

Caspar ([00:00](#)):

It's not a secret. We become a pretty obese world. Worldwide obesity has neither really tripled since 1975. And in the US three out of every five are overweight and one in five is obese, but what does that mean for our health and how can we use science and research to help lose weight? We're bringing on a good friend of the podcast to talk about this and his new book. This is the Obesity's Fix with Dr. James DiNicolantonio. Doc. Good to see you again. Fourth time on the show.

Dr. DiNicolantonio ([00:32](#)):

I love it. Thanks for having me back, Caspar.

Caspar ([00:33](#)):

Yeah, congrats man. And another incredible book right over my shoulder over there for those watching on YouTube. But you know, I, I kind of wanted to set the stage here because this is an incredible subject right now. That's somewhat polarizing and there's a lot of pushback on this idea of fat shame and even talking about obesity as a bad thing, but I wanna put emotions aside and political correctness aside and really get into what the data shows and what are the medical consequences of living with obesity?

Dr. DiNicolantonio ([01:07](#)):

Right? Yeah. And I think that's a good point. I mean, we're not here to fat shame. It's not about that. It's it's to let people know that when you are overweight, typically you have insulin resistance and you have metabolic syndrome. And with that comes inflammation and numerous increases of metabolic conditions like high blood pressure like cancer, heart disease, strokes. So there's consequences to being overweight and you, you know, there's a, there's a fine line by saying you can be healthy at any weight and, and really that's simply not true. You can't be as healthy as you are when you're fit versus let's say, okay, you're a hundred pounds overweight. You're not gonna be, you might not acutely have, let's say a heart attack right then and there, but it dramatically increases your risk for numerous chronic diseases later on in life. And that's the key is that you, you wanna work towards being fit and in shape and not being overweight.

Caspar ([02:13](#)):

Yeah. And one of the things, you know, you first hit on is we just experienced the pandemic and the book states obesity and metabolic syndrome are the biggest non-genetic risk factors contributing to the severity of COVID 19. Can you elaborate on what the data shows as far as just obesity viruses in general, immunity?

Dr. DiNicolantonio ([02:33](#)):

When someone has obesity and basically typically they use BMI for this which isn't a hundred percent accurate if you're super muscular and short, but if you are obese that's a BMI of 30 or higher, it can increase your risk of dying from COVID by about twofold and increase your risk of being hospitalized by about three and a half fold. Now we know too that viruses actually replicate longer in people who are overweight and obese, giving the virus more time to mutate, increasing viral spread, and potentially increasing the spread of a more virulent strain as well. So if you think about it from that perspective, not only are you potentially increasing transmission, you're potentially increasing transmission of a more virulent strain and you are more susceptible to having poor outcomes as well. So there's the numerous benefits to being in better shape when it comes to getting a virus.

Caspar ([03:35](#)):

Yeah. And what, one of the first subjects you hit on in this book, a really big one is sugar and our over consumption of sugar. And you really broke it down that it's not all, you know, all sugar is the culprit. It's just, we've concentrated and processed sugar so much that it's stripped the votes, all of future and super concentrated and addictive. But can you go into what we need to know about sugar as it relates to obesity in modern times?

Dr. DiNicolantonio ([04:00](#)):

I think one thing that people forget is that most of the sugar is being consumed by children. That's the key. And by the time they're 20, 25 30, that huge amount of sugar that they were consuming, most of their lives has already caught up to them. So that even if they start eating a somewhat lower amount of sugar, they're already basically overweight, obese, high blood pressure, et cetera. And so there's a lot of people who have argued, okay, there's certain graphs that around 1970 sugar intake hit like 120 pounds per person per year. And it slowly started going a little bit down as the obesity epidemic started increasing. Okay. There are certain charts that will show that, but the problem is that's looking at the average sugar intake, not the sugar intake in children. So typically on average, to where it's about 200 grams of sugar per day. So they're consuming a third of their calories from added sugar. And so when you do that for 10, 20 years early on, that causes severe metabolic damage. So that even if now you're only consuming 50 grams of sugar, that's too much now the body can't handle it. And so it's really that early stage sugar intake that leads to dramatic harm later on.

Caspar ([05:14](#)):

And one of the things people don't know, but I actually read, and I'll quote you here. Studies suggest that added sugars are as addictive as cocaine, nicotine, alcohol, tobacco, and caffeine. And we're feeding that to kids, right? I mean, isn't, isn't that part of the problem. This is what I always get into people with the one free crispy cream donut. Isn't the problem. I get it. You won't get, you know, obese or have metabolic dysfunction from the one, but it's gonna lead you to want more. Isn't that the whole thing that you just have a little bit, but then you get cravings as if it were cocaine. I mean, that's a very addictive substance. So isn't that the problem with sugar?

