

INTERNATIONAL #1 BEST SELLING AUTHOR  
*CHRISTOPHER DAVID ALLEN*

# REVERSE DIABETES

LOWER BLOOD SUGAR TO NORMAL

BE DRUG FREE

END TESTING

**BONUS:**

HOW TO KEEP DIABETES  
OFF MEDICAL RECORDS



**International  
Best Selling Author  
#1 Best Selling Author  
On Amazon  
*Christopher David Allen***

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DIABETES**

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# HOW TO KEEP DIABETES OFF MEDICAL RECORDS

## HOW TO BOOK & GUIDE FOR SMART DUMMIES

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# DIABETES OVERVIEW

**THE DIABETES MYTH:** While usually referred to as a “group of diseases”, all types of diabetes are NOT DISEASES. Rather, all diabetics suffer from a “single symptom” and that symptom is “high blood glucose”.

**Diabetes is the state of having excessive glucose in the blood due to inadequate insulin production or the body’s cells are not responding properly to absorb glucose produced by the body.**

**In the USA, Diabetes is ranked as the 7<sup>th</sup> highest killer in the USA.**

Diabetes is significantly under-reported as a cause of death. Studies have shown that only 35% to 40% of people with diabetes that died had diabetes listed on the death certificate. Only 10% to 15% had diabetes listed as an underlying cause of death.

When you consider that most diabetics have heart disease (#1 killer) or cancer (#2 killer) on their death certificates and NOT diabetes which was the underlying cause ... Diabetes is probably more like the #3 or #4 killer.

**Approximately 120 million people in the USA are “diabetic” or “prediabetic”.**

As of 2014, an estimated 387 million people have diabetes worldwide, with Type 2 diabetes making up about 90% of the cases. The number of people with diabetes is expected to rise to 592 million by 2035.

**The Center for Disease Control (CDC) has stated “one in three born in 2000 and the years since will get diabetes”**

**Data from the National Diabetes Statistics Report, 2014 (released June 10, 2014)**

- **\$245 billion USD** Total costs of diagnosed diabetes in the United States in 2012
- **\$176 billion** for direct medical costs



- **\$69 billion** in reduced productivity

The global economic cost of diabetes in 2014 was estimated to be \$612 billion [USD](#).

**Medical expenses for people with diagnosed diabetes are 2.3 times higher than what expenses would be in the absence of diabetes.**

**Diabetes at least doubles a person's risk of death.**

**Top Ten Countries** - While diabetes affects people in countries all around the world, it tends to be more prevalent in certain countries. According to figures from the International Diabetes Foundation, the top ten countries with the highest rate of diabetes are as follows, starting with the highest rate of the disease:

1. China
2. India
3. USA
4. Brazil
5. Russia
6. Mexico
7. Indonesia
8. Egypt
9. Japan
10. Pakistan

**The two underlying causes of the single diabetes symptom of high blood glucose (high blood sugar) are:**

1. Abnormal metabolism of blood sugar because the pancreas does not produce enough insulin



2. The cells of the body are not responding properly to insulin produced by the pancreas.

Diabetes is diagnosed by high blood sugar levels in the blood over a prolonged period.

Other signs of high blood sugar include [frequent urination](#), [increased thirst](#), and [increased hunger](#).

**If left untreated, diabetes can cause many complications. [Acute complications](#) include:**

- [Diabetic Ketoacidosis](#) Coma
- [Nonketotic Hyperosmolar Coma](#)
- Death

**Serious long-term complications include:**

- [Heart disease](#) and Stroke - Death from heart disease and stroke is three times higher for diabetics
- High Blood Pressure - 75% of diabetics have high blood pressure (130/80 or higher)
- [Kidney](#) Disease - Diabetes is the leading cause of kidney failure
- Nervous System Damage - Most diabetics develop nervous system damage such as reduced feeling in the feet, erectile dysfunction, and impaired digestion
- [Foot ulcers](#)
- Amputation - Diabetes is the leading cause of limb amputations
- Damage to The Eyes - Diabetes is the leading cause of blindness in adults
- Cancer - Diabetes dramatically increases the risk for cancer. Diabetes doubles the risk of [liver](#), [pancreas](#), and [endometrial cancer](#). It

increases the risk of colorectal, [breast](#), and [bladder cancer](#) by 20% to 50%.

