

VicePart2

well, here we go. So if you listen to part one of this special two-part solosome, then you already know that this is part of a myth-busting series. That is my response to a vice.com article that came out and attempted to debunk what they called the most overhyped Wellness promises. And in the last episode, which you can listen to at BenGreenfieldfitness.com/Vicepodcastone, I covered everything from lectins to probiotics to kombucha alkalizing the ketogenic diet dark chocolate gluten the list goes on and on I covered 22 different myths and in today, I'm going to cover an additional 22 myths to top off the 44 different myths that vice.com.

Kind of pissed me off with based on some of the the questionable claims they made that I feel are unfounded. And granted some of their claims, for example, as you learned in the last podcast episode charcoal toothpaste are indeed, correct.

And after doing the research on it in response to that article, I decided I'm going to move on from charcoal toothpaste. However, Many of the other things that they claim I think there is no evidence for and in fact evidence to the contrary. Now, if you hear noise during this podcast episode, it's because I am recording from the Swiss Alps.

I'm actually a little clinic right now, doing two weeks of pretty intensive detoxification and liver therapy protocols. Everything from hyperthermia, meaning about three hours spent with induction of a fever via an infrared machine where I just sweat like a pig for three hours, to colonic hydrotherapy and coffee enemas, to electrical stimulation of the liver different infusions UV treatments of the blood Etc.

I'm logging a lot of that over at. [Instagram.com/BenGreenfieldFitness](https://www.instagram.com/BenGreenfieldFitness) if you want to check that out and if you're interested in attending something like this yourself coming over and traveling to the Swiss Alps flying into Milan and taking the the 60 to 90 minute trip up into the mountains. Here in Switzerland. Just go to BenGreenfieldfitness.com/Swiss clinic and you can read up more on that.

But I digress. Let's jump right back into my response to this Vice article all research everything. I cite every story I discuss as well as the original Vice article.

Myth number 23 red yeast rice supplements aren't that effective at lowering cholesterol? Is this true? Well red yeast rice is a type of fermented rice. Its produced using a specific species of mold. And it contains something called manacolin K, which is actually the same active ingredient that's found in a Statin like like Lovastatin, for example of prescription cholesterol-lowering medication.

Now red yeast rice has actually been studied the issue. Is that some forms of red yeast rice do not actually contain doses that are as high as what is used in the literature. So when I say something like for example, there was an eight week study in 79 people's not a huge population, but it showed that taking 600 milligrams of red yeast rice compared to a control group was very effective at lowering cholesterol. Another review of 21 different studies on

red yeast rice found that it is effective at reducing triglycerides at managing blood pressure and also at lowering total cholesterol.

Again, like I said in the previous podcast episode, not that lowering cholesterol is necessarily something you should be looking at if your total cholesterol is high. I would instead be paying attention to variables such as inflammation, triglyceride levels, cholesterol particle size and count etcetera.

You shouldn't attempt to lower total cholesterol willy-nilly, but red yeast rice can indeed have an effect on high cholesterol on triglycerides and on blood pressure. Now in addition to that, It's also been studied to induce greater insulin sensitivity. An 18-week study found that red yeast rice can reduce blood sugar, reduce insulin levels and reduce systolic blood pressure, and people with metabolic syndrome.

Another eight week study, this one on rodents fed a high-fat diet, showed that red yeast rice was actually able to prevent increases in cholesterol levels and body weight in response to that high fat diet.

Inflammation can be another issue, especially for people with metabolic syndrome, and a study in 50 people showed that taking a supplement with red yeast rice reduced levels of oxidative stress, a key cause of chronic inflammation, by up to 20%. Another study in rodents found that red yeast rice extract could reduce the level of specific proteins involved with inflammation and kidney damage.

In addition to that, red yeast rice has been studied to decrease tumor volume in rodents. Those who have prostate cancer in vitro studies not in actual human or animal subjects, but in test tubes have shown that red yeast rice was able to decrease cancer cell growth to a greater degree than Lovastatin, which is also known to have some anti-cancer effects.

And so not only does it not have the side effects of a Statin but seems to act somewhat similarly to a Statin again because that manacolin K the active compound found in red yeast rice now a number. Red yeast rice supplements have popped up of late based on This research, but many contain only Trace Amounts of manacolin K.

So what you need to look at is taking adequate dosages right like that 500 to 600 milligram dose of red yeast rice, but you also need to do your research on a form of red yeast rice that would actually contain a high manacolin K count and the only way to do that would be to look at the label. Or contact the manufacturer.

I personally do not take red yeast rice because I do not have any issues with my cholesterol or with my insulin management. But if I did I would definitely do the research. A lot of major supplement Brands even exceed that 500 discs are milligram dose and include 1202 24 milligrams daily divided into two or three doses.

So ultimately it's only been studied in doses that range from about 200 to four thousand and eight hundred milligrams. Most supplements recommend 1200 to 2400 milligrams of it. You need to ensure that you have a high manacolin K count. But if that is all in place, then I

would disagree with vice. That red yeast rice supplements aren't that effective at lowering cholesterol.

Now speaking of eating things and cholesterol the next myth they say is that you should not eat your placenta. If this might raise an eyebrow for you, it is actually based on something called human.

The consumption of placentas and the reasoning behind this is an end. And the reason that that it's been something that has been considered by many mothers and of course, you know, I own goats for example and all the goats whenever they give birth, the first thing they do is they eat the placenta. When we look at the placenta, it does actually have a very interesting nutritional composition. It has a significant amount of the trace elements iron and selenium, as calcium, copper, magnesium, phosphorus, potassium, and zinc. A whole host of vitamins, including a full vitamin B complex, a bunch of different cytokines and growth factors.

And it also has a pretty interesting hormonal profile. Placental tissue includes the hormones of that many women, especially in alternative medicine circles and hippie compounds will eat their placenta. Now in terms of the actual literature on this there actually is on PubMed several systematic reviews on studies behind this so-called placenta. and what they've found is that based on the bioavailability of hormones after oral ingestion and the minerals and nutrients that placentas are rich in, it may indeed be beneficial for a specifically based on depressive disorders or postpartum Blues baby blues, which is basically the situation with your mother becomes depressed after giving birth. Placentas are chock-full of many of the hormones that can help to combat that, including even progesterone and the idea is that this would allow a mother to not only replace many of the trace Elements and Minerals that she might lose during pregnancy, but it may also provide a source of natural hormones and essential amino acids. It also does not appear to be one of those things that would be risky in terms of microbiological contamination and potentially toxic Trace elements or some kind of an autoimmune reaction in response to consuming the placenta at the same time.

There is not much human clinical research showing that it actually does have this effect. So this is one of those issues where it doesn't appear to be harmful. It's kind of like eating a big old ribeye steak along with some liver and taking a multivitamin and it's there. So I mean if you wanted to be one of those mothers who takes their placenta and brings it home and freezes it and then perhaps dries it encapsulate it, puts it in smoothies things like that.

I don't see any issue of danger based on the research that. However, I have also not seen a lot of human clinical studies aside from these so-called our ancestors have done it for a long period of time animals do it and we can learn from the Animal Kingdom etcetera. I'm not going to Discount that kind of ancestral wisdom approach.