Dr. DiNicolantonio ([05:52](#)):

Yes. I mean, at least. So if you look at the animal studies, animals will actually basically induce death in themselves by consuming so much sugar. In other words, they will eat a diet that's lacking in nutrients that will lead to an early death if it's filled with sugar, because they will constantly consume that. And so when you think about it, from that perspective, you always have people saying, well, sugar in moderation, right. But it's like telling an alcoholic, alcohol in moderation, right. It doesn't make sense for a subset of people. So we're not here to say that sugar is addictive for everyone, just like alcohol, isn't addictive for everyone. Right. But when you put it in a food and it's hidden, you don't even realize that you're getting it. And then when you add like when you process it and you put it and package it with added fats, now you have this super hyper palatable food that does become addictive too, for a lot of people.

Caspar ([06:51](#)):

So if I'm a parent and I see my child is eating too much sugar, is slightly overweight you know, what would be your advice of how I could pivot off of that since it is quite addictive. And I think just completely going off any sugar substitutes may be difficult for a child's palate.

Dr. DiNicolantonio (07:08):

Right. And I think the easiest thing is to start substituting some of that added sugar with just real fruit, whether, whether it be watermelon, whether it be berries, something to give that child, the sugar that their, their cells are used to using, but in a more healthier form.

Caspar (07:23):

Yeah. Now let's talk about refined carbs. You know, what are they and how do they contribute to obesity? Cuz you hear about it a lot. But I feel like some people don't even really understand what that means by refined carbs.

Dr. DiNicolantonio (07:36):

So when you refine a carb, essentially in the, in the late 18 hundreds, they invented something called the steel roller mill, which basically pulverized basically grains and wheat into a very fine powder. And so the coarseness of powder will determine high how high your blood sugar spikes. And then also if it will cause hypoglycemia. So the coarser grains that are sort of stone ground lead to a smaller spike in glucose and smaller spike in insulin. And they actually typically don't cause hypoglycemia. And so you don't get the, the constant sugar cravings from the cycles of, in the dips in your blood sugar. But when you consume a highly refined grain, you get a much higher spike in insulin and glucose and you go low, blood glucose or hypoglycemic. And so that's the difference is the particle size. Now this isn't to say that eating stone ground flour is healthy. You know, in small amounts is probably fine for many people, especially if you add it with proteins and fats, but the typical even 100%, whole grains in the United States are typically ran through a steel roller mill. So even if it has the whole grain symbol on it, it's typically a refined grain and it is not healthy. It will lead to the high blood sugars and the crashes.

Caspar (08:48):

Yeah. You know, one of the things we talked about in the past when I've had you on one of the three other times is with your, The Mineral Fix. And we talked a lot about mineral deficiencies. Now in that one, it was very much based overall health and you know, dysfunction, but here you're linking it to weight gaining. And I, I read about mineral magnesium deficiency in general as being a big part. Can you go into how minerals work within weight gain and loss, especially magnesium?

Dr. DiNicolantonio (09:20):

Yeah. I, I would say the, the two biggest minerals that do contribute to weight gain, if you're deficient in that would be magnesium and chromium. There's been actually a lot of studies looking at chromium in regards to fat loss and muscle gain because chromium is important for insulin to work and simply sub like supplement to 400 micrograms of chromium has been shown to increase lean muscle gain and also decrease body fat. And there's actually numerous studies showing this. So simply supplementing with a mineral can actually improve weight loss and muscle gain. And magnesium has similar benefits as well because it's also important for improving the insulin's ability to work. And obviously insulin is important for, you know, allowing us to burn fat and utilize glucose and, and give us energy and, and activate ATP. So minerals really allow the whole system to work much better and they allow hormones to work as well, like thyroid hormone and things like that. So when it comes to thyroid hormones, selenium sodium, which is required to drive iodine in into the thyroid gland is super important. So selenium and sodium are also very important from a thyroid functioning perspective and obviously same with iodine as well. So numerous minerals impact, hormone function, insulin sensitivity energy production, which is

all, you know, comes down to, okay, do you even have the energy to go work out and burn calories? Because magnesium is required to bind to ATP to activate it.

Caspar ([10:50](#)):

Yeah, that was really interesting. When I read that whole section on a hormonal mechanisms of obesity, really linking a lot to the thyroid and how critical the thyroid is and how many people really kind of have a start of hypothyroidism that can lead to obesity. Can you talk about some of the step? How, how would you know, first off if your thyroid is functioning properly and part two, what would you do about it to aid the thyroid in losing weight?

Dr. DiNicolantonio ([11:16](#)):

So there's numerous ways we measure low thyroid and elevated TSH to thyroid stimulating hormone is typically what occurs when you are low thyroid. In other words, the you're basically trying to stimulate thyroid production more because the thyroid hormones aren't working well. You can have low free T3, which is the active form. You can have low T4, which eventually gets converted to the active form T3. So those two thyroid tests can be low. You can have high reverse T3, which prevents T3 from actually working. And then you can have a high inflammation, which your numbers may look correct, but you actually can't get the signal through, into once the thyroid hormone actually binds to its receptor, the signal isn't getting through into the cell. And then things like inositol that can also prevent the thyroid hormone from working. And one of the most common causes of low thyroid is Hashimoto's thyroiditis. And they actually gave those individuals 600 milligrams of acetol per day with selenium versus just selenium Malone and the individuals that got acetol became youth thyroid, despite having Hashimoto's thyroiditis. So a simple supplement, which allows this, the actual signal for thyroid hormone and insulin to work, inositol, supplementing with that has been shown to improve thyroid function.

