The Blood Sugar Solution: Food, Fitness, and Supplements Transcript

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Introduction to Blood Sugar Problems

Research involving people with type 2 diabetes has shown that it significantly reduces blood glucose levels as well as hemoglobin A1C levels. In some studies, berberine was as effective as metformin, the common diabetes drug, in lowering blood-glucose levels A typical dosage is 500 mg Welcome to Health Breakthroughs with Dr.

Stengler. I'm Dr Mark Stegler and each episode we cut through the noise to bring you practical, science-backed insights for more energy, better health and a life that feels like yours again.

Hey everybody, Dr. Mark Stengler here. In this video, I want to talk about the problems with elevated blood sugar because it's so common in America and actually around the world.

So let me go through the different types of problems of elevated sugar like pre-diabetes, diabetes, and med box syndrome. and what we can do about to solve this problem.

Let's start with pre-diabetes, because that's the stage before type 2 diabetes. And this is diagnosed when your fasting blood sugar glucose level is between 100 and 125 mg per deciliter.

Or if you're measuring the hemoglobin A1C, which is an average over 2-3 months, that is 5.7% and 6.4%.

Prediabetes: Risks and Symptoms

It's astounding to think that almost 44% of US adults have pre-diabetes. And pre diabetes is important to address because obviously it increases the risk of type 2 diabetes.

But more than that, when you have prediabetes, it also increases your risk for cardiovascular disease, chronic kidney disease and fatty liver disease.

Being overweight or obese also just overall increases you risk death or mortality. Now, for most people, they may not have obvious symptoms of pre-diabetes.

However, you may experience fatigue, weight changes like weight gain, especially around the midsection and hips. You may have darkened patches or skin tags, often on the neck, the armpits or the groin.

Now let's talk about type 2 diabetes. Now type two diabetes is diagnosed when your fasting blood glucose is above 125 milligrams per deciliter or your A1C is about 6.4% and almost 15% of US adults have type-2 diabetes It's the eighth leading cause of death in the United States, so it has to be taken seriously.

So contributing factors obviously are overweight or obesity, physical activity, and diet. Diet really is the big one. Now, common symptoms include fatigue, increased thirst and hunger, frequent urination, blurred vision.

You could have neuropathy, which is tingling or numbness in your hands and feet. It could be poor wound healing. But type 2 diabetes really increases dramatically your risk of serious diseases such as cardiovascular disease, chronic kidney disease.

Certain cancers are at increased risk if you have type 2 diabetes.

Type 2 Diabetes: Diagnosis and Complications

Various eye diseases like diabetic retinopathy, for example. Gum disease. You can have sexual and bladder dysfunction and dementia. Type 2 Diabetes definitely affects the brain and degeneration and inflammation of the

nervous system.

You've done everything you were told to do and something still feels off. Health Breakthroughs with Dr. Stengler, we go beyond symptom management to explore integrative, science-backed approaches to the issues that medicine too often overlooks.

Chronic fatigue, brain fog, gut dysfunction, inflammation, hormone imbalance, and healthy aging. If you're ready for real answers and practical tools to support your health naturally, follow Health breakthroughs of Dr Stegler on Doctor Talks or wherever you listen to podcasts.

Now let's talk about metabolic syndrome. Metabolic syndrome is a group of conditions that increase the risk of coronary heart disease, type 2 diabetes, and stroke.

And about 33% or one in three adults in the United States has metabolic syndrom. Now metabolic is diagnosed when someone has three or more of the following.

First, your waistline is over 35 inches in women or 40 inches and men. That's measured around the belly button area. You have high blood pressure, you have elevated blood glucose levels, and you may have High triglycerides, low good HDL cholesterol and metabolic syndrome is also called insulin resistant syndrome because just like with prediabetes and diabetes, at the root of it is insulin resistance.

Now let's talk about the root causes of insulin resistance. Again, pre-diabetes, type 2 diabetes, and metabolic syndrome all share this common mechanism of Insulin Resistance.

Metabolic Syndrome and Insulin Resistance

So let us talk how insulin normally works so we can see where the dysfunction comes from. Insuline helps to move glucose from the bloodstream into cells, where it is used for energy.

So with insulin resistance your muscle, your fat, and your liver cells become less responsive to insulin. This is the resistance that occurs. Now the pancreas produces more insulin to try and compensate.

Therefore glucose remains in your bloodstream instead of entering your cells to produce energy. And as a result, you're blood glucose or blood sugar levels are going to rise.

Now, when you have elevated insulin levels, it also contributes to increased fat storage, inflammation, elevated cholesterol and triglycerides, high blood pressure, and other metabolic imbalances.

Now over time, especially in people who are overweight and inactive, the pancreas may begin producing less insulin, worsening blood sugar control. And that ultimately could lead you not on the path to just type 2 diabetes, but type 1 diabetes where you need insulin replacement.

Now let's talk about the role of excess body fat. Excess fat tissue, especially that deep abdominal fat, releases inflammatory chemicals called cytokines.

Now these cytakines interfere with insulin signaling at the cell level. Central obesity, which is fat around the abdominal organs and liver, is especially harmful.

