Natural Alternatives for Diabetes and Blood Sugar Problems

Drug Companies Don’t Want You to Know

Enjoy healthy blood sugar for pennies on the dollar and freedom from needles, insulin, meters, and medications.

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Contents

Chapter 1:
Syndrome X Marks the Sugar Spot! ..............................................9

Chapter 2:
Help! My Sugar Processor is on the Fritz! ..............................13

Chapter 3:
From Syndrome X to Diabetes Can Be a Short Journey! ..............................15

Chapter 4:
The Four Faces of Diabetes ..........................................................17

Chapter 5:
Understanding Diabetes Can Be “Risky Business” ..............19

Chapter 6:
The High Price of Sugar Addiction ............................................21

Chapter 7:
Skip the Sugar to Reverse Symptoms of Syndrome X! ......27

Chapter 8:
Hey, I Can’t Get Into My Skinny Genes! ..............................43

Chapter 9:
You CAN Become the “Biggest Loser!” ..............................47
Introduction

“Your test results show higher than normal blood sugar levels that indicate you’re pre-diabetic...”

Has your doctor given you this unwelcome news? If so, you’re one of some 41 million Americans with a blood sugar imbalance. In fact, if you’re middle aged or older, there’s a great chance that you’re “pre-diabetic”—and don’t even know it. Why?

The latest research shows an estimated one in four American adults over age 30 is pre-diabetic. And this number keeps growing because many doctors overlook this serious health threat.

You should never downplay the danger of excess sugar in your body. It can cause a number of worrisome health problems such as extreme thirst... frequent urination... fatigue... and weight gain. In time, the extra sugar circulating in your bloodstream can damage your heart, kidneys, eyes, and even your brain!

If you think your only option is to endure years filled with painful needle sticks... mood swings... exhaustion... and eating binges—think again!

For years, doctors and scientists have been searching for natural ways to help stabilize blood sugar levels. And the good news is they’ve discovered some all-natural, effective remedies to help protect your kidneys, eyes, and other organs
from dangerous blood sugar imbalances!

This guide is designed to help you understand different types of blood sugar imbalances. You’re about to discover how doctors determine if you’re pre-diabetic—a condition also called “metabolic syndrome” or “Syndrome X.”

You’ll also know what causes diabetes—the most serious form of blood sugar imbalance. But best of all, you’ll learn about some cutting-edge treatments that provide safe, natural solutions to help prevent—and even REVERSE—these illnesses!

These helpful tips can be your personal success plan to help you clobber blood sugar problems and preserve your health!
Syndrome X Marks the Sugar Spot!

Metabolic syndrome or syndrome X is a group of risk factors for diabetes and cardiovascular disease. It is caused by eating a diet high in calories and saturated fat—and getting little or no physical exercise.

Current estimates show an astonishing 57 million people in the United States—about one in four adults over age 30—are affected by metabolic syndrome! How can you know if you’re one of them?

According to the American Academy of Family Physicians, you have metabolic syndrome if at least three of the following are true:

- You are overweight or obese, and carry the weight around your waistline.
- You have high blood pressure (130/85 mm Hg or greater).
- You have a high amount of sugar in your blood (a fasting blood sugar of 110 mg/dL or greater).
- You have a high amount of fat in your blood (a triglyceride level of 150 mg/dL or greater).
- You have low HDL (good) cholesterol; for men, this means HDL less than 40 mg/dL and less than 50 mg/dL for women.
You participate in limited physical activity.

- You eat highly refined, processed, and otherwise nutrient-deficient foods.

The more of these risk factors you have—the higher your chances of developing blood sugar problems or heart disease. And carrying excess belly fat—also called visceral adipose tissue (VAT)—is one of the most common, but most easily reversible triggers for blood sugar problems.

Scientists have spent more than ten years studying the health effects of excess belly flab. They discovered that fat cells called adipocytokines (pronounced AD-ee-po-SY-toe-kynz) release chemicals that attack your normal tissues. These “bad” fat cells create deadly inflammation—the very cause of diabetes. Now here’s the good news...

There are also the “good” adipocytokines which reduce inflammation! And YOU can actually influence which of these fat cells dominate your body just by improving your diet!

It should come as no surprise that foods such as refined sugars, refined oils, and junk foods turn on the bad adipocytokines. Research shows the more padding you develop around your midsection—the more bad fat cells you produce to suppress the good ones. This helps set the stage for Syndrome X... diabetes... cardiovascular disease... and cancer!
However, just by losing your belly flab—you can improve your cells’ sensitivity to insulin. This will allow glucose to enter the cell and be used for fuel. Reducing your abdomen fat also improves your cholesterol levels and helps reduce your risk for heart problems and other chronic diseases.\(^1\) Best of all, if you’ve got VAT—it only takes a modest weight loss for you to show substantial improvement in your metabolism!\(^2\)

The best way to determine if your waistline foretells a future of blood sugar problems is to measure your waist circumference. Optimal health corresponds with a waist to hip ratio below 0.7 for women and 0.9 for men.

Another risk factor for developing blood sugar imbalances occurs when your body becomes insulin resistant. If you’re not sure what this means—just keep reading!

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Help! My Sugar Processor is on the Fritz!

Believe it or not, sugar is very important to maintaining your health! Every cell of your body needs the form of sugar called glucose to function properly and thrive.

For example, your muscles use glucose to fuel muscle contractions. But sugar needs a helper to enter your cells so they can be used as fuel. That helper is the hormone insulin.

Your pancreas—an organ located behind the lower part of your stomach—is responsible for making insulin. It usually makes just enough insulin to process the food you eat.

The American Diabetes Association\(^3\) says insulin is like a “doorman” at the entrance to your cells. When it works properly, it unlocks the door and allows glucose to enter. But when you have insulin resistance, your cells refuse the insulin—and prevent it from doing its job.

When the cell door won’t open, your pancreas continues to make insulin to try to stabilize your blood sugar. The extra insulin helps—at first. But in time, even the extra insulin can’t open the cell doors.

If sugar cannot enter cells readily, it builds up in your blood stream. Eventually, it binds to the cells of your eyes, heart muscle, nerves, and even kidney tissues.

This condition can be a stepping-stone to full-blown diabetes.

\(^3\) http://professional.diabetes.org/UserFiles/File/Make%20the%20Link%20Docs/CVD%20Toolkit/05-Insulin-Resistance.pdf.
And before you know it, your cells and organs start to wear down—then may give out completely!

Insulin resistance usually has no symptoms. If you have a severe form of insulin resistance, you may get dark patches of skin on the back of your neck.

Sometimes a dark ring forms around your neck or you may see dark patches on your elbows, knees, knuckles, and armpits. This condition is called *acanthosis nigricans*—and should prompt you to get your blood sugar tested right away.

In fact, the National Institutes of Health\(^4\) recommends that anyone 45 years or older should consider getting tested for diabetes. If you are overweight and age 45 or older, it is strongly recommended that you get tested.

And even if you’re younger than 45—they recommend testing if you’re overweight and have one or more of the following risk factors:

- Family history of diabetes
- Low HDL cholesterol and high triglycerides
- High blood pressure
- History of gestational diabetes (diabetes during pregnancy) or gave birth to a baby weighing more than nine pounds
- Race or ethnicity is African American, American Indian, Hispanic American/Latino, or Asian American/Pacific Islander; some professionals\(^5\) recommend that high risk ethnic groups be offered screening at earlier ages.

If your “sugar processor” is out of whack—you’ll find out later which lifestyle changes you can make to help repair it. But for now, you should know how what starts as a little extra sugar can turn into a serious and deadly disease.

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Insulin resistance is definitely a warning sign that more serious blood sugar problems could be around the corner. But doctors and researchers are still unsure about the cause of diabetes—although genetics, obesity, and lack of exercise appear to play roles.

The fact that millions of folks have a form of this disease and don’t know it shows it can be a silent health destroyer!

Doctors typically test for and discover diabetes in patients who complain of symptoms such as:

- Frequency of urination or urinating large amounts of urine
- Unquenchable thirst
- Losing weight without trying
- Weakness and fatigue
- Feeling very hungry or tired
- Blurry vision
- Tingling or numbness of hands or toes
- Wounds that don’t heal properly

There are two tests commonly used to diagnose your blood sugar condition. They are:
1. Fasting Plasma Glucose Test (FPG)—measures blood sugar levels after a minimum 12-hour fast. A fasting glucose level between 100 and 125 mg/dl signals pre-diabetes. Levels of 126 mg/dl or higher indicate diabetes.

2. Oral Glucose Tolerance Test (OGTT)—measures your blood glucose level after a fast, then two hours after drinking a glucose-rich beverage.

   If the two-hour blood glucose level is between 140 and 199 mg/dl, the person tested has pre-diabetes. If the two-hour blood glucose level is at 200 mg/dl or higher, the person tested has diabetes.

   Suppose your blood tests show higher than normal glucose readings? It could be helpful if you understand the specific type of problem you could be experiencing.
The American Diabetes Association has identified four major types of blood sugar problems. This includes:

1. Type 1 Diabetes—develops when your immune system destroys pancreatic cells that make insulin—the hormone which “unlocks” your cells to allow glucose to enter and fuel them; Type 1 Diabetes was previously called juvenile-onset diabetes or insulin-dependent diabetes mellitus (IDDM).

People with this form of the disease must have insulin delivered by injection or pump to survive. You’re at greater risk for Type 1 Diabetes if you have parents or siblings with the disease.

2. Type 2 Diabetes—usually begins as insulin resistance where your cells do not use insulin properly; Type 2 Diabetes accounts for about 90% to 95% of all diagnosed cases of diabetes.

Many people with Type 2 Diabetes can manage their blood glucose by following a healthy eating plan... adopting a regular exercise program... and losing excess weight. In some cases, doctors may recommend oral medications to regulate blood sugar levels.

3. Gestational Diabetes—a form of glucose intolerance during pregnancy requiring treatment to stabilize blood sugar levels; 70% of women with gestational diabetes develop Type 2 Diabetes at some point during their lifetime.

4. Pre-diabetes—occurs when you have blood glucose levels higher than normal—but not high enough to be classified as
diabetes; more than 57 million Americans are considered to have pre-diabetes.

