

Microbiome expert: How to reset your gut overnight | Tim Spector

25 MIN · YOUTUBE · [HTTPS://YOUTU.BE/WNHGEX0AVA0](https://youtu.be/wnhGEX0ava0)

<https://youtu.be/wnhGEX0ava0>

SUMMARY

Tim Spectre discusses the outdated nutritional guidelines that focus solely on calories, fat, protein, and sugar, arguing that this approach has led to public health issues. He emphasizes the importance of gut health and presents eight practical tips to improve it, advocating for a shift in how we think about nutrition.

- *Traditional nutrition education is overly simplistic and has contributed to poor public health.*
- *Mindfulness in eating encourages awareness of food choices and their effects on health.*
- *Consuming a diverse range of at least 30 different plants weekly is crucial for optimal gut health.*
- *Incorporating three servings of fermented foods daily can significantly improve gut health and reduce inflammation.*
- *Diversifying protein sources, particularly through beans and lentils, enhances gut health and provides fiber.*
- *The focus should be on food quality rather than calorie counting, as the latter often misrepresents nutritional value.*
- *Avoiding ultra-processed foods is essential due to their negative impact on gut health and overall well-being.*
- *Practicing time-restricted eating allows the gut to rest and repair, contributing to better health outcomes.*

The old way of thinking about nutrition is the way doctors are still being taught that essentially there's only four things you need to know. It's calories, how much fat there is, how much protein there is, and how much sugar there is. If you get those four things right, everything else will follow. We've been following that advice for the last 40 years, and it's been a complete disaster. It's only really helped the food companies sell us more crappy products and it's led to a disaster uh of unbelievable scale for the public health. My name is Tim Spectre. I'm an MD. I'm a professor of epidemiology at King's College in London and I'm also co-founder of the nutrition and gut health company Zoey.

>> Eight tips for maintaining a healthy gut ecosystem. Real food, unlike fake food that is made just from a few ingredients, contains thousands of chemicals. And all of these uh play a role in our body because they then nourish the trillions of microbes inside our gut to produce thousands of other chemicals that our body can't produce. It's only by focusing nutritional health guidelines on this new organ in our body, our gut microbes, that it all makes sense. We have to have a seismic shift in our idea about nutrition in order to make healthy progress and focus on gut health and what are the key principles to improve all of our gut microbes which will help us. As I've been studying the gut microbiome, I've been obviously thinking of how I can translate that science into progress and practical tips for people in various ages and states of how they can improve their gut health. The first one is what we call mindfulness. And this seems a bit strange. What what's he talking about mindfulness for? Well, I remember when I uh started to change my diet, I decided to be vegan. It was an easy way to change

your diet.

as a temporary fix if you like because it meant that when I was going to medical conferences I would stop and think before I just took something from that tray from that buffet I would say what's in it uh was there meat in it or is there dairy in it and we don't need to be that extreme all you need to do is to think about what you're eating just for a second before you grab it or you put it in your mouth So mindfulness in this context means just stop and think am I hungry do I need this what's in it you know and what what are those contents are they going to uh have an effect on me and then what effect is that going to have on me if I do eat them. So these sort of three steps that I think are important in mindfulness is an important realization that food is much more than just calories. uh is it going to affect my mood? How am I going to feel in three hours time? Uh what what are the long-term consequences? But also, is it going to be really tasty? Am I going to really enjoy it? Or am I just being forced by marketing by big food to eat this rubbish that I don't really want?

So there three uh steps in this this concept of mindfulness. We just want people to stop and think. That's number one. So the second principle, probably the most important that we've found scientifically, is to eat a diversity of plants. It's not about eating the same plant many times a week. We think that the science is pointing us to is something around 30 different plants a week gives you optimum gut health. This is a study that I took part in with the British gut and the American gut about 10 years ago where we saw that the sweet spot for gut health was people eating around 30 different plants a week. It looks like it might be slightly more than that, but certainly 30 is a really good target. It turns out it doesn't matter if you're vegan or vegetarian or an omnivore. It's the people that eat the most plants have the healthiest gut, which I think is is really interesting.

