consistent improvements can make a significant difference in overall health

How can you learn more about nutrition, gut health, and cancer tailored to your diagnosis and treatment?

- Consult with an integrative oncologist or nutritionist specializing in cancer care
- Attend support groups and patient education programs; find patient networks that share evidence-based nutritional information
- Review reputable sources like cancer research centers
- Work with your medical team to develop a personalized nutrition plan
- Participate in clinical trials focused on nutrition and cancer
- Stay updated on the latest research through medical conferences and publications
- For more from Professor Thomas, please see his blog: Keep-healthy.com, Youtube: ProfThomasMD, Instagram: @HealthNetUK, and LinkedIn: https://www.linkedin.com/in/profthomas/
- For notes and recordings from previous Cancer Patient Lab webinars on lifestyle and nutrition in cancer, please see:
    - “Applying Nutrition Science to the Optimization of Cancer Treatment by Solving Symptoms” (Susan Bratton) [#41]
    - "A Patient’s View on Nutrition, Supplements, Integrative Oncology, and Complementary Therapies" (Robert Ellis and Glenn Sabin) [#33]
    - “Scientific Research on Lifestyle Choices to Reduce Your Cancer Risk” (Nigel Brockton) [#40]

medical treatment, product, or course of action. You should always consult a doctor about your specific situation before pursuing any health care program, treatment, product or other course of action that might affect your health.

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Meeting Notes

KEYWORDS

Nutrition, gut microbiome, cancer, prostate cancer, phytochemicals, probiotics, Omega-3, vitamin E, inflammation, dietary supplements, active surveillance, PSA progression, immunotherapy, prebiotic fibers, medicinal mushrooms.

SPEAKERS

Robert Thomas (87%), Brad Power (10%), Bruno Vinel (2%), Susanne Folkesson (1%)

CHAT CONTRIBUTORS

Allen Morris, Bruno Vinel, Russ Hollyer, Jessica, Elizabeth Clemmons, Rick Davis, Dianne Dowling, Ginny, Michael Penny, Hilary

SUMMARY

Professor Robert Thomas discussed the impact of nutrition and gut microbiome on cancer, particularly prostate cancer. He highlighted the importance of avoiding burnt meats and consuming a balanced diet rich in phytochemicals and omega-3. He emphasized the benefits of probiotics, especially Lactobacillus, and a supplement containing phytochemicals and organic ginger. His study showed that combining phytochemicals with probiotics significantly slowed PSA progression and improved urinary symptoms. He also noted the role of gut health in cancer treatment outcomes and the potential of medicinal mushrooms for inflammation reduction.

OUTLINE

Introductions

- Professor Robert Thomas has a focus on integrative oncology, nutrition, the gut microbiome, and cancer.
- This presentation was delivered at the British Urology Group Conference.
- Topics covered include what to avoid, fish oils, vitamins, gut health, and phytochemical-rich foods.
- Diet and lifestyle are important in cancer treatment and prevention.
- Data from various studies and trials highlight conflicting evidence on certain nutritional supplements.

What to Avoid in Diet

- You should avoid burnt and smoked meats, which are linked to cancer.
- "What's on the plate matters" – you need to consume meat with vegetables, fruits, herbs, and spices.
- The metabolization of nitrates in meats can lead to harmful nitrous amines, but the presence of phytochemicals can convert them into healthier nitric oxide.

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- You should focus on the overall dietary approach rather than individual foods.

Omega-3 and Fish Oil

- There is conflicting evidence on the impact of omega-3 on prostate cancer risk.
- Studies show both benefits and risks of omega-3 intake, including the CATFISH study presented at ASCO.
- The reduction of omega-6 rich foods, such as deep-fried foods, corn oil, and palm oil, may be more beneficial than increasing omega-3 intake.
- Oily fish and taking high-quality supplements should be consumed in limited amounts.

Supplements and Vitamins

- There are potential risks of certain supplements, including vitamin E, selenium, folic acid, and vitamin A.
- High doses of direct antioxidants can interfere with the body's natural processes and increase cancer risk.
- Extracted phytochemicals, such as lycopene and soy isoflavones, may not have the same beneficial effects as whole foods.
- Consuming whole foods is important for their synergistic effects.

Gut Health and Cancer

- Gut health has a role in cancer prevention and treatment.
- A leaky gut can have an impact on systemic inflammation, immune response, and cancer risk.
- The gut microbiome helps digest phytochemicals, absorb vitamin D, and detoxify carcinogens.
- Poor gut health is linked to worse outcomes in cancer patients undergoing immunotherapy, radiotherapy, and chemotherapy.

Phytochemicals and Probiotics

- Phytochemicals can reduce cancer progression and improve urinary symptoms.
- Combining a phytochemical-rich supplements with a specific probiotic can enhance their effects.
- The study presented at ASCO showed that a combination of phytochemicals and probiotics led to significant reductions in PSA progression.
- The study also found improvements in markers of inflammation, grip strength, and testosterone levels.

Active Surveillance and Lifestyle Interventions

- Lifestyle interventions can help men on active surveillance for prostate cancer.

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- A study involved a phytochemical-rich supplement and a probiotic, with positive results in slowing PSA progression.
- The combination of phytochemicals and probiotics led to significant reductions in PSA progression and improvements in MRI findings.
- The study also showed improvements in urinary symptoms and markers of longevity.