If your blood sugar readings fall in the unhealthy ranges—you might consider monitoring it on a regular basis to note any changes. The blood test known as hemoglobin A1C is the gold standard test for tracking blood sugar levels.

In addition to frequent “finger poke” blood sugar testing, the hemoglobin A1C level measures the sugar molecules that attach to hemoglobin molecules in blood cells. Research shows that once a hemoglobin molecule has sugar attached to a blood cell—they’re partners for the life of that cell.

Because the average life of a blood cell is about 120 days, tracking these types of cells directly reflects the average daily blood sugar levels for the previous three months.

Doctors also use the following tests to track the health or deterioration of various organs affected by diabetes:

- Microalbumin urine test—to test kidney function
- Urinalysis—to check for urine infections and kidney function
- Retinal eye scan—to screen your eye retina function
- Dental examination—to check for tooth infections
- CMP—a comprehensive test of mineral electrolytes, kidney filtration, and liver enzymes
- Lipid profile—to determine cholesterol and triglyceride levels
- EKG test—to screen heart function, heart vessel function, or any previous myocardial infarction

As you can see, several tests can help doctors assess your blood sugar levels and related health conditions. But is there any way to know about your risks for developing this disease?

The answer is YES—especially when you know what to look for.
You should be aware that risk factors and actual causes of diabetes are two different things. This is important because you can eliminate causes—but you might not be able to control risk factors.

Risk factors are findings and associations to an illness, such as lab results... related illnesses... and lifestyle habits that relate to having or getting diabetes. In contrast, causes of diabetes actually contribute to the development and progression of diabetes.

Known causes of diabetes can be anything that worsens normal cell metabolism. Conventional medical wisdom would say that diabetes is caused by your genes. The cause started several generations ago with poor eating habits and expression of illness, which gets compounded through offspring.

But modern research shows that you can make lifestyle changes to successfully battle some of these “disease genes.” Here are some common risk factors for diabetes:

- **High blood pressure**—caused by foods that worsen inflammation, a stressful lifestyle, smoking, and other triggers for inflammation at the cell level
- **Family history of diabetes**—especially in your immediate family
- **Symptoms of low blood sugar**—such as nausea, blurred vision, weakness, or moodiness after meals
- **Symptoms of high blood sugar**—such as increased urination, excess thirst, weight loss, blurred vision, or numbness in the toes
A Surprising Link Between Diabetes and Bug Spray!

According to researchers from the National Institutes of Health (NIH), licensed pesticide applicators who used chlorinated pesticides for more than 100 days in their lifetime had a 20% to 200% increase in risk for diabetes.6

Although some of these pesticides are no longer on the market—others are still in use by the general population. And many of these chemicals linger in the environment and have measurable levels in the foods you eat!

If you have blood sugar concerns—check to see if any chlorinated pesticide products are being used in or around your home. You might need to change these products for safer alternatives that don’t raise your diabetes risk!

- **High triglycerides**—provide an early sign of a high insulin state
- **Skin tags**—small flaps of tissue that hang off the skin by a connecting stalk and are often associated with developing diabetes
- **Known cardiovascular disease**
- **Lack of physical activity or exercise**
- **Obesity**
- **Any chronic disease**
- **Metabolic syndrome**
- **Polycystic ovary syndrome**
- **Excess anger or depression**

Being aware of these risk factors is more than just “nice to know” information. It can help you identify areas where you can make changes—and improve your health!

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CHAPTER 6

The High Price of Sugar Addiction

Just having high blood sugar alone doesn’t cause any symptoms of pain or dysfunction. But it can have a significant effect on your eyes, nerves, kidneys, heart, skin, and immune system...

When your organs experience damage from years of excess sugar circulating in your blood stream—the unfortunate results are aches and pains in your body, as well as to your pocket!

Diabetes accounts for about 20% of all healthcare dollars spent in this country. People with diabetes experience elevated risks of a variety of other illnesses including heart disease and stroke... blindness... peripheral nerve disease and nerve pain... kidney failure... and skin disorders.
In 1969, diabetes accounted for $2.6\text{ billion}$ of the health-care costs in the United States. In 1986, the total economic burden of Type 2 Diabetes—including healthcare expenditures and productivity forgone due to disability and premature mortality—climbed to $19.8\text{ billion!}$

By 1995, the economic burden of diabetes in the United States was a whopping $137\text{ billion!}$ That’s a $5,200\%$ increase over the course of a single generation!

In 2007, estimates for the cost of diabetes care topped an astonishing $174\text{ billion!}$ This translates into one out of every five healthcare dollars being spent on a person with diabetes.

Adding more to the overall cost, diabetics also experience higher risk from the wide variety of other illnesses listed earlier. Let’s examine just a few of the health problems that are linked to diabetes.

**Retinopathy**

Light-sensitive nerve tissues in the back of your eye make up your retina. Retinal disease is the most common disease associated with diabetes—and can lead to blindness. In fact, diabetes is the leading cause of new blindness in adults ages 20 to 74.$^8$

Consistently high blood glucose levels cause changes in the blood vessels of the retina. Eventually, these tiny blood vessels swell and burst—which ultimately blocks blood flow.

In most cases, this inflammation and blood flow blockage develops without symptoms of blurry vision or pain. Therefore, it is wise to have your eyes examined to determine if any treatment is needed before vision loss occurs.
The Diabetes Control and Complications Trial (DCCT) showed that you can slow the onset and progression of retinopathy by controlling blood sugar levels. In this study, patients who kept their blood sugar levels at or near normal had fewer incidents of kidney and nerve disease. This translated into a reduced need for laser eye surgery.

Laser surgery is the treatment of choice to shrink inflamed blood vessels. In this procedure, the surgeon places 1,000 to 2,000 laser burns in the affected areas of your retina.

Although it causes some loss of side vision, color vision, and night vision—laser treatment saves you from going completely blind! It is most effective when done early on in the disease progression. This is the main reason why doctors perform dilated eye exams yearly in diabetic patients.

**Neuropathy**

Neuropathy is a general term referring to disorders of peripheral nerves. The peripheral nervous system is made up of the nerves that branch out of the spinal cord to all parts of the body.

This nerve disorder can be associated with poor nutrition, pressure, or trauma. And nearly 60% of people with diabetes suffer from nerve pain disorder or a nerve sensory loss.

It is the sensory loss combined with the propensity for infections that leads to lower extremity amputations. For example, more than 60% of all non-traumatic amputations occur among people with diabetes.

Nerve pain is perceived differently and treated differently—depending on the nerves affected. The burning, lancinating kind of neuropathy is usually treated with capsaicin cream or the blood pressure pill, clonidine.
The deep, dull, and gnawing pain is often related with antidepressants such as amitriptyline (Elavil®), anti-seizure medicines such as carbamazepine (Tegretol®), gabapentin (Neurontin®) and phenytoin (Dilantin®), or the centrally-acting pain reliever, tramadol (Ultram®). Narcotic pain relievers can always be used as a back-up with caution. The newest drug for diabetic neuropathy is pregabalin (Lyrica®).

**Nephropathy**

The nephron is an important filter in your kidneys. It regulates concentrations of water, salts, and other substances by filtering your blood. In addition to eliminating wastes, the nephron also regulates blood volume and pressure, controls levels of electrolytes and metabolites, and regulates blood pH.

Nephropathy linked to diabetes occurs when excess blood sugar clogs the filters. This makes it hard for the nephron to eliminate wastes in your blood. It’s little wonder that diabetes is the leading cause of end-stage kidney disease and is linked to nearly 44% of all kidney failure!

Diabetic patients are 17 times more prone to kidney disease than the normal population. When diabetes causes your kidney filter to shut down—you could wind up needing dialysis treatments just to stay alive.

A dialysis machine is basically an artificial kidney that detoxifies your blood by removing waste. During dialysis, doctors access a large artery in the arm and circulate your blood through the dialysis machine. The purified blood is then returned to your vein.

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10 Centers for Disease Control; National Institutes of Health; American Diabetes Association.
Heart Disease

Cardiovascular disease is by far the most dangerous and prevalent complication of diabetes. A whopping 65% of deaths among people with diabetes are due to heart disease and stroke. Also, people with diabetes are two to four times more likely to develop heart disease than people without diabetes.\textsuperscript{11}

According to two large recently reported clinical trials involving more than 21,000 patients with Type 2 Diabetes, intensive blood sugar control actually slightly increases heart attack and death rates. This means that diabetics must reduce the causes of cardiovascular disease like the rest of us and not rely on medications to keep their blood sugar in the normal range.

In fact, the main risk factors that increase your likelihood of coronary artery disease are the same ones for diabetic patients—namely high blood cholesterol, hypertension, and smoking. But diabetics have the added risks of high blood sugar and a condition called microalbuminemia, which occurs when protein spills through the kidneys.

For the patient with Type 2 Diabetes, intervention is similar, too. They must eat nutrient-rich foods, get consistent physical exercise and deal effectively with stressful feelings. Most traditional doctors will prescribe medications such as those designed to thin your blood. This includes aspirin and clopidogrel (Ticlid\textsuperscript{\textregistered}) and even anticoagulants such as warfarin (Coumadin\textsuperscript{\textregistered}).

Blood pressure-lowering meds such as angiotensin-converting enzyme inhibitors, angiotensin II receptor antagonists, and beta-blockers are also heavily prescribed. And the cholesterol and triglyceride-lowering medications known as “statins” are prescribed—as well as oral anti-diabetic medications to lower blood sugar.\textsuperscript{12}

\textsuperscript{11} ibid.

Infections

Influenza, colds, bacterial infections, and yeast infections are much more common in patients with diabetes. This is because the immune system is impaired, due to long-standing out-of-control diabetes. Your skin is one organ that can be infected by bacterial cellulitis... abscesses... and fungal skin rashes.

Doctors know that when a diabetic patient comes in with any of these bacterial skin infections, they must act quickly to get the infection under control. Otherwise, the surface infection can reach the blood stream—and become deadly!

Diabetics experience more fungal infections because of a dysfunction in the white blood cells called neutrophils. And this cell dysfunction is directly related to a high level of blood sugar!

What’s more, weakened small blood vessels give poorer peripheral circulation. This leads to skin ulcers and fewer white blood cells going to fight infections.

Some of the more serious infections associated with diabetes include systemic infection with candida (candidiasis) and mucor (mucormycosis), which can invade and rot away your nose and face tissues. Also, the bacterium Pseudomonas aeruginosa can cause deep ear infections—and possible hearing loss!