### Types of Diabetes (more detail in coming chapters):

1. **Prediabetes** is a condition that occurs when a person's blood glucose levels are higher than normal but not high enough for a diagnosis of Type 2 diabetes. It is preventable and reversible with lifestyle changes.
2. **[Type 2 diabetes](#)** is diagnosed when a person's blood glucose levels are consistently high enough to become health threatening and require intervention. It is the dominant form of diabetes and it has reached epidemic proportions worldwide. Type 2 diabetes represents the majority of diabetes cases at about 90%. It is preventable and reversible with lifestyle changes.
3. **Type 1 diabetes** primarily results from an autoimmune reaction that destroys insulin producing beta cells in the pancreas. This results in failure of the pancreas to produce enough insulin to carry blood glucose to the body's cells or complete failure to produce insulin. Type 1 is also caused by decreased insulin sensitivity of the body's cells. Approximately 5% of diabetes cases in North America and Europe are from Type 1. People with Type1 where the pancreas is still producing some amounts of insulin may be able to regenerate the pancreas through lifestyle changes to regain normal blood sugar levels.
4. **[Latent Autoimmune Diabetes of Adults \(LADA\)](#)** is a condition in which Type 1 diabetes develops in adults. Adults with LADA are often misdiagnosed as having Type 2, based on age rather than [normal](#) causes of Type 2. People with LADA may be able to recover to normal blood sugar levels through lifestyle changes.
5. **[Gestational diabetes](#)** occurs when a pregnant women without a previous history of diabetes develops high blood sugar levels. Gestational diabetes resembles Type 2 diabetes in several respects with a combination of relatively inadequate insulin secretion and cellular responsiveness. It occurs in as many as 10% of all

[pregnancies](#) and may improve. It usually resolves after the birth of the baby. However, after birth, approximately 5% to 10% of women with gestational diabetes develop diabetes, most commonly Type 2. Gestational diabetes is treatable with lifestyle changes, but requires careful medical supervision of a diabetes knowledgeable doctor throughout the pregnancy.



## Overview of the main symptoms of diabetes

**The classic initial symptoms of untreated diabetes are:**

- Lethargy
- Stupor
- Weight loss
- Polyurea (Frequent Urination) - The body attempts to get rid of excess glucose by diluting the high blood sugar. It draws water out of the cells into the bloodstream and gets rid of it through urination.
- Polydipsia (increased thirst)
- [Polyphagia](#) (increased hunger)

- Kussmaul breathing (deep and labored breathing)
- Smell of acetone on the breath

**Several other signs and symptoms can mark the onset of diabetes, although they are not specific to the disease. In addition to the ones above, they include:**

- Blurry vision that can progress to blindness
- Headache
- Chronic [Fatigue](#)
- Slow healing of cuts
- Itchy skin
- Nausea
- Vomiting
- Abdominal pain

## **Comparison of Type 1 and 2 diabetes**

<b>Feature</b>	<b>Type 1 diabetes</b>	<b>Type 2 diabetes</b>
<b>Onset</b>	Sudden	Gradual
<b>Age at onset</b>	Mostly in children	Mostly in adults
<b>Body size</b>	Thin or normal	Often <a href="#">obese</a>
<a href="#">Ketoacidosis</a>	Common	Rare
<a href="#">Autoantibodies</a>	Usually present	Absent
<b>Endogenous insulin</b>	Low or absent	Normal, decreased or increased
<a href="#">Concordance</a>	50%	90%
<b>in <a href="#">identical twins</a></b>		

**Prevalence**

~10%

~90%

**The common clinical tests used to diagnose diabetes are measures of blood glucose levels:**

1. **Fasting Plasma Glucose (FPG) test** measures the amount of glucose in the blood after fasting. Prediabetes is diagnosed if the fasting blood glucose level is between 100 and 125 mg/dl. Diabetes is diagnosed if the fasting blood glucose level rises to 126 mg/dl or above.
2. **Oral glucose Tolerance Test (OGTT)** is used to measure insulin response to high glucose levels. During this test, patients are given glucose, and the rise in blood glucose levels is measured. Prediabetes is diagnosed if the glucose level rises to between 140 and 199 mg/dl. Diabetes is diagnosed if blood glucose levels rise to 200 mg/dl or higher.
3. **HbA1c Test** is also helpful in diagnosing less severe cases of diabetes. From this test, clinicians can estimate the average blood glucose level during the preceding two to four months. Normally 4 to 6 percent of hemoglobin is glycosylated, which corresponds to average blood glucose between 60 and 120 mg/dl. Mild hyperglycemia increases HbA1c to 8 to 10 percent (or 180 to 240 mg/dl), while severe hyperglycemia increases HbA1c values up to 20 percent. For diabetics, a healthy HbA1c level is less than 7 percent, which corresponds to an average blood glucose level of 150 mg/dl or less.

A diabetes test result, in the absence of definitive high blood sugar, should be confirmed by a repeat of any of the above methods on a different day. It is preferable to measure a fasting plasma glucose level because of the ease of measurement. There is a considerable time commitment for oral glucose tolerance testing, which takes two hours to complete and offers no prognostic advantage over the fasting test.