30 plants to many people say that sounds way too much. The average American probably has between 10 and 12 plants a week. How do I get, you know, how do I get over double that? Well, you got to remember what a plant is. It's a it's not only a fruit and a vegetable, but it's also a nut. It's every different type of seed. It's an herb. It's a spice. It's even things like coffee, which is a fermented bean. So when you just change your mind a bit about what plants are, then it becomes easier and fun to add them to your plate. Think about more rather than less. Most diets are all about excluding things. And what we're trying to do for our gut health is to include more things. We've got little microbes just waiting around for that bit of baobab or that particular nut or seed or berry. uh the chemical that comes from it. So the more you can give your gut microbes, the better.

My third guideline is to eat three fermented foods daily. So I've spent the last three years researching fermented foods and have a book on that subject. And what was really interesting is I I didn't think it was a topic worth discussing three years ago because the science wasn't really up to it. But I've been convinced by a couple of studies. The first was from my colleague Christopher Gardner at Stamford, a very detailed but small study of adults who were told to eat five fermentss a day, comparing that group to a high-fiber group. And what they showed was that not only did the gut health improve in the fermented group, particularly the immune system was impacted and they had around 25% less inflammation. So suddenly moving from anecdote and lots of small not very good studies in the literature uh that were all pointing the same way that fermented foods were good for you to suddenly a mechanism that this can really impact your immune health in different ways to just rather than just eating lots of fiber and plants. People think what is a ferment fermented food is something that's been

transformed by microbes into something better. So you transform milk into cheese much more interesting than milk. You transform grapes into wine. Uh you're transforming cabbage into sauerkraut. So think the 4ks. Kefir, uh kimchi, kraut, kombucha.

Kombucha is uh fermented tea, which is all really good for you. Most cheeses, if they're not, uh made artificially in in in factories, are good. Yogurt is great. All the soy products that you see in Japan, miso paste, all these krauts and pickles that are fermented in salt are really good for you. So variety is important. They've all got plenty of different microbial species and they're probably better for you than just taking probiotics from the pharmacy or the drugstore. So my recommendation is to build up to three fermentss a day as an extra boost for your immune system and your gut microbes. a big fan of fermented foods now because the science has finally caught up.

The fourth guideline is to diversify your protein. We're going through a protein craze at the moment where every product has added protein in it. Every uh American thinks they're deficient in protein. And there's nothing wrong with protein. It's not particularly harmful. that if you don't uh need it, you lose it. You can't store it. So, you pee it out or it gets converted to fat. If you are trying to get more protein and perhaps 10% of people are lacking in protein because they're unwell, they might be elderly, they're uh trying to uh build body mass or try and not lose it too much as they're on the these um weight loss drugs. Then my view is you should be trying to think about other protein sources rather than just uh red meat.

The one that comes to mind are beans and lentils. uh things that have really high protein content but also contain lots of fiber. This means your microbes can actually use that at the same time as your body's getting that protein. So that's a real reason why we should be switching eating many more beans and pulses than we are currently. They're very cheap. They're accessible. They're good for the planet and our microbes love them.

Guideline number five is focus on quality, not calories. For decades, we've been obsessed with the calorie as the main source of describing food and nutrition about whether it's healthy or not. There are hardly any uh nutrition scientists who now believe in the dominance of the calorie. It's only a tool for the food companies to make rubbish food uh seem more healthy because it is lower in this magic term.

The science tells us that these uh in the vast majority of people fail. It's really impossible for most people to follow a calorierestricted diet for more than a few weeks. And even if they do lose weight, as most people do, uh virtually everybody regains it because your body's appetite signal is turned up. The brain has finally tuned to know if you're uh not getting enough energy and it switches up its thermostat to ramp up your hunger signals. Your body is designed by evolution to overcome that pure uh calorie signal. The other problem with calories, not only the fact that it's it's virtually impossible to calorie count and and lose weight, is that it disguises the food in ways that gets us to stop thinking about the quality of what we're eating. And that's what the food companies have been doing for the last uh 40 or 50 years, trying to switch our thought away from the fact that they are just making this uh crap food out of a few ingredients that have government surpluses, away from the food we should be eating, which are whole foods, which is what our gut microbes want to eat. They want to eat a variety of foods that are in their original state that have the the casing uh that contains most of the fiber. They want the skin on it. This is where most of the nutrients and ingredients are that uh we need for our bodies to work really

well. This is a really important step as people um try to disregard the calorie which effectively doesn't have a major role in our any of our plans and we ignore the calorie completely. So tell people it doesn't matter. It's all about the quality of the food, how it's going to impact your gut microbes. And once you do that, it's very liberating for people to think I don't have to worry about this. And generally, if something's got low calorie on it, it's a poor quality food. You should be avoiding it.

