



Blood Sugar & Diabetes 101

CAUTIONARY NOTE: Blood Sugar & Diabetes 101 Guide is designed to promote awareness about blood sugar and diabetes control and to provide information, tools and techniques that will enable individuals to make healthy lifestyle changes.

The coaching techniques are not intended to replace medical advice or to address any individual's specific medical problem(s). **Always seek the advice of a physician before beginning any diet, exercise, or nutritional program.** Diabetes and pre-diabetes are serious medical conditions. It is important that program participants do not reduce, change or discontinue any medication or treatment without consulting their physician.

©2021, Janet Sanders & Great Life, Inc. All Rights Reserved

No part of this report may be reproduced, stored in a retrieval system, or transmitted by any means without the written permission of the author.

Table of Contents

| | |
|--|-----------|
| DIABETES COACHING FOR SUCCESS | 3 |
| THREE Roadblocks to Conquering Diabetes..... | 4 |
| SIX “Secret” Components for Conquering Diabetes..... | 6 |
| EIGHT Diabetes Coaching Steps that Get Results..... | 7 |
| STEP #1: LEARN HOW YOUR BODY WORKS | 8 |
| EIGHT Diabetes Terms You Should Know..... | 9 |
| NINE Risk Factors for Type 2 Diabetes..... | 10 |
| TWELVE Symptoms of Type 2 Diabetes..... | 10 |
| TEN Steps On the Path to Type 2 Diabetes..... | 11 |
| FIVE Symptoms of Insulin Resistance(and why so many people have “belly fat”)..... | 12 |
| FOUR Health Tests To Find Out Where You Are..... | 13 |
| ONE Easy Thing You Can Do Today to Assess Your Risk for Diabetes & Other Chronic Diseases..... | 14 |
| THREE Tests to Keep Your Body Parts Intact..... | 15 |
| ELEVEN Tests Your Heart Will Love You For..... | 16 |
| THREE Tips to Be an Awesome Sugar Detective..... | 18 |
| FIVE Common Natural Sugar Substitutes..... | 20 |
| NINE Things to Love About Stevia..... | 21 |
| EIGHT THINGS TO LEARN ABOUT SPLENDA..... | 22 |
| TEN Observations about Our Love Affair with Grains, Flour, Bread, Pasta, Rice & Potatoes..... | 23 |
| FIFTEEN Ways to Snack Smart..... | 24 |
| Establish New Success Habits | 25 |
| TWO Ways Physical Activity Lowers Blood Glucose Levels..... | 26 |
| FOUR Types of Exercise to Choose From..... | 26 |
| EIGHT Exercise Safety Guidelines for Diabetics..... | 27 |
| EIGHT Tips to Get You Moving..... | 28 |
| SIX Tips To Help You De-Stress to be Your Best..... | 29 |
| Establish Your Ongoing Support Team | 30 |
| EIGHT People to Coach, Teach, & Motivate You on Your Journey to Achieve Better Blood Sugars..... | 30 |
| ENJOY LIFE | 31 |
| FIFTEEN Little Luxuries for Lifestyle Changes That Will Last a Lifetime..... | 31 |
| THREE Sure Fire Ways to Succeed..... | 32 |

DIABETES COACHING FOR SUCCESS



Diabetes coaching is the missing link in the traditional approaches to diabetes management.

It provides the clarity, commitment, concrete tools, consistent action, community of support, and courage (self empowerment) to help individuals control their blood sugars and reach their goals.

THREE Roadblocks to Conquering Diabetes

If you are diabetic, pre-diabetic or struggling with yo-yo weight gain my guess is that you have probably tried a “diet” plan or education program to get control of your weight and/or blood sugars.

And if you still continue to struggle, here’s the deal:

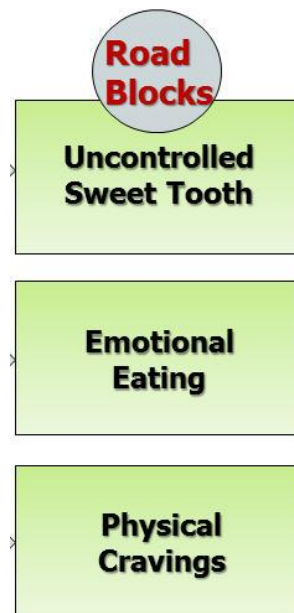
It doesn’t matter if it is the greatest diet in the world.

It doesn’t matter if it has lots of great recipes or fabulous advice.

There is not a diet in the world that will work if you can’t stick with it!!

You see, unfortunately, when all is said and done we are only “human” and most of us come to diabetes with behaviors & habits, that I call “Roadblocks to Diabetes Control™”.

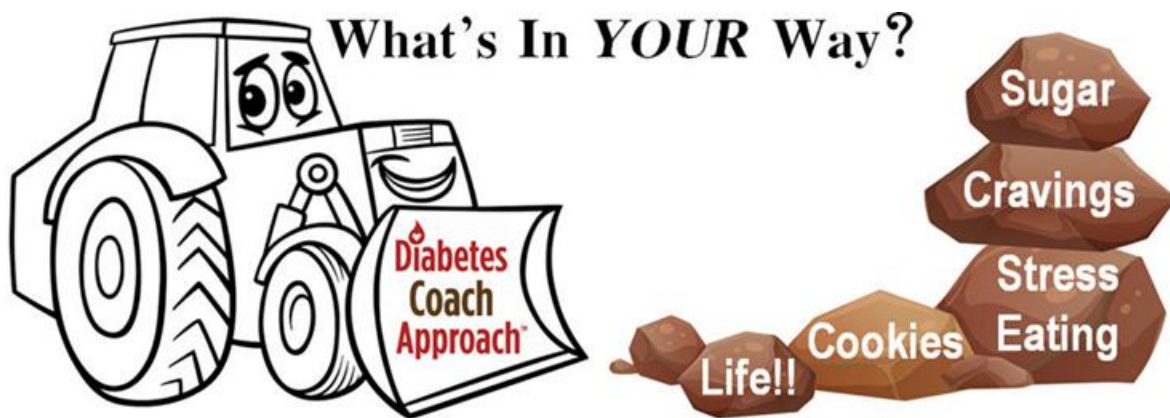
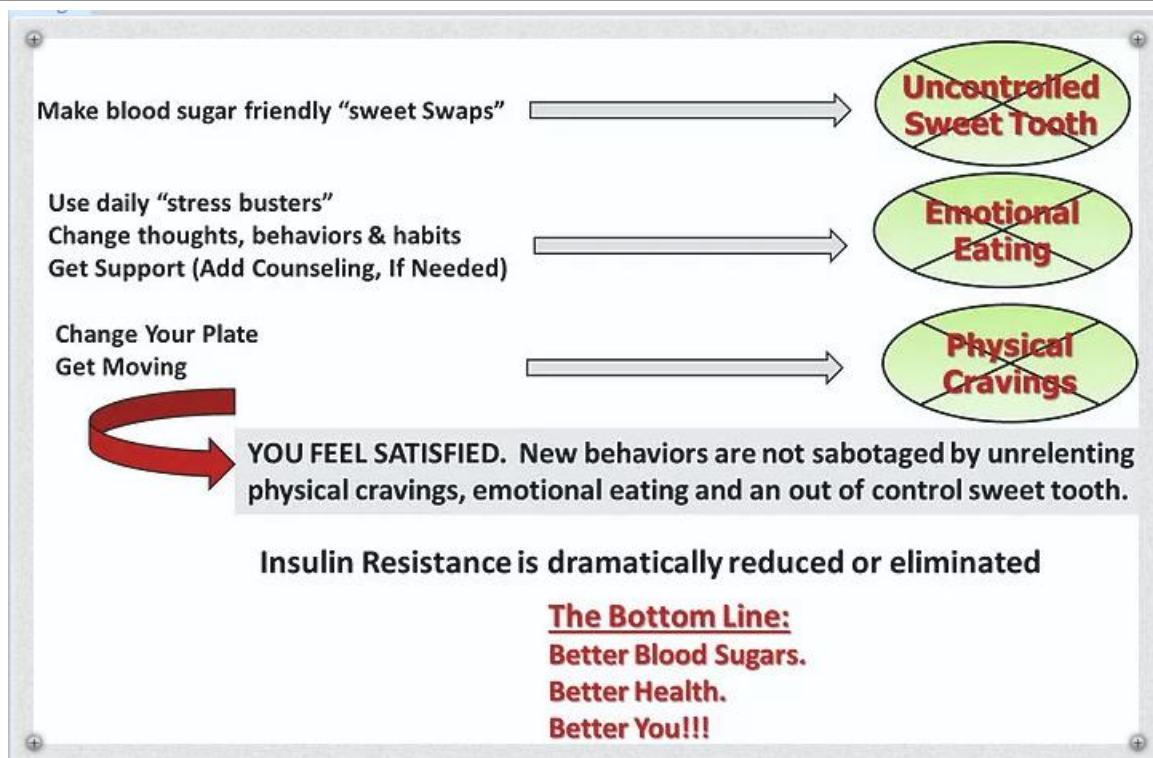
HERE ARE THE THREE MOST COMMON ROADBLOCKS TO SUCCESSFULLY CONTROLLING BLOOD SUGARS:



Any one of these will totally sabotage your efforts to stay on track!!