**Diabetes is diagnosed by persistent high blood sugar demonstrating any one of the following:**

## **Fasting Plasma Glucose Level**

- 70-90 mg/dl = Normal
- 91-100 mg/dl = Not ideal
- 101-125 mg/dl = Prediabetic
- 126 mg/dl or above = Diabetic
- [Plasma glucose](#)  $\geq 200$  mg/dl two hours after a 75 g oral glucose load as in a [glucose tolerance test](#) = Diabetic
- Symptoms of high blood sugar and casual plasma glucose  $\geq 200$  mg/dl = Diabetic
- [Glycated Hemoglobin](#) (HbA<sub>1C</sub>)  $\geq 6.5$  [DCCT](#) % = Diabetic

**As little as five pounds of excess fat on a body can interfere with insulin's ability to deliver glucose to the body's cells. Excess body fat interferes with the action of insulin in multiple ways:**

**Insulin also works less effectively when we eat fatty foods, overeat, or eat low-nutrient foods.**

**IMPORTANT NOTE:** Giving overweight diabetic people more insulin makes them sicker by promoting more weight gain and causing them to become even more diabetic.

**The purpose of this book is to help diabetic and prediabetic patients to understand and discover the best choices to deal with the high blood sugar underlying causes of diabetes and become "Diabetes Free".**

# PREDIABETES

**Obesity, lack of exercise, and excess carbohydrate consumption are the leading causes of prediabetes.**

This stealth condition has no symptoms and is generally present long before a diagnosis for [Type 2 diabetes](#). Fasting blood sugar level is higher than normal, but not high enough to be diagnosed with diabetes (101 mg/dl to 125 mg/dl).

Carbohydrate digestion is mildly abnormal but other symptoms indicating [diabetes](#) are absent. The development of Type 2 diabetes is expected with prediabetes. Many people destined to develop Type 2 diabetes (covered next) spend many years in a state of prediabetes.

Most prediabetic people are undiagnosed and unaware of their condition. They can easily prevent progression to Type 2 diabetes and reverse their blood sugar levels to normal with lifestyle changes including exercise, a diabetes diet, and weight loss. Early diagnosis through [BLOOD SUGAR SELF-TESTING](#) (click to go to that chapter) or doctor testing could halt the epidemic progression to Type 2 Diabetes.

About 86 million people in the U.S. over age 20 have prediabetes. Reversing it can prevent more serious health problems later on. These range from [Type 2 diabetes](#) to problems with your [heart](#), [blood](#) vessels, eyes, [kidneys](#), and limbs. By the time of a diabetes diagnosis, many of these serious and life-threatening problems have already taken hold.

**[Prediabetes Warning Signs ... You're more likely to get prediabetes if you:](#)**

- Have a family history of [Type 2 diabetes](#)
- Are a mother who had [gestational diabetes](#) (pregnancy onset diabetes) or gave birth to a baby weighing more than 9 pounds
- Are a woman with [Polycystic Ovary Syndrome](#) (PCOS)



- Are African-American, Native American, Asian American, Hispanic, or Pacific Islander
- Are overweight or [obese](#), especially around the middle (belly fat) ... For some, even a small weight gain can trigger prediabetes or progression to Type 2 diabetes
- Have high [triglycerides](#), low HDL [cholesterol](#), and high LDL [cholesterol](#), or total cholesterol over 300
- Don't exercise
- Are 45 years or Older
- Eat a high carbohydrate diet

You should do [BLOOD SUGAR SELF-TESTING](#) at home or be tested by a doctor for prediabetes if you meet any of the criteria above and you:

- Had an abnormal blood sugar reading in the past
- Have heart disease
- Show signs of insulin resistance, which means the body produces insulin, but doesn't respond to it like it should

**What Are the Symptoms?** ... Although most people with prediabetes have no symptoms, a prediabetic person might notice they are extra thirsty, pee a lot more, have blurred [vision](#), or chronic [fatigue](#).

**How Is Prediabetes Diagnosed?** ... Your doctor can perform one of three different [blood](#) tests or you can self-test at home:

1. **Fasting Plasma Glucose Test:** Measures your blood sugar after an 8-hour fast. If your blood sugar level is higher than normal but below

diabetes diagnosis level (101 mg/dl to 125 mg/dl), you may have prediabetes.

2. **Oral Glucose Tolerance test:** Records your blood sugar after an 8-hour fast and again 2 hours after you have a very sweet drink. If your blood sugar is higher than normal 2 hours after the test, you may have prediabetes.
3. **[Glycated Hemoglobin \(HbA<sub>1C</sub>\) Test:](#)** Looks at your average blood sugar for the past 2 to 3 months. It can be used to see if your diabetes is under control or to diagnose the disease.

**Blood Sugar Self-testing at Home:** To save medical expenses or to avoid the possibility of having diabetes or prediabetes showing on your medical records, go to the chapter [BLOOD SUGAR SELF-TESTING](#)

**Treatment for prediabetes is without medication (lifestyle changes):**

- Eat a [healthy high protein, low carb, and quality fat diabetic diet](#)
- Lose [weight](#) (losing 5% to 10% of your weight can make a huge difference)
- Exercise (choose a form or multiple forms of exercise you find enjoyable so you will do it every day regardless of weather, like rebounding or dancing)
- [Stop](#) Smoking
- Get quality rest
- Reduce Stress
- Treat [high blood pressure](#) (hypertension) and high cholesterol by getting off hypertension and statin drugs ... CLICK to go to the Chapter

## DANGEROUS STATIN DRUGS.

# TYPE 2 DIABETES

**Type 2 diabetes develops when the body becomes resistant to insulin or when the pancreas stops producing enough insulin.** In Type 2 diabetes, the insulin process to deliver glucose to the body's cells doesn't work well. Instead of moving into your cells, sugar builds up in your bloodstream. As blood sugar levels increase, the insulin-producing beta cells in the pancreas produce more insulin. Eventually, these cells become impaired and can't make enough insulin to meet the body's demands.