Future Research and Applications

- There is ongoing research on the use of phytochemical-rich supplements in women with side effects from cancer treatments.
- The potential benefits of these interventions include improving quality of life and reducing side effects.

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TRANSCRIPT

Brad Power
This is the Cancer Patient Lab.

We're honored to have with us Professor Robert Thomas. He's going to be talking about nutrition, gut microbiome, cancer, prostate cancer, and a whole variety of things. Professor Thomas was introduced to me by a number of people, most notably Rob Newton, who's going to be speaking in another week or so on exercise and cancer. He recommended Professor Thomas for his work. He will give his bio and introduce himself more thoroughly.

First of all, this is medical information. It is not advice. We try to arm our patients with information they can take to their medical team.

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Robert Thomas 1:40
I'm a consultant oncologist at Bedford and Cambridge University trusts. I'm a head of integrative oncology at UCLH London, and I have run a lifestyle research lab for the last 30 years, looking at strategies to empower patients, to help them look after themselves during cancer treatments and afterwards, to reduce side effects and improve outcomes, mainly to produce research evidence, so we can first of all find out what to do, but also to persuade colleagues to take integrative and lifestyle medicine a bit more seriously.

I'm going to give a little bit of a talk which I presented to the British urology group conference a couple of weeks ago. But although this talk concentrates mainly on prostate cancer, a lot of what we do is not just for prostate cancer, so I'd welcome a discussion for any types of cancer. But a lot of this data does extrapolate to other tumor types.

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Over the years, I've had some sponsorship companies, etc, but all the nutritional supplements used in this presentation were supplied free to the trials unit, so we got some benefit for the trust, but there's no individual financial connection to me or anyone on the trials unit. Next slide, please. So I'm just going to cover today, you know. So what to avoid? A bit about fish oils, because there was some presentation in ASCO urology this year. Bit about vitamins, gut health, and the latest in phytochemical rich food supplement and intake. Next slide, please. So what to avoid? Well, I mean, there's lots of things we need to avoid. Smoking, not you know, sedentary lifestyle, but in terms of cancer, sort of burnt meats, or meats which are smoked seems to be number one on the naughty list. So anyone who likes their smoked barbecues should be feeling guilty right now next slide. And it's not just about what we there's a famous chef in Britain called Dr rupee who always says, what's on the plate matters. So if you have, you know, some meat, for example, which has lots of health benefits but lots of risks. If you have it on its own or with some sweet, you know, drink without any vegetables or fruit or herbs and spices, it tends the

nitrates within them tend to get metabolized into nitrous amines, which is actually the thing which damages your DNA and causes mutations. But if you have it with herbs, spices, vitamin C, phytochemicals, which you get in fruit and veg or herbs and spice, it tends to be metabolized into nitric oxide, which is actually healthy. It causes vasodilation and improved tissue diffusion. So. So yeah, it's about what's on your plate in general, rather than eating any individual thing.

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I'd like to talk a bit about Omega three. Now, we all know that we need a lot of Omega three in our diet, and omega six and other essential fatty acids. But there seemed to be a bit of confusion amongst patients whether we should be taking supplements, etc.

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So originally, but the health Stacey Canfield from the health professionals follow up study from California published a paper showing that men, for example, who had more fish and had more omega three in the diet had a lower risk of prostate cancer. So that seems quite obvious and beneficial. Next slide. The trouble is, since then, there was a Japanese study showing that people who have a lot of fish intake have a higher risk of prostate cancer. The prostate prevention study which actually looked at finasteride or not, found that people who had more omega three had a higher risk of prostate cancer. The Select study which looked at vitamin E, selenium and against placebo, did a sub analysis and found that omega three correlated with an increased risk. And the British biobank study recently showed the same thing, although it showed for breast cancer, taking supplements reduce the risk, but for prostate cancers actually increased risk. Next slide please. So you know, that's all a bit confusing. And then suddenly, in ASCO this year in San Francisco, the catfish study was presented, which shows that men who took a supplement of Omega three actually had a reduced risk of prostate cancer progression. So if anyone can tell me what the answer is, I'll be all ears. My take on this data, which is very conflicting, and I can see why patients are confused, is that this study also looked at reducing Omega six rich foods, but they categorize these as deep fried foods, corn oil, palm oil, and things like this. So my take on this is, is actually it's the reduction in these Omega six, rich, cheap oils which actually gave most of the benefit, rather than adding more omega three. And the reason is that omega three is usually preserved with vitamin E, and vitamin E in the Select study showed that it's too much of an antioxidant actually increases the risk of prostate cancer. So I think, I think the evidence is out there. My personal take is, you know, eat lots of oily fish if you're going to take a supplement, maybe take one of very good quality. Keep it in the fridge, keep it dark, and definitely don't go anywhere near the use by dates, and just take limited amounts. But I think there's a bit of confusion remaining.

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What about the different types of supplements we mentioned: fish oil, vitamin E?

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Many of my patients, and I'm sure your friends and colleagues and people within your organization do take supplements, and you have to be a bit careful. Well, we've mentioned Omega three. We know from the Select study that vitamin E and selenium increase the risk of prostate cancer. We know that taking too much folic acid has the same problem, and so does vitamin A, and these are because they're direct antioxidants, they cause too much mopping up of the free radicals which we need. So I'm not too keen on high doses of vitamins.