Is there an answer? YES!! Read On.....

Cleaning Away the Roadblocks Changes EVERYTHING:



SIX “Secret” Components for Conquering Diabetes



What's the secret to Conquering Diabetes? SIX essential coaching components that I call the “the SIX C’s™” of Diabetes Success Circle Coaching™:



When these elements are all present you CAN'T fail. If you want to clear away the roadblocks and conquer diabetes, you must have these six coaching components on your side.

EIGHT Diabetes Coaching Steps that Get Results

The 6 C's are the foundation of the **BSC's LIVE FREE Coaching System** and are an integral part of what makes the coaching process successful. The first letters in each of the EIGHT steps form two distinct acronyms: LIVE and FREE.



LIVE: The first steps in the coaching system are designed to empower you to change your daily habits, particularly when obstacles get in your way. You will learn how to balance your blood sugars and how to stay on track and motivated in the face of life's daily challenges. These steps include:

- ❖ **Learn How Your Body Works**
- ❖ **Implement a Food Plan**
- ❖ **Validate Your Intent with an Action Plan**
- ❖ **Energize with Daily Success Habits**

FREE: Once you have begun to implement new lifestyle habits, it becomes important to totally free yourself from old behaviors so that you can continue to move forward. The final four steps in the coaching system encompass this process. These steps include:

- ❖ **Find out Where You Are and Monitor Your Progress**
- ❖ **Reverse Behaviors Sabotaging Your Health**
- ❖ **Establish an Ongoing Support Team**
- ❖ **Enjoy Life**

STEP #1: LEARN HOW YOUR BODY WORKS



You don't need to become a medical expert to gain a basic understanding of the relationship between diabetes and how your body functions.

But, if you want to be proactive in making informed decisions about your own health and lifestyle, you will need to have both a general understanding of what is going on inside your body and information about the options available to you.

Gaining information about diabetes & healthy living will empower you to:

- ❖ Make the connection between your physical condition and the behaviors that affect your physical health,
- ❖ Work effectively with your medical providers,
- ❖ Make informed decisions,
- ❖ Connect with needed resources, and
- ❖ Take action to achieve your lifestyle goals.

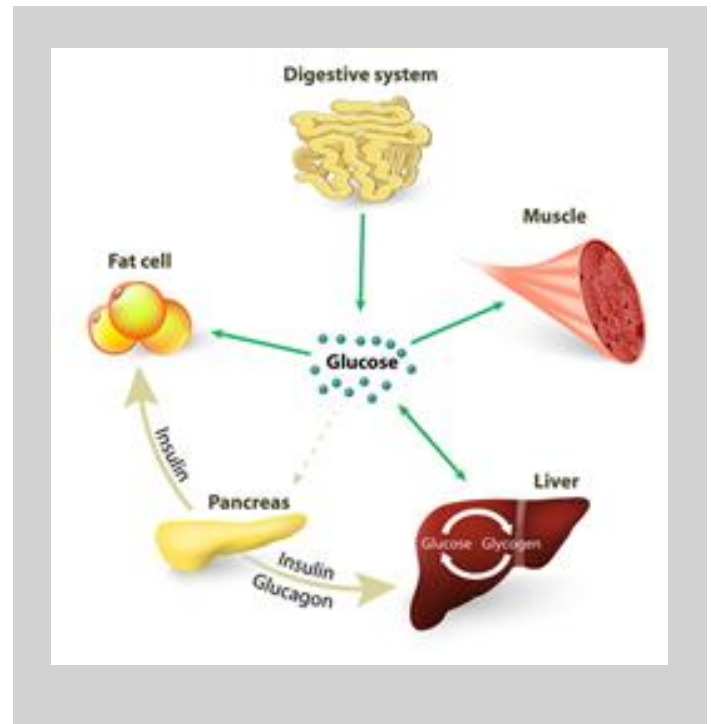


EIGHT Diabetes Terms You Should Know

❖ **Diabetes:** a disease in which the body does not produce or properly use insulin. (the hormone that is needed to convert glucose into the energy needed for daily life.) The two major forms of diabetes have different causes, although both are characterized by elevated blood sugars and insulin problems.

❖ **Type 1 Diabetes:** the pancreas either no longer produces insulin or it doesn't produce enough of it.

❖ **Type 2 Diabetes:** your pancreas makes insulin, but you experience high glucose levels either because 1) The pancreas may not be producing insulin in sufficient quantity, 2) The body's cells may have lost their ability to respond to insulin - even if the pancreas is producing enough insulin, or 3) A combination of these two factors



❖ **Pre-Diabetes:** a condition where an individual has levels of sugar in the bloodstream that are higher than normal, but not yet high enough to be classified as diabetes. Pre-diabetes can be detected with a number of different blood tests

❖ **Pancreas:** The pancreas is a large gland that is located in the abdomen, behind your stomach. The main function of the pancreas is to produce insulin, digestive enzymes, and other hormones. To maintain the proper balance of glucose in your blood, the pancreas produces two hormones: insulin and glucagon.

❖ **Insulin** is a hormone produced by the beta cells of the pancreas that helps move blood sugar (glucose) into the cells of your body. Insulin is like a key that opens up the locks on your body's cells so that glucose (blood sugar) can get inside and be used for energy. Insulin also plays a role as a fat storing hormone.

❖ **Glucagon:** a hormone produced by the ALPHA cells of the pancreas released when your blood sugar levels are low to stimulate the liver and muscles to break down stored glycogen and release the glucose into the bloodstream for energy.

❖ **Insulin Resistance:** a condition in which cells fail to respond to the normal actions of the hormone insulin.

NINE Risk Factors for Type 2 Diabetes

If you have any of the following risk factors, (or a combination of factors) you may be at an increased risk for diabetes. You should be particularly vigilant for the symptoms of diabetes and getting tested. If you have any of the items below, talk with your physician about your risk for diabetes and whether you should be tested.

- ❖ Family History
- ❖ 20% over a healthy weight or obese
- ❖ Sedentary Lifestyle
- ❖ You are African-American, Latino, Asian, Native American or Pacific Islander
- ❖ Diabetes during pregnancy or had a baby who was 9 lb. or more at birth
- ❖ Low HDL (good cholesterol) or high overall cholesterol levels
- ❖ Very high blood pressure or very high triglycerides
- ❖ Higher than normal Blood glucose (blood sugar) levels (“pre-diabetes”)
- ❖ Polycystic ovary syndrome (PCOS)

TWELVE Symptoms of Type 2 Diabetes

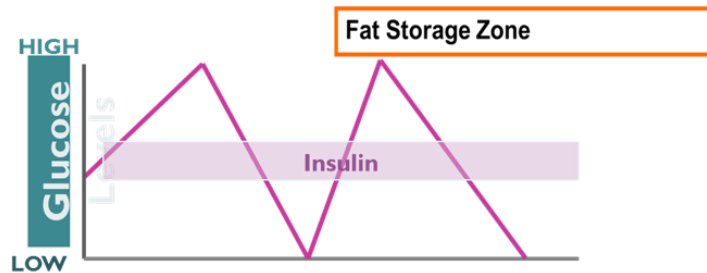
Diabetes has a number of symptoms that you might not suspect are associated with the disease. If you have one or more of these symptoms, discuss diabetes testing with your physician.