**A person is Type 2 diabetic when the fasting blood sugar level is higher than prediabetes levels (higher than 125 mm/dl).**

Type 2 diabetes is the most common form of diabetes (90%). It was previously referred to as "non-insulin-dependent diabetes mellitus" (NIDDM) or "adult-onset diabetes".

In Type 2 diabetes, medications or lifestyle changes are the options. It is important to find a doctor who does NOT jump straight to medications as many misinformed doctors are unfortunately trained to do.

**IMPORTANT NOTE:** Lifestyle changes are far preferable to medications to avoid unnecessary dependence upon medications, their side effects, and negative long-term consequences.

Type 2 has increased dramatically over the past five years. It is more common among older people (45 and older) than in other segments of the population, but it is affecting children at increasingly alarming rates.

Traditional medicine treats Type 2 diabetes with lifestyle changes (diet, exercise, weight loss, stop smoking, quality rest), medications (pills), and with or without insulin (injections). However, medications and insulin are NOT the best approaches as insulin and some oral medications can cause the dangerous reverse effect of [low blood sugar](#) and have many other adverse side effects.

**When glucose builds up in your blood instead of going into cells, it can cause two problems:**

- Your cells may be starved for energy and you feel weak or fatigued all the time.
- Over time, high blood glucose levels may cause damage to the body, which includes your eyes, kidneys, nerves, heart, and can cause death.

For most people, Type 2 gets worse over time but that is not a given. A person can choose to take a natural path to normal blood sugar levels. Many people with Type 2 control their blood glucose through healthy eating and being active.

**Researchers don't fully understand why some people develop Type 2 diabetes and others don't. Carbohydrate digestion is strongly abnormal and other causes and symptoms of [diabetes](#) are present. It's clear that certain factors increase the risk, including:**

- **Weight** - Being overweight is a primary risk factor for Type 2 diabetes. The more fatty tissue you have, the more resistant your cells become to insulin. However, you don't have to be overweight to develop Type 2 diabetes.
- **Fat distribution** - If your body stores fat primarily in your abdomen, your risk of Type 2 diabetes is greater than if your body stores fat elsewhere, such as your hips and thighs.
- **Lack of exercise** - The less active you are, the greater your risk of Type 2 diabetes. Physical activity helps you control your weight, uses up blood glucose as energy, and makes your cells more sensitive to insulin.
- **Complex carbohydrates** - Potatoes, rice, bread, white flour, pasta, etc., are associated with diabetes.
- **Simple carbs** - Consumption of [sugar](#)-sweetened drinks in excess is associated with diabetes as are processed foods containing high amounts of sugars.

- **Saturated fats and trans fats** - Excess fat consumption in fried foods, salad dressings, and unhealthy oils such as soybean, vegetable, corn, and cottonseed oils is associated with Type 2 diabetes. It is far better to use healthy oils, such as coconut oil and extra virgin olive oil.
- **Lack of sleep** - Good rest is important for proper body function, including insulin function.
- **Stress** - Stress, both physical and mental, can send your blood sugar soaring.
- **Smoking** - Smoking is especially risky. The nicotine in cigarettes makes [blood](#) vessels harden and narrow, curbing [blood](#) flow around your body. Since [diabetes](#) makes you more likely to get [heart disease](#), you don't want the extra risk that comes from [smoking](#).
- **Family history** - The risk of Type 2 diabetes increases if a parent or sibling has diabetes.
- **Race** - It's unclear why, but people of certain races including Blacks, Hispanics, American Indians, Asian-Americans, and Pacific Islanders are more likely to develop Type 2 diabetes.
- **Age** - The risk of Type 2 diabetes increases as you age, especially after age 45. That's because people tend to exercise less, lose muscle mass, and gain weight as they age. However, diabetes is also increasing dramatically among children, adolescents, and younger adults.
- **Prediabetes** - Prediabetes is a condition in which your blood sugar level is higher than normal, but not high enough to be classified as diabetes. Left untreated or undiagnosed, prediabetes will likely progress to Type 2 diabetes.
- **Gestational diabetes** - If a woman develops gestational diabetes when pregnant, the risk of developing Type 2 diabetes increases. If a woman

gives birth to a baby weighing more than 9 pounds, there is an increased risk of Type 2 diabetes.

- **Polycystic ovary syndrome** - For women, having polycystic ovary syndrome, a common condition characterized by irregular menstrual periods, excess hair growth, and obesity, increases the risk for diabetes.
- **High cholesterol drugs (statins)** - These drugs are known to cause diabetes.
- **High blood pressure drugs (hypertension)** - Diabetes is commonly associated with heart disease. High blood pressure and hypertension drugs are an additional risk for diabetes.