But what Vice says is that you should not eat your placenta. I don't think it's a case of. The fact that you should not eat a placenta, especially in a postpartum situation, but rather that you can't say there's much human clinical research behind it. It's probably not dangerous and in my opinion based on the nutrient and the hormonal profile of placentas. I don't see an issue with it. So I'm kind of I'm kind of neutral on this one.

Okay, then the next the next myth is that microwaves? How exactly do they phrase this microwaves are not bad for you. They do not cause cancer or zap all the nutrients out of your food. Well I don't use microwaves. I don't own a microwave.

I have not for years and it is not because I feel that it ruins food. I personally think it kind of dehydrates food because that's essentially one of the ways that microwaves work is based on the microwave interaction with the water molecule in the food and this is why. You know it can work so quickly to heat up food, but can also dehydrate food pretty quickly and I just don't like the flavor profile that it creates.

However, I do not feel that it introduces any amount of harmful radiation into food, nor is there any research showing that to be the case. However one of the issues is that if you expose your body to the enormous stream of photons that are emitted by a microwave signal, then you can expect a significant increase in the temperature of cells.

You can expect some protein breakdown. You can expect some mild amounts of radiation and there is some research that suggests that electromagnetic radiation can have a carcinogenic effect. It can change the DNA structure in humans. So the issue is not that microwaves is bad for your food.

The issue is instead that just having a microwave in your house is yet another form of non-native EMF that you are exposing your body to along with all the Wi-Fi and Bluetooth and 5G. It's already getting exposed to now devices do get tested before they leave the factory when it comes to microwave production.

But you know the doors electromagnetic seal, which all microwaves have can wear out over time, waves could at that point be emitted from the device and there is a mild amount of microwave radiation being emitted, even when the unit is not in use. So because of that, I just play it safe. There is no evidence that microwaves are causing people to walk out of their kitchen with cancer.

However, because it's yet another signal in the kitchen and because I have other options like a convention oven, like the broiler on my oven. Like a suvi wand, you know, a stainless steel pan or cast-iron skillet. There's so many other ways to cook food that I'd rather choose something that does not produce non-native EMF.

So this is one of those situations very similar to eating your placenta where I can't say there's evidence showing that it is harmful. However, I play it safe on this issue and I don't own or use a microwave for this reason and when I. To an Airbnb or anywhere else where a microwave is present in close proximity to me.

I unplug it and I would say if you do own a microwave and you want to use it go for it, but perhaps walk out of the room while the microwave is on or at least for Pete's sake don't stand next to the microwave.

So the the next myth is about crystals. And the claim is that crystals do not store healing, stress-relieving energy.

So for those of you wearing your Crystal bracelets who have special crystals scattered across your house and next to your garden gnome out in your yard. Are you wasting your time with all this? Is it complete woo? Well, there's certainly a lot of skepticism surrounding crystals.

And you know, there's a few things you might want to consider here. First of all, you know, if you have a laptop or computer monitor or a mobile phone that uses an LCD display, LCD stands for liquid crystal display. So crystals are using the screens of many electronic devices. And the reason that they're used in these and they're also used in microchips is because crystals contains silica dioxide also known as quartz.

That's a constituent of sand. It's found in nature in the form. Quartz, it's even found in the tissue of many living biological organisms. There's something very similar to quartz crystals in the form of its. I forget the name of it. It's in your pineal gland. It's a magnet magnetite, I think.

Called that this mineral in your pineal gland that you know, some people hypothesize. This is how birds for example can way find with surprising accuracy by using some of the signals that they're able to detect based on this Crystal. That's kind of located in between the iso. It's the storage capacity of the quartz crystal and the ability of silica dioxide to be able to store data.

That is the reason that it is used in for example computer chips and in LCD screens. So if we did not have crystals, you know much of modern Computing would be not possible. Now. There was a researcher named Marcel Vogel. And he published a paper called luminescence and liquids and solids and their practical application and what he studied was the geometric structure of different crystals and basically showed a whole bunch of different science behind crystals, which you can find in the video documentary Crystal visions and in that documentary and in his research, he does go into the idea and the fact really that crystals can store energy. They can store certain frequencies and then they can release those and we've even seen some research by dr. Masaru Emoto who has shown that for example Water Crystals can store energy as well. That's kind of the basis behind for example homeopathic.

So if you expose a crystal to a certain frequency that could be beneficial to the human body and I don't have time to get into frequencies and their variety of effects upon cells. But for example in Bruce lipton's book biology of belief and in doctor Dawson Church book, Minds to matter.

They do a pretty good job of explaining how different frequencies can actually affect the body. So let's say that a crystal that you were going to wear or place in your house is exposed to or is producing a frequency that might make you feel good or that might for example mitigate some of the non-native EMF that you might be exposed to.

Well there is some evidence that based on the fact that silicon dioxide can actually carry frequencies, store frequencies and also release frequencies, that there might be something happening and that's about all that I can say about Crystal healing because there is no

human clinical research showing that crystals have some kind of a health promoting effect on the human body.

All you can point out is the fact that silicon dioxide can store information as can water. Tolls as can any form of a crystal it can store frequency. It can release a frequency and this might have an effect on people and plenty of people feel better when they're wearing their crystals or when they have their their, you know, Crystal sculptures in their house or what not.

You know, they look pretty, at least there's that and they're not necessarily going to hurt you although you could hypothesize that if that Crystal was exposed to a deleterious frequency like placed next to a Wi-Fi router and then put on your body that it might cause some kind of a deleterious effect.

I personally don't do much at all with crystals. The evidence for me is still not really really high that it has going to do much. I think there are there are better devices like a Blue Shield or. You know some of the other scalar producing devices that I talked about before on my weekly Roundup that might do a pretty decent job mitigating some of the effects of non-native EMF.

There are also things like Himalayan salt lamps that release a small amount of negative ions, which may also be beneficial for the cells. I'm personally not a huge Crystal guy, but I'm not one of those guys who says a lot of bad things about crystals just because I think that as we learn more about quantum physics about storage of frequencies about emission of frequencies, That it may turn out that there eventually is some kind of a human clinical research done on crystals.

So Vice is wrong when they say crystals do not store energy. If that were true. Then LCD display displays and computer chips based on silicon dioxide wouldn't work. Is it healing stress-relieving energy? I don't think there's any research behind that so they're kind of sort of right, but at the same time I'm not going to completely discount crystals or Crystal.

Alright the next myth you do not need a colonic to power wash your intestines. This is interesting because I literally at the Swiss Clinic have just had something called colonic hydrotherapy done and the way that this works kalon cleanse or colonic irrigation or Hydro therapy or whatever you want to call it is you flush the: typically using some kind of a machine and it's a lot of times accompanied by some way to initiate a greater amount of peristalsis like an abdominal massage done on you from left to right and down across the area that the large intestine travels to support peristalsis and to help to remove byproducts from the colon as you're getting this colonic hydrotherapy done, which essentially involves a tube stuck up your rectum.

