

Insulin Resistance and a Plant-Based Diet

By Penina Taylor

Everyone agrees that diabetes is a huge problem in the Western world, especially Type 2. Type 2 diabetes, or what used to be called adult-onset diabetes, is no longer only an adult problem and is the seventh greatest killer of adults in the United States. Left unchecked, diabetes leads to nerve damage, kidney disease, heart and blood vessel diseases, as well as stroke, heart attack, and loss of limbs.

What is not agreed upon, even by the experts in the field, is what is the best diet for a diabetic to follow. It has long been the reasoning that if diabetes is, in essence, too much sugar in the blood, a diabetic should cut out all sugar, including carbohydrates, which are broken down into sugar. This will keep the blood sugar levels in control and at a level that will not destroy organs.

But to understand why this may not be a healthy approach at all, one first has to look at what sugar does in our body, and why diabetes keeps the sugar in the blood instead of allowing the body's cells to pull the sugar out of the blood and use it to fuel our body, as it's designed to do.

Sugar, the simplest form of carbohydrate, is a fuel for our body. We need it to function. It's why mother's milk is sweet – our brains need carbohydrates to grow and function properly. Our cells need it to reproduce and to do their jobs. Sugar (at least in natural forms) is not, in and of itself, the evil it's made out to be today. Without this fuel, our bodies will shut down. But how does our body use the sugar we eat and what is actually happening when we have diabetes?

When we eat carbohydrates, a message is sent to the brain indicating that we've just refueled (yes, the metaphor of a car works quite well here – without fuel a car can't run, and without fuel in our system, our thought processes and other functionality becomes diminished and we eventually shut down). This message triggers the release of an enzyme called insulin. Insulin is the key that unlocks the doors of our cells allowing the sugar in the bloodstream to enter the cells and give them the energy they need to do their jobs.

But sometimes the lock on the cell doors gets gummy and doesn't respond to the key, causing the door to remain locked and not allowing the cells to take the sugar from our bloodstream. This is what is called 'insulin resistance'. When we are insulin resistant, the sugar remains in our bloodstream causing all kinds of damage to our major organs, as well as starving our cells at a very basic level.

If we could figure out what is gumming the locks on the cell doors and remove that, we would be able to cure the problem of Type 2 diabetes (Type 1 diabetes is a different issue, caused by the complete failure of the pancreas to create insulin at all).

In recent years, low-carb diets have become very popular, especially for diabetics, because by not consuming carbohydrates, the dieter maintains fairly good blood sugar control. The only problem is that this does not actually un-gum the locks on the cells and although blood sugar control is good, the cells are not getting the fuel they need. This is why low-carb diets rely on high fat consumption to create an alternative fuel source for the cells, and since it is a much more difficult process for the cells to utilize fat as their main fuel source, there is often the added benefit of weight loss. Sounds like a good deal, except that our brains and bodies need carbohydrates to function properly and there are a lot of other health issues associated with these diets. But the most significant issue is that it doesn't cure insulin resistance. It only serves to control the blood sugar levels on a temporary basis. One "cheat" and the person is faced with the same problem – the body's cells cannot access the sugar and the raised blood sugar levels begin to wreak havoc with the major organs of the body.

So back to the question of what is gumming up the locks on the cell doors. [Studies have shown](#) that the locks are gummed up with animal fats. When diabetics are placed on a whole food plant-based diet, not only do they gain blood sugar control, they can actually reverse their diabetes – the locks on the doors to the cells actually respond to the insulin "key" and remove the sugar from the blood. By ungumming the locks to the cells which cause insulin resistance, a diet free from animal fats provides the answer to this growing plague.

There are lots of reasons to choose not to consume animal products, but the fact that it heals the body of one of the biggest killers of our times is a pretty compelling one. And in today's age where there are so many plant-based meat and dairy substitutes, it's not the sacrifice it once was. A few small changes to the way we eat can eliminate insulin resistance and all of the health problems associated with it.

In addition to her many talents, Penina Taylor is a certified nutritionist.