Caspar ([12:44](#)):

Yeah. And a big part that you hit there is the insulin resistance and obesity, and, you know, go into a little bit of how fast foods promote insulin resistance, which leads to weight gain. Cause I, I feel like still people don't understand, they just think fast food is mostly about calories, like empty calories. That's how you're putting it on, but there's so much more to it. And part of that is insulin resistance. Could, could you hit on that?

Dr. DiNicolantonio ([13:07](#)):

So to just give you like a quick example of like, let's say refined sugars and processed foods, they can make the fat cell insulin resistant, forcing fat to be stored in the visceral adipose tissue. Okay. So a lot of foods will dump fat into the subcutaneous fat, which isn't as harmful. That's just, you know, the fact that you can grab, but it's storing fat in and around the organs, it's actually much more damaging. And so certain substances that cause inflammation or that increase cortisol, like added sugars, can drive fat to be actually stored in and around the organs.

Caspar ([13:43](#)):

Yeah. And speaking of visceral fat you know, I know I saw about fiber intake can reduce the risk of visceral fat, but another thing I saw was probiotics. How do probiotics do that?

Dr. DiNicolantonio ([13:55](#)):

Oh, so probiotics. I mean, there's, it depends right on the strain and how much, and is it, is it actually not being broken down, but simply improving the gut microbiome we know has effects systemically overall throughout the body. And you can get, you know, better productions of things like butyrate when you have healthier gut microbiome. And then that butyrate can actually get into fat cells can get into the liver and improve the health of those organs and improve overall insulin sensitivity. So that's kind of how we think it works.

Caspar ([14:26](#)):

Mm-Hmm.

Dr. DiNicolantonio ([14:28](#)):

Which is, which is pretty interesting.

Caspar ([14:30](#)):

Yeah, no, I've, I've always been told that by doctors that probiotics could have that impact. I mean, gut health is so vital, so many things, immune system, all these other things, inflammation, even. So it makes sense there. One of the things I, I learned, I did not know this cause I knew about visceral fat and subcutaneous fat, but you talked about white fat cells, beige fat cells and brown fat cells. Can you go into those three and the differences there and what we should be looking for when we talk about those?

Dr. DiNicolantonio ([14:57](#)):

Yep. So white fat has basically has no mitochondria. So as fat gets more mitochondria it becomes beige and then the brown fat has the most mitochondria. So the most metabolically active. It can actually produce heat. And so you're liberating calories through the production of heat, the more brown fat you have. So you can basically switch white adipose tissue into brown, or you can brown that tissue by simply exercising, especially resistance training. So if you wanna have more metabolically active fat that can burn calories and release energy and you wanna have more brown fat, and that's why exercise is pretty important for, for that aspect. And then going into cold temperatures, whether it's going into a cold bath or being outside in the cold that can also induce brown fat as well and increase basically your basal metabolic rate.

Caspar ([15:52](#)):

So you're a fan of ice baths, crypto, cryotherapy, and all that.

Dr. DiNicolantonio ([15:58](#)):

There's a huge, so yeah, I am to if you get it correct. And I, especially for athletes, for helping with recovery, it's, it's really like a godsend for a lot of these athletes that are in hard training camps and they have to train the next day. If you quickly jump in, in an ice bath or even a bath, that's like, let's say even up to 59 degrees Fahrenheit, if you do that for just like five minutes, that will dramatically increase power output even out to 72 hours. Because it helps, you know, suppress all the inflammation. The only thing is, is you do get a little bit of a decrease in the hypertrophy and may maybe potentially some of the strength gains, but that's really not a big deal. If you are like a soccer player or, you know, someone like that, where you're not just like lifting heavy weights all the time.

Caspar ([16:47](#)):

Let's talk about the fats and let's go into diet a little bit more, cuz that's where everyone focuses on. When we talk about obesity and when we stick to the fats, you say there are fats that make you fat and they're fats that make you lean. Can you go into the difference there?

Dr. DiNicolantonio ([17:02](#)):

So the, the two fats that are going to make people the most metabolically dysfunctional, the most inflammation are trans fats. And then the omega-6 oils that are basically cooked in almost every fast food restaurant that you can think of. So if you want to eliminate the worst fats, you wanna reduce your intake of foods at restaurants or food or fast food. Now of course there are certain restaurants that are starting to change in using things more like Extra Virgin Olive Oil or animal fats. And that's great, but for the majority of restaurants and fast foods items, they're gonna be saturated in trans fats and omega six seed oils. And particularly because when you cook omega-6 seed oils, they're so susceptible to oxidation that they're already oxidized before your body even breaks them down, but they get become further oxidized in the acidity of your stomach. And especially when you combine them with things like heme iron and it just becomes this metabolic destruction thing in your stomach. It's like a bioreactor. So avoiding things like canola, corn, sunflower safflower that's very important when it comes to improving, you know, weight loss.