Followed by large amounts of water that make their way through the colon and the water can carry out matter as it comes back out through that hydrotherapy tube, and there's a lot of water like they'll use like 16 gallons of water at a time as they're doing this. Well, the American Journal of gastroenterology has looked into this and is not been able to find any well-controlled studies done in humans to prove the benefits of colonic hydrotherapy.

We know that bowel movements are indeed important for removing all the toxins that are produced. Phase 1 and Phase 2 liver detoxification, you know that that's where things are bound and remove via sweat via urine and of course via stool. It's also how your body eliminates excess fatty acids from the body.

And we also know that in someone who is severely constipated sometimes a power wash can help out quite a bit especially putting things into your mouth like magnesium or psyllium husk or something like that are not quite doing the trick because there's this kind of a blockage or nerve. Farther down that might be limiting your ability to actually eliminate in and so based on this.

I think they can be helpful for some people at the same time. There's not a lot of research that have been that that's been done showing hydrotherapy to actually be something that is effective for managing say IBS or Crohn's disease or diverticulitis or ulcerative colitis. In addition, if you're pregnant, if you have active hemorrhoids, if you suffer from kidney disease, if you're dehydrated, it can lead to some pretty big issues and even like an electrolyte imbalance or could make the rectum more susceptible to tears or to bleeding you would also need to repopulate the colon afterwards with the probiotics supplement to help repopulate the gut with healthy bacteria.

Which I did after my colonic hydrotherapy. I re-infuse myself through my rectum with a probiotic blend mixed into warm water too. And that was an enema retention. So I held that for about an hour while I worked on my computer and did some some handstands in the room against the wall etcetera now anecdotal.

Kind of like crystals many people feel amazing after colonic hydrotherapy. I personally felt absolutely fantastic. I felt like everything had been cleaned out my bowel movements have been amazing since I did it. I think that it also may induce a little bit more of a release of bile by the liver or production of bile by the liver and release by the gallbladder.

So I think that there are some benefits to it. I think that some people who have electrolyte imbalances or some of the issues that I mentioned may actually be damaged. Like colonic hydrotherapy, but if you suffer from chronic constipation Etc, I think that it's worth a try. I think you should try other things first, like dietary alterations pelvic floor therapy abdominal massage a lot of the other things that may also be contributing to the constipation.

But after doing colonic hydrotherapy for the first time this week, I can tell you it's probably something I will do because I know there is a colonic hydrotherapy outfit where I live in Spokane Washington, I will probably do this about once a month just because I felt so amazing and everything just felt so clean and wonderful after I did it but I do agree with vices stance that there's not research behind it and you don't need a colonic to power wash your intestines.

Alright the next myth is don't drink red wine because you think it's healthy. I know that Resveratrol and the research on Resveratrol has been blown way out of proportion and that the amount of Resveratrol in red wine is not that close to what was actually used in some of the life-extending or antioxidant benefits of Resveratrol.

I recently wrote a big article on my website about all the different benefits of red wine from an ancestral standpoint. We know that most the blue zones have a habit of drinking one to two glasses of wine in women and two to three glasses of wine in men and that this is one of the things that in the book Blue Zone. Their Superior health is attributed to part of that is likely due to the total polyphenol content of red wine not white wine, which usually contains less polyphenols and tends to just be like a, you know, a glass of alcohol and sugar for the most part but especially in red.

Now you'll find Resveratrol you'll find anthocyanins. You'll find catechins. You'll find tannins. Can you get those from say grape juice? Yeah, absolutely, you know, but at the same time Vice is not saying, you know, drink grape juice instead of red wine. It's saying red wine is not something to drink for help period. Now, when we look at multiple studies that have been done on red wine, it has been shown that women are at a lower risk for cardiovascular disease, heart arrhythmia hypertension and diabetes when they are regular red wine consumers. In addition to that. We have the Blue Zone data. We have all the studies have been done on Resveratrol and heart and cardiovascular disease on enhanced activation of cellular signaling networks, including modulation of the nitric oxide.

System including activation of sirtuin which is a longevity enhancing technique to improve mitochondrial Health. We also know that Resveratrol can improve myocardial lippo peroxidation in myocardial free Iron and antioxidant and enzyme activities, which means that it probably has a pretty beneficial effect on the cardiovascular system.

Another antioxidant that's present red wine is flavonoid and the effects of flavonoid on cardiomyocytes under oxidative stress has been studied and it has been shown to be very beneficial for heart cells as well the most common wine anthocyanins, which is called Melvin has also been studied on cardiovascular function and it's been shown to reduce chronic inflammation to reduce mitochondrial destabilization to prevent the formation of oxygen free radicals to increase antioxidant.

Cavity and then when we look at even more of the studies that have looked at alcohol intake in general and wine in general. It has been shown that for example, when wine is paired with a regular physical exercise program as compared to physical exercise alone. Are the folks who drink wine and exercise improve their LDL to HDL ratios dramatically even people who are on Statin therapy.

There have also been human studies that have shown that wine can have an effect on blood pressure a beneficial effect on blood pressure. There was another study on more than 20,000 Mediterranean University graduates that showed a significantly. Lower incidence of death and cardiovascular disease among wine drinkers compared to beer and other alcohol drinkers another study on 27 thousand participants showed that low to moderate dose alcohol is associated with a significant decrease in the risk of adverse cardiovascular outcomes.

The French paradox is no doubt something that you're familiar with the idea that the French have a relatively low incidence of coronary heart disease despite a diet that includes a high amount of saturated fats and. Observation of a hundred and twenty nine thousand French

adult showed a decreased risk of mortality from cardiovascular disease in wine consumers compared to people who are consuming other forms of alcohol and that may be one of the protective mechanisms of the French diet is the daily moderate wine consumption.

The cardioprotective effects of the Mediterranean diet have also been studied and a review on that showed that long-term daily red wine consumption reduced inflammation reduced atherosclerosis improve lipid metabolism improved antioxidant production and improved endothelial function another study on Dutch folks with over a thousand participants.

Showed that alcohol intake was inversely associated with total mortality reduced cardiovascular and myocardial infarction incidence and mortality. The list goes on and on and I will link to several systematic reviews on red wine, but it's been shown to be beneficial for longevity for mitochondria even on the intestines on.

The stomach on a host of different gut functions even on pancreatic cancer. So the list goes on and on I could probably do an entire podcast on the beneficial effects of wine granted much wine in the u.s. Is sprayed with herbicides is sprayed with pesticides has lots of higher residual sugars in it.

But if you're drinking a good organic biodynamic wine, like say a fit fine wine or. Dry Farm wine to of the brands that I drink when I'm when I'm not in Europe or wind tends to be more organic and biodynamic. I don't think that you are going to have any issues at all. And as a matter of fact, I think that Vice is way off when they say don't drink red wine because you think it's healthy the data just flies in the face of that.

Alright, the next myth is that Epsom salts don't relieve muscle pain and that hot baths may actually make things hurt more. So Epsom salt that's that's what you would take a bath with to relieve soreness. It's a chemical salt with a mixture of magnesium and sulfate and when you look at how the the studies have been conducted or what studies have been conducted on Epsom salts.

The idea is that during stress magnesium ion availability decreases while adrenaline increases and that once Epsom salt dissolves in warm water the magnesium. Breakout from the Epsom salt molecules. They get absorbed through the skin and the level of magnesium in the body becomes elevated and it has been shown that the level of magnesium can increase after exposure to an Epsom salt bath.