**Type 2 usually develops slowly and the previously noted risks or causes may be subtle or even absent.**

**People with Type 2 diabetes can and should avoid drugs and therapies that increase levels of insulin. Type 2 is marked by elevated levels of both insulin and glucose. Instead, treatment should focus on strategies to increase insulin sensitivity through lifestyle changes such as weight loss, diet, and exercise.**

**SYMPTOMS:** Type 2 diabetes symptoms often develop slowly. In fact, a person can have Type 2 diabetes for years and not know it. Look for:

- **Increased thirst and frequent urination.** Excess sugar building up in your bloodstream causes fluid to be pulled from the tissues. This may leave a person thirsty. As a result, they may drink and urinate more than usual. The body attempts to dilute high blood sugar in the blood by drawing water from the cells so it can be excreted in the urine. This condition is known as hyperglycemia and results in high levels of glucose in the urine.
- **Increased hunger** - Without enough insulin to move sugar into the body's cells, muscles, and organs become depleted of energy. This



triggers intense hunger.

- **Weight loss** - Despite eating more than usual to relieve hunger, a person may lose weight. Without the ability to metabolize glucose, the body uses alternative fuels stored in muscle and fat. Calories are lost as excess glucose is released in the urine.
- **Chronic Fatigue** - If the body's cells are deprived of sugar, a person may become tired and irritable.
- **Blurred vision** - If blood sugar is too high, fluid can be pulled from the lenses of your eyes. This may affect the ability to focus.
- **Slow-healing sores or frequent infections** - Type 2 diabetes affects the ability to heal and resist infections.
- **Areas of darkened skin** - Some people with Type 2 diabetes have patches of dark, velvety skin in the folds and creases of their bodies, usually in the armpits and neck. This condition, called acanthosis nigricans, may be a sign of insulin resistance.

**How Is Type 2 Diagnosed? ... Your doctor can perform one of three different [blood](#) tests or you can self-test at home:**

1. **Fasting Plasma Glucose Test:** Measures your blood sugar after an 8-hour fast. If your blood sugar level is higher than normal (higher than 101 mg/dl) but lower than the diabetes diagnosis level (125 mg/dl or above), you are at prediabetes levels. Higher than prediabetes levels (126 mg/dl or above) and you are at Type 2 diabetes levels.
2. **Oral Glucose Tolerance test:** Records your blood sugar after an 8-hour fast and again 2 hours after you have a very sweet drink. If your blood sugar is higher than 126 mg/dl, 2 hours after the test, you may have Type 2 diabetes.
3. **Hemoglobin A1C Test:** Looks at your average blood sugar for the

past 2 to 3 months. It can be used to see if your diabetes is under control or to diagnose the disease.

**4. Blood Sugar Self-testing at Home:** To save medical expenses or to avoid the possibility of having diabetes or prediabetes showing on your medical records, you can do self-testing at home. Go to the Chapter [BLOOD SUGAR SELF-TESTING](#)

Type 2 is treatable without drugs or insulin, but requires careful medical supervision. An aggressive nutritional and lifestyle protocol is needed to reverse Type 2 quickly without the need for risky drugs. While nutrition and lifestyle changes are far preferable to the use of medications and insulin, many uninformed doctors go straight to drugs.

**If a doctor recommends drugs without first trying aggressive nutrition and lifestyle changes, it is time to find a better doctor. Go to the chapter [CHOOSE THE RIGHT DOCTOR](#)**

# TYPE 1 DIABETES

Type 1 diabetes is an autoimmune disease where for whatever reason, the body's immune system has turned on itself and is destroying some of its own cells. In the case of Type 1, specific cells found in the pancreas known as Beta cells (B cells) are destroyed. B cells produce insulin, which the body uses to deliver glucose to the body's cells.

This type of diabetes was previously referred to as "Insulin Dependent Diabetes Mellitus" (IDDM) or "Juvenile Diabetes" because the majority of cases are in children.

Most affected people are otherwise healthy and of a healthy weight when onset occurs.

About 10% of people with diabetes have this less common form of diabetes.

Type 1 is more common in people descended from northern European countries and is less common in those from the Middle East, or Asia.

Type 1 diabetes is NOT caused by obesity or weight gain. Excess body fat is dangerous for anyone with diabetes but it is especially dangerous for the Type 1 diabetic.

Sensitivity and responsiveness to insulin are usually normal, especially in the early stages.

Symptoms may develop rapidly (weeks or months) in Type 1 diabetes.

Traditional medicine treats Type 1 diabetes with lifestyle changes (diet, exercise, weight loss, stop smoking, quality rest), medications (pills), and with insulin (injections).