- | | | |
|---------------------------|--|---|
| ❖ Frequent urination | ❖ Frequent infections | ❖ Tingling or numbness in hands or feet |
| ❖ Excessive thirst | ❖ Blurred vision | |
| ❖ Unexplained weight loss | ❖ Slow to heal cuts & bruises | ❖ Recurring skin, gum or bladder infections |
| ❖ Unusual hunger | ❖ Vaginitis or recurring yeast infections in women | |
| ❖ Extreme fatigue | | |
| ❖ Irritability | | |

TEN Steps On the Path to Type 2 Diabetes



- ❖ The habitual overconsumption of simple carbohydrates like flour and sugar causes chronic glucose and insulin spikes.
- ❖ Insulin, is also a fat storage hormone, and chronic high insulin levels increase the storage of fat (as belly fat)



- ❖ If the cycle of spiking glucose and spiking insulin continues over a long period of time, the muscle, fat and liver cells begin to stop responding properly to insulin. This is the beginning of **insulin resistance**.
- ❖ Now, less glucose is getting into the cells and more remains floating in the bloodstream, setting the stage for “high blood sugar levels”.
- ❖ In this situation, the body tries harder to bring glucose levels down to normal by producing even more insulin --which results in more fat storage. while also blocking the appetite-control hormone “leptin”. So your brain doesn’t get the “I’m full” message and you are constantly hungry, (usually for more carbohydrates.)
- ❖ Too much fructose makes the situation even worse in two ways. First, It goes right to your liver where it starts to manufacture fat,(which triggers more insulin resistance and high insulin levels that drive your body to store more fat). Too much fructose can also cause a condition called “fatty liver” which generates inflammation. (leading to more weight gain and worsening insulin resistance)
- ❖ As insulin resistance worsens,more insulin is produced and more and more fat is stored. Finally, the pancreas starts to tire.This is when **pre-diabetes** appears as a warning sign that something is wrong.
- ❖ Most likely either your cells have become insulin resistant and insulin can no longer function effectively to transport glucose into your cells or the cells in your pancreas that produce insulin are becoming worn out and your pancreas is no longer producing enough insulin. Or it could be a combination of both.
- ❖ Left untreated, this situation can lead to full blown **type 2 diabetes**.

FIVE Symptoms of Insulin Resistance(and why so many people have “belly fat”)

Below is a list of some of the most common symptoms of insulin resistance, a pre-cursor to diabetes. It is very possible to change the progression of diabetes by making lifestyle changes. If you are experiencing one or more of these symptoms, speak with your physician, especially if you have risk factors for diabetes.

- ❖ **Fatigue.** The failure of insulin to work properly and the inability of your cells to get sufficient glucose eventually take its toll on the body. Some people with insulin resistance are tired in the morning or afternoon, others are exhausted all day.
- ❖ **Low blood sugar.** Prolonged periods of hypoglycemia, accompanied by many of the symptoms listed here, especially physical and mental fatigue, may be symptoms of insulin resistance.
- ❖ **Sleepiness.** Many people with insulin resistance get sleepy immediately after eating a meal containing more than 20% or 30% carbohydrates. This is often a pasta meal, or even a meat meal that includes potatoes or bread and a sweet dessert.
- ❖ **Increased weight and fat storage.** For many people, one of the first signs of insulin resistance, is excess weight around their middle as insulin stores excess glucose as fat in a desperate attempt to save their life. In males, a large abdomen is the more obvious and earliest sign of insulin resistance. In females, it can be a large abdomen and/or prominent buttocks.



- ❖ **Increased triglycerides.** Individuals typically may have stores of excess triglycerides in their arteries as a result of insulin resistance.

Now you know that Type 2 diabetes is a progressive disease that starts way before high blood sugars begin to show themselves in testing..

To make a long story short, to avoid type 2 diabetes or turn it around (if you already have it) you need to get control of your blood sugars and get rid of insulin resistance.

It's OK to have some blood sugar spikes every now and again, but for vibrant health, you want to get your pancreas “purring” like a Rolls Royce engine. And that means eating the right foods and getting some exercise.

And you can do this, I am going to tell you how, and if you need it, **The Fast Track to Diabetes™** on-line program can guide you every step of the way.

FOUR Health Tests To Find Out Where You Are

- ❖ **Fasting Plasma Glucose:** After an 8 to 12 hour fast, your blood is drawn and blood sugar levels measured. Per new ADA guidelines, A reading of less than 100 mg/dl is normal; 100 to 125 indicates pre-diabetes and 126 or higher is a sign of full blown diabetes. If your blood glucose level is abnormal after the fasting plasma glucose (FPG) test, you could have what's called "impaired fasting glucose. ("IFG")
- ❖ **Oral glucose tolerance test:** During this test, your blood sugar is measured after a fast and then again 2 hours after drinking a beverage containing a large amount of glucose. Two hours after the drink, if your glucose is higher than normal, you have what's called "impaired glucose tolerance. ("IGT")
- ❖ **HbA1c Screening Test:** A blood test that measures the level of Hemoglobin A1C in your blood. This test is utilized to indicate your average blood glucose over a 2-3 month period. Pursuant to ADA recommendations a normal HbA1c level is less than 6% for non-diabetics and a GOAL for diabetics is less than 7%. Studies show that people with diabetes who keep their A1C levels below 7% are less likely to have diabetic complications.
- ❖ **Thyroid Testing:** The thyroid is the body's accelerator, controlling the tempo of all its internal processes. When the gland doesn't work hard enough, a condition develops called hypothyroidism. When it starts to work too hard, hyperthyroidism develops. Thyroid disease is a leading contributing cause of high cholesterol, and left untreated, it can increase your risk of heart attack, stroke, osteoporosis, cancer and depression. Thyroid disease can be difficult to diagnose by symptoms alone because many other illnesses cause the same symptoms.

A TSH test can be taken to determine if your thyroid is working properly. This test measures thyroid-stimulating hormone, made by the pituitary gland to keep the thyroid under control. Criteria vary, but a TSH higher than 5 mIU/ml usually indicates hypothyroidism, and a TSH below 0.1 indicates hyperthyroidism. If you have glucose imbalances or diabetes you are at higher risk for thyroid disease and should talk to your doctor about testing. If your TSH test is within normal ranges, but your symptoms persist, you should consider speaking to your physician about testing the levels of the T4 and T3 thyroid hormones in your blood.

ONE Easy Thing You Can Do Today to Assess Your Risk for Diabetes & Other Chronic Diseases

- ❖ **Measure Your Waist circumference:** Waist circumference is one of the most practical tools to assess abdominal fat for chronic disease risk.



A high waist circumference or a greater level of abdominal fat is associated with an increased risk for type 2 diabetes, high cholesterol, high blood pressure and heart disease.

What is it about abdominal fat that makes it strong marker of disease risk?

The fat surrounding the liver and other abdominal organs, is very metabolically active. It releases fatty acids, inflammatory agents, and hormones that ultimately lead to higher LDL cholesterol, triglycerides, blood glucose, and blood pressure

Studies suggest that health risks begin to increase when a woman's waist reaches 31.5 inches, and her risk jumps substantially once her waist expands to 35 inches or more. For a man, risk starts to climb at 37 inches, but it becomes a bigger worry once his waist reaches or exceeds 40 inches.

To properly measure your waist circumference:

The tape measure should be placed directly on your skin, or on no more than one layer of light clothing. •

The correct place to measure your waist is horizontally halfway between your lowest rib and the top of your hipbone. This is roughly in line with your belly button

Breathe out normally and take the measure

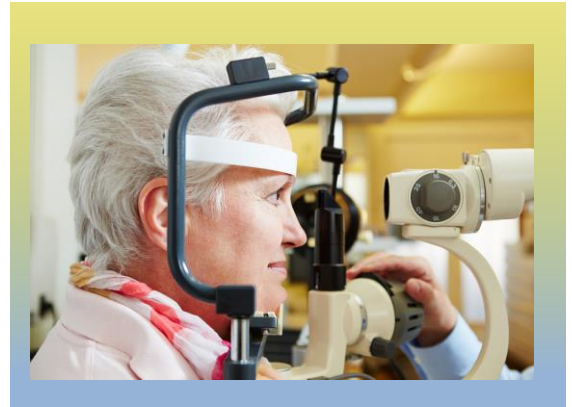
Make sure the tape is snug, without squeezing the skin.