Caspar ([18:11](#)):

And what types of oils and fats are you looking to cook into actually lose weight.

Dr. DiNicolantonio ([18:19](#)):

So especially if you're consuming like a moderate amount of carbohydrate, ideally things like extra virgin olive oil, avocados, certain nuts, things that are higher in monos, saturated fat. Now, most people have been taught, don't cook with extra virgin olive oil. It doesn't have a super, super high smoking point. Okay. But let's contrast that to omega-6 oils, which have a very high smoking point, but they start to oxidize right away. So we need to understand that smoking point has nothing to do with when an oil actually starts to oxidize. And in fact, every single study that I've ever looked at, which is new, there are numerous studies that have tested extra virgin olive oil. When you cook it show that it is extremely resistant to oxidation due to the high amounts of polyphenols in the oil, preventing it from oxidizing. And because it only has a single double bond, it's a mono unsaturated fat.

Dr. DiNicolantonio ([19:13](#)):

So it's pretty resistant to heat. So it's a great oil to cook with and you will get less fat gained per calorie consumed. If you use something like olive oil versus butter, if you're on a moderate carbohydrate intake. In fact, there was one study that tested this out where people either consumed olive oil or they consumed butter for, I think it was eight weeks and there was a six pound fat loss in the people who consumed olive oil versus butter. But it was, again, it wasn't a moderate carbohydrate intake. So this doesn't apply to apply to low carb people or ketogenic people, but it would apply to an athlete who's consuming, you know, a fairly high amount of carbohydrates or your typical American.

Caspar ([19:53](#)):

Yes. Really interesting, because you are taught these kind of back and forth. Don't use cooking, like just put a little on your salad of the EVOO versus what you're saying is actually you can cook with it and it's been shown research to be beneficial. You know, two of the things you said right there, I wanna go into keto and low carb. So what are your thoughts on ketogenic diets for fat loss in general?

Dr. DiNicolantonio ([20:15](#)):

I think initially they can work well for a lot of people. The problem is, is you can start to see increases in cortisol when you really drop the carbohydrate intake because you're putting a metabolic burden on the body to start creating its own glucose. And so the body wants to produce 130 grams of glucose per day. If you allow that to come through a lot of it from the diet, then it reduces the metabolic stress on the body. Now, of course, the body can do this and you can live completely fine doing it. But thyroid hormones seem to not work as well. On a very low carb diet cortisol does seem to increase. And for the majority of people, energy does go down when they cut out their carbs to let's say less than 50 grams. So what I found is that for most people consuming anywhere from 60 to 160 grams of whole food carbs is really a much better for vitality.

Dr. DiNicolantonio ([21:07](#)):

Being able to sustain that type of diet. And if most of those are coming from low starch vegetables, like broccoli, asparagus, zucchini, things like that, you're gonna see a huge weight loss because it's so full of fiber. So low in calories that people don't over consume it. And where the starch comes in is typically for people who are highly active, how I like to use the plate model for those people is about half plate vegetables, a quarter plate starch. So potatoes, sweet potatoes, and then a quarter of, of the plate being meat or animal foods and, and eggs and things like that. And for your typical person, who's not super active. I would probably eliminate the starch and just do a half a plate of vegetables and a half of plate of animal foods. And tho those two plates work for the majority of people that I've worked with.

Caspar ([21:57](#)):

So you're not a fan of low carb diets for weight loss?

Dr. DiNicolantonio ([22:00](#)):

Not long term, I think acutely, maybe for two to three months. But I think after that, most people plateau and they feel like, and you wanna start exercising more too, once you've lost the weight. And that's where ramping up the carbohydrate intake really helps, you know, that type of lifestyle.

Caspar ([22:20](#)):

And what about intermittent fasting? I saw a little bit of that in the book. What are your thoughts on that with weight loss?

Dr. DiNicolantonio ([22:27](#)):

Highly individualized, just like everything. And I, I find myself on a nice, hard workout day. I won't intermittent fast. I'll have three meals a day and I'll be completely fine. I'm not gaining weight doing that. Because it's almost like your exercise routine is kind of eliminating a meal anyway. So you're almost intermittent fasting anyway by eating three meals, but working out that day. So I don't suggest people who are lifting heavy and doing a hard vigorous exercise to cut out that meal because I don't think they'll feel as good. So I think fueling workouts is important, but for some people eliminating breakfast or dinner on non-workout days definitely helps some people. And I think people who are not active intermittent fasting is like a godsend for those people.

Caspar ([23:12](#)):

And let's talk about that, cuz you said eliminating breakfast or dinner. Most of the people I know that are intermittent fasters, myself included at times, just skip breakfast that, and then we call it intermittent fasting. I'm just too busy for breakfast normally. And just skip it, go into lunch, have dinner before 8:00 PM, a 16, eight split, let's say. Yeah, but would you recommend that someone maybe kickstart the metabolism with the breakfast and then go secondary a little bit later in the afternoon? And that's it because it seems to me that a lot of people are just doing this out of convenience for missing at breakfast, loading up at lunch and really going heavy at eight o'clock when it's, you know, and kind of getting a lot in there when you're kind of getting ready for sleep almost, you know? So what are your thoughts on that?