**NOTE:** *Be aware that medications and insulin can cause the dangerous reverse effect of [low blood sugar](#) and have many other side effects.*

**People with mild Type 1 diabetes, where the pancreas is still producing some amounts of insulin, may be able to recover to normal blood sugar levels. It is possible to flood the body with micronutrients and fortify the immune system. This may give the pancreas a chance to rest and recover**

**before it is too late and insulin production stops completely. They should minimize insulin, drugs, and therapies that increase levels of insulin and maximize lifestyle changes to restore the pancreas to normal insulin production.**

**Many Type 1 diabetics can never entirely avoid the need to take insulin, because the pancreas is no longer producing insulin. However, it is possible to greatly reduce the amount of insulin needed on a healthy diabetic diet. A diabetic diet can also save a Type 1 diabetic from serious health complications later in life.**

More than one third of Type 1 diabetics die before the age of 50, but this does not have to be the case. Type 1 diabetics can live a healthy, normal, and longer than average life. By adopting a high-nutrient diabetic diet, they can lower insulin needs and no longer have extreme and life-threatening high and low swings in blood glucose levels.

Various factors may contribute to Type 1 diabetes, including genetics and exposure to certain viruses or immunizations. Although Type 1 diabetes usually appears during childhood or adolescence, it can begin in adults which is covered in the next chapter.

Type 1 diabetes signs and symptoms can come on quickly and may include:

- Increased thirst
- Frequent urination
- Bedwetting in children who previously didn't wet the bed during the night
- Extreme hunger
- Unintended weight loss
- Inability and other mood changes
- Fatigue and weakness

- Blurred vision
- In females, a vaginal yeast infection

**When to see a doctor:** Consult your doctor if you notice any of the above signs and symptoms in yourself or your child.

**How Is Type 1 Diagnosed? ... Your doctor can perform one of three different [blood](#) tests or you can self-test at home:**

1. **Fasting Plasma Glucose Test:** Measures your blood sugar after an 8-hour fast.
  2. **Oral Glucose Tolerance test:** Records your blood sugar after an 8-hour fast and again 2 hours after you have a very sweet drink.
  3. **Hemoglobin A1C Test:** Looks at your average blood sugar for the past 2 to 3 months. It can be used to see if diabetes is under control or to diagnose the disease.
4. **Blood Sugar Self-testing at Home:** To save medical expenses or to avoid the possibility of having diabetes or prediabetes showing on your medical records, you can self-test at home. [CLICK HERE: BLOOD SUGAR SELF-TESTING](#)

Type 1 may be treatable with no drugs or insulin or minimal amounts for those where the pancreas is still producing some insulin, but requires careful monitoring of blood sugar levels. An aggressive nutritional and lifestyle protocol is needed to reverse Type 1 without risky drugs. While nutrition and lifestyle changes are far preferable to the use of medications and insulin, many uninformed doctors go straight to drugs.

**If a doctor recommends drugs without first trying aggressive nutrition and lifestyle changes, it is time to find a better doctor. Go to the chapter [CHOOSE THE RIGHT DOCTOR](#)**

**Surgery:** A [pancreas transplant](#) is sometimes considered for people with Type 1 diabetes who have severe complications of their disease, including [end stage kidney disease](#) requiring [kidney transplantation](#).

**Those with Type 1 diabetes often feel that having the condition is like having a second job. Such is the stress of monitoring blood sugar levels and administering doses of insulin.**

**NEW HOPE FOR TYPE 1 PATIENTS (Coming Soon):** The “Bionic Pancreas” delivers freedom from testing and superior blood sugar control. It mimics a real pancreas by automatically delivering both insulin to lower blood sugar and additionally, glucagon to raise it as needed. For more information, go to the chapter ... [THE BIONIC PANCREAS.](#)

# **LADA (Latent Autoimmune Diabetes of Adults)**

**LADA is Type 1 diabetes and covered in more detail in the previous chapter on Type 1 diabetes. However, it is diagnosed in adults rather than in children.**

Adults with LADA are often misdiagnosed as having Type 2, based on age rather than [normal](#) causes of Type 2.

**People with mild LADA where the pancreas is still producing some amounts of insulin may be able to recover to normal blood sugar levels. They should minimize insulin, drugs, and therapies that increase levels of insulin and maximize lifestyle changes to restore the pancreas to normal insulin production.**

**Many LADA diabetics will require insulin injections for life as the pancreas is no longer producing insulin.**

LADA may be treatable with no drugs or insulin or minimal amounts for those where the pancreas is still producing some insulin, but requires careful medical supervision. An aggressive nutritional and lifestyle protocol is needed to reverse LADA quickly without risky drugs. While nutrition and lifestyle changes are far preferable to the use of medications and insulin, many uninformed doctors go straight to drugs.

**If a doctor recommends drugs without first trying aggressive nutrition and lifestyle changes, it is time to find a better doctor. Go to the chapter “CHOOSE THE RIGHT DOCTOR”.**

**Surgery:** A [pancreas transplant](#) is sometimes considered for people with LADA who have severe complications of their disease, including [end stage kidney disease](#) requiring [kidney transplantation](#).