Now magnesium may also inhibit nerve receptors linked to trigger point pain. It can regulate the release of neurohormones several research Studies have shown that magnesium ions and epsom salt can regulate electrolytes in the body because you absorb many of those electrolytes. Studies have shown Improvement in blood circulation in response to an Epsom salt bath as well as blood glucose regulation being enhanced probably because magnesium is so important for proper proper function of insulin receptors and for proper insulin sensitivity.

So better better sugar uptake into into tissues. Epsom salts may also assist in removing toxins and heavy metals from cells and that would be due to the sulfate ions the same thing as you would get from like a sulfurous vegetable now. Based on this and I'll link to many of

these studies over at Ben Greenfield fitness.com Vice podcast to I definitely see a benefit to Epsom salts.

I personally don't use them. I instead use magnesium sulfate salts, which have higher levels of magnesium. I use the Ancient Minerals Magnesium flakes, but even Epsom salts themselves can be highly beneficial for the host of reasons that I just mentioned. I think a weekly bath and epsom salts, especially for a hard-charging athletes has a variety of benefits that support recovery and electrolytes and relaxation.

I think it's wonderful for sleep and in terms of muscle pain when it comes to muscle pain, Vice is correct. There is not much research on actual pain. Although it has been studied to be beneficial in the relief of bronchial asthma and migraine headaches. I think the research on relieving muscle pain is a little low and I would like to see magnesium sulfate studied as a potential alternative to muscle pain because or to Epsom salts because I personally get a huge amount of relief from magnesium sulfate.

There was one study. In 2015 that did look at myofascial trigger point focused head and neck massage for recurrent tension type headaches and they did find that Epsom salt intake might actually assist with some type of muscle pain and muscle soreness in the head and neck area especially post massage, but I don't I don't really think it's great data.

And ultimately I have to say that Epsom salts might not be the best way to relieve muscle pain, but I don't think they should be I don't think. They should be thrown out or I don't think we should how do they say throw out the baby with the bathwater? So alright. The next myth is that you can't cure depression by working out exercise is great for people with compromised mental health, but not a substitute for treatments like therapy and medication.

Well, what does the research tell us on the link between exercise and depression? Well a new study. Published in the Journal of the American Medical association's Psychiatry, they use genetic data from more than 600,000 adults enrolled in multiple genomic Association studies and they looked at people's genomes.

They looked at their medical histories of depression and depressive symptoms and how much physical activity that they got as measured by wearable fitness trackers and also by self-report. Then they compared this information. They identified several different Gene variants linked to a person's likelihood to exercise and also linked to a person's likelihood of developing depression.

So people who had genetic markers linked to a greater likelihood of exercising were less likely to develop depression, but people with markers of depression or not less likely to exercise. So the researchers reported that exercise can protect against depression. But depression does not make someone less likely to exercise.

So in other words, they showed that physical activity and a higher amount of physical activity May prevent depression and this. Just the latest study among a host of studies that shows that exercise can prevent depression 1 2018 review of studies found that physical

activity like weight lifting can reduce a host of different depression symptoms, perhaps even as effectively as conventional treatments like cognitive behavioral therapy and.

Other Studies have found that virtually any type of workout from cardio to yoga can lessen depressive symptoms. They've shown that rigorous workouts like weight lifting and running can increase blood flow to the brain can increase mood boosting endorphins brain derived neurotrophic Factor dopamine and research has even shown that small amounts of exercise can improve mental health such as you know walking after a meal for example, and and you know for advice to say.

That exercise is not effective for managing depression. They're just so far off the mark on this. It's not even funny. I mean your workout doesn't even have to be that brutal and 2017 study showed that light exercise like walking was more beneficial to mental health than vigorous exercise. So sometimes it really is as simple as just going out on a walk and another study from 2017 show the just an hour of exercise a week may be enough to prevent depression another study on one.

Two million adults a huge study from 2018 found that about 20 minutes per day of exercise can be incredibly effective for better mental well-being. So of course exercise is wonderful for depression and vices completely wrong with their claim that it. The next piece that Vise reports is that meditation isn't always soothing and for some people it can lead to hyperarousal sensitivity to light and sound and intense negative emotions.

Well, I looked into this and it turns out that there is there's a lot of anecdotal evidence that some folks when they do meditation can get hyper aroused they can experience increases in anxiety and fear and panic. Insomnia in trauma trauma flashbacks, they call it or emotional instability and that's probably because of the intense increase in mindfulness that occurs while meditating and if someone is not prepared for that type of increased mindfulness in the same way that if someone isn't prepared for say like, you know an Ayahuasca Journey or you know or psilocybin or something like that things can get pretty unpleasant now at the same time when we look at the amount of research showing.

To Tatian to be beneficial for mental health. I think that Vice in the same way that they need to be careful saying there's nothing wrong with lectin and nothing wrong with gluten which we actually discussed in the last podcast. I think they need to be careful saying something like this. I think that I think many of the claims made in this article are just being done.

As a way to increase the amount of attention brought to the website because these are obviously kind of inflammatory claims. But yeah a small subset of the population has been reported to have a deleterious response to meditation due to the enhanced. I think with proper instruction and with proper preparation that can be completely avoided but yeah meditation isn't always soothing but at the same time, I don't think that's a reason not to meditate.

It's just a reason to be aware of that to be mindful of it and to be prepared to go into meditation with positivity with good relationships and with not any amount of negativity the

same way as you would approach any psychedelic Journey holotropic breathwork or anything else. In which you are experiencing a significant increase in mindfulness.

The next myth is that cryotherapy doesn't help your muscles recover. So these are the frigid chambers that you stand inside. Well I have said before and I'll say it again that cold water immersion in every study that's been done on muscle soreness and muscle pain and inflammatory markers is shown to be superior to whole body cryotherapy probably due to the hydrostatic pressure of the cold water against the skin.

Probably due to that the fact that you get enhanced vagus nerve function when your head goes under water and water touches your face due to the triggering of the mammalian dive reflex. However, When you look at the latest studies including one recent 2018 study on cryotherapy. I mean the the the study shows that whole body cryotherapy decreases the levels significantly of inflammation and oxidative stress and atherosclerosis or plaque markers.

And this was with the standard 3 minute exposure in a cryotherapy. Most studies do show that regular use is needed meaning you need to be using one of these cryotherapy Chambers multiple times per week to get the effect which kind of influences my decision just from a pure convenience standpoint to just do cold showers cold soaks jumping in a cold River or cold lake or a cold pool and doing my cold water immersion as an alternative to cryotherapy.

But at the same time, I mean cryotherapy can be enormously beneficial for inflammation and for cytokines relative to Coldwater immersion. Again, it's not as effective but it does work. You do need to make sure you get cold enough. I like to for example get into a cold shower dry myself off then do the cryotherapy and then sometimes I'll even wait until the practitioner test my my skin temperature to make sure that the skin temperature is back up to a high enough temperature and then do a second round.