Number six, avoid high-risk processed foods or high-risk ultrarocessed foods. These are the foods that make up 50 to 70% of the American diet high in kids. And most those foods are really harmful for us. There isn't a universal definition of an ultrarocessed food. We think that ultrarocessed food itself is is too broad a term because it most people use as anything that has got an additive in it. Some of those additives can be like vitamin C, therefore not particularly bad for you, whereas others are are dreadful. And the worst ones, the ones we categorized that make up 25% of uh the American diet have a number of components that make them particularly harmful. Remember these are foods that are mainly made from cheap ingredients that are government subsidized like uh like maize uh like uh soy and uh wheat and sugar. These are things that are plentiful and taxpayers are paying for them to be cheap and they have surplus of it. So they've got to make create foods with them and they do that really effectively. and they try and upsell them by adding additives to them that change their color and they change their texture and they change their taste. And some of these additives are not too bad.

Others are quite unhealthy and others are really unhealthy for us. Some of them are associated with cancer. Some of them associated with mental health problems in kids. You have emulsifiers which glue them together which are bad for our gut microbes. You've got artificial sweeteners which uh many of them develop from the petrochemical industry which our bodies are not used to that cause our microbes to produce funny strange chemicals in response and are generally harmful. You've got others that we still don't know how bad they are. That that's the additives. Then you've got uh the hyper palatability that the companies use a mixture of salt, sugar, and fat in those combinations to make that food override your normal fullness signal. So they do this very deliberately. We all know we've eaten a big bag of chips or whatever it is in front of the TV and it's got potato, which is starch in it. It's got um salt. It's got usually um some some uh fats in there and it's that sugar, salt, fat in the perfect combination that these brilliant food scientists have created that will tickle our brains into uh thinking we can keep eating them and we just don't get full.

So hyper palatability is a component of 70% of these foods. The other component that you need to be looking out for is is it something that you can eat super quickly? Uh its structure has been taken away. So you strip off all those bits of plants that make it necessary to chew it and you've just got the inside uh bits. So we end up eating baby food. They melt in your mouth, dissolve away. You can keep eating them without even noticing it, without exercising your jaw. And then finally, the best from the food company's point of view are foods that you can get lots of energy in really quickly without noticing it. And this is called calorie density. The worst offending foods have those. So these are the the four categories. The ones to look out for are the ones that have all of those components. And that makes up 25% of the American diet. breakfast cereals uh for kids, uh most children's yogurts, um most savory snacks, most cookies, uh most ready meals, most uh sodas and drinks, even if they are low calorie. So, not only is it bad for your gut microbes, it's also going to make you uh keep eating and become obese and have all those problems of diabetes, etc. I don't think it's realistic to cut them all out completely and

my view is that yeah, you can still have the odd uh treat, but don't have any of these as a regular part of your diet.

Number seven, try and eat the rainbow. You may have heard that before, certainly been around a while, but we now know why it's good to eat the rainbow. Rainbow plants and uh especially fruits and vegetables have rich colors. And that's what we're looking for when we trying to select something to put on your plate is to try and get as bright and as varied as possible because plants that have these bright colors tend to also have high levels of a defense chemical called polyphenols. Plants like humans, you know, have a defense mechanism and this is their defense mechanism. They are fighting off insects and sunlight and draw drought etc. with these chemicals that turn out to be actually very good for us. They used to be called antioxidants which is a rather vague scientific term. We now know that our microbes can use these polyphenols as a form of fuel. If they're getting this, it's like they're getting extra gasoline. And so this engages all our microbes to be healthier. So as well as breaking down the fiber in the these plants, they're also getting these extra chemicals which is acting as a fuel which makes them even more productive.

So nature has given us these clues, bright colors. For example, you got a store uh you got an iceberg lettuce there and you've got a rosolo, an Italian one with lots of purple uh leaves on it. always go for the brightly colored one. That will have a thousand times more uh polyphenols than the uh ubiquitous iceberg lettuce whose only advantage is that it stays forever in your fridge. It has no nutritional value other than that it will come still be there after your vacation. The other clue in nature is they can be bitter as well. So, slightly bitter tasting plants like your broccololis, the cruciferous vegetables, uh nuts and seeds. You've got uh extra virgin olive oil, which is my oil of choice, is really high in polyphenols. The best ones will make you slightly cough, and you want them to be really nice and young. You've got dark chocolate. over 70% is generally healthy because that cacao bean has really been um fermented and is uh really strong in polyphenols as is coffee. If you like a drink uh the the the only one I'd recommend for your gut health is probably red wine which has high levels of polyphenols uh again in moderation.