Skip the Sugar to Reverse Symptoms of Syndrome X!

If your blood sugar readings are above the normal ranges, it does NOT have to mean you’re stuck with diabetes. You can lower your blood sugar into normal ranges just by changing what you eat!

This is called becoming “diet-controlled”—which is not the same as having full-blown diabetes. But you would be diabetic if you went back to eating lots of sugary, refined, or processed foods.

Changing your genetic inclination towards some diseases is no tall tale! In the case of diabetes—like many chronic illnesses—you CAN reverse them and change the way your body works.

Whether you know it or not—all carbohydrates are NOT created equal! Some carbohydrates can make your blood sugar spike. These are called high-glycemic load (HGL) foods.

Other carbs barely affect your blood sugar. These are called low-glycemic (LGL) foods. Knowing about the foods that fall in each category can help you:

- Prevent blood sugar highs and lows that can wreck your health!
- Choose foods wisely when eating at home or dining out!
- Shed unwanted pounds painlessly!
Lose the extra flab around your belly!

Just by choosing the RIGHT foods—you can start to look and feel better than you have in decades!

In order to make better food choices, first you should learn the difference between these two types of carbs. You should also know how researchers decide which foods are considered HGL or LGL foods.

The GI Scale: Here’s How Foods Measure Up

The glycemic index—or GI for short—was developed nearly 30 years ago at the University of Toronto. The system ranks foods as having either a high- or low-glycemic load, based on how they affect your blood sugar levels.

The University of Sydney glycemic index website describes how scientists determine a food’s GI rating. In short,

1. First, scientists serve measured portions of a food containing 10 to 50 grams of carbohydrates to ten healthy people after an overnight fast.

2. Next, the researchers take finger-prick blood samples at 15 to 30 minute intervals over the next two hours.

3. Finally, the scientists develop a blood sugar response curve for the two hour period.

Scientists use the area under the curve (AUC) to calculate the total rise in blood glucose levels after eating the test food.

They next calculate a GI rating (%) by dividing the AUC for the test food by the AUC for the reference food, then multiplying by 100. The reference food must have the same amount of glucose as the test food.
The average of the GI ratings from all ten subjects is published as the GI of that food.

So how can you determine which foods are considered high or low GI options?

**Remember: The Upper GI Keeps Your Blood Sugar High!**

Eating lots of high GI foods can take a toll on your health by pushing your body to extremes. This is especially true if you are overweight and don’t exercise regularly.

A diet based primarily on low GI carbs helps glucose slowly trickle into your blood stream. This keeps your energy levels balanced and helps you feel fuller longer.

In a nutshell, foods with scores of 70 to 100 are considered high-glycemic foods. Folks with blood sugar concerns should steer clear of these. Some examples of high GI foods include:

- Breads and pasta made with processed white flour
- Cereals
- Rice
- Baked goods

On the other hand, foods with scores of 55 or below are considered low glycemic foods. These healthier food choices include:

- Fruits
- Vegetables
- Whole grains
- Beans

A dietitian can help you find lists of high and low
Natural Alternatives for Diabetes and Blood Sugar

GI foods. You can also check food GI numbers with the University of Sydney’s free online database at www.glycemicindex.com.

Sugar, Sugar EVERYWHERE!

Sugar is one food that deserves special consideration in the discussion of diabetes and metabolic syndrome. According to 2004 U.S. Department of Agriculture data, each and every American ate about 200 pounds of sugar that year! And with new snacks, juices, pastries, and candies being introduced regularly—just imagine how much sugar the “average Joe” is eating NOW!

Refined sugary foods are by far the most inflammatory—not to mention addictive. This happens when you eat them on a regular basis and in relative high amounts per meal.

Because sugar comes in many different forms, it’s important to be able to identify those with the highest nutritional value and implement them into a whole-foods diet. Furthermore, you need to know which types of sugar have the lowest nutritional value so you can avoid them as much as possible!

Sucrose and Other Refined Sugars

White sugar (sucrose) has the highest glycemic index score at 100. This means it quickly raises blood sugar levels after you eat it. On the other hand, low-GI foods are absorbed slowly and produce gradual rises in blood sugar. These foods trigger only minimal surges of insulin.

You should avoid eating refined sugars if at all possible. These foods tend to lack proper nutrients and
trigger inflammation in your body tissues. Some examples include white table sugar, powdered sugar, and brown sugar.

As you know, more than half of grocery store children’s foods with pictures or names of fruit on the outer packaging actually contain no fruit at all! The food products that falsely advertise real fruit are mostly cereals and yogurt. Of 37 top grocery store products that show pictures of fruit—or use the words “fruit” or “fruity” on the packaging—19 of these have no real fruit ingredients!

In contrast, natives of Paraguay have used stevia powder for centuries to sweeten their bitter tribal beverages. In Japan, stevia comprises about 40% of their sweetener market.

Yet, in the U.S., stevia can only be sold as a dietary supplement and cannot be labeled as a sweetener, even though there is no evidence of it being toxic. Could it be that the U.S. Food and Drug Administration (FDA) has knuckled under to bullies in the processed sugar industry?

**How Can Sugar Destroy Thee? Let Me Count the Ways!**

According to the peer-reviewed scientific literature, refined sugar can destroy your health in several ways. There are more than 100 separate studies demonstrating the adverse effects of sugar, such as immune system suppression... reduced mineral absorption... decreased skin elasticity and accelerated aging... worsening cancer growth... and even weakening eyesight.

There are at least 20 ways in which sugar has been proven to harm you—as shown by the scientific research included as references!
Here’s the sour truth about the negative health effects of sugar:

1. **Sugar weakens your immune system:** Refined sugar allows cold and flu viruses to last longer. It also slows healing time from an injury and actually makes highly acidic tissues MORE acidic while you’re sick! (American Journal of Clinical Nutrition. Nov 1973). Sugar has also been shown to reduce your defense against bacterial infection (Dental Survey. 1976).

2. **Sugar impairs brain function and behavior:** Sugar can cause hyperactivity, anxiety, difficulty concentrating, and crankiness in children. (Journal of Abnormal Child Psychology. 1986). Excess sugar also worsens the symptoms of children with attention deficit hyperactivity disorder (ADHD), (Journal of Pediatrics. Feb 1995) and reduces learning capacity (NeuroScience. 2002).

3. **Sugar accelerates aging of skin and tissues:** Sugary junk foods do not provide the lean protein and nutrients your tissues need to function properly. It also speeds up loss of tissue elasticity (Annals of the New York Academy of Science) and changes the structure of

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collagen proteins (*Journal of Clinical Investigation*, 1993).\textsuperscript{20} What’s more, Sugar can make your tendons more brittle (*Essence*, 1992).\textsuperscript{21}

4. **Sugar leads to/or increases most all cancers:** Refined sugar “feeds” abnormal cancer cells. On the contrary, nutrient-rich foods—such as juiced veggies, as well as raw and cooked produce of all kinds—provide the nourishment you need to overcome cancer. (Ovarian—Tohoku University School of Medicine, *Holistic Health Digest*. Oct 1982;\textsuperscript{22} stomach—*European Journal of Epidemiology*. 1995;\textsuperscript{23} colon—*Cancer Causes & Control*. 1994;\textsuperscript{24} gall bladder—*International Journal of Epidemiology Applied*. 1993;\textsuperscript{25} lung—*Nutrition and Cancer*. 1998;\textsuperscript{26} prostate—*British Journal of Cancer*. 1999;\textsuperscript{27} breast—*Cancer Causes & Control*. 2002;\textsuperscript{28} small intestine—

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\textsuperscript{22} Takahashi E, Tohoku University School of Medicine, *Wholistic Health Digest*. October 1982:41. \\
\textsuperscript{26} De Stefani E.“Dietary Sugar and Lung Cancer: A Case Control Study in Uruguay.” *Nutrition and Cancer*. 1998;31(2):132-7. \\
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6. **Sugar causes tooth decay**: Sugar can cause tooth decay and periodontal disease (FDA Report of Sugars Task Force).

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Force. 1986). This is because bacteria feeds on the sugar and creates acids that destroy weak enamel.

7. **Sugar contributes to obesity:** Sugar provides empty calories that can cause you to gain weight (*British Medical Journal.* 1989). What’s more, rapid absorption of sugar promotes excessive food intake in obese people (*Pediatrics.* Mar. 1999) and can increase the total amount of food consumed. (*Journal of Nutrition.* 2003). Plus, your body changes sugar into two to five times more fat in the bloodstream than it does starch (*Nutrition Health Review.* 1985).

8. **Sugar worsens your joints:** Excess sugar worsens symptoms of fibromyalgia and arthritis. And refined sugar also weakens your joints and can cause them to become inflamed and arthritic (*Lancet.* Feb 1986). Sugar can also increase your risk of gout (*Sweet and Dangerous.* 1974).

9. **Sugar contributes to lung, skin, and allergy problems:** Sugar can cause asthma (*Lin Chuang Er Bi Yan Hou Ke Za Zhi.* Aug. 2002), *American Journal of Clinical

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43 *Nutrition Health Review.* Fall 85. Sugar Changes into Fat Faster than Fat.”


**Natural Alternatives for Diabetes and Blood Sugar**

*Journal of Nutrition.* Nov. 2004)\(^{47}\) as well as emphysema (*Journal of Gerontology.* 1990).\(^{48}\) It can also contribute to eczema in children (*The Saccharine Disease.* 1974).\(^{49}\) Excess sugar has also been linked to food allergies (*New York: Lick the Sugar Habit.* 1988).\(^{50}\)

By eliminating refined sugar from the diet, some patients have dramatically slowed allergic-related symptoms of the lungs, skin, mucus membranes, and digestive tract.

10. **Sugar feeds yeast infections:** Sugar promotes the uncontrolled growth of Candida Albicans fungus which promotes yeast infections (*The Yeast Connection.* 1984)\(^{51}\).

11. **Sugar worsens multiple sclerosis:** Clinical experience shows patients’ symptoms always improve by eliminating refined sugar foods from their diet.

12. **Sugar increases blood pressure:** Sugar can increase the systolic blood pressure (*Journal of the American College of Nutrition.* 1998)\(^{52}\) and worsen blood pressure readings in obese people (*Diabetes Mellitus, a Fundamental and Clinical Test.* 2nd Edition, 2000)\(^{53}\).