Dr. DiNicolantonio ([23:56](#)):

No, I think that's exactly what I was gonna say too, is that the people who typically tend to skip breakfast have a fairly large lunch and a very large dinner. And the problem with that is that that can lead to acid reflux later at night, which can lead to Barretts and even, you know cancer and things like that. So, and that's when you're least insulin sensitive is at night as well. So I think for a lot of people, if you eat a high protein breakfast with some healthy fats, like let's just say steak and eggs, you will not eat as much later on in the day. And it's okay to eat three meals in a day, but it's really that last meal that you wanted to be pretty moderate. And because you'll get a lot of gains from that because you're less insulin sensitive, you're getting ready to sleep. That's really where you want a small meal is at dinnertime.

Caspar ([24:48](#)):

And one of the things I learned about dieting in this book was something called the Matador method or Matador diet dieting. And at first I was like, oh cool. I could eat like a bull fighter, but it's not that at all. Tell us about what Matador dieting is.

Dr. DiNicolantonio ([25:05](#)):

Yeah. It kind of puts the whole calorie thing on its head because you actually get more weight loss with not chronically consuming, a low amount of calories, actually eating more calories actually lead to almost twice the weight loss. And this was, you know, a very nice clinical study that showed us, essentially you're comparing about a 30% calorie deficit chronically versus two weeks of a 30% calorie deficit. And then you go up to your maintenance calories for two weeks and then you go back down and you just keep doing that and doing the Matador method again leads to almost twice the weight loss and it, it leads to sustainable weight loss. And that's really key too, is that people could follow Matador when you go back to baseline calorie intake versus just trying to chronically starve yourself. And the reason why this works is because it prevents what's called adaptive thermogenesis. It prevents the body's metabolism from dropping due to the low chronic calorie intake. So it basically helps you maintain a high basal metabolic rate despite intermittent energy restriction. So it basically, it's not all about calories. It's about sending signals to your body that, okay, you're not starving yourself for two weeks. Go ahead and keep your basal metabolic rate high and don't increase hunger hormones like crazy at the same time. So that's really, the key is intermittent. Energy restriction is a very good way to sustainably lose weight.

Caspar ([26:40](#)):

And we've had this discussion before about the calorie counting that it all comes down to calories and we know it's much different. You made up a good, a good point in the book that no one's gonna actually count all their calories anyway, in any single day. And how accurate can you truly be about any single

calorie in everything you intake and you wrote thus the key to weight loss and optimal body composition is moderation eating and the quality of the food that you eat. Would you recommend that people then start to look at where their food comes from rather than even what it is, meaning you want grass-fed beef, not just beef, you know, that's conventionally grown, you want true organic, you know, types of foods versus GMO versus processed foods and everything. Do you think people just need to really stick to focusing more on that than reading actual calories?

Dr. DiNicolantonio ([27:34](#)):

I think so it almost like becomes a question of, you know, yeah. Can you lose weight eating 1500 calories of M&Ms. Yes or Twinkis right. But in the long run, you're not gonna be able to state sustain a healthy body because you're not getting the nourishment. And so eventually systems will start crashing. It will just take a little bit. And so usually typically studies don't go out long enough to actually see those end results. So we know that we need to be fueling our bodies with all the nourishment, because even taking things like astaxanthin, which is gonna be high in wild salmon versus your typical farm salmon, although there are great farm salmon that used krill and things like that. So I don't wanna just demonize farm salmon, but for the majority of, you know, this there was one somebody that gave eight milligrams of astaxanthin per day in, in humans. And there was a significant drop in visceral fat in a significant weight loss and things like that just by taking an, an antioxidant, no decrease in calories at all. So even the antioxidants that we get from higher quality foods can have an impact on weight loss.

Caspar ([28:45](#)):

Yeah. And there's so much food out there that's positioned as vitamin rich and nourished, right. Enriched, fortified. You went into that and I love this quote from, I believe it was someone else had said it, but you know, they're basically akin to animal feed designed to fatten up livestock for humans. Right. And can you go into, why is it that enriched and fortified are really BS terms for just, you know, nutritious junk food in a sense that in the end isn't gonna be good for you.

Dr. DiNicolantonio ([29:15](#)):

Yeah, it it, well, so the thing is, is that fortifying junk food with vitamins and minerals doesn't make it a healthy food. Right. And, and that's the key. But we do have a chapter in the book on how basically fortifying refined grains allowed people to not get sick on them and lose weight. It allowed them to have just enough of satiety to over consume them. So farmers have known this for over 100 years, that if they simply give their cows refined grains, they will end up getting sick, they'll get peptic ulcers, and they will become basically anorexic and they won't gain fat, but by simply adding vitamins to the feed would allow them to over consume and thrive and get very fat. And so the same thing is being played out on humans, we've taken refined grains and we've fortified them with B vitamins in particular, which allows us to not get sick to, to not get, you know, the, the stomach ulcers and the fatigue and the anorexia. And it allows people to over consume that junk food. And so really it's the fortification of grains that allows people to thrive just enough to really over consume that.