**Those with LADA often feel that having the condition is like having a second job. Such is the stress of monitoring blood sugar levels and administering doses of insulin.**

**NEW HOPE FOR LADA PATIENTS (Coming Soon):** The “Bionic



Pancreas” delivers freedom from testing and superior blood sugar control. It mimics a real pancreas by automatically delivering both insulin to lower blood sugar and glucagon to raise it as needed. For more information, go to the chapter ... [THE BIONIC PANCREAS.](#)

# GESTATIONAL DIABETES

[Gestational diabetes](#) occurs when a pregnant woman without a previous history of diabetes develops a high blood sugar level in the diabetes range. Gestational diabetes resembles Type 2 diabetes in several respects with a combination of relatively inadequate insulin secretion and responsiveness. It occurs in as many as 10% of all [pregnancies](#) and may improve. It usually resolves after the birth of the baby. However, after birth, approximately 5% to 10% of women with gestational diabetes are found to have developed diabetes, most commonly Type 2.

Overweight women are more prone to develop gestational diabetes during pregnancy.

Diabetes diagnosed during pregnancy is an indicator for developing diabetes during future pregnancies or later in life.

Elevated glucose during pregnancy increases birth weight, which can cause delivery complications leading to the need for a C-section.

High glucose also increases the risk of high blood pressure during pregnancy and excess amniotic fluid around the baby.

Other risks to the baby include congenital heart disease, central nervous system anomalies, and skeletal muscle malformations. Increased fetal insulin may cause [respiratory distress syndrome](#). A [high blood bilirubin level](#) may result from [red blood cell destruction](#). In severe cases, perinatal death (5 months before and 1 month after birth) may occur.

Children born to mothers with gestational diabetes are more likely to develop obesity and diabetes. Hypoglycemia and increased risk of neonatal jaundice are also a concern in these babies.

**How Is Gestational Diabetes Diagnosed? ... Your doctor can perform one of three different [blood](#) tests or you can self-test at home:**

1. **Fasting Plasma Glucose Test:** Measures your blood sugar after an 8-hour fast. If your blood sugar level is higher than normal (higher than 101 mg/dl) but below diabetes diagnosis level (125 mg/dl or

below), you may have prediabetes.

2. **Oral Glucose Tolerance test:** Records your blood sugar after an 8-hour fast and again 2 hours after you have a very sweet drink. If your blood sugar is higher than normal 2 hours after the test, you may have prediabetes.
3. **Hemoglobin A1C Test:** Looks at your average blood sugar for the past 2 to 3 months. It can be used to see if your diabetes is under control or to diagnose the disease.

4. **Blood Sugar Self-testing at Home:** To save medical expenses or to avoid the possibility of having diabetes or prediabetes showing on your medical records. CLICK HERE: [BLOOD SUGAR SELF-TESTING](#)

Gestational diabetes is treatable, but requires careful medical supervision throughout the pregnancy. The conventional approach to treating diabetes using drugs is inadequate and risky. An aggressive nutritional protocol is needed to reverse gestational diabetes quickly without risky drugs. While nutrition is far preferable to the use of medications and insulin, many uninformed doctors go straight to drugs.

**If a doctor recommends drugs without first trying nutrition and lifestyle changes, it is time to find a better doctor. Go to the chapter ... [CHOOSE THE RIGHT DOCTOR](#)**

# SCREENING FOR PEOPLE WITHOUT SYMPTOMS

**Tens of millions of Americans and hundreds of millions more worldwide are walking around undiagnosed and without knowing they have diabetes or prediabetes. It is important to have guidelines to determine who should be tested for diabetes.**

## BODY MASS INDEX

Body Mass Index (BMI) measures a person's weight relative to their height for people over age 20 and helps to determine whether a person is underweight, normal weight, overweight, or obese.

**Calculate your BMI by clicking below and comparing your BMI number to the weight ranges following:**

<http://www.whathealth.com/bmi/calculator.html>

**Compare your BMI is to the following weight status categories to determine if you are:**

- **Underweight** (BMI: below 19.5)
- **Normal weight** (BMI: 18.5 - 24.9)
- **Overweight** (BMI: 25.0 to 29.9)
- **Obese** (BMI: 30.0 & above)

### **Body Mass Index Can:**

- **Overestimate Body Fat** in individuals who are athletic and/or have a muscular build and they may be categorized as overweight. Body builders are often categorized as obese.

- **Underestimate Body Fat** in individuals who have lost muscle mass and this often occurs with older people.

**Diseases Associated with being Overweight or Obese:** In general, the greater the BMI the greater the risk of contracting diseases associated with obesity. These diseases include:

- **Diabetes** or excessively high glucose levels in the blood
- **High Blood Pressure** that can lead to heart failure, stroke, kidney damage, or loss of vision due to retinal damage. High blood pressure is also associated with a higher risk for diabetes.
- **Arteriosclerosis** is a narrowing and thickening of the arteries, which can cause cerebrovascular and coronary disorders. Arteriosclerosis is associated with increased risk for diabetes.
- **Hyperlipemia** is a high level of fat in the blood, which is associated with high cholesterol levels. High cholesterol levels are associated with a higher risk for diabetes.