So they're the tips that nature's given us uh to identify why eating the rainbow and bitter foods are actually good for us. The final tip is try and give your gut a rest. And by that I mean timerestricted eating. 20 years ago and certainly when I was at medical school was the idea that we should be uh grazing not feasting. Things have now changed and we now realize that constant grazing is what your gut microbiome doesn't like at all. We know how important sleep is for our health. Uh getting eight hours a night can really extend your lifespan, improve your immune system. Well, the same is true for our gut microbes. They have a circadian rhythm. They actually go to sleep and they need this time to repair the gut. So if it's eating all the time and you're having late night snacks, early breakfast, they're not getting the natural time they need that our ancestors had for millions of years to clean up our gut, particularly the lining of the gut where the mucosa is.

This is really important as an immune barrier and the healthier that is, the healthier generally our immune responses are. So give your gut 12 to 14 hours to recover overnight and this is the basis of timerestricted eating. The way timerestricted eating seems to work is through a number of mechanisms. The first is by leaving that gap uh in time your microbes are not focusing on eating and you have a a defense team that comes out at night.

A bit like in American football you have a different teams for offense and defense. defense comes out.

It cleans up the lining of your mucosa. That tidies up the gut lining, makes it more efficient, helps the immune system. You're also getting metabolic advantages so that uh your gut health is generally better the next day because it's all been tidied up for you. There isn't that much debris lying around and you get less unhealthy bugs over time. It also seems to be uh better for your mental health. A lot of this is uh anecdotal, but we did do a large study in Zoey of 140,000 people asked them to do timerestrict eating. A third of people hated it. They were snackers and they just found it really difficult. A third loved it. They're still doing it years later. And what we we learned was the people that that were adhering to it had improved mood, energy, and less hunger from doing it. So there do seem to be other benefits that we still uh are looking at. And it also helps you avoid snacking. And we know that uh mindless snacking accounts about 25% of calories in in in the United States and the UK.

So it just makes you a bit more thoughtful about what you're eating if you're trying to give your gut microbes a rest. Timerestricted eating is a form of intermittent fasting, but you're not restricting calories. you're just eating the same food you would normally eat, but in a more limited time frame. So, for people wanting to give it a go, I would say the easiest thing is to start with a little rule like leave at least 2 hours before going to bed where you're not eating anything else except maybe some black tea or or or water. That way, your gut will have a chance to recover and hopefully you'll notice the difference the next morning. And if that works, then you can extend it and maybe say, "Okay, I can try this uh for a 12-hour overnight fast as well." We are moving to the idea that many people can do very well just having two main meals a day or maybe combining breakfast and lunch. The concept of brunch, many people are enjoying around the world and see actually I feel quite good at the weekend when I do that. I don't necessarily need to eat first thing in the morning. And I think we're realizing that this this idea of three big meals and maybe three snacks events has been forced on us by the food industry. Mr.

Kellogg was probably the first one to say that everyone had to have a breakfast before doing anything otherwise you'd be unable to work. >> Happy day. I personally find, you know, I'm doing this interview now and I decide not to have breakfast because I'm actually sharper uh when I haven't eaten just before it. So for me uh two or three meals, no major snacking events, eating relatively late, I eat until say finish eating maybe 8:30 at night and then we'll try and not have anything to eat before about 10:30 the next morning.

That suits me. When we asked the 140,000 Zoey members what they preferred, they found twothirds preferred that same rhythm, onethird uh couldn't miss breakfast. They said, "Oh, I really like my breakfast. I'm hungry when I get up. I want to have my breakfast, but then I'll finish eating around uh 6 6:30." And so people have different rhythms as we discovered. I think there is a bit of personalization to this and you have to find the one that suits you. But my advice would be don't follow what the big food companies want you to do. Uh do experiment. Find out what works for you and follow that.

So there you go. There are my eight guidelines. The key message is you got to eat for your gut microbes. If they're happy, you're going to be happy. Want to support the channel? Join the Big Think members community where you get access to videos early, ad free.