For 3 minutes, I think you get a lot more effects out of that. But I mean when when Vice says that cryotherapy doesn't help your muscles recover or reduce inflammation or curb muscle pain, I beg to differ now one thing I think they might be right about. That you don't see a market Improvement in say like the next day's work out after cryotherapy.

Nor do you see any evidence that the muscle is recovering faster, but you do see a decrease in inflammation and a decrease in inflammatory cytokines. So I'm not against cryotherapy. I'm a bigger fan of Coldwater immersion, but I don't think Vice is correct in that crowd therapy is not useful for reducing inflammation.

The next myth is that food intolerance tests are based on shoddy science and that many of the food intolerance test sold online screen for antibodies that could mean merely that you were recently exposed to a certain food. Not that your body is sensitive to it in any way. This is 100% true. This is why people who eat a lot of eggs get a standard food allergy test find out they're allergic to eggs throw up their hands in despair because eggs are a staple in their diet are worrying about nothing because the only reason they flag positive for an allergy to egg is because eggs were Staple in their diet not because they were allergic to them.

I do think there are some very accurate forms of food allergy testing out there namely one called Cyrex what Cyrex and that spelled C-- yre X uses is what's called an antigen purification system, which allows them for much them to have much greater specificity in identifying antigens that are presented in response to certain proteins from food.

They test both the cooked and the raw forms of the protein, which is very important because if you look at like green beans for example, just about everybody will produce an allergic response to uncooked green beans. And as soon as you cook them that antigen response diminishes, but most food allergy testing Protocols are testing the form of the RAW Protein of that food not the cooked and the raw protein in addition.

Cyrex runs every single patient specimen in a side-by-side duplicate and they have to have. In between those parallel tests before they will report results. So there's far fewer false positives and finally one of the things that I really like about. Cyrex is they validate every single food antigen individually.

They don't use one reference curve for an entire group of foods, but they've got over a hundred different and 80 different kind of food. That they test so whenever I have someone approached me and asked me about how they should test for food allergies. I tell them go get cyrex is gold Panner test for food allergy testing, which is a ray 10c.

See like cat have a physician order it for you. You can't it's not one of those tests. You can just order to your house yourself, but if you can have your doc order you a cyrex panel in my opinion you are getting a good picture of food that you're actually allergic to. Now the next myth is that eating soy isn't going to give men boobs soy doesn't cause feminizing effects on men even for people in Asian countries who get way way more of their protein from soy than Americans.

Now this is all based on the idea of Dinoco masdea the growth of abnormally high amounts of breast tissue in males that usually caused by a change in hormone levels. It's been shown that some contributing factors would be high steroid use high alcohol intake high amounts of marijuana use and also some people have hypothesized a change in hormone levels.

Due to dietary soy and the reason for that is because soy has isoflavones those get converted by the body into phytoestrogens very similar to the human estrogen that we find in both men and women. So theoretically a high isoflavone intake could stimulate production of estrogen and decrease production of testosterone, which could result in enlarged breast tissue.

Now the only study that's out there that shows this to be the case is this case study of one single man who reportedly developed large breasts due to the consumption of soy milk and this just spread all over the Internet and suggested to folks that the high amount of isoflavones and soy and the estrogenic response to that was going to cause giant comb astia.

There is no actual human clinical research showing that to be the case. However, There are genetic Snips that show a certain polymorphism associated with increased giant comb astia risk that's called grp 30 you can test your grp 30 and if you happen to have that Gene that puts you at increased risk for giant comb.

Astia. I would be very careful. Just phytoestrogen intake in general. I would eat fermented forms of soy which are going to be lower in those isoflavones like miso or natto or tempeh. For example, I would avoid, you know, for example conventional personal care products and conventional household cleaning chemicals.

I would get a book like *Estrogen* and read up on all the other ways from plastic to styrofoam to air pollution that you can decrease your exposure to estrogens. But at the same time. I think in most people especially people who don't have that genetic risk of BRCA mutations that soy is not going to cause any issues as far as man boobs are concerned and vices is for the most part correct.

That eating soy isn't going to give men boobs although in a man who has a genetic risk for gynecomastia. Astia who's also not controlling phytoestrogen sources in general. It might actually have some kind of an effect on breast tissue growth. All right ladies, you ready for this next myth the birth control pill does not cause breast cancer.

The birth control pill does not cause breast cancer. Well, is this true? Let's let's talk a little bit about why this would be the case if it actually were true. When we look at Oral Contraceptives the idea is that estrogen can cause as you've just learned proliferation of breast tissue and would be expected to increase breast cancer risk by stimulating the growth of stem cells in breast tissue and the influence of estrogen and also progestin on breast epithelial proliferation and differentiation can differ with age.

And the idea is that possibly especially for folks at a younger age on an oral contraceptive. We might see an imbalance in estrogen and progestin that could increase the proliferation of breast tissue stem cells that may actually result in an increased risk of cancer. And when we look at the research on this.

One paper entitled oral contraceptives and breast cancer a review of The epidemiological Evidence with an emphasis on younger women did find that there may actually be a little bit of an increased risk in younger women who use oral contraceptives, especially before the first full term pregnancy or before age 25 and especially over long duration of use.

But the research is pretty pretty slight when it comes to an actual association between oral contraceptives and breast cancer and it appears that it might be safe to avoid it at a young age, especially if you're trying to ensure. That across the board you're decreasing any type of potential issues in terms of breast cancer risk.

Now. I'm personally not a huge fan of hormonal contraception just because of the estrogen imbalance is that they can create. And because of some risks of hormonal contraception like blood clots or Strokes or heart attacks. There may be an actual reduce risk of some type of cancers like ovarian or endometrial cancer, but.

You know, I think that that if especially you are kind of similar to the issue with men and soy a carrier of the BRCA mutation, which increases your risk for breast cancer. You may actually by using a hormonal contraceptive like the birth control pill put yourself at a slight increase for breast cancer.

So, I think that that Vice is correct in that there. There's not an. Nation between the birth control pill and breast cancer, but because of the general hormonal dysregulation that the birth control pill can cause and you know, there's there's even of course the the funny stories about how because women who are on birth control pills have a different hormonal response when it comes to their.

This to certain types of men or or what type of men they find attractive that a woman on a birth control pill may actually get married then when she gets off the pill and her hormones return to normal realize that she actually did not marry the person who she's biologically attracted to Once her hormones are back into their natural.

And you can you can look up that data. I've talked about it on podcast before but you know, I think that you know, unplanned pregnancies or a woman being put into a situation where she must raise a child or be forced into a situation where she has to make a decision about an abortion. That there may be some situations in which a birth control pill might be a good idea.

But I think there are some risks especially if a woman carries the brca breast cancer mutation. I'm not a fan of anything that affects hormones deleterious Lee. I am a fan of things. Bioidentical hormone replacement for women and hormone replacement in general for men but I'm not a fan of just doing things like, you know shutting down the the normal balance between estrogen and progesterone which a birth control pill can do.

However Vice is correct that that there isn't a strong link between oral contraceptive use and and breast cancer the next myth is that hydrogen Rich water? And what do they say Georgian water isn't better water hydrogen water isn't better water. Well, I've done podcast before on hydrogen water hydrogen or H₂ as it's known is the most abundant molecule in the universe, you know, it's odorless.