13. **Sugar worsens metabolic syndrome and diabetes:** Excess sugar circulating in your blood causes metabolic

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52 Preus, H G. “Sugar-Induced Blood Pressure Elevations Over the Lifespan of Three Substrains of Wistar Rats.” *J Am Coll of Nutrition.* 1998;17(1) 36-37.


14. **Sugar contributes to atherosclerosis:** Refined sugar in your body contributes to atherosclerosis—or inflamed arteries filled with sticky plaque (*Circulation Research. Mar 1999, Postgraduate Medicine. Sept. 1969*). \(^{57}\)

15. **Sugar intake relates to increased rates of Parkinsonism:** Sugar inflames nerve tissues of the brain in folks with Parkinson’s disease (*Neurology. Sept. 1996*). \(^{58}\)

16. **Sugar can cause migraine headaches:** As previously noted, sugar inflames body tissues—including brain tissue—and can cause severe headaches (*Lancet. 1979*). \(^{59}\)

17. **Sugar can feminize men:** Excess sugar increases estradiol—the most potent form of naturally-occurring estrogen in men (*Annals of Nutrition and Metabolism. 1988*). \(^{60}\)

18. **Sugar triggers salt and water retention:** Sugar produces bloating and weight gain (*CCL Family Foundation. Nov-Dec. 1993*). \(^{61}\)

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19. **Sugar contributes to varicose veins:** As with other connective tissues, sugar can contribute to the weakening and swelling of veins under pressure (*On the Causation of Varicose Veins*. 1960).  

20. **Sugar worsens intestinal disorders:** Sugar causes your intestines to churn and produce gas. The more sugar you consume—the higher your chance of getting irritable bowel syndrome (*Scandinavian Journal of Gastroenterology*. 1983).  

Now you just learned about 20 major ways that sugar can harm your health. But that’s not the end of the story! Just consider the damage you can do from using some of the “safer” sweeteners...

**Here’s the Real Deal on Artificial Sweeteners**

Artificial sweeteners are even worse sugars than refined sugars. Their one saving grace may be that they are usually consumed in smaller amounts. But the FDA receives a number of complaints surrounding adverse effects linked to artificial sweetener use. In fact, some estimates are as high as 75% of all food complaints nationwide!

These synthetic chemicals fake your brain into feeling satisfied from sugar. They include acesulfame K (Sunette®), aspartame (NutraSweet®), saccharin (Sweet’N Low®), sucralose (Splenda®) and Equal® (a combination of aspartame, dextrose, and maltodextrin).

Ralph G. Walton, M.D., Chairman of the Center for Behavioral Medicine and Professor of Clinical Psychiatry at the Northeastern Ohio Universities College of Medicine reviewed 164 studies on the safety of aspartame. Seventy-four of these

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studies were sponsored by companies promoting aspartame for profit and 90 studies were funded by independent (non-aspartame industry) money. Of the 90 independent studies, 92% linked one or more serious health problems with aspartame use. And just to show you how deceptive and controlling “clinical trials” can be for ulterior motives, of the 74 industry-sponsored studies, ALL of them—yes, 100%—claimed there were no problems found with aspartame!

Even worse, six of those “independent” studies were FDA-sponsored and not really independent, because a number of FDA officials were employed by the aspartame industry immediately following aspartame’s FDA approval for its use in the food market—including the former FDA Commissioner! And this kind of “independent” clinical research is repeated in many areas of the food and health care industry!

**Least Healthy and Most Healthy Sugars**

The least healthy sugars are the most highly refined... the most devoid of nutrients... and are the ones absorbed most rapidly in your bloodstream. The following sugars trigger insulin surges in the blood because of their high glycemic index:

- **Sucrose:** White table sugar
- **Confectioner's Sugar:** Powdered sugar
- **Brown Sugar:** Sucrose crystals from molasses syrup
- **High Fructose Corn Syrup:** A highly refined sugar source
- **Dextrose:** Made from cornstarch
- **Invert Sugar:** A combination of glucose and fructose

The least healthy sugars are responsible for various negative health effects. In fact, more than 100 separate
scientific studies prove sugar plays a role in immune system suppression... impaired mineral absorption... skin age acceleration through decreased elasticity... worsening cancer growth... and even weakening eyesight.

Remember that foods like refined honey (typical grocery store honey), pancake syrup, candy, fruit juices, carbonated drinks, cakes, pies, donuts, cookies, and all other such sweets also contain refined flour that is quickly digested down to sugars. And both the sugar and the refined flour are quickly dumped into your blood stream—and ready to make your blood sugar levels spike!

There are some healthier sugars and sweeteners which contain some nutrients—but still have a fairly high glycemic index. The healthier sugars are:

- **Agave Nectar**—made from a cactus-like plant in Mexico.
- **Fructose (levulose)**—found in many foods in combination with glucose and galactose such as: Honey, tree fruits, berries, melons, beets, sweet potatoes, parsnips, and onions. Fructose is a lower glycemic index (GI = 32) relative to sucrose (cane sugar). You should limit your use of refined fructose because it has been shown to cause cell damage that is linked to many age-related chronic diseases.
- **Sugar Alcohols**—sorbitol, mannitol, and xylitol (wood sugar or birch sugar); xylitol gums decreases bacterial infections and can reduce dental cavities.
- **Rice Syrup**—made from rice and sprouted grains; maltose is the main form of sugar.
- **Turbinado**—raw sugar cane juice that has been dehydrated, colored, and crystallized; it should be considered a partially refined sugar.
- **Fruit Juice Concentrate**—made from the remaining sugar from apples, minus most of its fiber, enzymes,
vitamins, and minerals.

- **Date or Kiwi Sugar**—made from dehydrated ground dates or kiwis.

- **Grade B Maple Syrup (unrefined)**—from maple tree sap; the syrup still contains some vitamins and minerals.

- **Unsulphured Molasses**—made from the juice of sun-ripened cane; blackstrap molasses is the residue of the cane syrup after the sugar crystals have been separated. Both are nutritious, containing high levels of calcium, iron, and potassium.

- **Sucanat**—non-refined cane sugar that has not had the molasses removed; it contains nine minerals and six vitamins as it is only minimally processed.

- **Rapadura**—pure dried sugarcane juice, similar to sucanat.

- **Raw Honey**—made by bees and typically only sold in health food stores; raw honey still contains minerals and vitamins.

- **Stevia**—a sweet herb powder or liquid.

  The herb stevia is a godsend for folks who love sweet tasting foods. Why? When you taste it and then read the health benefits of this non-sugar natural sweetener you’ll be amazed!

  Stevia is from a plant native to South America—with some species reported to be as much as 300 times sweeter than sugar! And stevia has beneficial effects on obesity, and has even been proven to strengthen the immune system...

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64 Geuns JM. Stevioside. *Phytochemistry*. 2003 Nov;64(5):913-21. Conclusions: Stevia is safe when used as a sweetener. It is suited for both diabetics, and PKU patients, as well as for obese persons intending to lose weight by avoiding sugar supplements in the diet. No allergic reactions to it seem to exist.

lower blood pressure... and slightly improve blood sugar control in diabetes.67

And better still, there aren’t side effects associated with using stevia. There is just the great sweetening taste—without any calories!

Stevia has been the subject of trade complaints and embargoes on importation and handled at times by the FDA as if it were an illegal drug. The result of the government intervention is that since the Dietary Supplement Health and Education Act (DSHEA) was passed in 1994, stevia can only be sold legally in the United States as a “dietary supplement” rather than as a food or sweetener.

**For the Healthiest Sugars... Eat Whole Foods!**

Better than all the sugars previously mentioned are the sugars found only in whole fruits and vegetables! Even dried fruits such as raisins and dates are great for sweetening food. These whole-food sugars also contain micronutrients such as fiber, enzymes, complete vitamins, organic minerals, antioxidants, and phytochemicals.

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67 Barriocanal LA, Palacios M, Benitez G, et al. Apparent lack of pharmacological effect of steviol glycosides used as sweeteners in humans. A pilot study of repeated exposures in some normotensive and hypotensive individuals and in Type 1 and Type 2 Diabetics. *Regul Toxicol Pharmacol.* 2008 Jun;51(1):37-41. Conclusions: No side effects were observed in the two treatment groups. This study shows that oral steviol glycosides, taken as sweetener are well tolerated and have no pharmacological effect.
Hey, I Can’t Get Into My Skinny Genes!

The latest figures from the Endocrine Society show 30% of the U.S. population is obese. This group defines obesity as excess body fat that makes you weigh at least 30% more than what is ideal for your height.

And nearly two-thirds of Americans are classified as overweight. According to the National Institutes of Health, this means weighing at least 10% more than your recommended weight.

If you think this isn’t such a huge problem—think again. In 2004, the Centers for Disease Control and Prevention (CDC) ranked obesity as the #1 health threat facing Americans!

Folks struggling with extra weight are prime targets for diabetes... cardiovascular disease... and hypertension. And according to A Handbook on Obesity in America, obesity causes about 400,000 deaths each year!

But you don’t have to worry about eating yourself into an early grave! You’re about to find out about some easy ways to boost your metabolism—and even burn fat FASTER!

But first, let’s talk about why the numbers on your scale sometimes head in the wrong direction...
What’s the Root Cause of Obesity?

Many folks would be tempted to say the answer is simple. You get F-A-T by stuffing yourself with more food than you can burn! The fact is—overeating may be only part of the reason for weight gain.

It IS true that eating more calories than your body can use does cause you to gain weight. But there other causes and contributing factors you may need to consider, including:

- **Environment**—you may be surrounded by poor quality food choices and folks who need a constant “eating buddy!”
- **Genes**—you might have missed out on a “food furnace” metabolism at birth!
- **Hormones**—your dials might not be set to “full throttle” when it comes to processing calories!
- **Culture**—your relatives, friends, and the region you live in may have a bias toward being “too skinny!”

All of these factors can play a role in your developing an imbalance between calories you eat and those you burn. This is why it is important to recognize that obesity is not always just a behavioral issue.

The Real Reason You’re Tempted to Overeat

Let’s face it—a common reason for overeating is simple: **Food tastes, smells, and looks GOOD!** And depending on what you feast on—you can trip a cycle of food cravings that urge you to continue eating!