Next slide

The same applies to extracted phytochemicals from things like lycopene. We know from the health professional study that tomatoes, which are rich in lycopene, and those sorts of foods, reduce the risk of prostate cancer, but when people have taken out the phytochemical which causes the red color that actually had no effect on PSA. And the same with soya. We know that soya is very good for you and it's good for breast and prostate cancer, but when you take out the genestein, there was actually some negative effects, such as increase in EGFR, which could be harmful. So again, it's the whole foods which matter

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Let's move on to gut health. We all know it's very important. We've been banging on about this for 30 years, and it's nice to see in the last four or five years, it's suddenly become very trendy. But. For good reason, because there's more evidence coming through. We know there's trillions of different bacteria in our body, and we can broadly split them up into pro inflammatory or anti inflammatory.

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SHow does having good gut health influence cancer? Well, there's lots and lots of mechanisms. The effect on the gut is probably the most important. Because if you look on that slide, the picture to the bottom left, you know, if you have an inflamed gut with lots of holes, it's got, it's, well, we the nickname is leaky gut, or it's so you get you get nutrients leaking out, and you get, more importantly, toxins leaking in, which then sets up an inflammatory reaction. So your body's reacting against this, these bugs, and as a byproduct of this inflammation, it then sort of attacks your pancreas, leading to diabetes, your brain leading to dementia, joint pains, you know, your bones all sorts of things, and it creates more oxidative stress. And because you're using up inflammatory things, you actually get a lower immunity. So that combination of high inflammation and low immunity and oxidative stress is a perfect storm to get cancer. Also, we know that the bacteria help digest the phytochemicals, which are the things in food, which give its color, taste and smell. It helps with vitamin D absorption, etc, and I've just mentioned they can be an antidote to some carcinogens.

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Robert Thomas 11:38
This is a PLCO study from the US showing that if you have a poor gut, you're more likely to get aggressive cancers and a higher chance of death. That's been established.

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We know that many cancer patients now are going on to immunotherapies, where we are trying to persuade the body's immune system to discover cancer as foreign and attack it. The classic is these kings called PDL-1 inhibitors, which were first used for melanoma, but they're now used for many cancers. And we know if you have poor gut health, you're 40% less likely to respond. You're more likely to get pulmonary toxicity and diarrhea, which means you have breaks in treatment. And you know, the president of ASCO turned around last year and said, We really need to prehabilitate patients with gut health before they start these treatments. Unfortunately, that's not happening

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We also know that patients on Zoladex for the sake of our androgen deprivation therapy, tend to have worse gut health. It changes, and that change to poor gut health might be responsible for many of the side effects. Now, in animal studies, they found that mice who become androgen resistant if you gave them feces from humans who were sensitive, they restore their sensitivity, which is quite amazing. We're saying we can restore sensitivity to drugs by improving their gut health, which opens up enormous doors in research.

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The same applies for radiotherapy and

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chemotherapy. We're still being told day-in-day-out for patients to avoid kimchi or fermented foods on chemo, which is the exact opposite advice they need to be given.

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At ASCO this year, I was really pleased to see that there were at least three studies showing that giving interventions to improve gut health, mainly through probiotics, found to have better response to chemotherapy, better response to biological agents.

I'd just like to talk a bit about the study we presented.

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Phytochemicals, as I've said, are things which give food its color of taste and smell.

Next slide

I've mentioned them above. Phytochemicals also are anti-inflammatory. They improve epigenetic expression of the bad genes we're born with. I've already mentioned they improve gut health because they act as prebiotics. They slow down diffusion of sugar through the gut walls, reducing the glycemic index, and they enhance antioxidant pathways. They're not direct antioxidants like vitamin A and vitamin E, that are more enhancers, and they improve DNA repair.

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There's very much a synergy between phytochemicals and probiotic bacteria. They both help each other.

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You know how we improve our gut health. We need more prebiotic fibers, more fermented soluble fibers, more bacteria fermented. Foods like kimchi, and avoiding processed sugar, and all these other things. But I think you're well aware of that.

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Can we do it? We all know this is pretty well established, that diets low in phytochemicals and poor fermented food cause cancer, and you don't react as well to cancer treatments, but can you do an intervention to correct that? That's less well known.

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In terms of which group would we investigate that hypothesis? Active surveillance is a very good group to investigate because a lot of them, 60% of men now in the UK and USA are put on active surveillance. So they have a disease you can follow and they're not on any other treatment. A lifestyle intervention will be very useful. And also, there's a big problem with active surveillance, although many men opt for it, 50% drop out by five years, and they probably don't need to have an intervention. We looked at that group.

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Why would we use a supplement in these men? Because, you know, we all want to eat healthily, and we don't want to rely on supplements. However, two studies have been done where we actually try to improve the diet of people on active surveillance to see if it had an impact. And both trials were negative. Now it could be that they just didn't change the diet enough, or it could be that what you get with a well-made supplement is you do get significantly higher levels of phytochemicals, which have the anti-cancer properties. You can take them

throughout the day, and you can standardize and measure the levels of phytochemicals, which you can't really do in whole foods. So that's why we went on to do a supplement study.

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That's just an introduction. We did this study with Stacey Kenfield from California and Rob Newton from Australia.