It's colorless. It's a tasteless gas. And in 2007 in Japan, they found that when folks inhaled hydrogen gas it protected the brain from free radicals it act as an antioxidant so they started to do a lot of research and the molecular hydrogen. Foundation is one fantastic website to go to to dig more into this research.

But what they found was that hydrogen could actually affect over 63 different diseases due to its effects on free radicals antioxidant activity and cells in general. And this is probably because it's so small. I can penetrate into virtually every organ and cell in the body. We even know that ATP production is in part due to the the balance and hydrogen in the.

Membrane of the cell during the electron transport chain, and when we look at the actual research, I mentioned about inhalation of hydrogen gas, but hydrogen solution in stroke patients has been shown to have a safe and Mild antioxidant effect other patients with Parkinsons disease who drank hydrogen water had significantly improve symptoms up to 1 liter of hydrogen water drink daily for a year hydrogen water has been shown to reduce.

Oxidative stress and prevent Parkinson's disease in other studies hydrogen water has been shown in rodent models to prevent cognitive and learning and memory problem and even

act as a or have a protective effect in the brain specifically in the hippocampus protecting the brain from the detrimental effects of stress.

It's been shown also in rodent models to cause proliferation of brain cells. And a suppression of inflammation in human subject. It's also been shown as well as an animal's to have some pretty significant anti-inflammatory effects. And for those effects to be based on what's called selective antioxidant effect.

Meaning that hydrogen water may actually cause you to be able to. Fight oxidation and free radicals without suppressing the natural hormetic response to exercise in athletes. It's been shown to reduce lactic acid buildup, which is one reason that that I personally notice a far less burn in muscle tissue after I've used hydrogen water prior to workout.

It's been shown to increase time to exhaustion in cyclists. It's been shown to increase power during Sprints in rodents with muscle wasting disease. It's been shown to prevent abnormal body mass gain and. Increase the production of the antioxidant glutathione peroxidase and may even potentially improve Muscular Dystrophy and muscular dystrophy patients.

It's been shown to have an effect on the liver especially in rodent models who are fed a high-fat diet and to prevent hardening of the arteries or atherosclerosis. It's also something that has been shown to protect the body's energy Powerhouse the mitochondria in several studies of folks in humans who have muscle disease.

It's been shown. To decrease cholesterol to improve glucose tolerance and insulin resistance. I realize now I'm making it sound like some kind of a magical snake oil cure-all, but the fact is that you can find at the molecular hydrogen Foundation over 1100 different research studies on hydrogen Rich water and it's beneficial effects on metabolic function kidney function liver function exercise.

It's even been shown to prolong the life of stem cells by reducing oxidative stress, and you know some. Think that drinking hydrogen water could increase longevity in humans, although that's still unsubstantiated because of all this research and because there's zero evidence showing hydrogen water to actually have any type of a damaging effect aside from the dent in your wallet.

I personally travel with hydrogen water tablets. I drink to a day. I put one and every bottle of water that a drink in an airplane special on a long-haul flight. I own a hydrogen water generator to my basement and I can actually drink water from that and I do a giant glass mason jar of it both in the morning and in the evening and for vice to say hydrogen water isn't better water and that there's no evidence that hydrogen water can have an anti-inflammatory effect in folks.

It's just. It's completely wrong. The only way you could say that is in someone who's perfectly healthy with no inflammation. Maybe it wouldn't give them much benefit. But even then that's kind of grasping at straws because most people are somewhat unhealthy or have some levels of moderate inflammation, even, you know, even even athletes so so hydrogen water definitely beneficial I think Vice is wrong on that one.

Alright, next myth is that you don't need to work out on an empty stomach to lose fat. This is kind of that fasted exercise myth. They say a single pre-breakfast workout may burn more fat than workout done after eating but after a few weeks your body adapts, and there's no difference. Well, This is slightly true turns out that fast exercise and the increase in beta oxidation or the drop and what's called the respiratory exchange ratio a shift of fat burning into carbohydrates while that is something that people initially experience in response to fast exercise sessions.

It can kind of taper off Over time. However, at the same time there have been studies on fat loss and fasting insulin levels and human subjects who participated in high intensity interval training. In a fasted state in which there was a significant reduction in total body fat subcutaneous leg fat trunk fat and insulin resistance when they did this fasted exercise session three times per week other Studies have shown a significant increase in human growth hormone in response to a fast exercise session.

I have an entire podcast. That's. Hour-long in which I go into the benefits of fasted exercise a few other things that they've shown is an increase in metabolic flexibility meaning a switch into a greater amount of fat oxidation, which I already mentioned and that may taper off over time, but it is something that could be useful especially for a short term weight loss stint.

There is also a blunting and inflammation in heavily exercising athletes that has been shown with an intermittent fasting protocol typically using 12 to 16 hours. Now at the same time, you may see a reduction in testosterone with frequent fasted exercise, especially in women, there can be.

Some hormonal imbalances that can be created and folks who are trying to get enough calories to gain muscle or to recover. It can be an issue. I do a fast at work out just about every single day typically accompanied by some type of cold water immersion typically accompanied by some breathwork some ability.

I stay lean year round I do that 365 days a year and I think it is enormously beneficial. So yes, you don't have to work out on an empty stomach to lose fat. But the benefits of a morning fasted exercise session are profound they've been researched especially the effects on the endocrine system, especially the effects on beta-oxidation.

I think it's a smart strategy. It's something I incorporate it's something I encourage all of my clients to incorporate so I would not mix the fast exercise session just be careful, especially if you're a woman fasting very very for a long period of time a couple that with Hard Exercise sessions.

That's where I've seen some issues. To arise but for the most part, I think the benefits of fasting and exercising especially mild or light exercise is it's pretty profound. So the next myth is that vitamin IV drips don't do anything for helpful people they can however help those who have conditions like celiac disease that make it harder to absorb nutrients.

I agree with Vice on this although I would say that there is a group of healthy people who may benefit from IV vitamin infusions from elevating levels of vitamins and minerals in the

body to a higher level than you would get if you hadn't. Bypass gastric absorption and just a Mainline something like a Myers cocktail IV drip or push IV straight into the bloodstream.

We're talking about vitamin C B vitamins magnesium calcium glutathione in many cases some minerals and the population that I think would highly benefit from that would be healthy folks who need to quickly recover after an intense sporting events or big exercise Block in training like running a marathon.

You know leading up to let's say some kind of a fight or a competition or a situation which minerals and vitamins are becoming heavily depleted. I think that it can also be useful as a way to enhance anti-inflammatory activity after things like long-haul flights or a lot of travel. I think that while there are of course folks who have celiac disease or poor gut function who can very much benefit to like a Myers cocktail treatment or some type of vitamin IV, I think.

So the athletes and frequent Travelers can benefit quite a bit. I always have in the little fridge in or the little drawer in my fridge bunch of IVs from dr. Craig Conover. He just sends out push IVs or called Fast vitamin IVs. I give myself a quick push IV when I returned from a bunch of travel or when I'm in the middle of a heavy training block.

