

DIABETES IS NOT A DISEASE OF BLOOD SUGAR

By Ron Rosedale M.D.

Diabetes is not a disease of blood sugar!

As I have stated previously, and one concept that I would like to make well-known to save thousands and perhaps millions of lives as soon as possible, is that diabetes is not a disease of blood sugar, but a disease of insulin and perhaps more importantly leptin signaling, and until that concept becomes well-known in the medical community, articles like the one published in this issue will fortunately continue to be published revealing the inadequacy of current conventional medical treatment for chronic diseases such as diabetes and heart disease, and the falsity of their advice about nutrition.

Typically treatment concentrates on fixing a symptom, in this case elevated blood sugar, rather than the underlying disease. Symptoms are generally the way that nature has taught our bodies to deal with a disease. For instance, a runny nose is a symptom designed to cleanse the nose and sinuses of viruses and bacteria when one has a "cold". Taking a decongestant just inhibits our own body's mechanism for dealing with that infection and will therefore prolong it.

Similarly, treatments which concentrate merely on lowering blood sugar for diabetes while raising insulin levels can actually worsen rather than remedy the actual problem of metabolic miscommunication. It just trades one evil for another.

Elevated insulin levels are highly associated and even causative of

heart disease,
peripheral vascular disease,
stroke,
high blood pressure,
cancer,
obesity and
many other so-called diseases.

Since most treatments for (type 2, insulin resistant) diabetes utilize drugs which raise insulin or actual insulin injections itself, the tragic result is that the typical, conventional medical treatment for diabetes contributes to the manifest side effects and the shortened lifespan that diabetics experience.

To Be Victorious, One Must "Know Thy Enemy."

Traditional medicine appears certainly not to, especially with diabetes. For two millennia diabetes has been considered to be a disease of sugar. Despite centuries of scientific progress including the discovery of insulin and more recently leptin, that has not changed. It appears that medicine has made little to no progress with that myth. Furthermore, the actual purpose of insulin is widely, if not uniformly, mistaken even among the medical community.

The Main Purpose Of Insulin Is Not To Lower Blood Sugar.

It may surprise you, as well as your doctor, that insulin's main role is not to control blood sugar. The control of blood sugar is mostly in an upward direction, not a downward direction. A few types of tissues and cells in our body such as red blood cells require glucose for energy (the rest can and even desires to burn fat or byproducts of fat metabolism called ketones). Thus it is important to always have a little bit of glucose dissolved in our blood.

The trick throughout most of our ancestral history was to keep sugar in our blood from falling too low since there was not that much sugar to be had. Most starches and grains that would turn into sugar are mostly indigestible unless cooked. You might even strain your jaw trying to eat an uncooked potato.

The major source of sugar was fruit, and that was mostly available only seasonally, and even then we had to work and exercise to obtain it, burning the sugar and preventing it from spiking very high. The hormones cortisone, epinephrine, norepinephrine, glucagon, and growth hormone make sure that we always have some glucose available to the tissues that need it.

High Blood Sugar Was A Rarity.

However when our blood sugar did become elevated it was a sign that we had more energy available than we could currently burn and thus it would be a good idea to store the extra. "Waste not, want not." Food was not always available; feast or famine was the rule. When blood sugar becomes elevated it is a signal for insulin to be released to direct the extra energy into storage.

A small amount is stored as a starch called glycogen in our body, but the majority is stored as our main energy supply -- fat. Thus, in this regard insulin's major role is not to lower sugar, but to take the extra energy when available and store it for future times of need. Insulin lowers glucose as a side effect of directing the extra into storage.

Insulin's purpose may go far beyond even that. Insulin is being researched very heavily by scientists who study the biology of aging. It has been found that when insulin is kept low either through diet or via genetic manipulation animals live much longer and the rate of aging is significantly reduced. This appears true in many different species of animals from single cell yeast, to worms, to flies, and appears likely to be true also in primates.