Caspar ([30:29](#)):

Yeah, it's, it's really sad cuz you see a lot of people look for the fortification, they look for those, you know, vitamin extra added and everything and think that's healthy. And I think that's a big part. People have this misunderstanding, what is healthy food and that's, you know, part of what you're trying to change here with this book. And you know, I wanted to go into that cuz you have something called the

pretty simplistic obesity fix challenge. Yeah. And goes over six points. Can you talk about those and, and how really this challenge is not that difficult if you just stick to these six.

Dr. DiNicolantonio ([31:03](#)):

Yeah. I mean, one of the things is to eat about one to 1.2, five grams of protein per pound of lean body mass. I mean really that's where a lot of your long term satiety is going to come from in eating quality foods, whole foods versus processed foods. Those two things right there is going to give most people, their bang for their buck. Eating a moderate amount of food. So there's something called Hari hachi boo that they practice in Japan where they only eat till they're 80% full mm-hmm. And I think that's key too, is that people just eat to the point where they're just completely bloated and they're just completely full and that's not what you wanna do. You want to eat to about 80% fullness and what can help people out too is portioning out their foods. It's not calorie counting, but you shouldn't be throwing a huge amount of food on the plate because you may end up subconsciously eating all that. So it sounds very simple, right? Portion out your meals only eat till 80% fullness eat whole foods, eat a high protein intake, eat fibers foods, which are low calorie fibers. When you pair fiber with protein, you get the initial satiety of the fiber. You get the long term satiety of the protein. And that's really the magic bullet to weight loss is pairing things like asparagus and, and brussel sprouts or, or broccoli with lean meats and, and things like pastured eggs. And that's gonna give most people their bang for their buck.

Caspar ([32:28](#)):

Shouldn't we also be eating slower. I mean, isn't that part of it because the, the Garin that shows you whether your satiate or not takes about 20 minutes or so to kick in and really tell your stomach and stomach may be already overfilled. So I feel like this idea of people eating, even when they say they're eating healthy, they're just eating it quickly on the run, not focusing on the food at all, not taking time to chew it. So putting pressure on the digestive system and do more work and then we overeat. We don't even know it. And we're really tired afterwards. Shouldn't we be able to see things as, Hey, let's sit down and eat this slowly. Isn't that part of the fix also?

Dr. DiNicolantonio ([33:05](#)):

100%. Yeah. Even studies have shown that eating more family meals and socializing when you're eating has been shown to lead to less obesity and an increase in satiety. And a lot of people are just scrolling on their phones and eating and they look down at their plate, the food is gone. It hasn't even registered in their brain that they've had a meal cuz they're not focusing in on what they're actually doing. And so yeah, being distracted and eating like eating while watching TV or you know, kids eating while playing video games. That's the worst thing that you can do for leading to overeating.

Caspar ([33:41](#)):

Yeah. It's a shame whenever you see that in a restaurant, right? Like just a kid and just scooping it. And not even realizing just going and then going over the parents' plates, like, wow, you're really overeat easily that way. But you know, part, part of this whole book a lot was on what to eat diet, things like that, looking at those others. But of course exercise is a portion of that and your movement and everything. Now in the book, you, you say view exercise, just like you would view brushing your teeth, eating or going to the bathroom. And so, you know, those are things we do every single day, you know, and never forget to do. Is that the point you're trying to make that we need to exercise on a daily basis? Or are you more saying like movement and you know, how, how intense are we talking here on a daily basis?

Dr. DiNicolantonio ([34:27](#)):

Yeah. Well I think if you look at like our ancestors, they had to physically move to get food. They were hunter gatherers. They, they didn't have just like lines and fields of corn and grain to graze on. They had to move to eat. And so, you know, definitely walking at least 10 minutes after meals is, is super important. But the other thing is building muscle is very important too, because we lose muscle as we age. So if we're not continually trying to build muscle, we're going to lose that. Right? So you basically, you lose what you don't use and muscle is our biggest glucose sink that you can have. So if you wanna be able to utilize carbohydrates well to fuel your workouts, then having good amounts of active skeletal muscle is very important, cuz that's gonna soak up all that glucose. So I think resistance training three to five times a week for about 45 minutes is a great gold standard. And you will find that when you start working out five, six days a week, your body will actually, it'll be harder for you to take a day off than fighting yourself to be like, Ugh, I have to actually exercise today. So just making it that daily habit, your muscles will send signals to your body. Like, Hey, I need to be activated again. And you'll, you'll find that it'll actually be harder to take a day off than it will be to force yourself to go and work out.

Caspar ([35:51](#)):

Yeah. And could you go back to that statement there? You said walking after eating, that's something you're proponent of to like finish your meal and go for a walk.

Dr. DiNicolantonio ([35:59](#)):

Yes.

Caspar ([36:00](#)):

Because most people would say, okay, I'm not supposed to swim after I eat. Right. Those kind of that, that whole idea. So wouldn't, I just sit and process this food and allow it to, to just digest what's the benefit of walking.

