

Pastor's Corner – 7-6-2019 – Things I have no business commenting on: Insulin

I have titled this short series “Things I have no business commenting on” because I am not a medical professional and I want to make it very clear that I (along with tens of thousands of online personalities and Adventist pastors) am not qualified to give health advice. Always consult your physician before following the health advice of a theologian.

Last week in my Pastor's Corner I talked a little bit about diabetes and I pointed out that type 2 diabetes is a metabolic disease resulting from insulin resistance. I talked about how insulin is the primary hormone behind diabetes. It is the hormone that takes sugar from your blood and deposits it in the cells where it can be used as energy. But if you have chronically high insulin (because of chronically high carbohydrate consumption) your cells can start to reject the glucose deposits that insulin wants to make. That leaves more glucose in the blood (high blood sugar) which means you need more insulin to clear out that glucose and keep everything in balance. The cycle continues unless you do something drastic to break it (like taking meds or insulin). Last week I suggested that cutting carbohydrates from your diet could be a way to break that cycle (I'll touch on that a bit more in a minute).

Fear of diabetes isn't the only reason to try and keep your insulin levels under control. Not only does it regulate blood sugar, it is also the primary hormone associated with fat storage. You can Google the details but the Cliff's Notes version is that when you have elevated levels of insulin your body is in fat storage mode. Insulin also inhibits the hormones that trigger your body to release fat to be used as energy. What this boils down to is if you have a diet that is high in carbohydrates and you eat three times a day with sugary snacks (or pop or juice) in between your insulin is almost always elevated and you never get into that fat burning mode. Even if you are in a caloric deficit. This is why it is so difficult to lose weight on a low fat, high carbohydrate diet eating multiple meals throughout the day.

Recent research into metabolism and weight loss is showing that hormones play a significant role in whether or not you can lose weight. It's not just a simple matter of calories in vs calories out. It seems that the best way to approach weight loss is through a diet that manages insulin as well as calories.

Ok, so let's assume that you want to dial back on your carbohydrate consumption in order to keep insulin levels low. Maybe you want to lose some weight, or maybe you have diabetes and want to scale back on your meds and insulin injections. The first

step is to TALK TO YOUR DOCTOR (I put it in caps so you wouldn't miss it – aren't I helpful?). Once you get the thumbs up from the guy in the white coat you can try a couple of things.

One option is to adopt a very low carbohydrate diet by cutting out all grains, fruit, and starchy vegetables (and of course sugars). You can still eat fibrous vegetables on a very low carb diet. Things like broccoli, spinach, and cauliflower are fine. They are relatively low in total carbs and so they don't jack up your insulin. There's lots of good options in the plant kingdom.

Now, you might be worried that you can't live without carbs (or complex carbs) but never fear. Your body was designed for just such an occasion. Believe it or not, your body can run on both gasoline and diesel fuel. Ok, not literally but it can run on two different fuel sources. The first and primary fuel source is glucose which comes from your carbs). It's a fast burning fuel, gives you good burst energy (think gasoline) and you can store about 2000 cal. worth in your muscles. The other fuel source is fat. It's a slower burning fuel, great for endurance (think diesel) and you have a near infinite supply of energy stored (each pound of fat contains about 3500 cal. worth of energy). The catch is that your body doesn't like to burn fat as long as it has glucose to use – it prefers gasoline over diesel. But on a very low carb diet you will be limiting the amount of glucose available to your body and force it to shift into fat burning mode where it will begin to tap into those rainy day, oh no the locusts ate our harvest, reserves.

It can be a rough transition at first. Especially if you have never done it before. But I assure you that your body will adapt and it gets easier. I have personally been on a very low carb diet off and on for about 5 years. I've run 2 marathons while consuming less than 20g of carbs per day (that's less than what is found in 1 slice of bread). I've even gone for a month or so eating zero carbs (ok, not quite, I had 2tb of coffee creamer every other day). The point is, you don't actually need carbohydrates to survive. Once your body learns how to shift from burning carbs to fat you can chug along quite happily.

Now, if you aren't eating carbs where should you get your calories from? You have only 3 options to choose from (called macronutrients) fat, carbohydrates and protein. Protein isn't used by your body for energy, it's used for building tissue. Fat and carbs are used for energy. So, if you want to cut carb consumption, you'll need to increase fat. I know that sounds scary. Fat is more calorie dense than carbs but it's also more satiating. Contrary to popular opinion, fat doesn't make you fat. Insulin is the fat storing hormone and a high fat low carb diet helps control that. Sure, you can over-

eat on a high fat low carb diet and gain weight, but without the blood sugar roller coaster it's actually quite a bit easier to control appetite and cravings will subside. So, yeah, one option to keep insulin low is to try out a very low carb diet.

The second option (and you can do both) is to try intermittent fasting. Intermittent fasting is when you limit your calorie intake to a small window each day. A common one (and the one that my wife and I have begun practicing) is 18/6. This means you fast for 18 hours and only eat during a 6 hour window (we do this 4 days a week). What happens when you do this is that you give your digestive system a much-needed break. But you also have a long period where your body isn't being flooded with insulin. That can give your cells a chance to regain some of their insulin sensitivity. It can also allow your body to start to produce those hormones that trigger fat loss.

Again, this is something that takes getting used to and my personal experience has shown me that intermittent fasting is easier on a very low carb diet than on one with lots of carbs (fewer cravings on). If you are able to do both of these things you can deliver a one-two punch to insulin resistance and weight gain.

Again, before you try any of this, talk to your doctor. But the things I'm suggesting aren't new or crazy. This is essentially the same approach that was recommended by our campmeeting speaker when he talked about reversing diabetes. This is also the same basic approach used by Sanford hospital with their Profile diet (without having to buy their shakes). Many physicians have been able to help their patients scale back or reverse metabolic syndrome with this kind of approach.

As Adventists we refer to the health message quite a lot but we tend to make it all about vegetarianism and caffeine. Unfortunately, our food supply is radically different today than it was back in Ellen White's day. Our disease profile has changed along with our eating profile. If you have insulin resistance, the last thing you want to do is eat a diet high in grains, fruit, potatoes, muffins, rice and cereal (this is my opinion – ymmv). These are all high carbohydrate foods which trigger that whole insulin deal (which is bad for weight loss and people with insulin resistance). My point is that health is not about whether you are a vegetarian or not. They're gads of unhealthy, overweight, diabetic vegetarians. More and more, scientists are discovering that diet isn't one-size-fits-all. You need to find the diet that works best with your unique genes, digestive profile and gut microbiome. If your current eating plan hasn't led you towards health, maybe it's time to try something different. A new approach to diet just might pay off. Happy Sabbath, Pastor Tyler