The most important next step to take is to discuss your finding with your physician so that together you can plan a course of action to further assess your health and take steps to reduce your risk for chronic illness.

THREE Tests to Keep Your Body Parts Intact

- ❖ **Dilated Retinal Eye Exam:** Over time, diabetes can damage the tiny blood vessels of the retina, (a light-sensitive tissue in the back of the eye that receives and transmits focused images to the brain) and abnormal blood vessel growth may occur.

This condition is called Diabetic Retinopathy, a complication of diabetes. Retinopathy can be detected through a dilated eye exam performed by an optometrist or an ophthalmologist.



- ❖ **Foot Exams:** Peripheral neuropathy (nerve damage in the legs and feet) and vascular disease (poor circulation) are major factors contributing to diabetic foot problems. Together, these problems make it easy to get ulcers and infections that, without care, could lead to amputations. The best defense against these complications is tight glucose control, taking good care of your feet, and seeing your physician right away if foot problems arise.

- ❖ **Microalbumin Measurement:** This is a test that measures small amounts of protein in your urine. This test is important because diabetes can damage the tiny blood filtering units in your kidneys where waste products from your blood are removed and eliminated in your urine. This allows protein molecules in your blood, such as albumin to leak into the urine. There are no early symptoms, but your doctor can determine the presence and extent of early kidney disease by measuring the amount of protein in your urine.



ELEVEN Tests Your Heart Will Love You For



Lipid Profile” (Total Cholesterol, HDL, LDL, Triglycerides)

- ❖ **Total Cholesterol:** Cholesterol is a waxy substance produced by the liver or supplied in the diet, through animal products such as meat, poultry, fish and dairy products. Cholesterol does not dissolve in the blood, so it must be carried through the bloodstream by proteins, called lipoproteins. Total cholesterol should be less than 200 mg/dL
- ❖ **Low Density Lipoprotein (LDL)** LDL carries cholesterol through the blood and is often called the “bad” cholesterol. When there is too much LDL cholesterol in the blood, it combines with other substances to form deposits on the blood vessel walls. This causes a narrowing of the blood vessels and increases the risk of heart attack. LDL should be less than 100 mg/dL
- ❖ **High Density Lipoprotein (HDL)** Often called the “good” cholesterol, HDL removes cholesterol from the blood vessel walls and carries it back to the liver to be disposed of. HDL cholesterol can be raised by regular exercise or weight loss. It can also be improved by consuming a daily diet low in sugar starch and trans fat. HDL should be greater than 40 mg/dL (Men) or greater than 55 mg/dL (Women)
- ❖ **LDL-P:** Cholesterol is fatty oil that can’t travel around in your bloodstream on its own. It needs to be packed into what are known as “particles.. The particles are what deliver the bad cholesterol inside the walls of the artery to form plaque, and the more particles you have, the greater your risk for heart disease. This number is known as LDL-P and you want this number to be less than 700. Small dense particles are more likely to damage our artery wall as they can enter more easily than larger LDL particles. So you also want to include testing for levels of sdLDL to understand if you have a large number of small dense LDL particles.
- ❖ **LP(a):** Another type of cholesterol you might want to be aware of, especially if you have diabetes or pre-diabetes, is Lp(a) cholesterol. With an attached “corkscrew” called apoprotein (a), Lp(a) is an inherited trait that can increase risk of heart disease and stroke. Having high levels of this form of LDL, can be un-nerving because there is very little that can be done in terms of lifestyle to bring Lp(a) down. But, the good news is that being even more vigilant with of your other lipid numbers can help with your overall risk for heart disease. If you are diabetic or pre-diabetic, it is important to work with your doctor to make sure you are getting the tests you need to understand where you are and what you need to do to manage your heart health
- ❖ **Triglycerides** are a combination of three fatty acids found in the foods we eat. Insulin allows triglycerides to enter the fat cells for storage. If this process does not take place properly and the triglycerides stay in the bloodstream, this can lead to heart disease. Triglycerides goals should be less than 150

OTHER HEART HEALTH TESTS

- ❖ **Homocysteine Levels:** Homocysteine is an amino acid produced by the metabolic breakdown of methionine, an essential component of dietary protein. Recent studies indicate that elevated levels of homocysteine may be an independent risk factor for cardiovascular disease.
- ❖ **C-Reactive Protein:** Another factor that may point to heart disease is a higher level of C - reactive protein which is produced by the liver and fat cells. It's level dramatically increases, when there is inflammation anywhere in the body, The higher the CRP, the greater the chance of a plaque rupturing and causing a heart attack. One thing to remember, is that CRP can be elevated for a number of reasons, If you are at risk for heart disease, consult your physician about having your CRP levels tested along with other tests to determine if a high level is actually in the arteries of the heart.
- ❖ **Fibrinogen:** This is a sticky, fibrous protein substance manufactured by your liver that promotes clotting and is part of the body's natural repair system. A certain level of fibrinogen is essential and at normal levels fibrinogen performs necessary and important functions in the human body.. But too high levels can make the blood thicker and make it more difficult for the heart to pump this thicker blood through the whole body. There is also greater chance of forming a clot that can obstruct an artery. Many studies have shown that elevated fibrinogen is a risk factor for heart attacks and strokes. The normal range for fibrinogen is 200 - 400 milligrams per deciliter (mg/dL).
- ❖ **Blood Pressure Monitoring:** Blood pressure is the measure of the force exerted by the circulating blood on the walls of your arteries. It is expressed by two numbers, systolic pressure (the top number, which measures the pressure exerted on the arteries during a contraction of the heart when the heart pumps blood out of the chambers) and diastolic pressure (the bottom number, which measures the amount of pressure exerted when your heart relaxes and the chambers fill-up with blood) High blood pressure exists when there is an increase in the amount of force needed to pump the blood through the arteries due to a narrowing of the blood vessel. The ADA recommends that for people with diabetes the systolic measure should be < 130 mm/Hg and the diastolic measure should be < 80 mm/Hg.
- ❖ **Intima Media Thickness Scanning (IMT):** This is a non-invasive scanning technique, found by the American Heart Association to be a valid and reliable test for assessing sub-clinical antherosclerosis. A trained sonographer places a probe on the main arteries of your neck, and the images are then analyzed to assess the vascular health of your arteries. This test is an independent predictor of TIA, (stroke-like symptoms) stroke, and heart disease.

THREE Tips to Be an Awesome Sugar Detective



On average, Americans consume more than 20 teaspoons of added sugars per day.. When high sugar foods and refined carbohydrates are eaten, blood glucose levels rise quickly, producing a heightened release of insulin. Keeping in mind that excess insulin promotes fat storage, it should come as no surprise that as Americans consume more and more sugar, government figures show that more than ½ of American adults are overweight or obese

- ❖ Be aware of the many sources of sugar

Naturally Occurring Sugar (i.e. lactose in milk, fructose in fruit)

Added Sugar (i.e. sugar added to foods to make them sweet)

Hidden Sugar (i.e. foods that don't have sugar in their ingredients but behave like sugar when digested, such as grain-based flour and other refined carbohydrates)

- ❖ Always read both the Nutrition Facts and Ingredients sections of the Food Label to understand the health value of a food product. Together, they give you the TRUE picture as to the health & nutritional value of the food product.

Ingredients: are listed in order, starting with the ingredient found in the largest amount, by weight, and progressing to the ingredient present in the smallest amount.. If the list of ingredients is long with words you don't recognize, it is likely that there are artificial and chemical ingredients that you want to avoid.

Sugar Lists the amount of all sugar. The source can be natural sugar from the food itself or added sugar. . (examples: sugar, dextrose, maple syrup, honey, fructose) The way to tell is to read the ingredients. As a general rule, you want to avoid food products with ADDED sugar listed in the ingredients in an amount over 1 gram as well as foods with large amounts of naturally occurring sugar.

Total Carbohydrate: Reflects the total amount of carbohydrates in the food product.