Dr. DiNicolantonio ([36:12](#)):

Right? And so you don't wanna obviously sprint or jog, but the benefit of walking is it is going to reduce the glucose spike from, let's say the carbohydrates that you ate and getting out in sunlight when you pair nutrient intake with sunlight, there's magic that happens there as well. So actually even eating in sunlight has been shown to have benefits as well. So I think just getting outside, doing that 10 minute walk is really great for a lot of people.

Caspar ([36:43](#)):

Yeah. And, and skip the spray on Oxybenzene, sunscreen, right.

Dr. DiNicolantonio ([36:48](#)):

Yeah, exactly.

Caspar ([36:49](#)):

Pissed off a lot of dermatologists there, but tell us about this supplement HMB cuz it's something I hadn't heard of, but I was reading about in the book and it was pretty interesting.

Dr. DiNicolantonio ([36:59](#)):

Yeah. It's more, it's a metabolite of leucine and so you would have to take an astronomical amount of leucine in order to get therapeutic amounts of HMB. But for people who are in a very low caloric state or have like cachexia, like in cancer, they're having muscle wasting or someone's bed written HMB has been shown to, you know, really preserve lean, met muscle mass. And so it's really for people who are, you know, almost doing like a, like a Matador for the two weeks that you do the low calorie intake, it helps to preserve muscle mass. So it's not really for a whole lot of people, but in low caloric states, it seems to have benefits on preserving lean muscle mass.

Caspar ([37:44](#)):

Yeah. It was pretty interesting to read about that. And I think also you had chromium in there as well, picolinate or yeah. Yes. That was another one you talked about.

Dr. DiNicolantonio ([37:54](#)):

Yep.

Caspar ([37:55](#)):

So, you know, looking at the ideal, just normalized kind of the everyday person, what's your ideal macronutrient breakdown in the ratios a shows you, you talked about there's protein, fat and carbs. What are the percentages you advise?

Dr. DiNicolantonio ([38:12](#)):

I think for most people, anywhere from 25 to 40% of calories coming from protein is optimal. For carbohydrates, it's gonna dramatically depend on activity level. So for people who are less active, probably F you know, five to 10% for people who are more active could probably get away with up to 25% of their calories is carbs. And then fat, most of it's just come from whole foods. You wanna limit added fats. So you wanna limit how much heavy cream you put in your coffee. You wanna limit throwing a half a stick of butter in your coffee, but a little bit cooking, a little bit of cooking with a little bit of butter is just fine.

Caspar ([38:52](#)):

Yeah. And for people that are like, all right, what does that kind of look like? As far as the foods, I should be eating for breakfast, lunch, and dinner, what, what, give some examples of what people can look into and, and start to purchase for those meals.

Dr. DiNicolantonio ([39:07](#)):

So for breakfast, high protein meals with moderate amounts of healthy fats would be something like Greek or Icelandic, full fat yogurt, lean cuts of meats, steak, chicken, venison, elk, bison, pork and then pastured eggs, fish shrimp. Those are gonna be your high protein foods, shellfish and seafood that are going to give you the long- term satiety compared to let's say, cereal for breakfast, right. And it sort of repeats for lunch and dinner. You know, there's not a whole lot of high protein options besides animal foods or, you know what I mean? Because the other high protein plant foods, like let's say peanut butter or beans or legumes, right. Lentils, they all come with a fairly high amount of calories and carbs in order to get 40 grams of protein from them. So that's what people miss is the fact that you're getting a ton more calories per gram of protein from plant foods versus animal foods.

Caspar ([40:14](#)):

And let's talk about also the missing kind of element in some of this that I, I found, I always find is interesting in health and everything, and that's sleep. How, how important is sleep in weight loss?

Dr. DiNicolantonio ([40:26](#)):

Studies have shown just one night of poor sleep can increase insulin resistance by 16%. So sleep is extremely vital to our health. And it's something that you can have a good workout on a crappy meal diet for the day, but you're not gonna have a good workout if you're sleep deprived. So it's much more acutely harmful, not getting good sleep versus let's say having one bad meal. In other words, it really maybe should be almost above diet in a way, although you will mess up your sleep. If you have a poor diet, cuz you're not gonna get the nutrients that are needed, the minerals to even create and synthesize melatonin. So it's kinda like, you know, the chicken or the egg, they're both obviously important, but sleep should definitely be at the, if you're talking about a pyramid of, okay, this is, you know, most important at the top and least important, sleep's gotta be number one or number two.

Caspar ([41:23](#)):

And it is kind of a, a vicious cycle of sorts because when you don't get that sleep, you crave more kind of calories and crappy food. In a sense, you almost feel like you're hungover off too little sleep and you crave like, you know, junk food and things to fill you up. Then you usually have those like spikes and you know, everything later at night, which causes poor sleep, which causes less sleep again and not enough. And you just keep doing that over and over. And I feel like if you just broke the cycle, not even from the diet standpoint, but started with just the sleep and got a good night, you wouldn't crave it as much. Right?