As soon as you taste food, your senses send information about the food to your brain. Depending on the flavor of the food, your brain sends out signals to eat more—or eat less.
In the book *The Flavor Point Diet: The Delicious, Breakthrough Plan to Turn Off Your Hunger and Lose the Weight for Good*, authors David L. Katz, M.D., M.P.H. and Catherine S. Katz, Ph.D. explain how what you eat influences how much you must eat to feel satisfied.

When you bite into any food, nerve endings on your tongue cause your body to release chemicals called opioids into your bloodstream. Opioids are like your body’s natural version of the drug morphine!

Katz says foods high in sugar and fat cause you to release more opioids. This flood of chemicals in your bloodstream makes you crave MORE sugary, high-fat foods.

These opioids and other chemicals in your bloodstream carry messages to the area of your brain called the hypothalamus. This triggers a surge of different chemicals used to regulate appetite.

The more flavors your taste buds register—the more stimulated your hypothalamus becomes. The complex variety of tastes causes your body to churn out a hormone called neuropeptide Y to promote hunger.

When you taste a lot of flavors at once—like when you eat a sausage, egg, and cheese biscuit for breakfast—your brain releases lots of neuropeptide Y. This hormone causes your appetite to rev into overdrive!

It won’t be long after you eat this type of meal that your body sends out the call for MORE
“feel-good” food!

But Katz says eating a high-fiber food like oatmeal won’t trigger the release of opioids in the same amounts as refined, sugary foods.

And the simple flavor of oatmeal makes your body produce far less of the “hunger hormone” neuropeptide Y.

In short, eating more high-fiber foods with simple flavors means you can experience:

- A slower, lower rise in blood sugar
- A slower release of insulin
- No rapid surge and dip in blood sugar levels, and
- Lasting fullness

This series of chemical and hormonal reactions shows that what you choose to eat influences how much you must eat to feel full and satisfied.

But there ARE steps you can take to manage this hormonal cycle—and tame a ferocious appetite at the same time.

The main point is this: Excessive refined sugar, belly fat (VAT), and lack of exercise trigger chemicals that cause destructive inflammation throughout the body.

This kind of chronic inflammation is at the root of chronic illnesses including cardiovascular disease, metabolic syndrome, hypertension, diabetes, and even cancer. And scientific literature and clinical experience show that diets high in fiber, fruits, vegetables, and herbal teas significantly reduce the occurrence of these and other deadly diseases!

To protect your health, start implementing a whole-foods diet in your life—TODAY!
You CAN Become the “Biggest Loser!”

One out of every three Americans is overweight. And as you learned in a previous chapter—excess flab can cause your body to produce excess chemicals that cause inflammation. This, in turn, can lead to blood sugar imbalances.

Most overweight folks have tried to lose weight using all types of diets. According to the *Journal of Behavioral Medicine*, a whopping 97% of all dieters regain the pounds they lose—and sometimes even MORE!

So why are weight loss efforts often unsuccessful? For starters, some diets lure you with promises of rapid weight loss. The problem is...

...Quick weight loss schemes wreak havoc on your metabolism—which practically guarantees you’ll gain the weight back!

According to Dr. Steven Lamm, assistant professor of medicine at New York University School of Medicine, dieting makes your brain think your body needs MORE food.

Dieting also lowers your metabolism, which causes your body to store more fat. This is a natural, self-defense mechanism to protect you from starving to death.

With each dieting cycle—you’ll find it takes longer to lose weight. What’s more, the pounds you lose will come back F-A-S-T-E-R!
And scientific studies prove this vicious cycle really does exist...

For example, UCLA researchers analyzed 31 studies where participants followed a diet for two to five years. The studies aimed to show long-term effects of weight loss on individual dieters.

According to results published in the April 2007 *American Psychologist*, the majority of participants regained ALL the weight they lost—and in some cases even MORE!

But gaining back lost pounds isn’t the only problem you’ll experience with yo-yo dieting.

The UCLA study shows repeatedly losing and gaining weight increases your risk of experiencing diabetes... heart disease... stroke... and can even suppress your immune system and leave you wide open to diseases!

So if diets really don’t work...

...What CAN you do to find success at shedding unwanted pounds?

**THINK Yourself Thinner!**

A *Consumer Reports* survey reported that one in four readers who used commercial diet programs kept off at least two-thirds of the weight they lost. What contributed to their success?

This is what Anne M. Fletcher, M.D., R.D. set out to understand when she surveyed 160 people. Everyone she spoke to had lost at least 20 pounds—and kept the weight off for at least three years.

In her article “10 Secrets of Successful Weight Loss,” Fletcher identifies some common characteristics of folks who maintained their weight loss. The first thing she mentioned is this:
Everyone who kept the pounds off believed they could do it.

These folks were determined not to use prior failure as an excuse. Instead, they felt empowered to take control of their weight loss.

This finding highlights an important aspect of permanent weight loss; namely, the close connection between mind, body, and spirit.

Your physical body is inseparably connected to your spirit. This is why many people experience improved health when taking harmless placebos—or sugar pills—as medication.

Doctors and scientists say many physical illnesses, including obesity, can often be tied to emotional and spiritual injuries.

Fletcher noted that many people who successfully maintained their weight loss had learned to confront negative feelings.

They looked for practical ways to solve problems—instead of trying to bury them with food.

She also noticed that people who maintained their weight loss also kept themselves pumped up with positive and encouraging messages. This was true even when they made mistakes in their eating plan.

Clearly, having healthy thoughts and feelings about yourself can impact on your weight loss and maintenance efforts. It even helps to visualize how you will LOOK when
you achieve your weight loss goals. This can help you stay focused—and increase your determination to succeed!

But please know that you still need to combine all those healthy thoughts with the right kinds of foods to properly nourish your body for healthful living.
The key to managing your blood sugar—and protecting your health—is partially linked to the foods you choose to eat. Choosing foods with low GI numbers is your best bet for maintaining healthy blood sugar.

But what can you do if a GI food list isn’t available when you need to eat? Just remember this handy rule of thumb:

**Unprocessed foods tend to have lower GI numbers than refined foods.**

With that in mind—here are some tips for choosing foods that will help you manage your blood sugar:

- Try to choose about half of your daily starches from low GI foods
- Include at least one low GI food with every meal
- Use breakfast cereals made with oats, barley, and bran
- Eat sourdough, whole grain, or stone-ground flour breads
- Reduce the amount of potatoes you eat
- Enjoy plenty of fruits and vegetables
- Use Basmati or Doongara rice

The truth is, you won’t always follow these tips to perfection. But don’t worry—you can occasionally “cheat” on your
low GI eating plan and still keep your blood sugar under control!

According to the online magazine *Prevention*, you can lower the overall meal GI by mixing high and low GI foods. For example, if you make instant white rice—throw in some beans or another protein to balance the effects on your blood sugar!

But just how reliable is the GI at improving your diet and your health?

**Lower Your GI—Lower Your BMI!**

The glycemic index is more widely used in Australia, Canada, France, New Zealand, and the United Kingdom.

But several large-scale and long-term studies in recent years have begun to boost its support in the United States.

For example, *The Journal of the American Medical Association* recognized the importance of the glycemic index in a 1997 article.

The journal reported findings of the Nurses’ Health Study of 65,173 U.S. female registered nurses. The study concluded that eating foods with a high glycemic index appeared to be a risk factor for Type 2 Diabetes.

A similar study of 42,759 male health professionals likewise showed that foods with a high glycemic load increased the risk for Type 2 Diabetes.

In another study printed in the *Canadian Journal of Cardiology*, doctors compared the effects of a low GI diet to those of the officially accepted Canadian Food Guide to Healthy Eating. The results?

After six months, folks on the low GI diet lost SEVEN TIMES more belly fat than those following the “official”
blood sugar control diet.

Plus, the levels of HDL (good) cholesterol in the low GI diet group improved SEVEN times greater than the control group!

**Seven Sensational Foods to Satisfy Your Hunger Pangs!**

Some folks dislike dieting because they complain of constantly feeling hungry. But a healthy eating plan really should involve eating smaller meals MORE OFTEN!

The key is to choose foods with a lot of weight and volume—and fewer calories.

Australian researcher Dr. Susanna Holt and her associates at the University of Sydney have developed a “Satiety Index.” This tool ranks different foods on their ability to satisfy hunger.

The research team fed participants 240 calories of different foods. Participants then ranked their feelings of hunger every 15 minutes.

After two hours, the participants were allowed to eat from a small buffet. The scientists measured how much they nibbled from a variety of other foods.

Using white bread as the baseline of 100, the researchers ranked 38 different foods. Those foods scoring higher than 100 were considered more satisfying than white bread while those under 100 were less satisfying.

Holt’s team found that of all the foods tested, boiled potatoes were the most satisfying. But potatoes in a different form—French fries—did not score well!

In a paper published in the December 1996 issue of the
European Journal of Clinical Nutrition, Holt and her researchers explain that the size, bulk, and blandness of potatoes may explain their ability to satisfy hunger.

But Holt said fatty foods are not nearly as satisfying as you might expect. “Because it doesn’t recognize the fat as energy for immediate use, the body does not tell the brain to cut hunger signals, so we go on wanting more.”

So what kinds of bulky foods besides potatoes should you keep on hand to help stave off hunger pangs?

Here are some great filling food choices that can help cut cravings:

- **Oatmeal**—a “comfort food” classic that is both tasty and filling!
- **Lentil beans**—these protein-rich nuggets have “time-release” nutrients to help you feel fuller L-O-N-G-E-R!
- **Oranges**—a tasty citrus snack can help keep the urge to nibble at bay!
- **Apples**—naturally sweet and bulky to help satisfy your sweet tooth and your appetite!
- **Popcorn**—crunchy goodness that will fill all the empty corners of your tummy!
- **Brown pasta**—a complex carbohydrate that helps satisfy your cravings for Italian food!
Develop a POSITIVE Exercise Addiction!

A balanced and nutritious eating plan is essential to maintain a healthy weight and to keep your blood sugar in check. But if you REALLY want to boost your weight loss efforts—a little bit of exercise can go a L-O-N-G way!