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Which one would we use? Well, we did a big evidence research looking at phase two studies, previous studies. We did a study, actually 12 or 14 years ago, which had broccoli, turmeric, pomegranates, and green tea, which did show some effect on PSA. We could have used that one, but we thought, “Maybe we'll use this opportunity to look at more recent data.” We found some evidence of cranberry extract reducing PSA progression. Organic ginger acts as a bio-enhancer. We know there's ways now with technology to extract the essence of, say, turmeric, and add it to whole turmeric. So you still get the benefit of the whole biodiversity of turmeric, but you can enhance the phytochemical levels and measure them. We used better food technology and more ingredients and came up with a new supplement, which, of course, for the study, had no name, but the people who supplied us are now obviously able to sell it if they want.

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Which probiotic did we use? This went through two ethics committees who were very keen on safety. So the safest ones are lactobacillus. Most of the pre-clinical data looking at animals, etc., are on lactobacillus as well, showing effects on prostate cancer. And we used one particular variety called “your gut”, plus in two COVID studies in the UK, because we led the national COVID intervention study and found it safe and reliable. So we used that one.

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What we did with this study is we worked with three patient support groups, which was over nearly 900 men. It had an impact in the design, and this was very important, because we wanted to just have, like a placebo, only two supplements, and maybe two arms with one supplement in each. But they flatly refused to allow this. They were not going to take this. They're not going to stop their over the counter supplements they take already, unless you can provide them. So it was quite an unusual design.

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All the men in the study ended up with the phytochemical-rich supplement. Then they were willing to stop all the other ones they took, and they were provided that free. They're very happy with that. The randomized element was the probiotic or not, which meant there was a level playing field. So the primary endpoint was whether the intervention to improve gut health made

a difference. We already knew that phytochemicals are beneficial and it was less important than the gap 12,

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Robert Thomas 20:19
It's now changed too much. These patients in the trial were having PSA progression, because those are the ones referred to us from the surgeons. We were able to look at PSA four months before trial entry, baseline, and then afterwards. Effectively, if you just took the phytochemicals, we saw that there was a slowing of PSA progression. If you just took the phytochemicals, which we sort of already knew, and it was a little bit more than previously, but which is good, but if you took the probiotic as well, you actually had an even greater reduction in PSA progression to the extent that most people actually had a lowering of PSA, which was very rewarding to see, and they were both statistically significant and very strongly.

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This was really surprising. We did this study. We did MRI before and after. You normally don't see much of a change on active surveillance, thank goodness. But in the group which took two elements, there was actually regression in seven patients and progression only in eight. But in the group which took one there was no regressions and progression in 19 that was statistically significant. So what that tells us is that these changes in PSA do correlate with underlying changes on MRI. That's a reassuring correlation, because some people say these foods can affect PSA and not the disease, but that actually only applies to phytoestrogenic foods, which were not included in this supplement, but that was a separate issue.

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We also saw an improvement in urinary symptoms such as erectile function and IPSs score, in other words, urinary flow and getting up at night, which was pleased in C

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We also saw markers of longevity. We measured markers of inflammation, grip strength, and testosterone levels did actually go up slightly. Now you would say, “Oh, that's not very good in active surveillance, but

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This is just showing grip strength improved in the group, which showed there's a general improvement in well being. If you have better gut health, I think that's my interpretation of that.

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Markers of inflammation go down. Well, we know that gut health correlates with systemic inflammation, so that just confirmed what we already know.

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Testosterone slightly went up, as I said.

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The data shows that men with low testosterone in the general public are more likely to get prostate cancer, which is odd, and then when we get it, the first one we do is reduce their testosterone levels. That's a paradox. We know also, and this was presented in ASCO, that if you've had radiotherapy or surgery, and particularly you've had a period of hormones, if you look 18 months later, the men with higher testosterone actually have a better disease free and absolute survival. When you're treating prostate cancer, you need to reduce testosterone, but actually, in the long term, you want it to get better again. This intervention might well be appropriate for men to prevent prostate cancer and to help them recover afterwards, but that's a subject of new research.

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In conclusion, we know that, as well as giving up smoking, exercise, not being too overweight, and reducing carcinogenic rich foods, we know that a capsule with phytochemical-rich food can slow prostate progression and improve urinary symptoms. We know that combining it with probiotics adds to its effect and also improves markers of well being.

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A study in Japan used them and found that they also helped women with side effects. Women's cancers are usually things which made them prematurely menopausal, and they found an effect on joint pain, hot flashes, and mood. This will be our next study. We're linking in with a breast oncologist and UCLH, and we're looking to see if this intervention will help women now cope with the side effects of treatments. We won't be looking at disease progression in that group, though.

Bruno Vinel 26:09
Thank you very much, Professor Thomas, for this presentation which confirms the direction of my health at the pleasure to be followed by Suzy Kazav in the UCL integrated cancer medicine. She talked to me about all that you explained today seven years ago. At that time, kefir or yogurt plus didn't exist, and I was told to eat at least 30 different vegetables or fruits or nutriments a week, which was quite challenging to do. I'm on your feet or on yogurt. Plus, I don't know the results yet. I'm due to have a PSA test soon.

I would like to know if you see a link between the gut and diabetes? I've been diagnosed with diabetes type two, and I know that high levels of diabetes are linked as well to inflammation in the body. I don't know what is the chicken on the egg, but basically, I think everything seems to be very linked to the quality of the gut and the diet.

