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Reversing the Metabolic Syndrome with Simple Lifestyle Changes

The Metabolic Syndrome

One of the greatest challenges to our healthcare system is the dramatic rise in the incidence of both obesity and diabetes. In the US and Canada, diabetes has increased over 500% during just the last generation. Over 70% of the adults and over 30% of our children are considered to be either overweight or obese. In spite of spending over 30 billion dollars each year on diets and weight loss programs, the rate of obesity has tripled in this country in the past 30 years. Even more concerning is the fact that the Center for Disease Control (CDC) has projected that one-third of our children born after the year 2000 will become diabetic. If they happen to be Black or Hispanic, nearly 50% are projected to become diabetic. The fact that diabetes is the leading cause of amputations, kidney failure, neuropathy, adult blindness, and premature death due to cardiovascular disease, creates great concern.

The obesity and diabetes epidemics have a common underlying cause—insulin resistance. Dr. Gerald Reavens, who is a physician and researcher from Stanford University, has identified a constellation of problems related to

this underlying problem of insulin resistance. They are primarily central obesity, elevated blood pressure, elevated triglyceride and cholesterol levels, low HDL or good cholesterol, increased blood clotting, and inflammation; all of these lead to a very high risk of developing heart disease and diabetes. Dr. Reavens initially labeled this as Syndrome X. Today, we refer to this as the metabolic syndrome or the insulin resistance syndrome.

Because of our poor diet and lack of physical activity, our bodies simply become less and less sensitive to insulin. As this insulin resistance increases, our bodies compensate for this situation by making more and more insulin. As our blood insulin levels begin to rise, we literally “tip over” into an abnormal metabolic state. Rising blood insulin levels cause us to gain an unusual amount of weight around our middle (central obesity), our blood pressure to rise, lipid abnormalities (high triglyceride levels and low HDL or good cholesterol—called dyslipidemia), increased fibrinogen levels (increasing clotting), and increased inflammation. These changes lead to an accelerated aging of our arteries and premature death due to cardiovascular disease. Over 10 to 15 years, our pancreas just can’t keep making this abnormally high amount of insulin, and insulin levels begin to fall as blood sugars begin to rise. The overwhelming majority of these individuals will develop type 2 diabetes. In fact, over 90% of all diabetes is the result of this process.

When a physician first diagnoses patients with type 2 diabetes, over 60% of them already have major cardiovascular disease. Nearly 80% of our diabetic patients will die prematurely from a cardiovascular event like a heart attack or stroke. This was true in 1970, and it is still true today. In spite of all of our medication and advanced medical treatments for diabetes, we have done nothing to decrease this horrible statistic. Why is this? The main reason is because we are diagnosing diabetes too late. These individuals have had the metabolic syndrome and the subsequent accelerated aging of their arteries for years before they actually become diabetic. Physicians are beginning to recognize these early signs of insulin resistance long before their patients become diabetic. An expanding waist size, increasing blood pressure, increasing triglyceride and cholesterol levels, and resistance to weight loss are just a few of the early signs you have become insulin resistant.

Healthy for Life Program

Since poor lifestyles is primarily the reason individuals are developing insulin resistance, it only makes common sense that developing a healthy lifestyle, which improves insulin sensitivity, is the answer. This has led me to pay more attention to the earlier signs of the metabolic syndrome in my patients and offer them a chance to firmly establish these healthy lifestyles that actually improve insulin sensitivity. To help patients, I developed the Healthy for Life Program located at www.releasingfat.com. Here I promote a triad of healthy lifestyles (healthy diet that promotes eating those good, low-glycemic carbohydrates, good fats, and good proteins; modest exercise; and nutritional supplementation). All of these improve insulin sensitivity through different mechanisms. The net effect is to improve insulin sensitivity enough to actually allow these individuals to “tip back” into a normal metabolic state. This means that their insulin levels would

drop naturally and that all the negative health consequences noted above would be reversed. In my clinical practice, I began to note that not only would these individuals begin to lose weight from around their middle, but also their blood pressure would decrease, their triglyceride and total cholesterol would decrease, their HDL or good cholesterol would increase, their inflammation would decrease, and they would significantly decrease their risk of both heart disease and diabetes.

The greatest challenge for me was to help my patients firmly establish these new, healthier lifestyles. Trying to help my patients change their behavior and replace those old, poor lifestyles with new and clinically effective healthier lifestyles has probably been the most difficult challenge of my career. However, my patients became excited when they realized that they never had to go hungry, that they felt great and actually had more energy, that their health parameters improved, and that they began losing weight when they were not even trying. They were then consistently able to make these changes in their lives. The use of my internet-based behavioral modification program was key to their success. They were evaluated, educated, motivated, and held accountable through the Healthy for Life Program located at www.releasingfat.com. I also was able to successfully use healthy meal and snack replacements that were low-glycemic and did not spike their blood sugar. I also had them take high-quality, complete and balanced nutritional supplements as they also began a modest aerobic exercise program.