I kind of time it for a little while after exercise. So all those antioxidants aren't blunting the hormetic response to exercise, but I do think that there are some healthy people especially healthy. You travel a lot and healthy people who exercise a lot who can benefit from vitamin IV drips or vitamin IV infusions.

So. I am a fan of those there. Also something that they're administering quite a bit at this Clinic while we're here in part due to the fact that you do deplete a lot of minerals and vitamins when you're doing lots of like colonic flushes and hydrotherapy and a lot of these liver detox treatments fasting and cetera.

So, you know, there are other situations such as a detoxification protocol where these things might come in handy as well. Or the next one is the fat burning effects of high intensity interval workouts have been exaggerated high intensity interval training. It does say that high intensity interval training does take less of your time than a long workout.

But when we look at high intensity interval training and the actual research behind it, let's let's see what the results actually show. So for example, one of the studies on hit that cited quite often was done. Group of men and women who were broken into two groups one did high intensity interval training and one did just basic steady-state aerobic training four times a week for 30 minutes and progressing up to 45 minutes over the course of the study at about sixty percent and in the hit group, they did about 25 to 30 minutes at about 70% of their maximal heart rate Reserve.

And they were doing burst like 10 to 15 bouts of around 15 seconds over the course of the study. They increase those to 30 seconds and I think they may have even gone as high as 90 seconds in this study. Once the study was over and they saw three times greater fat loss in the high intensity interval training group three times greater fat loss in the high intensity interval training group.

That's not to say that the steady-state group did not see benefits. They just saw less. If it's in the high intensity interval training group, despite spending more actual time exercising likely due to the post-exercise oxygen deficit that high intensity interval training produces and the increase in metabolic rate that stays with you for a longer time after high intensity interval training then the metabolic rate increase that you would experience with steady state exercise.

In addition there have been studies that show that compared to steady-state exercise that which might actually increase appetite that high intensity interval training may actually have an appetite suppressing effect. Now, there are a host of other researchers research studies on high intensity interval training that show that it's better at increasing metabolism.

It's better at producing long term decreases in fat. It's better of course as you would imagine. At increasing mitochondrial health and increasing VO2 max. I don't think it's the only way to exercise but at the same time when we say that the benefits have been exaggerated, you know, I guess I would agree with Vice about that for example in that study that I just cited some of the headlines said that high intensity interval training is actually nine times more effective than steady state training, but that was.

Basically a expressed an absolute terms not relative terms. However, that group still experienced three times more fat loss not nine times more fat loss, but three times more fat loss. So. Ultimately high intensity interval training beats steady state cardio hands down, especially for short on time.

And that would include for fat loss number 40. They say the concept of a superfood is misleading the concept of a superfood is misleading. Well, a superfood is classified as a food with a very high nutritional density. You're no doubt familiar with many of these things like blueberry or or liver.

For example is an animal-based superfood soy has been cited as a superfood before due to its high amount of phytochemicals a t due to its very dense amount of antioxidants dark leafy greens like kale or swiss chard or collard. Fatty cuts of Sam and even dark chocolate wine and and some forms of grapes are often cited as Super Foods as is, you know, spirulina and blue green algae and wheatgrass beet juice and turmeric and yeah, many of these compounds are on the nutrient density scale the vitamin scale the mineral scale etcetera higher in nutrient.

Now what Vice says is that the concept of a superfood is misleading blueberries kale or any single food won't make you healthier see when they say this. I mean, it's just it's ridiculous kale is going to make you healthier than iceberg lettuce blueberries are going to be healthier than an Oreo.

You know a nice fermented soy like miso or tempeh or natto or any of those other sorcerers as I talked about earlier that's going to be healthier for you than then, you know, white bread. And so yeah, I think that we can categorize Foods on a nutrient density scale and say that certain foods are very high on a nutrient density scale certain foods are higher in

antioxidants certain foods are higher in nutrients and vitamins and minerals and they can make you healthier.

Yes many. Foods have been blown out of proportion and the claims behind the health effects of superfoods. I think have been blown out of proportion. There's no one single magical food, but eating a wide variety of foods and even Googling things like nutrient density scale of foods and learning about foods like, you know, Darkly colored berries and different coffees and teas and organ Meats, for example, which are extremely high nutrient density and then incorporating a wide variety of those Foods into your diet.

Whether or not you call them Super Foods, you're going to be healthier than the person eating say, you know beans and rice and burgers as the primary Staples in their diet is just it's been shown over and over again many of these Foods in terms of nutrient density are far more beneficial for the human.

The next myth we are on myth number 41 out of 44 is that there's no reason for healthy people to avoid nightshades. Well, you already learned in the last podcast about the over 50 million Americans who have autoimmune issues. Now there are certain chemicals that are found in nightshades that have influenced many people to avoid nightshades.

Tom Brady probably being the most famous the professional football quarterback who swears by a Nightshade free diet.

All right, j makes sense James. So for example, we find alkaloids and glyco alkaloids, which are the naturally occurring pesticides at these nightshade vegetables can create solanine capsaicin nicotine are just a few of them lectins which I discussed in the previous podcast on part one calcitriol is another chemical that's found in nightshades and Sapone ins which are thought to protect plants from being eaten by vegetables and because of these potentially toxic.

And that these plants produce there might be some amount of toxicity some amount of joint pain some amount of gut damage that they could potentially create especially in folks who have compromised immune functions or constant compromise. Rodent Studies have shown a relationship between potato glyco alkaloids and increased intestinal permeability.

Although that hasn't been studied in humans dietary lectins its opponents, especially in people who have autoimmune disease have been shown to be incredibly harmful and something that aggravates immune disease and can aggravate irritable bowel syndrome. One popular autoimmune protocol that I recommend too many people have joint pain who have gut issues and this successfully eliminates many of those issues is just the basic paleo autoimmune protocol now, I think that in someone who does not have gut issues and does not have autoimmune disease that there's no issues with having a tomato on your salad and a side of sweet potato fries with dinner.

Or perhaps to go out and have some eggplant Parmesan every once in a while, but it is true that some of these things can be harmful and and you know nightshades do also have health benefits like criticism of them should not be done across the board tomatoes have Tomatina, which is a glyco alkaloid that can reduce plaque in the arteries the glyco alkaloids

and purple potatoes, you know, Food eaten by many of these folks in longevity hot spots that can slow the growth of cancer cells capsaicin and pepper can increase its satiety.

I can increase weight loss eggplant is very high in anthocyanins potatoes in general are more than one of satiating foods on the face of the planet. So I think that some people just like some people should avoid high amount of lectins and high amounts of gluten. Some people should avoid a high amount of nightshades and I do think they can be inflammatory and those folks.

I personally don't follow a Nightshade free diet. But I think that when Vice says there's no reason for healthy people to avoid nightshades. They're probably right and if you have gut issues or autoimmune issues, you probably should avoid not change. All right, Miss number 42 celery juice won't cure your health problems celery juice won't cure your health problems.

Well, when we look at celery juice, which has received a lot of attention lately as a speak of the devil superfood with folks claiming that celery juice can help to combat inflammation and high blood pressure and high cholesterol. Well, when we look at celery, yeah, it's got some folate some potassium some manganese in it's a decent source of vitamin K.