- ❖ Look for any of the following names for sugar in the ingredients portion of the label:

Barley Malt, Beet Sugar, Blackstrap Molasses, Brown Sugar, Cane Sugar, Carmel, Corn Sweetener, Corn Syrup, Date Sugar, Dextrin, Dextrose, Fructose, Grape Sugar, Grape Sweetener, Herbal Sweetener, High fructose Corn Syrup, Honey, Invert Sugar, Lactose, Maltose, Mannitol, Maple Syrup, Molasses, Polydextrose, Raw Sugar, Sorbitol, Sorghum, Sucanat, Sucrose, Sugar, Turbinado.

❖ **TWELVE** Tips for Cutting Back on Sugar



- ❖ First, cut back or eliminate the sugars you are least likely to miss. For example, instead of selecting a processed food that includes sugar in the ingredients, select a brand that has a small amount or no sugar.
- ❖ Stop adding sugar to foods, such as cereal and drinks, including tea and coffee (try Stevia, or another sugar alternative).
- ❖ Dilute concentrated sweeteners (such as honey with water), and mix sweet foods (for example granola) with an unsweetened food (such as plain cereal and nuts) to reduce the total amount of sugar consumed and to gradually get your taste buds use to a less sugary taste.
- ❖ Avoid “fat free” foods with high sugar content.
- ❖ Cut out soda, even diet soda, as some new research is showing that there seems to be a connection between the overconsumption of diet soda and sugar cravings.
- ❖ Try a combination snack of high quality protein and complex carbohydrate to beat a sugar craving. A few examples are nuts with a slice of apple, whole grain crackers with low-fat cheese, a turkey and lettuce tortilla roll-up with a touch of mustard.
- ❖ Get enough sleep and rest. When your body is tired, it wants energy, and that often translates into sugar binges.
- ❖ Eliminate refined sugar and sugary snacks from your kitchen. If they are not easily available, you will be less likely to eat them.
- ❖ Satisfy your natural desired for sweet taste with “sweet” vegetables such as sweet potatoes and onions. (Try caramelized onions on whole grain sourdough toast or mashed sweet potatoes sweetened with a touch of agave syrup).
- ❖ Explore the tastes of food without any added sugar, and use spices and natural flavoring extracts to add zip to your food. Coriander, nutmeg, ginger, cardamom, natural vanilla and cinnamon are all spices that can make a dish taste sweeter and help satisfy your sweet tooth without adding any sugar. Almond, mint, maple, coconut, and lemon extracts can be used to add flavor to everything from oatmeal to yogurt and sweet potato dishes.
- ❖ Do not restrict yourself to the point of causing a sugar binge. Incorporate fresh fruit into your food plan, and when you want to have a treat, go for one that has some health benefits, such as a good quality oatmeal cookie or a small piece of dark chocolate that is high in antioxidants.
- ❖ It is OK to indulge every now and then. If you opt to have dessert while out at a restaurant, split it with your co-diners.

FIVE Common Natural Sugar Substitutes

- ❖ **STEVIA:** is a non-caloric herbal extract with an intensely sweet flavor. Stevia is an excellent choice for diabetics as it has no calories, and it will not raise your blood glucose levels. You can buy Stevia in powdered or liquid form. Truvia® is Stevia + Erythritol (: The ingredients listed on the Truvia label are erythritol, stevia leaf extract and natural flavors. According to the Nutrition Facts label, one serving of Truvia is 3.5 grams, and a serving contains 3 grams of erythritol.)
- ❖ **Agave Nectar** is made through the extraction and purification of the juice of the agave cactus. It is mainly metabolized in the liver and has a lower glycemic index. On occasion, it is an effective sweetener for diabetics, but should be used very sparingly because of its high fructose content., (Fructose has a propensity to increase serum triglycerides)
- ❖ **Barley Malt, Brown Rice Syrup** are sweeteners prepared by fermenting the grain from which they came. Barley malt and brown rice syrup will have an effect on blood glucose levels and should be consumed sparingly by diabetics.
- ❖ **Coconut Nectar:** Raw coconut nectar, or "coconut palm nectar" comes from the sweet sap that results from tapping the thick flowering stems of the coconut blossom. This sap is further evaporated at low temperatures, producing a raw, low glycemic and nutrient-rich pourable syrup. It contains low amounts of glucose, sucrose and fructose (about 10%) but it is also high in the polysaccharide inulin, a prebiotic fiber that aids in the process of digestion. It is a good alternative to sugar in many baked goods.
- ❖ **Monk Fruit Extract :** Monk fruit, also known as *luo han guo* is a vine-ripened fruit, native to Asia. Monk fruit extract has zero calories and is said to be about 300 times sweeter than cane sugar. Monk fruit extract is sold commercially under a few brand names including Monk Fruit in the Raw® (dextrose is added) and Australian Made Norbu™ (Erythritol is added)

WHAT ABOUT ERYTHRITOL? Erythritol is a "sugar alcohol" that at the industrial level is produced through a natural fermentation process. Erythritol is 60 to 70% as sweet as table sugar and has a minimal effect on blood sugar level. It is absorbed before it enters the large intestine, and generally does not cause the laxative effects often experienced after consumption of other sugar alcohols such as Maltitol and Sorbitol.

NINE Things to Love About Stevia



- ❖ Stevia is the name given to extracts from leaves of the plant *Stevia rebaudiana* used as sweeteners or sugar substitutes. There are 150 species of stevia, all native to South and North America.
- ❖ The sweetness of the stevia leaves is caused by “glycosides” contained within them. (A glycoside is a molecule in which a sugar is bound to another functional group via what is called a “glycosidic bond”)
- ❖ Stevioside and Rebaudioside A (also referred to as “Reb A”) are the two main glycosides found in the Stevia plant and are the two predominant derivatives used in high-potency sweeteners..
 - Stevioside* is 250-300 times sweeter than sugar, but possesses a bitter aftertaste.
 - Rebaudioside A* is 350-450 times sweeter than sugar and is less bitter than stevioside, making it a popular option for use in sweetener preparations.
- ❖ Some of the trade names for stevia sweeteners are Enliten, PureVia, Stevia Extract In The Raw, and SweetLeaf.
- ❖ Truvia’s ingredients are: rebiana, the sugar alcohol, erythritol and natural flavors. Rebiana is the trade name for high-purity rebaudioside A. . According to the Nutrition Facts label, one serving of Truvia is 3.5 grams, and a serving contains 3 grams of erythritol.
- ❖ **PureVia** developed by PepsiCo is a blend of rebaudioside A, cellulose, dextrose and natural flavours. Per PureVia’s website: “We have reformulated Pure Via to be Non-GMO by replacing dextrose derived from corn with dextrose derived from cassava root or from Non-GMO corn. Those packages of Pure Via that are marked with our Non-GMO logo contain dextrose derived from cassava root or from Non-GMO corn”.
- ❖ **SweetLeaf Stevia Sweetener** contains two ingredients: stevia leaf extract and inulin, a soluble vegetable fiber. Inulin is a naturally occurring prebiotic that nourishes the body’s good intestinal flora, supporting good digestive health and immune function.
- ❖ **Stevia In The Raw**® consists of stevia extract and a bulking agent (dextrose or maltodextrin).
- ❖ If you want to add a touch of sweetness AND flavor to your water, SweetLeaf’s Liquid Stevia Sweet Drops™ and their new product Liquid Stevia Water Drops™ flavor water, and more with just a few zero-calorie, zero-carb drops. You can find these drops in health food stores, vitamin shops, Whole Foods, or you can buy them on-line.