Robert Thomas 27:27
I took over from Suzy cab, basically. If you like vegetables, it is great, but should you take maybe a higher intake of the ones which we know are linked to cancer? So you get higher levels of those particular phytochemicals, or should you take more of a diverse diet? Probably a combination of both. That's why, in the supplement we try to put as many different ingredients as possible, but it's only a capsule. You can't get that many in, but we are able to boost the phytochemical intake. I think a combination of diet and supplements is the right thing, rather than one alone. Interestingly, for type one diabetes, the link to poor gut health is actually a bit stronger now. That's something, which is starting in childhood and things, and that's because they feel that you get these toxins coming in, you get a bit of inappropriate inflammation, and you get a bystander effect on the pancreas, killing it, whereas, for type two diabetes, it's not so much. You do get pancreatic failure eventually, but it's more about insulin intolerance, and you don't look like someone with type two diabetes. I have to say, if there is more of a genetic element, interestingly, for type two than type one. So it could be that you're just unlucky. But we know that higher intake of phytochemicals will reduce the transport of sugar across the gut wall, so it can counterbalance some of the elements in our diet. That's why people who have a lot of fruit, paradoxically, have a lower risk of type two diabetes, unless you put it in a smoothie or something and break it down and make it very sugary. But whole fruit is linked to better diet, lower risk of diabetes, which is strange, and it's probably because of the phytochemicals protecting you. There is lots of data to show that people who have good gut health have more diabetic control, whether it reduces the instance of diabetes in the first place for someone like yourself, who's clearly pretty healthy, is difficult to say.

Susanne Folkesson 29:56
I've been told to avoid soya completely. But did you say that soya was good for breast cancer?

Robert Thomas 30:11
I'm really glad you asked that question because it's one of my things. I normally go red and steam comes out of my ears because I'm doing this clinic in UCLH, and UCLH is supposed to be one of the best hospitals in London. And people are still coming down saying, “My doctor told me to avoid fermented food, avoid soya, after breast cancer.” And it is literally the opposite. They are now phytoestrogenic. The estrogen receptors. If you have phytoestrogenic foods, they mildly block the estrogen receptor, actually stopping stimulation of the receptor, so it acts a bit like tamoxifen in that way. That's all been shown in lots of animal studies and things like that. There are two very large studies, one from China, one from the United States, showing that people who eat phytoestrogenic foods such as chickpeas, soya beans, and fermented foods, have a lower risk of breast cancer relapse. The data is 100% reliable that eating those foods are beneficial. If you put them in a supplement like the Genesis supplement, then, of course, you're over stimulus. It's too high a concentration, and there is some data on uterine hyperplasia and

things like that. So I definitely wouldn't take a supplement. Now, for 10 years, we've been writing to CRUK to say what was on their website was wrong, and it was based on zero evidence. It was just the word estrogen in a food frightened people, and in May last year, they changed their website, and it now says, if you go into CRUK, you should eat chemical rich food, soya, chickpeas, after breast cancer. There were no apologies that they've been giving the wrong advice for 10 years. Mind you, what was the other one? Was that just phyto Yeah, and broccoli is that good as well? Broccoli, of course, is very anti-cancer. It's great for you. It’s full of fiber, minerals, and phytochemicals. There's this mild effect on five inocarbonal, but this is tiny compared to the hormones in your body and other things enough in our food is it's protective.

Brad Power 32:32
A question from the chat: This is from Allen Morris. “There are various species of bacteria that are recommended in integrative medicine as probiotics. But what has entered mainstream medicine, and in what patient settings you may have covered some of this, and please specifically comment on lactobacillus, Bifidobacterium and akkermansia.”

Robert Thomas 32:56
The “new kid on the block”, as they say, is akkermansia, because there was a study showing, if you had higher levels of that commensal bacteria, you did slightly better on immunotherapy. It was only a couple of studies, and I don't think you can get too excited about that, and we all must go out and have akkermansia supplements.

We did a lot of work during COVID on which probiotics we recommend. And now the prostate study. We have trillions of bacteria in our gut. We have thousands of different types. We cannot replace our gut microbiome with a supplement. All we want to do is make a shift. If you make a shift to a more anti-inflammatory environment, it will allow the natural bacteria which will grow in that particular person to flourish more. So that's why we picked lactobacillus. First of all is that's a higher safety profile. They don't tend to have an antihistamine, histamine inducing effect. And the Ethics Committee were very keen on safety, especially ill people with COVID or men with prostate cancer. We found that just lactobacillus alone – there were five different types – plus a good prebiotic, was enough to shift the balance.

Cambridge has a tower block full of very clever PhD students trying to do this thing called the gut signature program, and we're trying to find the ideal profile for different types of cancer treatments. The trouble is, everyone's different. Brad, your gut health probably is perfect for you, and it might be terrible for someone else. So this is where it's more about just getting the best out of that person.

The other thing is, you know what you're taking with it. Vitamin D is a very good prebiotic, and vitamin D helps dampen vitamin inflammation in the gut. So a good probiotic, for example, would be good to have inulin and vitamin D in it, rather than the actual concentrate more on the bugs themselves, but it's a field which is just expanding. We're just getting into this. If you interviewed us, if we had the same conversation in 10 years time, we'd probably have a lot more information on which probiotics would influence different treatment programs.

Brad Power 35:38
Is there a natural source of lactobacillus?

Robert Thomas 35:41
Lots. Kimchi, kefir, generally, fruit and veg as a whole. This is why I must tell 20 patients a week to eat more kimchi, which is a sort of Korean fermented cabbage, which is packed full of lactobacillus and other healthy bacteria.

