

**Dr. Jason Fung –**

**What do you do if not count calories\_ (Interview 2 Vail 2016)**

So, if counting calories is pretty much useless for weight loss,  
what should you do instead?

I'm Andreas Eenfeldt from DietDoctor.com and I'm here again with Dr. Jason Fung.

Thank you for still being here.

Thank you, it's great to be here.

So, we talked about why counting calories is not really useful in another video.

And now I thought we'd talk more,

about how can you think about diet and weight loss instead,  
in a more effective way?

Yeah, exactly and this is the thing,

you have to understand of course, what causes the weight gain.

So, if calories don't cause the weight gain, then we have to go back  
and think about what is it that really causes us to gain weight?

Because if you know that, then you have a rational strategy to lose weight,  
if you don't understand what causes it, you have no hope.

So, what it comes down to, is that obesity is really not a caloric imbalance,  
it's not that scale in balance of calories, what it is--

It's too simplistic, huh?

It's too simplistic and it's not physiologic.

But what it really is, is an imbalance of our hormones.

So, you have to decide what is it about our hormones that is off, because the body actually doesn't act like a scale, it acts much more like a thermostat.

And we know this, because what happens is that our body sets a certain body weight.

If you try and go above it, if you try and force-feed yourself and go above it, at some point, it will stop you, it will stop you by making you full, it will stop you by making you nauseated, if you try and keep eating, and those are the satiety hormones.

And then you'll lose weight to get back down.

But on the flipside, what we were usually worried about, is that, if you try and go below that set weight, your body actually tries to make you gain back that weight.

And again, we've done studies

and we can measure things like ghrelin, which is the hunger hormones, so people who have dropped weight, their ghrelin is much higher, so they are hungrier.

And it's not just some psychological voodoo, they are actually hungry because their hormones are telling them to eat more.

And if you don't eat, because we can control what we eat, then again, the body actually starts to shut down its metabolism and then we can measure that in terms of its resting energy expenditure.

So then, you're burning less calories, until you gain that weight back up.

So, there's a sort of set point that the body wants--

So can you change that set point?

Yeah, we can and that's how you are going to be successful, because that's the only way that you are going to be in the long-term able to lose weight, is to change that set point down.

But in order to understand that, you have to understand what is setting that set point and really, it's a hormonal issue.

So, everything in our body is set by hormones.

So what is it that is setting that set point?

And probably the major player, but not the only player, so there's probably a host of minor players, but the major player is likely insulin.

And we know this, because when we give insulin, then people gain weight.

And the truth is that I can make you fat, I can make anybody fat, and if you understand that, I just have to give you enough insulin, so I can give you insulin shot--

So if I get an insulin injection, I will get hungrier and eat more?

Well, if you don't eat more, your body will shut down until you gain that weight.

And we know this, because we've used insulin for close to 100 years and when people inject themselves with insulin, they gain weight.

When I give drugs that raise insulin levels or will raise insulin effect, they will gain weight.

On the flipside, if insulin levels fall abnormally low, people will lose weight and it won't matter what they eat, it will only matter what your hormonal level is.

So, like, for example type I diabetes, insulin goes way down

and they lose weight even if they eat, you know, anything.

Yeah, they can eat whatever they want, you can force-feed these people to eat, but they will still lose weight, lose weight, lose weight and probably die.

Now of course, that's an abnormal situation,

but it goes to show you, that this idea,

that it's insulin which causes body weight to be set at a certain point, is still valid.

As opposed to the calories theory we talked about earlier,

if you think calories causes weight gain, it doesn't hold,

but if you say that insulin causes weight gain, then it does hold.

You raise insulin, people gain weight.

Not just on a two-month basis,

but for years at a time you can show this effect.

But it sounds so simple, right?

And still, some people are not at all convinced,

they are still sure that is all about calories. Why is that?

I'm not sure why,

I think it's because people confuse

what I call the proximate cause with the ultimate cause.

And this is where calories counting comes in,

because they say "Well, ultimately it's about calories in, calories out."

But that's not really the case.

So there's two causes of any event.

The proximate cause,

which is what happens immediately before that event

and what ultimately has caused this shift.

So for example, if you take alcoholism as an example, you could say "Well, obviously, it's about too much alcohol in or too little alcohol out."

But that doesn't really help you, that just redefined the question.

What's really the problem is-

So, you would tell an alcoholic to drink less?