EIGHT THINGS TO LEARN ABOUT SPLENDA

- ❖ Sucralose: Sucralose, or SPLENDA® Brand Sweetener, is made from a patented multi-step process that begins with sugar (sucrose).
- ❖ Three hydrogen-oxygen groups on the sugar molecule are replaced with three chlorine atoms.,
- ❖ Sucralose is not recognized by the body as sugar or as a carbohydrate. It is not metabolized by the body for energy and does not affect blood glucose levels.
- ❖ There is some controversy remaining over the safety of Splenda which relates to the molecular makeup of sucralose. The sucralose molecule is an organochloride (or chlorocarbon). The root of the controversy is that while some industry experts claim the molecule is similar to table salt or sugar, other researchers claim that it has more in common with pesticides. That is because the bonds holding the carbon and chlorine atoms together are more characteristic of a chlorocarbon than a salt — and most pesticides are chlorocarbons.
- ❖ Although some chlorocarbons are toxic, sucralose is not known to be toxic in small quantities and is extremely insoluble in fat; it cannot accumulate in fat like chlorinated hydrocarbons.
- ❖ In addition, sucralose does not break down or dechlorinate. So, the question remains, is Sucralose safe for everyday use? The answer is that we really don't know yet.
- ❖ The best advice is to use Splenda occasionally, in small amounts, for dessert recipes, and consume other types of natural sugar substitutes for daily use.
- ❖ For example, you might decide to use Splenda in your jello or for an occasional dessert recipe that calls for a sugar substitute. But if you are using a sweetener on a daily basis (for something like iced tea), Stevia would be a better choice.

What About Aspartame, Also known as Equal (NutraSweet): Aspartame is the main ingredient in Equal and NutraSweet. Recent studies in Europe show that aspartame use can result in an accumulation of formaldehyde in the brain, which can damage your central nervous system and immune system and cause genetic trauma. The FDA admits this is true, but claims the amount is low enough in most that it shouldn't raise concern. The issue is for consumers becomes, to what degree are we willing to play Russian roulette with our health with by ingesting this type of potentially dangerous substance

TEN Observations about Our Love Affair with Grains, Flour, Bread, Pasta, Rice & Potatoes

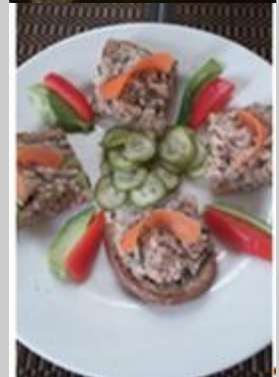


- ❖ Grinding grains into flour increases the surface area upon which enzymes work to more quickly convert starch into glucose. This means that any type of grain-based flour products have the same effect on blood sugar, whether the flour is produced from whole grains or not.
- ❖ Sprouted grain products are digested more like a vegetable with slower digestion and less of a spike in blood sugar. Sprouted grain breads will not have “flour” in the ingredients.
- ❖ If you choose to include grains in your food plan, the best types of whole grains are cooked whole grains (quinoa, oats, barley, rye) or high fiber sprouted whole grain breads. White rice should be avoided and brown rice eaten sparingly.
- ❖ If you are diabetic, you should check your blood sugars two hours after eating grains or grain based products to confirm their effect on your blood sugar levels. Avoid all grain-based flour products.
- ❖ Best breads: Paleo Bread (Store bought or homemade), non-grain based flour breads (made with nut, bean, or coconut flour. golden flax meal) Sprouted Whole Grain
- ❖ Sources for Non-grain based flour: Paleo Baking Company, Bob’s Red Mill, JK Gourment Finely Ground Almond Flour
- ❖ Non-grain pasta substitutes: Spaghetti Squash, Vegetable Noodles, Palmini “Pasta”
- ❖ Rice Substitutes: Quinoa, Cauliflower Rice
- ❖ Recipe Resources for Baking with Non-grain based flours
 - Against the Grain:** Danielle Walker, Victory Belt Publishing, Inc., 2013.
 - The Joy of Gluten-Free Sugar Free Baking:** Peter Reinhart & Demine Wallace, Ten Speed Press, (breads, cookies, pancakes, muffins....)
 - The Gluten Free Almond Flour Cookbook,** Elana Amsterdam, Celestial Arts, 2009
- ❖ NOTE: Not all complex carbohydrates behave the way you expect them to. For example, starchy vegetables, like white potatoes, behave more like simple sugars, breaking down quickly into glucose and causing a sharp insulin response.

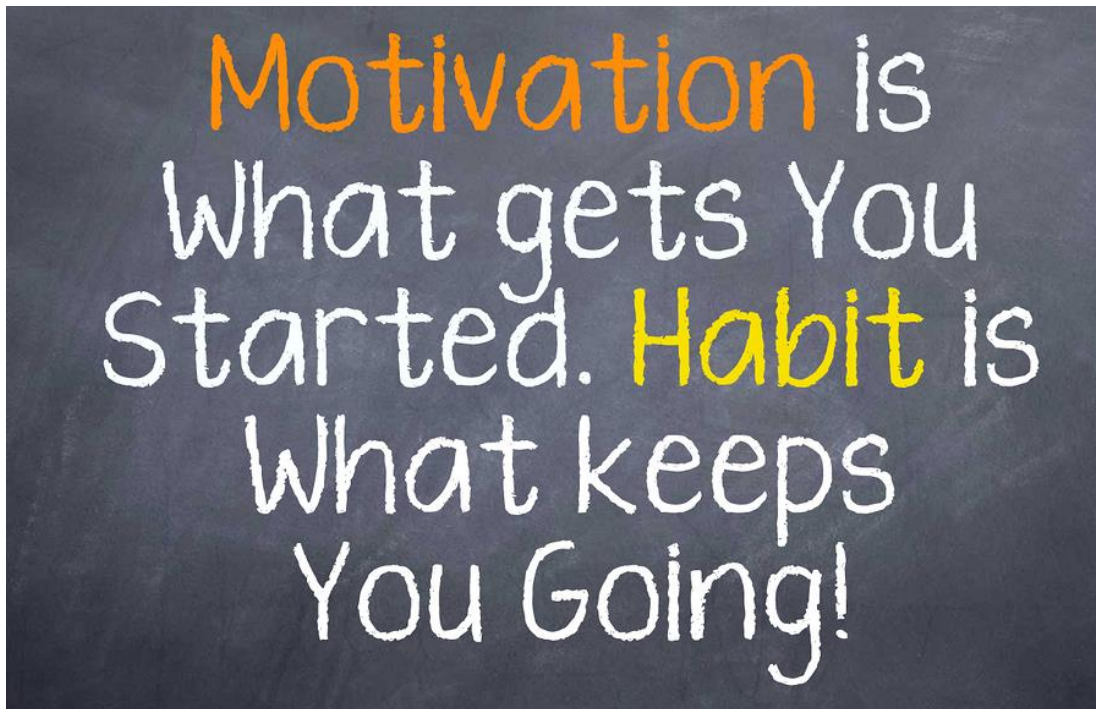


FIFTEEN Ways to Snack Smart

- ❖ Pumpkin Seed Mix (1/4 cup)
- ❖ ¼ cup nuts (almonds, walnuts, pecans) with a slice of low fat cheese or raw veggies.
- ❖ 1 TBSP almond butter with a piece of non-grain based bread or apple slices
- ❖ Edamame
- ❖ Turkey rollups with avocado
- ❖ Chopped tomato salad with, beans, red onions, avocado and dressing of choice
- ❖ Cherry tomatoes with tuna salad
- ❖ Deviled egg (if desired, with hummus substituted for mashed egg yolk)
- ❖ Hummus or Bean Dip with raw vegetables
- ❖ ¼ cup part skim ricotta cheese with unsweetened cocoa and a tablespoon of chocolate protein powder. (Add Stevia or Truvia to taste.)
- ❖ Cucumber or zucchini rounds with hummus or tuna salad
- ❖ Spicy, Roasted Chick Peas
- ❖ Guacamole with Jicama sticks
- ❖ Cup of lentil, vegetable, carrot or black bean soup.
- ❖ Sardine salad with cucumbers & vegetables
- ❖ Baby spinach “rollups” with Laughing Cow Cheese and walnuts



Establish New Success Habits



Controlling diabetes is challenging because there is no quick fix. It requires making changes that will enable you to keep your blood sugar under control and complications at bay for the rest of your life. It is not necessary to make drastic changes. In fact, there are lots of “little” things you can do that can make a “big” difference in your overall health

- ❖ Habits are the fabric of your life.
- ❖ Your daily behaviors take you either towards or away from your vision of health
- ❖ Success habits support your well-being and lead you towards your goals
- ❖ People who achieve their goals avoid or minimize activities and behaviors that lead them away from their vision and maximize behaviors that lead them forward.

In their essence, success habits are repeated behaviors that eventually become automatic. Many of us have the idea that we need to do something extraordinary to make meaningful changes in our lives. Paradoxically, it’s the little things that you do on a daily basis that determine your success.