It's got some vitamin A in it some of the vitamin B complex and a few antioxidants on namely apigenin and luteal. Which which may help to reduce inflammation, although they haven't been studied in terms of folks with inflammation consuming celery juice instead high dose apigenin high dose luteal and have been used in the studies on the control of inflammation and the control of arthritis.

In rodent models high intake of isolated sources of luteolin and apigenin not celery juice but actual isolated luteolin and epigenetic compounds has been shown to be protective against neurodegeneration. This was all in rodent models against the growth of some type of cancer cells against the severity of arthritis against allergic responses like asthma and rhinitis.

And even to control some amount of cholesterol and in the cholesterol study and one of them they did actually use celery Leaf rather than isolated luteolin or apigenin. Now there have been other studies showing benefits on cardiovascular health with these two compounds other benefits on high blood pressure.

And then there was one study that looked at the effects of celery consumption on fertility and animals and showed that celery could have a protective effect on fertility. And this is why also some people will claim that it's great if you're trying to, you know prepare for childbirth and. You know, if you're a man and a woman want to have a baby drink a bunch of celery juice everyday, but very few Studies have looked at actual celery juice only some of these isolated compounds in high doses that you find in celery juice, but you would have to drink a hell of a lot of celery juice to get as much apigenin and luteolin as has been found to be beneficial in many of these studies.

I don't think there's a lot of evidence that celery juice is bad for you celery is not expensive. You're not going to break the bank drinking celery juice every day. You're not going to get

high blood pressure from the sodium and celery juice and you know, if anything it might not help you that much.

Um sure it may have some kind of a mild cleansing effect. It might have a little bit of an effect on fertility. I think that celery juice however is blown way out of proportion and I do agree with Vice that in the studies that have been done on it. It's mostly the celery leaf and eating whole celery with all the fiber that allows for many of the benefits of celery and is probably better for you than drinking the cellular.

So, I'm sorry to all the people who are promoting celery juice, but I'm going to have to agree for the most part with what Vice has to say about celery. All right. Myth number 42 is that permit number 43 rather is that you can lose weight without cutting carbs. You can lose weight without cutting carbs going low carb isn't a sustainable diet in the long term or a particularly healthy.

Well, I disagree for many reasons that it's not a sustainable diet. I think going low carb can be completely sustainable and delicious. You know, I you know, I know many people eat 40 to 50 grams of carbs a day. I still consider myself to be a low-carb diet. I mean 100 to 200 grams of carbohydrate a day.

But it is true the most recent randomized clinical trial comparing a low-fat diet to a low-carb diet found that both diets produce similar weight loss and improvements in metabolic Health markers. And that what seems to be the kicker. What seems to be the most important variable here is the amount of actual calories that are consumed on the diet not the amount of fat versus the amount of carbohydrates and in this study was a year-long.

It was called the diet intervention examining the factors. Interacting with treatment success abbreviated the diet fits study oddly enough. It was conducted by the new C foundation and Gary tabs, which is a prominent low-carb organization. But what they found despite that study being overseen by a by a.

Low-carb Advocate Group was that whether people consume low carb or whether people consumed low-fat. There was no significant weight loss difference between either group. You know, I think that it is true that when it comes down to it a big big part of weight loss is the amount of calories that you consume.

However, it should be noted. This study did not look at mitochondrial function. It did not look at inflammatory markers. It does not look at cholesterol particle count. It didn't look at triglycerides. It didn't look at a host of other factors that may be deleterious Lee affected especially by a high sugar.

High processed and starch intake or even just a large amount of glycemic variability throughout the day which one would experience in response to a high carb diet nor did it look at gut health such as fermentation small intestinal bacterial overgrowth or any of the other parameters of the gut from a fermentation or a microbiome standpoint that could be deleterious Lee affected by high carb intake so we can never look at a study like this and say that.

Just because one diet is similar to the other as far as weight loss that one diet is similar to the other diet overall. And I think that generally painting with a broad brush some mitigation of carbohydrate intake from an overall metabolic standpoint is superior compared to high carbohydrate intake.

All right, we have made it to myth number 44, which is this. There are no known health risks associated with eating genetically modified foods. There are no known health risks associated with eating genetically modified foods corn soybeans and other foods that are genetically modified are safe to eat.

Well, Let me begin with this. there are at least 10 scientific studies that prove that genetically modified food can be harmful to human health multiple toxins from GMOs have been detected in both maternal and Fetal blood along with in those studies. The presence of Monsanto's BT Toxin and. This this is a big big issue for pregnant women eating GMO food DNA from genetically modified crops have been shown to be able to be transferred into humans who eat those crops.

Another newer study links GMOs to gluten disorders that affect over 18 million Americans another study has linked genetically modified corn to rat tumors. Yes, that's a rodent model, but it makes me not want to reach for a piece of GMO corn. We know that glyphosate induces human breast cancer cell growth via estrogen receptors.

This has all been studied glyphosate is also. Heavily linked to birth defects and remember most GMO crops are using high amounts of glyphosate. Another study has linked glyphosate to autism to Parkinson's to Alzheimer's we know that chronically ill humans have higher glyphosate levels than healthy humans another study linked GMO animal feed to severe stomach inflammation and enlarged uterus in pig model.

And GMO risk assessment is based on very little scientific evidence in the sense that the testing methods recommended are not adequate to ensure safety. I could go on and on about GM foods, but I think that a big big part of the arguments for GMOs and the argument that they actually are not an issue is a big dangerous thing.

I say. Far away from GMO Foods just because I do not want to play around with my DNA. I will link to a bunch of studies that have been done on GMO foods, but I feel that the toxins present in GMO foods such as glyphosate pesticides and herbicides and the fact that it has been shown that DNA modification can occur in humans in response to them actually eating GMO containing foods at.

Thing during digestion proteins and DNA are degraded into amino acids and nucleic acids, but based on the analysis of over a thousand human samples from four different independent studies. There is evidence that meal derived DNA fragment fragments are large enough to carry complete genes. They can avoid degradation.

And enter the human circulatory system and I do not want to mess around with that personally. So I'm playing it safe when it comes to GMOs. Even if you're going to tell me that there's not some huge robust scientific study on hundreds of thousands of people. I'm still playing it safe with that.

Just kind of like I'm playing it safe with microwaves and some of the other things that I discussed in this two-part series. All right, you guys we did it. We made it through 44 different myths. I'm going to link to all this stuff part 1 of this podcast is up Ben Greenfield fitness.com Vice podcast one part two of this podcast is a Ben Greenfield fitness.com Vice podcast to I'll link to all the research all the papers all the studies the original Vice article that inspired me to record this for you.

I hope this has been helpful for you. And ultimately I hope that it has perhaps inspired you to just raise an eyebrow. When you see headlines take a little bit of a deeper dive. Look at things with a balanced standpoint understand that there is some stuff in Wellness that is just snake oil or that is not proven but a lot of stuff does actually work and in many cases when popular websites trying to debunk, you know, a lot of these things I've talked about apple cider vinegar and kombucha and.

I'm free antiperspirant and just everything we've discussed a lot of times. They are simply dead wrong and do not think that it's correct. Just because it's written down on a popular website. All right. I'm off my soapbox.