Dr. DiNicolantonio ([41:57](#)):

Totally. I mean, studies show that if you are sleep deprived the next day on average, you'll consume anywhere from 300 to 500 more calories. So again, yes. You know, you can say, okay, it's as long as you're in a calorie deficit, that's all that matters. But try being in a calorie deficit the next day when you're sleep deprived is probably not gonna happen.

Caspar ([42:18](#)):

Yeah. I mean that, that's what so many people, I feel like miss, especially those that are kind of working out, trying to eat right. And everything, and then just don't sleep well and stay up at night. I think that's such a big, big component of all this. Dr. DiNicolantonio, you know, as we wrap this up, there's been a lot of books and lots of studies and a lot of research out there on obesity. And yet the numbers just keep going, getting worse and worse year after year. Now it's children more and more big food has a big, big grip on a lot of this, but what do you, think's going to turn it around because I feel like I speak to people all the time and tell 'em this stuff and tell 'em to focus on quality. You know what I mean? I got pushback for saying like, you know, free subway sandwiches is a total BS thing. Like, you know, and the free crispy cream and the free Slurpees, like, don't go for it. Those are addictive. Those and I get it, it's one and done. And it's never that. And we got so many people eating that and yet they know it's bad, but they keep going back to it. Is that part of the addictive side? Like what do you see breaking this trend? And finally seeing obesity go down rather than sky rocket up.

Dr. DiNicolantonio ([43:23](#)):

Right. I think it's sort of hard for people to like wrap their heads around, well, just eating this one meal isn't going to lead to, they don't think they can't typically think that far down the line. Right. So it's so

just day to day, I'm just here. I need to eat this really quick to get through the day. They don't have time to think about, okay, will this meal actually fuel me or will it harm me? Right. There's like so busy in their lives. And I think COVID, and everything that's happened has sort of put a spotlight now on our own health and you know, more free time and not working so hard. And I think people are starting to come to their senses that, okay, even if this food is free, I wouldn't put bad engine oil, even if it was free into my car. Cause it's gonna ruin my car, even if it's free. So don't eat the free subway sub or right. As the example you were mentioning, even if it's free, because it's going to slowly metabolically damage your engine, your internal organs. So I think just putting it out there, what you and I are saying right here is gonna help a lot of people in, in that perspective.

Caspar ([44:32](#)):

Absolutely. I love that idea of just stopping before you eat and being like, is this really going to fuel me or hinder me, you know, and you know, it internally, you know, this is not good and it's more gluttonous and it's more just quick fix and it'll taste so good right now, but I'm gonna feel like crap and be tired afterwards. Right. And then just think about what that means, you know, months down the line, years down the line, especially since most of us are at this stage where listen, I understand fat shame, that idea. I don't think there's anything good about shaming, anybody about anything. Right. You know, but the idea of living in a state where your health is absolutely at risk and, and not optimal and everything that goes along with it for so many years to come, that's kind of where I wish people did.

Caspar ([45:19](#)):

And it starts with that one question as you're eating something, is this gonna fuel me? Is this gonna help me guide me towards health? And if health is a priority, which it should be, cuz you and I probably seen so many people that are unhealthy in what that does for the rest of your life, how that impacts everyone around you as well. I think that's where the narrative will start to change a little bit and you're right. We're seeing it. And if there has been a silver lining from the pandemic, it's gotten people to be introspective about these things, about how their actual state of health is and how they can improve it. So I mean, this book is, is really jam packed as all your books are. So where can people purchase this book? It's on Amazon, right?

Dr. DiNicolantonio ([45:57](#)):

Yep. Yep. People can get my books on Amazon. And they're also available my website, Dr. James DiNic.com.

Caspar ([46:04](#)):

Awesome. And I gotta ask you, I always do every single time. What do you have up next? Is the next book like coming out in a few weeks? I, I feel like I, I should, we should just talk about now.

Dr. DiNicolantonio ([46:13](#)):

No, I, I am working on another book.

Caspar ([46:17](#)):

Of course you are.

Dr. DiNicolantonio ([46:18](#)):

But it's probably gonna be six months from now, maybe longer. Probably probably on how to, you know, fix sugar cravings, things like that. Maybe even a cookbook down the line too.

Caspar ([46:28](#)):

I like that. I think we need to keep hitting on these things over and over. Cuz as you know, sometimes it takes repetition. Sometimes it takes, you know, a, a, a few of the same things said in different ways for people to really click. But I do think this is a, a, a big one here because I mean, obesity is one of those things. It leads to so many different things as you wrote about that are incredibly hard to reverse almost, and, and really, really hindering us as a whole and at healthcare. So incredibly important book. Thank you for putting this out there and thank you again for coming on. Can't wait for the next book and the next time you're on,

Dr. DiNicolantonio ([47:05](#)):

Appreciate it, Caspar. Thanks for having me.

Caspar ([47:07](#)):

Yeah. And if you're listening to this and wanna learn more about the obesity fix go to Amazon, pick this up. It is jam-packed. It really does have a lot of information and it empowers you to take control of your health, to lose the weight, to stay fit and you know, really value your health. It's our greatest wealth. So go ahead and pick up the obesity fix until next time. Continue writing your own healing story.