TWO Ways Physical Activity Lowers Blood Glucose Levels

Getting moving should be an integral part of every diabetic's recovery plan, keeping in mind your current level of physical activity and any limitations that should be discussed with your doctor before starting an exercise program..

Once you have approval from your doctor, at least thirty to sixty minutes of continuous exercise every day will pay off in enhanced health. The important thing is to make exercise part of your daily routine in a way that supports your lifestyle and vision of health. Incorporating exercise into your daily routine will provide a number of benefits, including clearing the blood of glucose, increasing insulin sensitivity, and improving heart and cardiovascular health. Below are two ways exercise helps to lower blood glucose levels.

- ❖ First, it causes your cells to become more sensitive to insulin. What this means is that your insulin is more effective, and hence more glucose is used by your cells. This sensitivity to insulin and the benefit of lower blood glucose levels lasts for several hours, even after the activity has ended.
- ❖ Second, it lowers the amount of glucose produced in the liver. In addition to getting glucose from the food you eat, you also get glucose from the liver. This is a normal function of the liver, but sometimes it makes more glucose than your body can use, causing your blood glucose level to go up. Regular activity can help counter this effect

FOUR Types of Exercise to Choose From

When thinking about what types of activities to include, you can break exercise into a number of categories:

- ❖ **Physical Activity**, which is any movement that uses energy such as climbing the stairs, mowing the lawn or walking an extra row in the parking lot to get to your car.
- ❖ **Aerobic Exercise** that can be thought of as more vigorous, continuous and concerted movement like dancing, walking, running, rebounding or bicycling.
- ❖ **Recreational Activities** such as golf, bowling, tennis, hiking.
- ❖ **Flexibility and Strength Activities** which are very beneficial for relieving emotional tension and stress. Examples of these activities include stretching, yoga, tai chi, and strength training with weights.



EIGHT Exercise Safety Guidelines for Diabetics

- ❖ Rule #1: Clear any exercise program with your physician. This is absolutely essential for diabetics. In addition to assessing your overall physical health, your doctor can determine the kinds of exercise that are right for you. This decision will take into account certain kinds of exercise you should avoid if you have diabetic complications such as retinopathy, heart disease, or nerve damage.
- ❖ Start any new exercise routine slowly, with a gradual build up. For example, if you are starting a walking program, begin with just 10 minutes a day and gradually work up to 30 or 60 minutes a day.
- ❖ Stop whenever you don't feel well. If you feel pain or pressure in any area of your body during the exercise activity or experience shakiness, dizziness, faintness, blurry vision or headaches, discontinue the activity and inform your physician.
- ❖ Be consistent. You will get better results and you will avoid injury if you make some form of exercise part of your daily routine.
- ❖ Drink plenty of fluids. This is important for anyone participating in an exercise session, whether or not you have diabetes. Drink before exercise, during exercise if it's longer than 20 minutes, and afterward.
- ❖ Make attentive foot care an integral part of your exercise program. Peripheral nerve damage can lead to a loss of sensation in the feet, which means that a blister can go unnoticed and become infected. To avoid problems with your feet, buy fitness shoes that fit well, break them in slowly, and wear clean socks every time you exercise. After exercising, make sure to check your feet for blisters, redness or tenderness, and talk with your health care team if you experience any of these problems.
- ❖ Learn how your body responds to particular types of exercise by checking your blood glucose levels before, during, and after exercise.
- ❖ Know the symptoms of hypoglycemia. When exercising, keep a quick source of carbohydrates or other food that is recommended by your health care provider with you in the event that you suffer a quick or unexpected drop in blood sugar.



EIGHT Tips to Get You Moving

- ❖ **Find Out How Active You Really Are:** If you are taking less than 10,000 steps a day, set goals for getting more steps into your day. There are studies showing that people who use a pedometer to build more activity into their routine are more motivated to become more active in general and begin to see improvements in weight, cholesterol levels, body fat and overall fitness.
- ❖ **Identify Some Exercise Activities You Would Like to Try:** Think about what would fit into your daily routine. Some people enjoy getting out and going to the gym. Others would much prefer to take a walk in the park. Write down some activities that you think you “would actually do” and visualize when and how often you would do that activity in a week. Plan to begin gradually and increase the intensity and duration of your workouts over time.
- ❖ **Make A Schedule:** It’s easy to allow busy schedules and other activities to interfere with an activity plan. To avoid breaking your momentum, develop an exercise schedule and make it a priority. Consider carefully what times of the day and which days of the week are best for your activity. Think of your exercise time as a date you make with yourself, one that you wouldn’t break or ignore anymore than you would consciously miss an appointment with someone else.
- ❖ **Be Flexible:** Having said how important it is to make a schedule, it is also important not to make yourself crazy over exercising. If you do, you may grow to resent it and find yourself avoiding it altogether. The important thing is to keep moving on a regular basis. If you miss a day or two, the best thing you can do is to engage in some form of activity to get back into your routine, and don’t beat yourself up for taking a few days off from exercising.
- ❖ **Find a Buddy:** Activities and exercise are often more fun when you do them with someone else. Also, a partner can help you stay motivated and give you someone to compare your progress with.
- ❖ **Build in Variety:** The worst thing that you can do is become so bored with your exercise routine that you don’t want to do it. The best way to avoid this is to find several different types of activities that you enjoy and do them on different days of the week. You can even make your time in front of the TV count by working out on an exercise bike or treadmill while you watch your favorite show.
- ❖ **Make Exercise Fun:** There are going to be days when doing any exercise at all feels like too much effort. The trick is to figure out ways to make your exercise as much fun as possible so that you will want to do it on days when you aren’t feeling motivated. Dancing is one of the more fun ways to exercise. Today there are lots of innovative dance classes, and the best part is once you learn the routines you can put on some music do them at home. Think of your exercise as a gift that you give to yourself. Who wouldn’t want a present that helps you stay in shape and feel great all at the same time?

SIX Tips To Help You De-Stress to be Your Best

To maintain health, de-stressing is not a luxury, it is a necessity. Stress is a part of modern life. But, you can develop daily success habits to manage stress, including:

- ❖ Practice Deep Breathing: accessing the lower portion of your lungs activates a relaxation response in our bodies
- ❖ Incorporate at least ½ hour of a de-stressing activity into your daily routine (deep breathing, yoga, meditation, massage, etc.)
- ❖ Make your health a priority, and take some time for yourself every day.
- ❖ Exercise (walking, running, etc) for at least ½ hour 5-7 days a week.
- ❖ Write in a journal.
- ❖ Practice Gratitude & Enjoy Life



Chronic and unmanaged stress exacerbates high blood sugars

The key words here are chronic and unmanaged.

You see, stress in and of itself is not a bad thing. Our bodies are designed to handle it, and at times it is just what is needed to get through a situation.

If you are crossing the street and a car comes out of nowhere, a little stress is just what is needed to get you out of the way. But, when stress becomes a way of life (worrying about your job, meeting deadlines, juggling work and family, keeping up with finances, being bombarded with news about the latest global problem) our bodies and our health become compromised.

Here's what happens: Our body produces a hormone called cortisol that is released when we experience stress.

Cortisol tries to supply energy. But, if you are constantly feeling stressed out and there is no ready supply of protein available, then cortisol begins to steal nitrogen from the structural protein in our muscles. It converts the protein to sugar for energy, and the end result is the ongoing destruction of the muscle needed to burn fat. When stress is a constant, and continues unmanaged, this process repeats itself over and over again.