Exactly. You could say to an alcoholic "Oh, just drink less alcohol that will solve your problem."

And if somebody question you on that, they'd say,

"Well, this is the first law of thermodynamics of alcohol.

Your body doesn't create alcohol by itself, so, obviously I'm right."

But you're not, because the ultimate cause is that alcohol is an intoxicating drug, there are people who are dependent on alcohol, you need...

So, when you treat that, the alcoholism, which requires not just telling people to drink less alcohol, but requires family support, social support, all those supports.

So, you need to understand more about the background, about the real cause.

Exactly, what set it off in the first place.

So you can fix things, or at least try to help fix things.

Because that's the proximate cause, doesn't tell you anything.

That's like telling to the alcoholic "Just drink less alcohol,

that will solve your problem..." Yeah, sure.

The same thing is telling an obese person then of course,

"Just, eat less."

It's not that simple, you have to understand what is it they have to understand.

What's driving them to more, right?

It's their own body that's driving them to eat more.

We know this, because the ghrelin levels for example, are higher.

So, they are hungry, they are actually hungrier than somebody who is not.

Satiety hormones are lower, for example, the metabolism goes down,  
so something is making them eat more.

And what is that something? That's what's really important.

Because you need to treat the ultimate cause.

And is the same idea if you look at, let's say on airplane.

You could say for example, the proximate cause of an airplane crash,  
is either too much gravity or too little lift.

That's the fundamental law of physics,

so, therefore, according to this logic, that's the proximate cause.

Therefore, to prevent all plane crashes,

you need bigger wings or less weight. Right?

That's the only thing that's going to make any difference.

And if you challenge me I'd say

"You're not going to repeal this fundamental law of physics, are you?

The law of gravity?"

No, but that's not the point, the point is that something caused that.

So, human error, weather.

You are saying is an hormonal issue--

Exactly.

--and the main player is insulin,  
there are other more minor hormones at play as well,  
but the major one is insulin.

So, how do you get insulin down? What's the simple sort of--?

Yeah, exactly, so, once you understand it's all about insulin,  
that's the ultimate cause of what is driving the obesity,  
then you can say, "Well, how do I lower insulin?"

And that's the real question you want to ask,  
when you're trying to lose weight and lower that set point.

So, obviously, things that raise insulin, you want to cut them down.

So things like sugars, refined grains,  
a lot of these refined carbohydrates for example,  
those are all foods that we know stimulate insulin to a much larger degree  
than other foods such as butter, olive oil, that sort of thing.

Therefore if they are having more of an effect on insulin  
and insulin is what drives weight gain, those foods are fattening.

More so, per calorie than say butter or olive oil,  
which really, doesn't drive insulin to a very large degree  
compared... you know, comparatively.

So, but now you have a rational strategy  
because you understand what has caused the weight gain, is insulin,  
now you have strategies.

So, you could go on a low-carb diet and you get the insulin--

Exactly, and on the flipside--

Is that all there is to it?

Well, there's other things on the flipside, there's the low carbohydrate diets, but also, there's a lot of other factors which are at play.

So if you talk about the other macronutrients for example, fat is the macronutrient of the carbohydrates, proteins and fats.

That is the least likely to stimulate insulin, for the same degree of calories for example.

So therefore, it would be advantageous if your goal is to lower insulin, to take a low carbohydrate diet, which is high in natural fats, so LCHF.

And therefore, understanding the etiology of the obesity, leads you to a rational strategy to treat it.

Now, there are another other things that lower insulin as well.

-And you can look at--

-A few short examples?

Things... and they are not all that powerful, but there are things like fiber, which can help reduce insulin spikes, there are things like vinegars and fermented foods for example, that help lower insulin spikes, you can moderate your protein, so, certain proteins can also stimulate insulin. So, you don't want to go crazy on the protein. Right? You can eat zero protein, because there are essential amino acids, but on the other hand, you don't want to just eat protein,



because that can have the same effect.

And that's what a lot of people have noticed,  
that when they eat a lot of protein, their weight loss tends to slow.

So therefore, it's not LCHP, it's not low-carb high-protein,  
you're talking LCHF, which is a high-fat diet.

So those are some strategies,

and then, there are other strategies

that you can add on top of that, to lower insulin,

one of the most effective and most efficient being the intermittent fasting.

Meaning don't eat?

Don't eat, yeah.

So, I would have never guessed that not eating would help with weight loss.