Brad Power 36:08
Russ asks a question: Many cancer therapies work in part by DNA damage. Some of the supplements work in part by mitigating DNA damage. It seems to me that these two are at odds, and the outcome of studies seems logical or coincidental.

Robert Thomas 36:28
I get this off pharmacies every day. They say, “Oh, this patient's taking turmeric during chemotherapy. I've told him to stop, because turmeric is an anti-oxidant, and we need the chemo to Damn, you know, we don't want the DNA protected, which is odd, because we have DNA on our normal cells as well. So we don't want them dying when we give too much chemotherapy and what, yeah, and also DNA repair. We want those cancer cells to die, or we want them to have genetic damage. We don't want them to repair themselves. But it's all about chemotherapy. We're not going to be giving chemotherapy in probably five years time anyway. We're going to move over to biologicals, which is all about getting the immunity to attack the cancer. If you look at the data, for example for turmeric, it shows you actually get a better tumor kill, and you get more protection of normal cells. There are over 40 trials to show that foods like turmeric, which are supporting antioxidant pathways, actually improve the ratio of the cells which have been killed by the chemo and the protection to your normal cells. Although, in theory, they're fighting against each other, in practice, these foods protect our normal cells more than they interfere with any interference of chemotherapy.

Brad Power 38:12
Building on that, Jessica asks regarding curcumin as a supplement, which is turmeric: What does Professor Thomas think about the curcumin c3?

Robert Thomas 38:24
Curcumin is the yellow phytochemical base within turmeric. Turmeric is the root, isn't it? So, generally speaking, I'm happy with that. Because although I say it's the whole food is more important. Curcumin is almost a natural product in its own right. There are different grades, and this is what we've looked up very much. When we help the manufacturers with their supplement. It's more about the quality of the plant, whether it's got contaminants, like pesticides, herbicides, heavy metals. Those are the bigger differences between the different types of curcumin or turmeric. That's the more important thing, to look at where it's from, and have they done their due diligence and investigation of the product? You could increase the amount of curcumin by just increasing the amount of turmeric you take. Or you could take less curcumine. It's all about

the percentage. Most of it's not absorbed anyway. It just stays in your gut, and you probably get most of the effect by reducing inflammation and improving gut health, to be honest, with turmeric.

Brad Power 39:47
Elizabeth Clemens asks: You’re making a connection between your findings in prostate cancer and breast cancer, with the paradox of higher testosterone correlating with lower prostate cancer. How might you extrapolate the connection between estrogen- and hormone-positive breast cancer after treatment, if one is able to balance the estrogen pathway and estrogen dominance?

Robert Thomas 40:11
Good question. Quite technical. It was a bit of a surprise when we found the testosterone data. I was in a conference about five years ago when the data was shown. You have to take these correlations with a little bit of a pinch of salt. I'm just being a devil's advocate. It could well be that men whose testosterone levels are higher are just generally fitter. They exercise more. They're not overweight. They eat better. Rather than the actual hormone itself is protecting you. We know that in post menopausal women, there is a tendency if they're overweight and they don't exercise as much and have poor diets, their estrogen levels get quite high. It's sort of the opposite way round that we know. High estrogen levels probably correlate with an increased risk of breast cancer. So it's the other way around for women. So yeah, it's a tricky one. After women have breast cancer, we do everything we can to keep estrogen levels low with either Zoladex and ovarian suppression or aromatase inhibitors. The latest studies looking at CD2 inhibitors are suppressing it even lower. So it doesn't look like you're going to get the same benefit of restoring estrogen levels after breast cancer, I'm afraid.

Brad Power 41:47
Diane Dowling asks: Are there any studies that advise on diet for MDS and blood cancer?

Robert Thomas 41:58
There was a trial looking at chronic lymphatic leukemia, CLL, looking at green tea intake. There did seem to be a slowing because CLL is also one of those diseases if it's not too bad, you can watch for a while before coming in with interventions. So there are some opportunities for lifestyle studies there. So green tea did seem to help in that group. Of course, there are studies looking at gut health after bone marrow transplantation for leukemia. And there's clear evidence that fecal transplantation, auto transplantation significantly improves recovery post high dose chemotherapy. This data I presented today applies to prostate cancer, but logic says they probably apply to most tumors, because it's all about changing the body's attitude. It's allowing the body to fight the cancer through itself. So it's not really cancer-specific as such.

Brad Power 43:15
Bruno asks about fiber. He was told that fiber is critical to the quality of bacteria in the gut. Can you speak to sources of fiber?

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Robert Thomas 43:25
If you're a gardener, it's all about the soil, isn't it? The “seed and soil” hypothesis. The prebiotic fiber in beans, chicory, nuts, leeks, and garlic, that sort of thing, encourages the growth of healthy bacteria. Whereas something like too much cheap processed food, meat, and sugar encourages the growth of unhealthy bacteria. Many studies are not even giving bacteria. They're just giving fiber to encourage your own healthy bacteria to grow, which might be a place in our studies. We give both. So we give inulin, vitamin D, which is a prebiotic, as well as the lactobacillus, but fibers are incredibly important to a point.

You don't want to be taking too much. A lot of patients say, “But my gastroenterologist said the FODMAP diet is the thing for me.” The FODMAP diet data is only for about four to six weeks. If you reduce beans and fiber on people, of course, they get less wind for a while, but actually, in the long term, you're not encouraging the healthy bacteria. Whereas if you give someone who, especially someone with a bit of an irritable bowel, or if they haven't had a good diet, you tell them to take inulin, chicory, artichokes, beans, they get really bad wind initially and gripe, but if you push through that and perhaps just introduce it more slowly, you then get the change in fermentation and the change in bacteria, and then you can tolerate them really well. Fiber is the type of thing to introduce and build up slowly, and you'll reap the benefits in the long term.