Ongoing stress increases carbohydrate cravings & decreases serotonin levels, causing you to crave sweets and carbohydrates. Over time, the effects of chronic stress and high levels of cortisol include: Loss of Muscle Tissue, Stress Eating, Erratic/High Blood Sugars, Excess Insulin Production, Fat Storage, Fatigue, and Chronic Illness

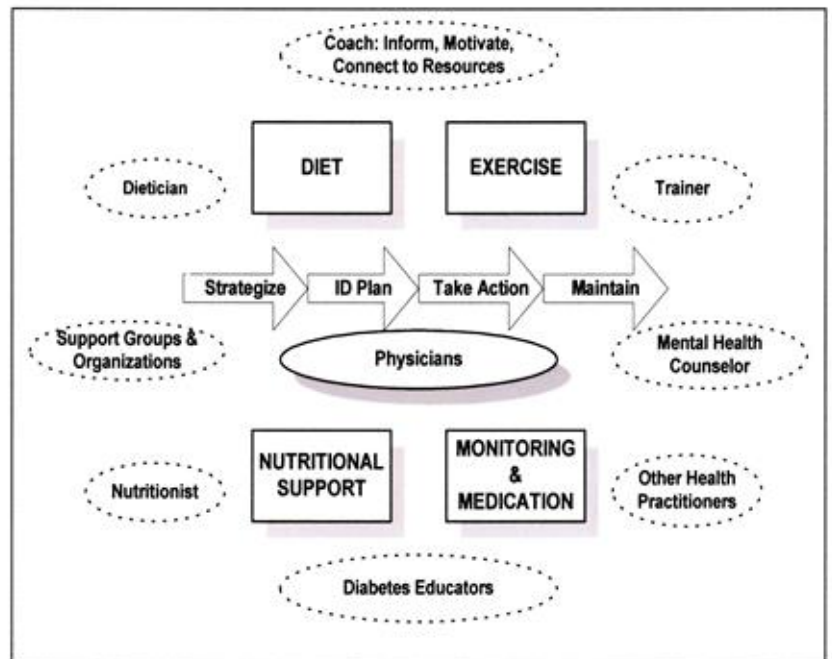
Establish Your Ongoing Support Team



The diagnosis of diabetes or pre-diabetes turns your life upside down. Denial or ignoring the diagnosis can result in extremely serious consequences, and for this reason, the need to take action is fairly immediate. Going it alone is not an option. At a minimum, you will need the supervision of a family physician or diabetes specialist, typically an endocrinologist, to help you keep your glucose levels under control.

EIGHT People to Coach, Teach, & Motivate You on Your Journey to Achieve Better Blood Sugars

- ❖ General Practitioner
- ❖ Endocrinologist
- ❖ Diabetes Coach
- ❖ Nutritionist/Registered Dietician
- ❖ Diabetes Educator
- ❖ Physical Trainer
- ❖ Mental Health Counselor
- ❖ Other Health Practitioner



ENJOY LIFE

FIFTEEN Little Luxuries for Lifestyle Changes That Will Last a Lifetime

1. Wake up early and spend some quiet time meditating or writing in your journal.

2. Take a Walk. It doesn't have to be aerobic. Enjoy nature and your surroundings.

3 Have lunch with a friend, enjoy good conversation and fine food.

4. Cook up a perfect pot of chili and invite some friends over for supper.

11. Get a Coach. Coaching can help you to reach your goals by providing guidance, ongoing support, motivation, and connection to resources.

12. Go to a movie, and don't forget to bring a delicious snack that you can enjoy during the previews.

13. Browse through the bookstore. Treat yourself to a new cookbook

5. BREATHE...

7. Light a scented candle, grab a good book and luxuriate in a good cup of tea. Green tea is especially beneficial for your overall health.

8. Concoct a magnificent sugar free dessert and share it with friends or family

9. Go dancing, it is a great way to get extra exercise

10. Get a massage or give one (both are fun).

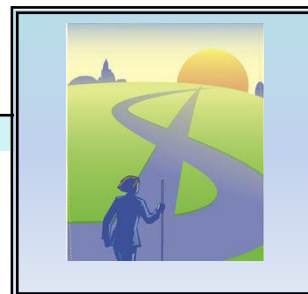
15. MAKE YOUR WELL BEING A PRIORITY

You get the idea. Life is short. Diabetes or Pre-Diabetes only means that you are going to take care of yourself better than you ever have before. Dare to believe that you are going to enjoy yourself and live life to the fullest. What could be better than that?

14. Take a personal day and do whatever comes to mind. Let the day take you wherever it leads.

6. Take a Yoga Class.

Uncontrolled stress raises your cortisol levels, & can affect both your blood sugars and weight. Yoga is just one of many great ways to de-stress.



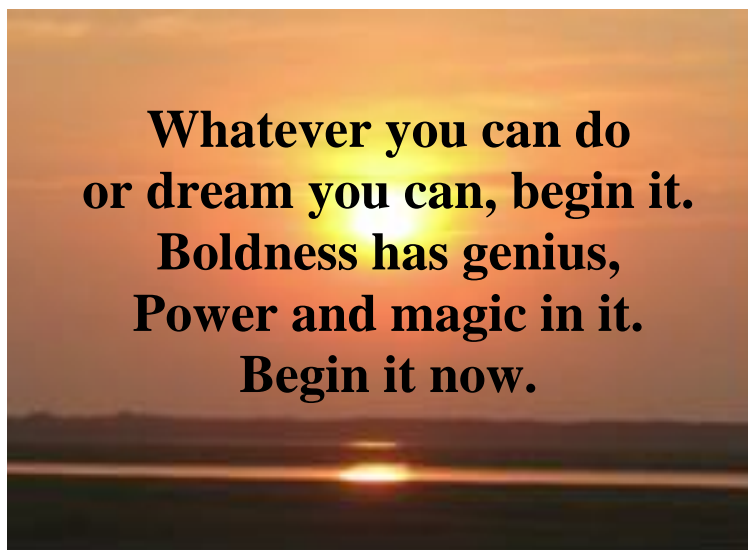
THREE Sure Fire Ways to Succeed

There are people all over the world who successfully control their blood sugars for the long term, and turn their health around.

So the real question is why do some people succeed while others struggle?

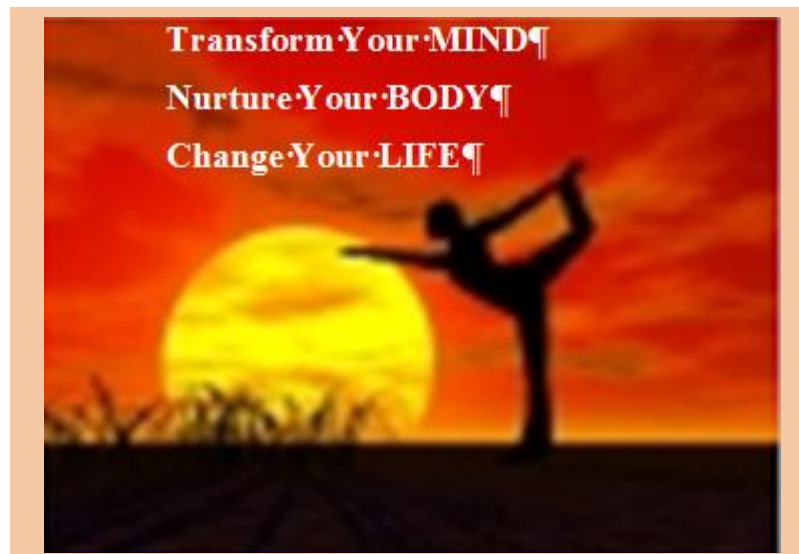


❖ **They Take Action.**



Johann Wolfgang von Goethe

❖ **They Clear Away the Barriers to Success.**



They Don't Quit.

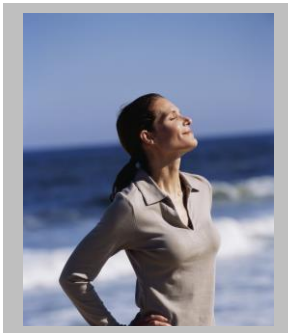
Janet B. Sanders, CHC



Winston Churchill

❖ **They Do Whatever it Takes!**

In a nutshell, people who are successful in turning their health around:



Take the time to gain **clarity** about their goals and their vision of health,
Are totally **committed** to their goals and have developed a strategy for achieving them,

Use the **concrete tools** available to them to remove barriers in their way, and to develop new habits and behaviors that take them towards their goals,

Take **consistent action** towards their goals, and re-direct themselves if they go off-course,

Seek **community** of support to help with barriers that might sabotage their efforts and accountability to stay on track, and

Have have the **courage** to make uncomfortable decisions, to keep moving forward when life is difficult and to take responsibility for their actions.

When you get into a tight place and everything goes against you, till it seems as though you could not hold on a minute longer, never give up then, for that is just the place and time that the tide will turn.

Harriet Beecher Stowe