Since excess weight is often related to diet and lifestyle, these areas should be the primary focus of treatment. Now let's talk about dietary approaches that improve blood sugar.

Research consistently shows that dietary changes can significantly improve insulin resistance. Therefore, you're going to help pre-diabetes, type 2 diabetes, and metabolic syndrome.

In some cases, especially with substantial weight loss, blood-sugar levels can normalize even with type-2 diabetes.

Diet Strategies for Better Blood Sugar Control

Now, there's several dietary patterns shown in research to be effective. The Mediterranean diet, the DASH diet a ketogenic diet. A low carbohydrate diet also a high protein, low fat diet and plant based diets.

All these have shown and researched to. Be effective in lowering glucose levels and improving insulin resistance. But the most successful diet share these features.

They have reduced carbohydrates, especially refined carbohydrates. There's the avoidance of calorie-dense processed foods, the ultra-processed foods. The elimination of sweetened beverages, especially your soda pops.

And by the way, this should include your artificial sweeten beverages. High diets that have a high fiber intake are helpful. Diets that had adequate protein intake or effective as well.

Then, in addition, you can have fasting strategies. Some individuals combine dietary changes with intermittent fasting. So, for example, restricting calories for set periods of time, like two days a week, or time-restricted eating, when you eat within a daily window period of such as 8 to 10 hours in a day.

All of these approaches have been shown to improve blood sugar control and weight in people with type 2 diabetes. Among them, the Mediterranean diet actually is the most extensively studied for overweight individuals who have type-2 diabetes Now let's talk about the powerful role of exercise.

Exercise is essential for improving insulin resistance. But how exactly does exercise improve blood sugar levels and insulin resistant? Well, when you look at the studies, there's a few different mechanisms.

First, they enhance GLUT4 transporters. These are trans porters which allow glucose to enter muscles without insulin. Second, exercise improves insulin signaling inside cells so it's received better by the cells.

Exercise for Insulin Sensitivity

Third, it reduces muscle and liver fat so you don't need as much insulin, also It improves mitochondrial efficiency where cells require less insulin, reduces inflammation, decreases that visceral body fat.

And so these are all the six different mechanisms of how exercise improves insulin resistance. Hey everybody, I want to take just a quick moment and invite you to my website drstengler.com.

Here we have the supplements that we've been using with our patients for many, many years. High quality and high potency supplements, very pure. So if you're looking for high quality supplements where you can notice a difference, both in how you feel and on your lab tests, go to our website at dr.stegler dot com.

What is a good exercise plan? Well, the most effective approach combines aerobic and resistance training. A rollback exercise should be about 240 minutes a week, and it's better if it is moderate to vigorous intensity.

Resistance training, also very helpful. Two to three sessions per week on non-consecutive days, research has shown to be effective. And consider high intensity interval training which is a great option where it involves short bursts of vigrous exercise.

Of course, if you have certain health conditions or diseases, consult the health care provider before you start a new exercise program.

Supplements for Blood Sugar Support

Let's talk about the supplements I like to use with patients to help support blood sugar control and improve insulin resistance. There are certain supplements which have research supporting their use in insulin resistant and type 2

diabetes.

Let us talk one of my favorites, berberine. Berberin is a well studied herbal extract. Now research involving people with type two diabetes has shown that it significantly reduces blood glucose levels as well as hemoglobin A1C levels.

In some studies, berberine was as effective as metformin, the common diabetes drug, in lowering blood glucose levels. A typical dosage is 500 mg two to three times daily.

Now, lower doses may be used with highly absorbable formulations. In my line, I typically use a phytozone formulation showing a much higher blood absorption.

Other supportive supplements you should consider. Glucomanin, which is a type of soluble fiber taken before meals helps to bind up excess glucose and helps make you feel full.

Cinnamon extract at 250 to 500 mg a day is good. alpha-lipoic acid about 900 milligrams daily, chromium 250 to 500 micrograms daily is good, and there's also Janema silvestra which is a herbal extract.

A 25% extract has been shown to reduce glucose levels as well. So when you use these supplements combined with the proper dietary changes, the regular exercise, we see that patients achieve really dramatic results in their pre-diabetes, their type 2 diabetes, and their metabolic syndrome.

Again, remember all these conditions share that common root issue of insulin resistance.

Lifestyle Changes and Closing Remarks

And so if you address the root causes with the weight reduction, modifying your diet, regular exercise, and using the right supplements, you can significantly improve your blood sugar regulation and overall metabolic health.

Again, you've got to be consistent with these lifestyle changes. The supplements do work, but to get the best effects, You've gotta improve the diet and the lifestyle.

And also, lifestyle factors which affect blood glucose regulation. That includes stress management. Well, hope you liked this video. Hit the like button.

I have other videos on blood sugar regulation, diabetes, and weight, And look for those on my YouTube channel. Thanks for listening to Health Breakthroughs with Dr.

Stengler. If today's episode resonated with you, please follow the show, share it with someone who needs it, and leave a review. It helps more people find us.

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