

PREVIEW_ Ted Naiman - Hyperinsulinemia (LCC 2016)

This is where it gets really interesting.

Everything before this was boring and stupid, but this is great.

To this you'll have to pay attention to.

We're going to look at glucose and insulin curves

in normal people and obese people.

Check it out.

There's a glucose curve, normal in green, obese in red,

you see spikes as mealtimes...

And actually that's not interesting now, they are exactly the same.

Who cares? This is pointless.

This is interesting - insulin.

Look at normal versus obese,

you've got normal in green, you've got obese in red.

And wow! Holy crap! Can I say holy crap?

Okay, sorry, holy crap... Can I say it twice?

The obese person is twice as high at baseline fasting

and it's double, triple, quadruple after eating.

It's a huge big deal, major difference.

It turns out there's nothing you can measure metabolically

that is this difference between lean and obese - that's the insulin levels.

Let's take a closer look at the rate of insulin secretion.

You've got normal in green, obese in red.

And wow!

Again obese persons, twice as high at baseline fasting
doubled, tripled, quadrupled AUC after eating.

So there's a huge big deal, this is major, this is enormous!

Now once you know, like everybody in this room now knows,
the primary function of insulin is inhibition of lipolysis.

You've got to ask yourself whether these obese people were ever burning fat.

Well that would be never, that's why they are fat.

And when do these people partition all their energy into storage?

And that will be all the time.

And then if you can't tap into stored body fat,
how hungry are you going to be a couple of hours after your last meal?

You are going to be really hungry all the time.

And if you can't tap into stored body fat,
what are you going to be burning mostly on the cellular level,

I mean your mitochondria?

You mostly are going to be burning glucose.

And what you've got right here
is the entire behaviors of obesity explained in one graph.

Always burning glucose,
always hungry for carbs, craving carbs for glucose.

Hungry all the time, eating frequently, low energy,
because you're constantly partitioning all your energy into storage,

always storing fat and never burning fat.

This explains the entire phenomenon of obesity in one slide.

It's huge big deal, very important, this is crucial.

I mean everybody has to know what's going on with insulin.