What's funny is that, I asked my son once,

just as a joke, I said, "How are you going to lose weight?"

And he says "Well, that's very easy, just don't eat."

I'm thinking "How did a six-year-old--"

he was like six or seven at the time,

"How did a six-year-old cut through all the bullshit kind of stuff

and get to the real heart of the matter?"

Why can't you just not eat, right?

You are going to be very hungry.

Yeah, I mean there are other things more intricate,

but again, if you think about it in terms of dietary intervention,

that's probably the oldest one in the book.

And one that you really can't argue with.

That is, if you don't eat, you will lose weight.

Right? There's no question it works.

And we did a whole video course series on this intermittent fasting before, and we'll put a link below this video for people who want to check it out.

Any other final words of advice for people to get their insulin down?

Yeah, I think that the thing to understand,

is that there's lots of different ways to the same target. Right?

So the target is not lowering calories, the target is to lower insulin.

So whether you want to do it with intermittent fasting,

whether you want to do it with low-carb high-fat diets

or whether you want to just try other diets,

there are actually other diets which are very high in carbohydrates,

that may still work if they're high in fibers, if they are unprocessed

that they are very, very, very low in sugar,

If they are very low in refined grains for example, that--

Like traditional diets.

Exactly, so they are traditional diets--

Like Mediterranean diet or whatever.

Yeah, like the Okinawans for example, ate a lot of sweet potato.

So the Kitavans which were studied extensively,

they ate I think somewhere around the order of 70% carbohydrate diets,

but if you measure their insulin, their insulin levels were actually very low.

And this was a fantastic experiment actually,

they compared the Kitavans, which had a 70% carbohydrate diet,

but all unprocessed foods--

Low sugar?

Very, very low in sugar, almost--

Some intermittent fasting, perhaps?

Likely, there are periods of fasting as well, although I can't say that for sure.

But their insulin levels were about 5% compared to a Swedish a population.

Meaning that their insulin levels were lower on average

than 95% of the Swedish population,

which explains why they really had no obesity,

because their insulin levels were very low.

But there are different paths to the same goals, so you don't have to be--

I'm like Kitavan I think,

because I did my blood tests a few weeks ago,

and everything was normal except for insulin that was, you know, abnormally low.

So I'm like a Kitavan I think.

That's right.

That's, I think, the result of low-carb and some intermittent fasting.

Right and you probably stay away from a lot of the highly processed foods

that are really everywhere here.

And it's difficult for people to avoid it entirely,

I mean, as much as we say we should do it,

we have to be realistic,

and a lot of people won't be able to avoid,

for convenience sake, for cost sake or whatever.

So, there has to be other strategies that you can bring into play and there are.

There's intermittent fasting, there's other things you can do.

And before we end this, you've written an entire book about this,

I know it's called "The Obesity Code", it just came out.

What can people learn from the book?

Yes, I think that the basis of this book is not so much,

again, not looking at the dieting, but the diet.

So, what causes weight gain, what's the underlying cause,

because once you start to shift your thinking into what is actually driving this problem,

once you know what's driving it, then you can say I'm going to fix this,

I'm going to fix this, I'm going to fix this,

and then you will see results.

As opposed to kind of setting up calories as the fall guy

and attacking calories,

when really it had nothing to do with it. Right?

It's ridiculous to think that somebody

who's eating kale with, you know, olive oil and vinegar,

"Oh, he's going to get fat,

because that kale salad with nuts had like you know 500cal."

It's not the way to get fat.

Exactly. Who gets fat eating kale?

Theoretically, you could, if it was all about calories,

but practically, there's no way.

And this is something that people have always recognized.

Like, if you were to ask your grandmother,

it's like "Oh, all I eat is vegetables and nuts and stuff,

you are not going to get fat, she knew that."

If you were to ask your grandmother what it is that causes a lot of weight gain, then the most likely the answer would be "sugar", everybody knew that, starchy foods and snacking. Right?

Those were the main things that people back then in the 50s, 40s... in the 30s, they knew it all.

Back when people were thin.

Well, yeah and before we started to really change into this whole calorie paradigm, that all calories are the same, they are not the same.

So, for people want to snap out of that, they can get your book, we are going to put a link to it, "The Obesity Code", and you also have a website, called the [intensivedietarymanagement.com](http://intensivedietarymanagement.com).

Yes.

-Thank you very much again—

-Okay, thank you.

--for an interesting interview.

Thank you very much.