Please understand that exercise doesn’t have to hurt to be helpful. Although some folks say you need to “feel the burn” to know it’s working—the truth is, the RIGHT kinds of exercise can keep you energized... burn the calories you eat... boost your metabolism... and keep your blood sugar in check!

In 1989, Cooper Institute researcher Steven Blair, P.E.D. shook the scientific world with his conclusions about how
much exercise you need. He measured the fitness levels of more than 13,000 American men and women.

Blair found that the 20% of participants who were most physically fit were 75% less likely to die over the next eight years than the 20% who were least fit.

But the real shocker was...

...The biggest reduction in mortality came from only a SLIGHT increase in exercise. Just by including regular, but moderate exercise—some participants enjoyed a 55% lower death rate!

Adopting a healthy exercise program doesn’t have to mean purchasing a costly gym membership—or training for the Boston marathon! You could start by doing just a little more of what you already do every day—WALKING!

Mort Malkin, D.D.S., author of Aerobic Walking—The Weight Loss Exercise, suggested that walking can provide just as much of a workout as running. He said you can boost the fitness value of walking by putting more muscle to work.

To optimize your walking stride, Malkin made the following suggestions:

- **Make your muscles work earlier**—instead of applying power only to the **end** of your stride, push backward against the ground the instant your heel touches down. This action will work the back of your thighs and your butt muscles too!

- **Swing your hips**—rather than using only your legs to carry your feet forward, reach forward with the hip of the leg you’re thrusting forward. This helps you work your abs, butt, and back muscles!

- **Boost your speed**—try to accelerate as soon as your heel touches the ground. As you walk, try not to bounce and
keep your eyes level.

When you put more muscle mass to work—you’ll quickly begin to see the benefits of walking. This includes improved glucose tolerance... better fat metabolism... and a lower resting heart rate.

You might enjoy other forms of exercise more than walking. Some folks find swimming enjoyable—and are less likely to think of it as a burden they must bear! Other folks enjoy hitting the dance floor—which can be even better exercise than walking.

Nieman says ballroom dancing burns anywhere from 200 to 385 calories per hour. And swing or Western dancing burns up to 400 calories per hour—YEE HAW!

Not only does regular exercise reduce your risk for heart disease, diabetes, and cancer—it also brings some immediate

The Health Benefits of Walking With Weights

Some folks prefer to use hand and ankle weights to burn more calories while walking. But be careful not to swing your arms too much as you could cause elbow or shoulder injuries.

Dr. David Nieman, professor of health and exercise science at Appalachian State University, says you should start with a one-pound weight in each hand to avoid injury. You can gradually increase to five-pound weights in each hand.

Keep your walking stride normal and consistent... and walk slowly until you’ve adjusted to the weights.
benefits as well. Donald Bliwise, Ph.D., director of the Sleep Disorders Clinic at Emory University says daytime exercise can help you sleep better at night!

He recommends bike riding, brisk walking, or other moderate aerobic exercise to promote better sleeping. And experts say you’ll notice greater sleep benefits by exercising earlier in the day.

Another major benefit of putting your body in motion involves clobbering another known trigger for illness and disease—STRESS.
If you’ve ever felt your heart pounding against your chest when you were tense or anxious—you’ve experienced your body’s natural reaction to stressful situations. When you’re under stress, your body releases stress hormones: Cortisol, adrenaline, growth hormones, and glucagons that increase blood clotting... damage the inside of your veins and arteries... and raise your blood sugar levels.

That’s because sudden stress increases the pumping action and the speed of your heart beat. It can also cause your arteries to constrict. Tighter arteries mean reduced blood flow—and that can choke and starve your heart!

What’s more, your artery walls may go into spasm in response to stress. This can produce heart irregularities which can lead to serious cardiac problems.

Excess stress can also make your blood stickier—which increases your risk of an artery-clogging blood clot.

A study reported in the New England Journal of Medicine indicates stress may be clobbering your immune system—and increasing your likelihood of being infected by colds and viruses.
In this study, researchers spent more than a year evaluating stressful events in the lives of 420 people. These stress-related incidences included job loss... death in the family... moving... divorce... or feeling unable to cope with life’s demands.

Study participants were then exposed to one of five cold viruses and tested a month later for antibodies. A full 90% of those under the greatest stress became infected!

This study and many others prove stress can weaken—even KNOCK OUT—your body’s natural defenses! This can leave you vulnerable to many dangerous germs and viruses.

It’s a known trigger for raising your blood sugar and has even been linked to six of the leading causes of death in America!

According to the Centers for Disease Control, excess stress is now a proven trigger for the six leading causes of death in America, including:

- Heart disease
- Cancer
- Lung ailments
- Cirrhosis of the liver
- Suicide
- Accidents

According to Eric Peper, Ph.D., Associate Director of the Institute of Holistic Healing Studies at San Francisco State
University, “Up to 80% of health problems in America today are considered stress related.” Clearly, any effort you make to beat stress will boost your total body health!

**A Natural Anti-Stress Formula for Better Living!**

Let’s face it: Stress is a daily part of life and very difficult to avoid. But a healthy diet—rich in fruits, vegetables, and whole grains—and regular exercise are two natural ways to combat stress. When your mind and body receive proper nutrients, you’re better equipped to react calmly when under stress.

Ed Boenisch, Ph.D., coauthor of *The Stress Owner’s Manual*, suggests these eight great relaxation techniques to clobber excess stress:

1. Leave your work at *work*—try to decompress as you transition from one part of your life to another; this prevents stress from one facet of life from spilling over into another area.

2. Adopt a “can do” attitude—remember believing something puts you on the road toward ACHIEVING it!

3. Categorize your worries—try to think in terms of things you can and cannot control; if something is important and you can act on it—DO so! If it’s something out of your control—just let it go!

4. Try aromatherapy—put fragrant flowers in your office or home or spray perfume in the air; remember cool, menthol scents will energize you while lavender will relax you.

5. Set realistic goals—be sure to envision yourself reaching them!

6. Get a pet—studies show pets can help lower your heart rate and blood pressure.
7. Take ten-minute breaks—be sure to get up and move around at least once every hour. This will help soothe stiffness and tension.

8. Choose to be happy—make a conscious effort to emphasize POSITIVE things and disregard the negative. Be sure to do this until it becomes a habit!

Stress is an unfortunate fact of life. But if you’re confident about your ability to control your life course—you can help reduce and even AVOID stress. Ultimately, this can help reduce your risk of developing stress-related diseases.

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**Squash Stressful Thoughts to Lower Your Cholesterol!**

It’s no secret that stress can suppress your immune system—and leaves you wide open to a variety of diseases. But studies show that the amount of stress you experience can even affect your cholesterol levels!

Catherine Stoney, Ph.D., associate professor of psychology at Ohio State University studied 127 airline pilots and 100 medical students. She found that the men’s “bad” LDL cholesterol rose 5% during high stress periods. Women’s cholesterol showed no stress-related rise. Stoney also found that medical students with high scores on tests to measure conscientiousness had “good” HDL cholesterol levels about 4% higher than those who scored lower.

You might consider this as proof that there IS power in positive thinking!
**Know Thy Mainstream Prescription Meds!**

Most doctors will recommend diet and exercise programs as a means for controlling blood sugar problems. But it is also common practice to resort to using pharmaceutical drugs to treat Type 2 Diabetes.

The problem is this recommendation nearly always falls short of what is really required for someone to make a true lifestyle change to nutrient-rich raw and whole-foods eating. And when attempts to get blood sugar under control with minor dietary changes are not immediately successful—patients and doctors may quickly resort to drugs to manage the disease.

You should be aware of some of the more common prescription medications doctors may recommend to control high blood sugar.

**Metformin (Glucophage®)**

Metformin comes from the French lilac (*Galega officinalis*)—a plant shown to lower symptoms of diabetes.\(^{70}\) It is now the first-line drug of choice for the treatment of Type 2 Diabetes.

Not only is it the best drug for overweight people with heart failure,\(^{71}\) but it is also the only anti-diabetic medication proven to

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reduce the cardiovascular complications of diabetes.\textsuperscript{72} It acts to reduce the formation of new usable sugar in the blood, a process called gluconeogenesis. Equally important, it increases insulin sensitivity and insulin’s ability to bind to cell receptors. This improves your cells’ ability to use blood sugar. It also decreases sugar absorption in your intestinal tract. Metformin is also used for polycystic ovary syndrome—with a weight-loss effect that is mild.\textsuperscript{73}

**Sulfonylureas**

These drugs have been in use since the 1950s. The oldest one still in use is Chlorpropamide (Diabinese\textsuperscript{®}). There are the second-generation drugs called glipizide (Glucotrol\textsuperscript{®}), glyburide (Micronase\textsuperscript{®}, Glynase\textsuperscript{®} and Diabeta\textsuperscript{®}), and glimepiride (Amaryl\textsuperscript{®}). They stimulate the beta cells of the pancreas to release more insulin. One of these is often combined with metformin.

**Rosiglitazone (Avandia\textsuperscript{®})**

This drug belongs to a family called the thioglitazones. It has been shown to decrease insulin resistance and to decrease inflammatory molecules called interleukins. They also help raise your good HDL cholesterol... decrease triglycerides... and lower

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\textsuperscript{73} Inzucchi SE. Oral Antihyperglycemic Therapy for Type 2 Diabetes—Scientific Review. *JAMA*. 2002; 287: 360-372.
the amount of blood sugar that binds to your red blood cells (HbA1c levels) by 1 to 2 percentage points.\textsuperscript{74}

Unfortunately, they have also been associated with serious side effects including weight gain, leg swelling, worsening heart failure, and liver abnormalities.\textsuperscript{75}

\textbf{Repaglinide (Prandin®) and Nateglinide (Starlix®)}

Repaglinide and nateglinide (Starlix®) lower blood glucose by stimulating the release of insulin from the pancreas. The drugs open the cell’s calcium channels, which encourages insulin secretion. Therefore, they lower blood sugar by causing the pancreas to produce insulin. These drugs are taken 30 minutes before starting each meal.

\textbf{Acarbose (Precose®) and Miglitol (Glyset®)}

These drugs are called \textit{alpha-glucosidase} inhibitors. The enzyme alpha glucosidase, which is found in your intestinal walls, releases glucose from large carbohydrates for absorption.

