

## Pastor's Corner – 11-2-2019 – Therapeutic Fasting

In today's Pastor's Corner I'm going to try and summarize the hormonal model of obesity and offer some suggestions of ways to effectively lose weight.

Everybody knows that weight gain is simply a matter of eating more calories than you expend. It's called the Calories In/Calories Out model (CICO for short). According to this model, if you eat 2500 calories in a day and only burn 2000, well those extra 500 calories get stored as fat. To combat weight gain, this model suggests that we need to be in an energy deficit. We can achieve this by eating less and moving more. If we were to reduce our daily calorie consumption (or increase our expenditure through exercise) by 500 per day, well, in a week we will have lost a pound. Makes perfect sense doesn't it? The only problem is it doesn't work.

I think we all know that this is a failed model because almost everyone who struggles with weight gain has tried some form of calorie restricted diet. We've all attempted the eat less, move more solution and it just doesn't work. I'm sure most of us blame ourselves and our own lack of willpower for that failure, never thinking that perhaps the underlying model is wrong.

The reason we have so much trouble losing weight and keeping it off is because as we reduce calories our body responds by decreasing the energy we use. Our metabolism slows down. There are studies going back a hundred years that prove this to be true. We can also see this phenomenon in the contestants from the show *The Biggest Loser*. During their time on the show, these folks are on calorie restricted diets and they exercise like crazy people. But unfortunately, when they go back home, almost all of them regain the weight. We assume the weight comes back because they got lazy, or started eating poorly again, or just couldn't maintain the same level of exercise. Some of that may be true, but the biggest issue is that their metabolisms slowed dramatically, making weight regain inevitable.

The CICO model would have us believe that weight management is all about energy balance and that we gain weight because we're taking in excess energy. But let me ask you this, why do teenaged boys grow? Is it because they eat so much (which undoubtedly they do) or is it because hormones are telling their body to grow and they eat to sustain the demands of those hormones? Of course we know it's the latter. Underfed a teenager and they will still grow. This suggests that metabolism is more complicated than CICO. It suggests that perhaps there is a hormonal component to weight gain.

What hormone might be causing weight gain, you ask? Well, that would be insulin. Insulin is the number one hormone responsible for telling your body to store fat instead of burning it. When insulin is relatively high in your system you are in fat storage mode. No matter how few calories you eat, insulin will still tell your body to store fat. Again, we know this to be true from many scientific studies. If you give an otherwise healthy and normal weight person doses of insulin, they gain weight, even if their calorie consumption doesn't rise. There are some diabetic medications that cause your pancreas to increase insulin production, those meds are also associated with weight gain.

What's the answer here? If the hormonal model of obesity is correct, then the appropriate therapy is to look for ways to reduce insulin in your system. Low carb diets are one way to do this, but there is another way that doesn't require you to significantly change what you eat: fasting.

Most of us think of fasting as a religious thing, but there's actually a lot of health benefits associated with fasting. Contrary to popular belief, fasting doesn't slow your metabolism the same way that calorie restriction does. You don't actually go into "starvation mode" when you skip a meal or two. When you are in a fasted state, your body starts to produce things like growth hormone that keep your metabolism revving high. When fasted your body has a chance to go into clean up mode. It also allows your insulin to drop and you can start using all that stored up energy you've been carrying around. The longer you fast, the more fat you can burn.

For those who are interested in trying out fasting to lose some weight there are several ways to do it.

If you just want to lose a little weight you might start by cutting out all snacking. Where did we get the idea that we have to stuff something in our mouth every 2-3 hours? Stick to 3 meals a day with no snacks. All those mid-day muffins and sugar laden coffees and mid-afternoon pop's all keep your insulin high. By restricting calories to specific meal times your insulin has a chance to return to baseline before you eat again.

If you have a bit more weight to lose, maybe try intermittent fasting. Common IF protocols are things like 16/8, 18/6, 20/4. This approach breaks your day into fasting windows and feeding windows. So, a 16/8 would have you fasting for 16 hours and consuming all your daily calories during an 8-hour feeding window (again, do this in dedicated meal times, not through continual snacking).

If you have a lot of weight to lose you can do alternate day fasting. One day you will eat your regular 3 meals and on the next you'll eat nothing. Then back to an eating day, followed by another fast. Always make sure to drink plenty of water and maybe even drink some electrolytes or add some salt.

Feel free to mix and match these approaches for what works for you.

The goal in all of these approaches is to try and keep insulin levels low. By doing that we should be able to move into fat burning mode (rather than storage). So rather than think of weight management as calorie management, we should be thinking of it in terms of insulin management. Whatever you can do to keep insulin low should help.

For those of us who are healthy and of average weight there is little to no health risk with short term fasting. Obviously, underweight people shouldn't do it. If you are on any medications make sure to talk to your doctor about any plans to start a fasting regimen. Fasting can radically alter your hormone profile and have dangerous complications with some meds. Talk to your doc.

I'm interested in putting the theory to the test and organizing an unofficial fasting for weight loss trial. Let me know if you want to join me – for science!

Happy Sabbath  
Pastor Tyler