Apparently, low insulin is a signal that energy is scarce and animals need to focus their energy needs on maintaining and repairing themselves so that they can outlive the famine to be able to reproduce at a future, more opportune time. Insulin's purpose has gone from controlling blood sugar, to directing energy stores, and now to actually regulating the rate of aging including the major symptoms of aging -- diabetes, heart disease, obesity, osteoporosis, dementia, and even cancer.

All Chronic Disease Is Due To Miscommunication Of Messages Between And Within Cells.

As stated in a prior newsletter, all chronic disease is due to miscommunication of messages between and within cells. Certainly diabetes is a disease of insulin miscommunication, and

recognizing insulin's true purpose certainly goes much deeper to the roots of diabetes and other chronic diseases. Yet we can go even deeper.

Insulin May Not Even Be The Most Important Hormone In Diabetes Or Other Chronic Diseases Of Aging.

That honor likely goes to leptin.

It appears that the hormone leptin is largely responsible for the accuracy of insulin signaling and whether one becomes insulin resistant or not.

Leptin, a relatively recently discovered hormone produced by fat, tells the body and brain how much energy it has, whether it needs more (saying "be hungry"), whether it should get rid of some (and stop being hungry) and importantly what to do with the energy it has (reproduce, upregulate cellular repair, or not).

Recent compelling research reveals that the two most important organs that will determine whether one becomes (type 2, insulin resistant) diabetic or not are the liver and the brain and it is their ability to listen to leptin that will determine this (perhaps link to article in prior newsletter).

Fat, and leptin, strongly influences chronic inflammation and therefore diseases associated with this including heart disease, Alzheimer's, and diabetes.

Leptin largely influences, if not controls, the manifest functions of the hypothalamus in the brain, including:

Reproduction,
Thyroid function,
Adrenal function and the
Sympathetic nervous system.

With the discovery of leptin, fat has gone from merely an ugly energy storage depot to an essential endocrine organ. It is commonly thought that the brain tells the body what to do. I believe that I could now make a very good argument that fat, by way of leptin, tells the brain what to do, and is really in the driver's seat.

The Enemy Is Not Only Foreign To The Medical Community; It Appears To Not Even Be Recognized.

It is no wonder that (type 2) diabetes has not been conquered.

By some estimates, diabetes has increased over 700% in the last 50 years. This reveals two very important facts.

Diabetes cannot be primarily a genetic disease, since the prior statistic has taken place within the same generation and presumably essentially the same genetics.

Something that we have been doing is obviously wrong and needs to be changed.

That something is diet.

It is difficult, or perhaps even impossible, to actually prove that something is true. However, it is not difficult to prove that something is false. Americans have been following (at least partially), for the last 50 years, the nutritional recommendations of high complex carbohydrate, low saturated fat diet. from the

American Dietetic Association,
American Heart Association, and the
American Diabetes Association of eating a

That, in itself, is an oxymoron since most of those "complex" carbohydrates, such as potatoes, rice, cereals, pasta, and breads rapidly turn to sugar and the excess sugar (glucose) rapidly turns into long-chain saturated fatty acids (palmitic acid; "palm oil"). Concomitant with that recommendation the incidence of diabetes and obesity has skyrocketed and has become one of the worst worldwide epidemics the world has ever seen.

Eating a high "complex" carbohydrate, low saturated fat diet for health and longevity has been shown, and perhaps even "proven", to be wrong. Minimal common sense would say to try something else.

Diabetes Is A Disease Of Nutrition, And It Is The Science Of Nutrition That Must Treat It.

Science is telling us that we must eat a diet that maximizes the accuracy of insulin and leptin signaling allowing cells, you, to better listen to their life-giving messages. (The need for those hormones to have to "yell" to be heard is reduced and the levels of insulin and leptin are therefore lowered.)

That would be the eating plan emphasizing good fats and reduced nonfiber carbohydrates/starches as outlined in my book "The Rosedale Diet" Doing so will greatly improve and even reverse type 2 "insulin resistant" diabetes, heart disease, hypertension, many other chronic diseases of aging, and even aging itself, as many of my patients who have been able to totally eliminate the use of their drugs, including insulin, can attest. Following those guidelines will let you -- and your genes -- "be the best that you can be".