These drugs block sugar from entering your blood stream from food by preventing carbohydrates from breaking down into glucose molecules. It is only a short-term effect to decrease blood glucose levels and over time has only a small reduction in Hgb A1c levels.

\textbf{Sitagliptin (Januvia®)}

A new medication called Sitagliptin (Januvia®) helps improve Hgb A1c levels without causing low blood sugar


\textsuperscript{75} Ibid.
symptoms—or hypoglycemia—as a side-effect. Sitagliptin does not tend to cause weight gain and has been shown to have a neutral, or even positive effect on your blood cholesterol levels.

**Insulin**

You’re probably now aware of how the hormone insulin strongly affects your glucose metabolism. It causes the liver, muscle, and fat cells to absorb glucose from your blood.

It then stores glucose as glycogen in the liver and muscle, and stops your body from using fat as an energy source. When insulin is low or absent, your cells don’t absorb enough glucose—and your body begins to use fat as an energy source.

Patients with Type 1 Diabetes depend on external insulin for survival because the hormone is no longer produced by the pancreas. Patients with Type 2 Diabetes either have low insulin production—or they may produce lots of insulin that their cells cannot use.

According to current statistics, 80% of Type 2 Diabetics will eventually require insulin as the disease progresses. This is because most physicians only offer pharmaceutical drugs as the answer to controlling blood sugar.

**New Diabetes Drugs**

Pramlintide (Symlin®) is a synthetic form of the insulin-like hormone amylin. Amylin works in combination with insulin and glucagons to maintain normal blood glucose levels.

Pramlintide injections taken along with meals have shown only a modest improvement in hemoglobin A1c levels.

Along with the drug exenatide and metformin, pramlintide usually causes a mild weight loss.

Exenatide (Byetta®) is part of a new class of drugs called incretin mimetics. Exenatide is a synthetic version of a naturally occurring hormone that lowers blood glucose levels by increasing insulin secretion.

A unique feature of this drug is that it only works when blood sugar levels are high, so it does not cause hypoglycemia.

Exenatide is also injected along with meals. It can replace the combination of metformin and a sulfonylurea when this drug combination does not properly control your blood sugar.

**Metabolic Activation Therapy (MAT)**

Metabolic Activation Therapy (MAT) is also known as pulse insulin therapy or cellular activation therapy. It produces a uniquely superior improvement in diabetes that is not seen with other intravenous or insulin infusions injected through your skin.

This new therapy was developed by Dr. Thomas T. Aoki in the 1970s while he was a researcher at the Joslin Research Laboratory, affiliated with Harvard Medical School. It involves a once-a-week treatment consisting of six hours of programmed intermittent intravenous insulin therapy, along with oral glucose.

This therapy mimics and enhances the effects of natural insulin secretion. The primary purpose of MAT therapy is not just to control glucose—but to improve changes to your biochemistry and physiology that are responsible for diabetes.

This therapy improves your liver’s ability to oxidize glucose as well as glucose metabolism throughout your body. Its effects can last for several days.

MAT therapy is performed in a doctor’s office or at a
clinic. During the remainder of the week, the patient must
stick to their usual treatment to control blood sugar.

A significant advantage to MAT therapy lies in its ability
to increase the way your organs use glucose for energy. This
decreases the organ’s oxygen requirements, which allows
your organs to function more normally—and even to
repair damage and heal!

It is also vital for you to know that some prescription
drugs actually WORSEN blood sugar levels in diabetics.
These drugs include:

- Prednisone—a strong anti-inflammatory drug
- Terbutaline—used to stop preterm labor or reverse
  asthma attacks
- Hydrochlorothiazide—a diuretic
- Phenytoin—a medication to prevent seizures

In addition to these prescription drugs, the B vitamin
niacin can also cause minor increases in blood sugar levels.
But William Davis, M.D., a cardiologist and author of the
book *Track Your Plaque*, said niacin in combination with
dietary reductions in processed carbohydrates will often
compensate for this blood sugar effect.

Although prescription drugs are common solutions
offered by the medical establishment—you’ll be glad
to know Mother Nature provides some natural and
EFFECTIVE alternatives for lowering blood sugar!

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Discover Some Premium Nutrients for Healthy Blood Sugar!

Many sincere folks in medical professions would have you believe that drugs and expensive therapies are the only way to battle blood sugar imbalances. But the truth is—Mother Nature provides some remarkable herbal remedies to help you fight and WIN the battle of blood sugar imbalances! Numerous scientific reports prove these remarkable remedies live up to their claims.

Several herbs have been used to control blood sugar levels for centuries. Although this includes approximately 400 different herbs—only a few have undergone enough studies to
determine their actual effects and potencies.  

Fortunately, you’re about to discover some of the herbs that have been thoroughly researched and proven to help regulate blood sugars in diabetes. These seven superstar nutrients can be part of your healthy prescription for balanced blood sugar. Let’s start with...

**Gymnema Sylvestre**

For more than 2,000 years, people in India have used the herb Gymnema sylvestre to help control blood sugar. In fact, the leaves of this climbing plant are prized by practitioners of Ayurvedic medicine—the holistic system of healing developed in India and practiced by renowned doctor, Deepak Chopra.

The herb is also called “gurmar,” which literally means “destroyer of sugar” in Hindi. This name describes the way that chewing the leaves interferes with your ability to taste sweetness. Because this amazing herb decreases the sensation of sweetness in many foods, this may reduce your cravings for sugary snacks.

Recent scientific studies indicate Gymnema sylvestre helps:

- Balance your fasting blood sugar level...
- Control hemoglobin A1c (average blood sugar) levels for three months...
- Improve your body’s glycemic control...
- Increase the effectiveness of insulin...

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78 David Fitz-Patrick M.D., Endocrinologist at the Diabetes and Hormone Center of the Pacific, Ala Moana Pacific Center, 1585 Kapiolani Boulevard, Suite 1500 Honolulu, Hawaii 96814 (808) 531-6886  http://www.endocrinologist.com/herbs.html.
Gymnema sylvestre helps control abnormal blood sugar levels by reducing your absorption of glucose. Just how does it work?

The herb contains gymnemic acids, which are known to suppress glucose absorption. Gymnema sylvestre also helps your pancreas make more insulin to balance blood sugar levels. These findings are backed by numerous clinical studies.

Dr. K. Baskaran published a study in the *Journal of Ethnopharmacology* involving patients who took 400 mg of Gymnema sylvestre extract daily for 18 to 20 months along with their oral medications. This group showed a significant reduction in their fasting blood sugar levels!

Scientific research confirms the powerful sugar busting effects of Gymnema sylvestre! But there’s yet another nutrient that can help ease your sugar cravings...

**Chromium**

Another weapon in nature’s arsenal of sugar fighters is the mineral chromium. Chromium aids in digestion and helps move blood glucose from the bloodstream into the cells for energy. It also helps turn fats, carbohydrates, and proteins into energy.

The results? Balanced blood sugar... fewer sugar cravings and energy crashes... and improved fat metabolism, to name a few. What’s more, chromium is critical for healthy insulin function. Without enough chromium in your body, insulin just doesn’t work properly.

In a study conducted at the Health and Medical Research Foundation in San Antonio, Texas, researchers divided 154 patients into three groups to study the effects of chromium on weight gain.
Group “A” took 200 mcg daily of chromium for 12 weeks. Group “B” took double the dosage—400 mcg daily—for the same period. Those patients in Group “C” were given a placebo.

The researchers wanted to measure the effect of taking chromium on “body composition improvement,” or BCI. The BCI indicates the increase in the ratio of lean muscle mass to fat in the patient’s body.

In both groups taking chromium, the scientists reported significantly higher positive changes in BCI compared to those patients not taking the chromium!

Chromium exists in many foods including:

- Whole-grain breads and cereals
- Fresh fruits and vegetables
- Potatoes (especially in the skin)
- Brewer’s yeast
- Meats
- Cheeses
- Molasses

Despite the wide availability of chromium from food sources, research shows that 90% of American adults have a chromium deficient diet! Could this be a key reason why an increasing number of Americans suffer blood sugar problems?

Cinnamon

Believe it or not—your kitchen probably already contains a key ingredient to help you control unhealthy blood sugar levels. Recent scientific discoveries prove that a commonly used spice helps regulate blood sugar in ways previously unknown.

Scientists at the Maryland-based Human Nutrition
Research Center were studying the effects of common foods on blood sugar. Dr. Richard Anderson, lead scientist and chemist, noticed that when patients ate apple pie... their blood sugar levels actually IMPROVED!

Further investigation revealed it was the CINNAMON in the apple pie—that helped their blood sugar levels!

But you might be wondering, “How on earth can eating cinnamon affect my blood sugar?”

Researchers discovered that cinnamon actually increases your glucose metabolism.

It contains a compound called methyhydroxy chalcone polymer—or MHCP for short—that works with insulin to help process glucose. In fact, a laboratory test conducted by the U.S. Department of Agriculture (USDA) showed MHCP increased glucose metabolism by roughly 20 times!

Just think... 20 times more energy to help sustain you while you work, exercise, and take care of other daily activities!
**Banaba Leaf Extract**

Traditionally, people living in the Philippines, South Asia, and India have brewed a banaba leaf tea to help regulate blood sugar. In fact, some natural healers sing its praises as a medicinal plant.

Medical scientists believe that banaba leaf’s beneficial effects on blood sugar are due to its high concentration of corosolic acid, a natural compound extracted from its leaves.

Corosolic acid mimics insulin by moving sugar out of your bloodstream and into your cells. And numerous scientific studies have proven banaba leaf’s effectiveness.

In one study, patients with blood sugar concerns took a supplement containing banaba leaf or a placebo three times a day for four weeks.

The placebo group had no change, but the banaba leaf group achieved very good results for blood sugar balancing.

With banaba leaf helping control your blood sugar fluctuations...

...You can also experience healthy weight loss. In fact, some folks have reported an average of two to four pounds a month!

**Fenugreek**

Modern science is shedding new light on another traditional folk remedy which delivers excellent health benefits. Fenugreek is an herb native to the Mediterranean, Ukraine, India, and China.

Its medicinal use was first mentioned 3,500 years ago in the Egyptian Ebers Papyri. And practitioners of Ayurvedic and traditional Chinese medicine have used the herb for more than 2,000 years.
Modern scientists now know fenugreek helps balance your cholesterol, triglycerides, and blood glucose.