Brad Power 45:25
What about psyllium husks?

Robert Thomas 45:28
You get that in sachets, don't you? It's a nice natural laxative. Things like crushed linseeds or flax seeds are good. They tend to induce a little bit too much looseness in some people, though I have to say, you have to know what's good for you, and titrate it.

Brad Power 45:56
Jessica's got a question, which is almost political or systemic, but I bet you have a point of view: Why are cancer patients still not taught about nutrition at the treatment stage? I had to learn everything myself, and the CRUK chat forum showed a shocking lack of knowledge. Why on earth wouldn't they use this wonderful opportunity to educate patients?

Robert Thomas 46:21
I wish I knew the answer to that. We did an audit recently where we looked at the first 200 patients who came to me in the RL Helm, and we categorized their advice in three categories:

1. Did they get the right advice regarding nutrition?
2. Did they get the wrong advice like avoiding soya, etc?
3. Did they get virtually no advice, like not exercising when you start androgens?

63% either had the wrong advice or no advice.

I totally agree. It is part of my role to educate. I'm giving talks in UCLH Royal Free guys, Bart's Hammersmith. I gave a session in British South lifestyle medicine last week. I am doing my best to go around and tell oncologists. There is a changing attitude. More recently, there was a prehabilitation program started by Macmillan. The president of ASCO turned around and said, “We really have got to take gut health and lifestyle more seriously, especially moving into these immunotherapies, because that could be the difference between life and death.” Because if you have poor gut health, you get profuse diarrhea, pulmonary toxicity, and it could be fatal. So people are shifting and the tide is turning, but it's too slow like you say, and I don't know why. I mean, I had an interview with Dr Saba from the Cleveland yesterday, who runs a wellbeing program. And I think America is definitely ahead of Britain. There are, in my opinion, MD Anderson and the Cleveland, these clinics are really integrating lifestyle a lot better amongst their patients than we are in the UK.

Brad Power 48:06
There was a question from Jenny: Is there any known link between Long COVID and cancer?

Robert Thomas 48:32
We did quite a few evidence reviews of this. Obviously the conspiracy theory is that the vaccine might be causing an increased risk, and there wasn't a strong link, to be perfectly honest. You know there is a correlation to people who have severe, long COVID, having poor gut health. And this is the thing we showed in our trial, that your gut health significantly reduced the risk of long COVID and severity of symptoms, but we also independently showed that people who had a history of poor gut health had worse long COVID, and people with a poor gut health have an increased risk of cancer. So it probably could be that people more vulnerable to COVID are more likely to get cancer.

Brad Power 49:15
A specific question about medicinal mushrooms, specifically Turkey Tail, PSP – what is your opinion about mushrooms?

Robert Thomas 49:25
It's a question I get asked a lot by my patients. There is some exciting laboratory data showing good impacts on reducing inflammation, and I really like their impact on reducing inflammation within the brain and improving neuronal repair. Brain fog is a big problem with people on androgens and post chemotherapy. There's enormous potential for medicinal mushrooms, not just Lion's Mane, but Reiki, cordyceps, Turkey Tail, but we don't have any strong clinical evidence. So if you're happy to extrapolate lab data, which has always been a bit of a problem, it doesn't always correlate, but I certainly advise patients to have as many mushrooms as they can in their diet. I've just begun to start taking an eight blend mushroom complex. I think it's called Your Fungi, which is not practicing what I'm preaching. But I am sort of quite convinced. You should say we'll wait for the randomized trials, but I don't want to wait five years. We are going to do a randomized trial of a blend of medicinal restrooms as one of our next studies. I'm excited by them, but just be careful. They're not proven just yet.

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Brad Power 50:55
We were talking about curcumin and turmeric before. Jessica has a question about bioavailability. It's her understanding that black pepper needs to be combined with it.

Robert Thomas 51:08
There's one trial which actually shows that black pepper blocks the excretion of turmeric from the body, so it increases serum levels. It doesn't actually increase absorption. Saying that black pepper is very healthy. It's a bio enhancer as well as ginger. We didn't include pepper in the design of your phyto because it does actually interfere with lots of drugs, sort of antihypertensive statins, and many of the men we have are on those other drugs. We just would have been a minefield, whereas organic ginger also is a bio enhancer, but it doesn't seem to have the same effect on medication. That's why we avoid pepperin. But you can just increase the intake of these foods without having to enhance it with pepper. Just taking more turmeric would have the same effect as a lower dose with pepper in it.

Brad Power 52:07
Michael Penny asks: is there some hierarchy of proteins to avoid for prostate cancer patients, besides smoked meat, bison, buffalo, chicken eggs, etc.?

Robert Thomas 52:21
There was a study recently showing eggs actually slightly reduced your intake risk. The best estimate is three times a week is the optimum amount of meat, and after that, you should be having most of your meals with plant-based proteins, which reduces the risk of cancer. And if you're going to have meat, presumably bison in America have walked around before they've been shot. Same as game in Britain, venison is a very good meat. It's eaten grass. Lamb is better because it's eaten grass. So the more natural and wild the animal is before it's converted into your steak, the better. I would imagine bison, venison, game is definitely more packed with, say, omega threes and other healthy proteins.

