

Burn Fat, Not Sugar to lose weight

By Ron Rosedale, MD

When we talk about what to eat, we must first realize who, or rather what, is eating. In fact, we, ourselves, are not really doing the eating. It is our cells that eat. When we put food in our mouth, that is just a continuation of the transport of food from the farms to the grocery store then into our mouth; the food is then transported to our cells by our bloodstream. It is our cells that really do the eating and that need the fuel and the parts to regenerate themselves. And cells can only eat two kinds of food for fuel. They can eat sugar or they can eat fat, and their health and your health will be determined by the primary fuel that they burn.

I have been asked to summarize in a single sentence what would best promote health. It is this: Health and lifespan is determined by the proportion of fat versus sugar people burn throughout their lifetime. The more fat that one burns as fuel, the healthier the person will be, and the more likely they will live a long time. The more sugar a person burns, the more disease ridden and the shorter a lifespan a person is likely to have.

Becoming a Fat Burner

How does one learn to, and how does one become a fat burner? How does one change their primary fuel from sugar to fat? One gets good at most anything by doing it frequently. You can become a good tennis player by playing tennis frequently and a good golf player by golfing frequently. Likewise, your body becomes adapted to burning fat by burning fat frequently. However, most people become very adapted at burning sugar; your body continues to want to "keep playing" sugar, to burn more sugar, even when you are not eating. When you're sleeping at night, your body then prefers to burn sugar and it gets that sugar by breaking down proteins in your body, which means lean body mass, which includes muscle and bone. I call that metabolic momentum.

Your body continues to like to do what it has become accustomed to doing. If you have burned sugar throughout the day, you prefer to burn sugar at night even when you are not eating. Your body does not store very much sugar and prefers to hold onto much of it and, therefore, you'll continue to manufacture sugar by a process called gluconeogenesis from lean body mass. You store fat -- and, in many people, lots of it -- in your "cupboard" and not very much sugar, because fat is the fuel that your body would prefer to store and later to burn to stay healthy.

However, when you eat sugar and fat together, your body will burn sugar first. I

believe that it burns the sugar off because that is one way to get rid of it. Sugar causes damage by glycosylation and having it around too long is extremely damaging and accelerates aging. Therefore, your body might get rid of sugar to minimize the damage caused by keeping it around. You'll have to burn off almost all the sugar that you eat before you can start burning fat and, in most cases, that means that the fat you have eaten with sugar gets stored. Your body continues to become adapted to burning sugar and not fat. People get fat not so much because they eat fat, but because they have forgotten how to burn it, and because of poor hormonal communication.

Leptin Resistance

Leptin resistance causes an increase in visceral fat. This smothers your liver from receiving proper hormonal signals. Your liver is a very important metabolic organ and when it cannot listen to signals properly -- for instance from insulin -- it makes too much sugar contributing to insulin resistance and diabetes.

Insulin and Leptin Resistance

Obesity is the price you pay to keep your blood sugars down. If you continue making fat out of sugar, it takes sugar out of your bloodstream, keeping your blood sugars low. You continue getting fat and having poor insulin sensitivity, but are not yet diagnosed with diabetes. However, your fat stores start leveling off. When you stop making fat and finally stop becoming more and more obese, your blood sugars rise because you have no place left to dump it into. A popular class of diabetic drug (the PPAR gamma agonists) works by making more fat cells to dump sugar into. They make you fatter but, once again, do not address the primary problem. It is important to note that, contrary to the belief of almost everyone, the public and medical professionals alike, diabetes is not a disease of blood sugar: It is a disease of insulin signaling.

Lowering blood sugar without addressing the primary problem of insulin resistance gets you nowhere at best, and most of the time will make you worse. Just as you can become hard of hearing, so too do your cells become "hard of hearing." Two hormones that they have a difficult time listening to over time are insulin and leptin.

Just as increased noise exposure can cause increasing deafness, so does increasing insulin and leptin exposure cause your cells to become more and more deaf to the life-promoting messages that insulin and leptin are trying to deliver to them.

A Note on Health

We are really a colony of cells. We are not a single individual. We are 10 to 15 trillion individual cellular lives that are trying to live in harmony. It is only a testament to the fine behavior orchestrated by hormonal orders that we perceive

our 10 trillion lives as a single individual. We are really a finely tuned ant colony or beehive.

Our 10 trillion lives are like an extremely cooperating military. The military is controlled by officers handing out orders. The officers comprise a hierarchy; some are generals, some are corporals, and some are captains. There are sergeants and privates. Insulin and leptin would most definitely be considered generals giving orders to many other hormones, many other subservient officers, which in turn must give orders to others. I would consider cholesterol to be perhaps a corporal only because cholesterol itself can be made into more prominent officers, into other hormones. Glucose is nothing more than a private listening to orders. It isn't the glucose that you want to change per se, but orders given to it. The same goes for cholesterol. If you want to be healthy, you must change the orders being handed out. That means changing hormonal signals as high up the hierarchy as one can. Fortunately, it is not that difficult to change those orders, or have those orders better heard and understood, especially of the two important generals: leptin and insulin.