Fenugreek seed stimulates insulin release. This helps food sugars reach your cells properly.

In one study, patients with blood sugar concerns were divided into two groups. Group One received one gram of fenugreek seed extract and Group Two received a combination of dietary control, exercise, and a placebo capsule for two months.

The results? Group One patients saw more positive results for blood sugar, insulin resistance, cholesterol and triglycerides, compared to Group Two.

And that’s not all...

Three more studies confirm that fenugreek seed extract helps stabilize blood sugar in patients with blood sugar and insulin problems.

Why such results? The seeds of fenugreek are rich in dietary fiber and other natural compounds which help balance your blood sugar!

**Bitter Melon**

Although it may be unknown to most people in the West—bitter melon has long been used in South America,

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79 Sahelian, R. Jaipur Diabetes and Research Centre.
the Caribbean, East Africa, and the Orient as both food and a natural medicine.

And scientific studies prove its value for treating blood sugar problems.

For example, two studies\textsuperscript{83,84} show bitter melon could play a key role in helping to balance insulin in your body—which of course means healthy blood sugar control.

And another study\textsuperscript{85} showed bitter melon had positive effects on the serum glucose levels of those taking it, following both fasting and eating!

**Policosanol**

People with blood sugar problems often struggle with high cholesterol too. The drug makers will push statin drugs as your best bet for lowering cholesterol.

They won’t tell you about dangerous side effects ranging from exhaustion and nerve damage to memory loss and even impotence!

But don’t worry—Mother Nature’s safer, more effective alternative is the nutrient policosanol.

This nutrient is a mixture of fatty alcohols derived from sugar cane wax. A number of controlled studies have shown that policosanol is an effective way to reduce high LDL (“bad”) cholesterol levels.

In one study, participants received 20 or 40 mg per day


of policosanol or a placebo for six months. Total cholesterol and LDL cholesterol decreased significantly and HDL cholesterol increased in both groups receiving policosanol.

None of the cholesterol readings changed in participants who took a placebo. And what’s even better is neither group reported any negative side effects from taking policosanol!

Some additional first-rate nutrients that help manage blood sugar imbalances include:

- **Green Tea**—increases metabolism and reduces chronic disease. It significantly reduces food intake, body weight, cholesterol, and triglyceride levels. In one study green tea increased insulin activity by about 15-fold, an effect of the active ingredient, epigallocatechin gallate.\(^{86}\)

- **Bilberry** (*Vaccinium myrtillus*)—leaves have a reported weak anti-diabetic activity and have been shown experimentally to lower blood sugar levels consistently by 26% in rats.\(^{87}\)

- **Ginseng** (Korean and American)—One study showed a significant reduction in post-meal glucose versus placebo in Type 2 Diabetes.\(^{88}\)

- **Conjugated Linoleic Acid (CLA)**—activates insulin receptor sensitivity.

- **Vitamin B6**—helps prevent a change in proteins that

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86 This study was reportedly led by Richard A. Anderson, Ph.D. from the University of California in Santa Barbara but on behalf of the USDA’s Agricultural Research Service in Beltsville, MD.


causes tissue damage from excessive blood glucose levels.

- **Magnesium**—changes insulin secretion and activity in your body; a deficiency can interrupt insulin production and increase insulin resistance.

- **Manganese**—can activate enzymes that promote glucose metabolism and is useful in energy production.

- **CoEnzyme Q10 (ubiquinone)**—can stimulate insulin production and reduce fasting blood glucose and ketone body levels by 30%.

- **Acetyl L-Carnitine**—an amino acid that boosts your cells’ energy metabolism.

- **Vitamin B12**—helps prevent and slow the progression of diabetic retinopathy.

- **Selenium**—helps prevent oxidative cell damage.

Nutrients from whole foods are still the best source of nutrients to help you battle blood sugar problems. But many of these vitamins, minerals, and herbs are available as nutritional supplements that you can purchase.
Conclusion

Diabetes begins as a quiet threat to your health. But as blood sugar levels rise—so do your chances of experiencing kidney problems, cardiovascular disease, blindness, and even premature death!

If your blood sugar levels are higher than normal, have you resigned yourself to a life of taking daily drugs... jabbing yourself with insulin... and praying that you don’t wind up on a dialysis machine or succumbing to a brain disaster?

This WON’T be your fate—especially now that you know about the risk factors and causes of blood sugar imbalances. What’s more—you’re now equipped with the information you need to avoid harmful refined sugars... choose foods packed with the nutrients that help control blood sugar levels... and implement a regular and healthy exercise routine.

You even know more about the benefits and risk of the most popular prescription drugs used to treat diabetes. And better still, you’ve discovered some all-natural alternatives for safely balancing your blood sugar!

Now that you’ve taken the time to read this plan to help balance your blood sugar—why not resolve to implement it, starting NOW! Make it part of your strategy for success in conquering blood sugar problems— for GOOD!
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Natural Alternatives for Diabetes and Blood Sugar


Index

A
Acarbose 65
Acetyl L-Carnitine 78
American Academy of Family Physicians 9
American Diabetes Association 13, 17, 82
Anderson, Richard Dr. 73
Aoki, Thomas T., Dr. 67
Artificial Sweeteners 38
Attention deficit hyperactivity disorder (ADHD) 32

B
Banaba Leaf Extract 74
Baskaran, K. Dr. 71
Bilberry 77
Bitter Melon 75, 76
Blair, Steven, P.E.D. 55, 56
Bliwise, Donald, Ph.D. 58
Blood pressure 9, 14, 19, 23, 25, 36, 42, 61, 86
Blood sugar imbalance 7, 8, 11, 47, 69, 77, 79
Boenisch, Ed, Ph.D. 61

C
Cancer 10, 31, 33, 34, 40, 46, 57, 60, 84, 85
Cardiovascular disease 9, 10, 20, 25, 43, 46, 79
Centers for Disease Control and Prevention (CDC) 22, 24, 43, 82
Chopra, Deepak 70
Chromium 71, 72
Cinnamon 72, 73
CMP 18
CoEnzyme Q10 78
Conjugated Linoleic Acid 77

D
Davis, William, M.D. 68
Dental examination 18
Diabetes 8, 9, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 30, 33, 35, 36, 37, 42, 43, 46, 48, 51, 52, 57, 63, 64, 66, 67, 68, 70, 75, 76, 77, 79, 81, 82, 83, 85, 86, 87, 89, 90
Diabetes Control and Complications Trial (DCCT) 23
Diet-controlled 27
Natural Alternatives for Diabetes and Blood Sugar

**E**
EKG test 18

**F**
Fasting Plasma Glucose Test (FPG) 16
FDA 31, 34, 38, 39, 42, 85
Fenugreek 74, 75, 81
Fletcher, Anne M., M.D., R.D. 48, 49

**G**
Gestational Diabetes 14, 17
Ginseng 77, 90
Glucose 11, 13, 16, 17, 22, 28, 29, 39, 40, 57, 64, 65, 66, 67, 68, 71, 73, 75, 76, 77, 78, 81, 82, 89
Glycemic index 28, 30, 35, 39, 40, 52, 85
Green Tea 77
Gymnema Sylvestre 70, 71

**H**
Health and Medical Research Foundation 71
Heart Disease 10, 21, 22, 25, 48, 57, 60, 83
Hemoglobin A1C 18, 66, 70
High-glycemic load (HGL) 27, 28
Holt, Dr. Susanna 53, 54

**I**
Infections 18, 23, 26, 36, 40
Insulin 11, 13, 14, 15, 17, 20, 30, 39, 46, 64, 65, 66, 67, 70, 71, 73, 74, 75, 76, 77, 78, 79, 81, 82, 89
Insulin resistance 13, 14, 15, 17, 64, 75, 78, 82
Insulin-dependent diabetes mellitus (IDDM) 17, 81

**J**
Juvenile-onset diabetes 17

**K**
Katz, David L., M.D., M.P.H. 45, 46
Catherine S. Katz, Ph.D. 45, 46

**L**
Lamm, Steven, Dr. 47
Lipid profile 18

**M**
Magnesium 78
Malkin, Mort, D.D.S. 56
Manganese 78
Metabolic Activation Therapy (MAT) 67, 68
Metabolic syndrome 8, 9, 11, 20, 30, 36, 37, 46, 82, 87
Metformin 63, 64, 67, 89
Microalbumin urine test 18
Miglitol 65

N
Nateglinide 65
National Institutes of Health 14, 20, 22, 24, 43, 82
Nephropathy 24
Neuropathy 23, 24, 82
Neuropeptide Y 45, 46
Nieman, David, Dr. 57
Nurses’ Health Study 52

O
Opioids 45
Oral Glucose Tolerance Test (OGTT) 16

P
Peper, Eric, Ph.D. 60
Policosanol 76, 77
Polycystic ovary syndrome 20, 64
Pre-diabetes 14, 16, 17, 18, 82
Pre-diabetic 7, 8
Prescription Meds 63, 68, 79

R
Repaglinide 65
Retinal eye scan 18
Retinopathy 22, 23, 78
Rosiglitazone 64

S
Satiety Index 53
Sitagliptin 65, 66
Skin tags 20
Stevia 31, 41, 42, 87
Stoney, Catherine, Ph.D. 62
Stress 34, 58, 59, 60, 61, 62, 85
Sucrose 30, 32, 34, 37, 39, 40, 83, 85, 87
Sulfonylureas 64
Syndrome X 8, 9, 10, 15, 27, 51, 68, 89
T
Triglycerides 14, 20, 64, 75
Type 1 Diabetes 17, 42, 66, 75, 81, 88
Type 2 Diabetes 14, 17, 22, 25, 52, 63, 64, 66, 68, 77, 82, 88, 89, 90

U
U.S. Department of Agriculture (USDA) 30, 73, 77, 89, 90
U.S. Food and Drug Administration (FDA) 31, 34, 35, 38, 39, 42, 85
Urinalysis 18

V
Visceral adipose tissue (VAT) 10, 11, 82
Vitamin B12 78
Vitamin B6 77

W
Walton, Ralph G., M.D. 38
Natural Alternatives for Diabetes and Blood Sugar Problems

Drug Companies Don’t Want You to Know

Enjoy healthy blood sugar for pennies on the dollar and freedom from needles, insulin, meters, and medications.

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