The Clinical Trials

After witnessing the amazing success in my patients, I decided to become involved in a twelve-week clinical trial that would prove what I had been witnessing in my own practice. The initial trial involved 25 participants who had the

metabolic syndrome. This study was performed under the guidelines and direction of the Western Institutional Review Board, which is under the direction of the FDA. The participants were guided into these new, healthier lifestyles at www.releasingfat.com. Here they received daily emails and weekly trainings from me. They were required to fill out their own "Lifestyle Journal" where they recorded exactly what they ate, how they took their supplements, and how they exercised. Their journal was automatically graded and also reviewed by their own personal lifestyle coach. They took their high-quality nutritional supplements throughout the 12 weeks of the clinical trial. For the first month, they consumed 2 low-glycemic meal replacements and 1 low-glycemic nutritional snack bar. They also ate 1 regular low-glycemic meal and 1 regular low-glycemic snack, which did not spike their blood sugar. During the first month, participants also avoided all sugar, flour, bread, cereals, rice, pasta, and potatoes. They also began a modest aerobic exercise program for 30 minutes 5 times per week.

During the second and third month of the clinical trial, the participants consumed 1 low-glycemic meal replacement and 1 low-glycemic nutritional snack bar. They ate 2 regular low-glycemic meals and 1 regular low-glycemic snack. They continued their exercise program and also began eating those healthy low-glycemic whole grains, cereals, rice, and potatoes. All 25 participants were able to firmly establish these new, healthier lifestyles. They also were guided to avoid those foods that were dangerous and could quickly spike their blood sugars and that lead to an increased appetite and carbohydrate cravings. They all commented on how easy the program was and how great they felt. In fact, all 25 participants were able to do all three aspects of the Healthy for Life Program at least 80% of the time. Here are the results of this clinical trial:

- Their weight decreased an average of 13 pounds
- Their BMI (Body Mass Index) decreased 2.2 points
- They lost an average of 2 ½ inches from their waist (all the weight loss was from their abdomen)
- Their systolic blood pressure dropped an average of 10 points
- Their diastolic blood pressure dropped an average of 6 points
- Their total cholesterol decreased an average of 17%
- Their LDL or bad cholesterol decreased an average of 20%
- Their Triglyceride levels dropped an average of 27%
- Their insulin sensitivity index increased an average of 12%
- Their blood insulin levels dropped an amazing 40%
- Their C-Reactive Protein (a measure of inflammation in the body) decreased an average of 12%

In fact, all 25 participants did not have any evidence of insulin resistance at the end of the study. They were all able to reverse their metabolic syndrome and "tip back" into a normal metabolic state. Since the metabolic syndrome is a pre-clinical diabetic state, they significantly decreased their risk of developing diabetes. There are several pharmaceutical companies that would love to have these kinds of results with the use of their medications. What is amazing is the fact that these individuals were able to accomplish these kinds of results by simply improving their lifestyles.

The clinical results were so exciting that this same clinical trial was repeated at the University of Colorado Medical School in Denver. Again, this was a clinical trial that was

under the guidelines and direction of the Institutional Review Board (IRB) and FDA. This trial was strictly third party and was under the direction and total control of Dr. Holly Wyatt, an endocrinologist and researcher at the University of Colorado. This time there were 60 participants who had the metabolic syndrome. Fifty-three participants completed the clinical trial with the following preliminary results:

- Their weight decreased an average of 12 pounds
- Their BMI (Body Mass Index) decreased 2.1 points
- They lost an average of 2 ½ inches from their waist (all the weight loss was from their abdomen)
- Their systolic blood pressure dropped an average of 6 points
- Their diastolic blood pressure dropped an average of 8 points
- Their total cholesterol decreased an average of 5%
- Their Triglyceride levels dropped an average of 16%
- Their fasting blood insulin levels dropped 32%
- Their insulin levels during an oral glucose tolerance test at 120 minutes decreased by an amazing 44%
- Their insulin resistance as measured by the HOMA index decreased by 32%
- Their C-Reactive Protein (a measure of inflammation in the body) decreased an average of 27%
- Urinary Isoprostanes, a marker of oxidative stress, dropped an average of 29%
- Plasma Antioxidant Reserve (PAR) increased 20%
- Vitamin E levels increased an average of 30%

All of these changes are consistent with improvements in the markers of the metabolic syndrome and offered each participant significant improvements in their cardiovascular and metabolic health.

Conclusion

You don't just wake up one day and have diabetes. It is the result of years and years of poor health habits. The combination of inactivity and a poor diet results in individuals developing insulin resistance. These two clinical trials prove that individuals do have choice. Even if you are genetically predisposed to developing diabetes, I believe that over 90% of type 2 diabetes can and should be prevented. Once the participants stopped spiking their blood sugars, their natural appetites decreased and carbohydrate cravings disappeared. They were literally "freed up" to eat healthy, delicious food. Several of the participants even questioned the difficulty of never going hungry, feeling great and having more energy and focus, seeing health parameters improve, and losing weight without even trying. Does this sound too good to be true? The clinical trials prove that it is true.

Dr. Holly Wyatt, a physician and faculty member of the University of Colorado's Department of Medicine, Division of Endocrinology, Metabolism and Diabetes, supervised this study and stated, "This is a very promising program that produced some very positive changes in the cardiovascular risk factors associated with the metabolic syndrome." Dr. Wyatt went on to say, "The shifts in dietary habits to low-glycemic meals, nutritional supplements and modest increases in physical activity were not only effective but also are realistic behavioral changes many people can make."

Hopefully, this clinical trial will be reported in a peer reviewed medical journal in the very near future. It is truly the answer to the diabetes and obesity epidemics worldwide.