Brad Power 53:19
I always like to close Professor Thomas with an opportunity for you to give a summary closing statement, like parting words of wisdom, key messages, something of that sort.

Robert Thomas 53:33
The evidence now is becoming more and more convincing that it is worth helping yourself. Everybody's going to be benefiting from self help strategies, and you shouldn't blame someone or yourself if your cancer is progressing or comes back that you haven't tried hard enough. Because it's all about reducing the odds of progression, reducing the odds of your cancer coming back. The evidence that more and more trials are showing is that we can reduce these odds, so it is worth looking at your diet, looking at your lifestyle, maybe taking selective supplements, and avoiding dangerous foods, because you will improve your odds of cancer, longevity, and overall well-being.

“Nutrition and Gut Health after Cancer” (Robert Thomas, MD) [#163]

CHAT CONVERSATION

00:22:18 Allen Morris: There are various species of bacteria that are (integrative medicine) recommended as probiotics, but what has entered mainstream medicine and in what patient settings------ and please specifically comment on Lactobacillus, Bifidobacterium, and Akkermansia ????

00:26:36 Bruno Vinel: After ten years being diagnosed with prostate cancer and several rounds of androgen suppression therapy, I was diagnosed a year ago with Diabetes type 2. There was history of diabetes in my parents but I suspect that my diabetes condition could be linked to the side effects of the ADT (putting on weight, fat in the belly). At the same time I read that an increase of insuline is causing inflammation in the body that is favouring the development of cancer cells. What is your take on that and what do you recommend?

00:32:50 Russ: Can you address this: Many of the cancer therapies work in part by DNA damage. Some of the supplements work in part by mitigating DNA damage. Seems to me that those two are at odds and the outcome of studies seems logical (or coincidental :)

00:35:11 Russ: Directed at me? I am largely pro whole food. I'm not directly anti-supplement but in many cases we aren't good at supplying all the synergists. And we often introduce toxins and impurities. Plus the actual dose is often misrepresented.

00:38:06 Russ: Interesting that anti-oxidants upregulate PARP. Obviously that would fight some of our therapies. Any good studies to look at?

00:44:21 jessica: Re the curcumin as supplement, what does Prof Thomas think about the curcumin C3?

00:46:49 Russ: Link to the PRS + PB study?

00:51:28 Elizabeth Clemmons: With the paradox of higher testosterone correlating with lower prostate cancer, how might you extrapolate the connection between estrogen and hormone positive breast cancer after treatment if one is able to balance the estrogen pathways/estrogen dominance?

00:51:35 jessica: I am a huge fan of Prof Thomas, as a stage 3 NSCLC surviver - 9 years now with no recurrence. Personally I drink one litre of very strong green tea daily plus two portions of various brassicas daily plus all the colourful veg. Plus now curcumin Super diet plus full three prong medical treatment has helped me stay alive and well today. Oh and gum health!

00:52:58 Allen Morris: If the gut biome is that central to general health, why don’t people with Ulcerative Colitis (the prototype for ongoing gut inflammation) show higher rates of a wide range of non-gut diseases?

00:53:03 Rick Davis: if interested, please watch Dr. Michael Liss, uro onc at UCSD, present on gut microbiomes earlier this year. https://ancan.org/dr-michael-liss-on-gut-microbiomes-040225/ Also his study for men for early AS Pr Ca https://oncobiomix.com/?utm_source=substack&utm_medium=email

00:57:19 Russ: Opinion: probiotic vs. prebiotic importance? I shoot for 30g or so of fiber a day, various natural sources of probiotics with kefir being the only thing I "target" for PB.

00:57:52 Dr Dianne Dowling: Prof Thomas, are there any studies that advice on diet for MDS and blood cancer? Dianne

00:58:10 Bruno Vinel: How about fibre? I was told that they are critical to the quality of bacteria in the glut

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00:59:25 jessica: Re your ref to CRUK, taking the conversation wider, why are cancer patients still not taught about nutrition at treatment stage. I had to learn by myself, and the CRUK chat forum showed a shocking lack of knowledge which CRUK mods did not attempt to address. Why on earth wouldn’t they use this wonderful opportunity to educate patients.
01:00:21 GINNY: Is there a known link between Long Covid and Cancer?
01:00:40 jessica: What does Prof Thomas think about medicinal mushrooms - specifically the Turkey Tail PSP
01:01:13 jessica: Isn;t it do with bioavailability? For curcumin. Black pepper is a must right?
01:01:35 GINNY: Reacted to Isn;t it do with bio... with "👍"
01:02:29 Michael Penny: Is there some hierarchy of proteins to avoid for PC patients--besides smoked meat, bison, buffalo, chicken, eggs, etc?
01:05:39 Hilary: Please comment on mushrooms. I have learned from Osher Center at UCSF that some mushroom extracts, such as PSK and PSP from turkey tail mushrooms, have shown potential in boosting the immune system and may be used as adjuncts to cancer treatment.
01:06:04 jessica: Reacted to "Please comment on mu..." with 👍
01:11:28 jessica: Nutrition is esp important in the UK, where diet isn’t that good - compared to Italy for example, where lots of olive oil and fruit and veg. Also UK lags behind comparable countries for cancer survival. So pleased we have Prof Thomas!
01:13:01 jessica: Wow RCT on medicina mushrooms!! Fab