## **SCREENING FOR DIABETES & PREDIABETES**

**For an Adult of any Age with a BMI Greater to or Equal to 25 and Who has One or of the Following Risk Factors:**

- Physical inactivity
- First-degree relative with diabetes (father, mother, or sibling)
- High risk race (African American, Asian American, Latino, Pacific Islander, Native American)
- Mother who previously delivered a baby weighing more than nine pounds or previously diagnosed with gestational diabetes
- Total cholesterol greater than 200

- Hypertension (blood pressure greater than 140/90 or anyone on hypertension medication)
- Polycystic Ovarian Syndrome (PCOS)
- A1C blood glucose level greater than 5.7
- Obesity
- History of heart disease

## **AGE**

**Age is a major factor for diabetes. Everyone should be screened beginning at age 45, even if they don't exhibit any of the above risk factors.**

## **HOW OFTEN SHOULD YOU BE SCREENED**

**If an initial screening showed:**

- **Normal** - Doctor testing should be repeated at least every three years or annually if there are multiple risk factors
- **Prediabetes** - Go to the chapters [CHOOSE THE RIGHT DOCTOR \(Find an Integrative Holistic Medicine / Naturopathic Doctor\)](#) & [BLOOD SUGAR SELF-TESTING \(BONUS: How to Keep Diabetes Off Your Medical Records\)](#)
- **Diabetes** - Go to the chapters [CHOOSE THE RIGHT DOCTOR \(Find an Integrative Holistic Medicine / Naturopathic Doctor\)](#) & [BLOOD SUGAR SELF-TESTING \(BONUS: How to Keep Diabetes Off Your Medical Records\)](#)

## **SELF-TESTING**

**Doctor testing might be unwise if you fear getting a “diabetes” or “prediabetes” diagnosis on your medical records. A diabetes diagnosis entered into your medical and insurance records could make it impossible or more expensive for you to buy health insurance or life**

**insurance.**

It is easy and inexpensive to self-test at home without the risk of a "diabetes" diagnosis written into your medical records. Simply use a low-priced blood sugar meter to test your fasting and post-meal blood sugar yourself. You do not need a prescription to buy the meter or test strips.

**To learn how, go to the chapter ... [BLOOD SUGAR SELF-TESTING](#)  
([BONUS: How to Keep Diabetes Off Your Medical Records](#))**



# DIABETES IN PETS

In the animal world, diabetes is most commonly encountered in dogs and cats.

Middle-aged animals are most commonly affected.

Female dogs are twice as likely to be affected as males.

According to some sources, male cats are more prone than females.

In both species, all breeds may be affected, but some small dog breeds are more likely to develop diabetes, such as [Miniature Poodles](#).

The symptoms may relate to fluid loss and frequent urination, but the course may also be stealthy.

Diabetic animals are more prone to infections. The long-term complications found in humans are much rarer in animals.

The principles of treatment (weight loss, oral antidiabetics, insulin) and management of emergencies are similar to those in humans.

# DANGEROUS STATIN DRUGS

**Every year an estimated 40 million people take statin drugs.**

**Big pharmaceutical companies protect their profits and mislead the public because they have \$29 billion reasons to lie about cholesterol. \$29,000,000,000 dollars ... That is the annual profits for the most profitable drugs on the planet ... Statins.**

**Big Pharma lies about statin drugs have finally been exposed in a British Medical Journal:** (NaturalNews) “To hear Big Pharma tell it, statin drugs are "miracle" medicines that have prevented millions of heart attacks and strokes”. However, a recent study published in the British medical journal tells a different story: For every heart attack prevented by the drug, two or more people suffered liver damage, kidney failure, cataracts, or extreme muscle weakness as a result of taking the drug.

**Statin drugs harm far more people than they help.**

Statin only "work" on about 2.7% of those who take them. Yet they cause serious damage in about 4.4% of those who take them.

If you take statin drugs, your odds of benefiting from them is less than 3 out of 100. Your odds of being harmed by them are more than 4 out of 100. For 96 out of 100 people, statin drugs have no benefit except to make the [drug](#) companies rich and pollute the waterways every time someone flushes a toilet.

From the point of view of Big Pharma, they have the added benefit of causing other diseases that often result in yet more drugs or medical procedures being prescribed. Kidney dialysis makes big money for hospitals and it's a multi-billion-dollar business all by itself. Statin [drugs](#) are a gateway drug for the sick-care industry to recruit new patients into kidney dialysis, because some percentage of statin drug users are going to end up with full-blown kidney failure.

**The statin scam:** Statin drugs are a dangerous scam and the doctors who prescribe them are puppets used by Big Pharma to sell high-profit drugs to

people who for the most part won't benefit from them.

If the truth about statins were openly known, the drugs wouldn't be prescribed to anyone. Big Pharma would be sued for billions of dollars for false advertising, marketing manipulations, and wrongful death.

**The FDA admits “Statin Drugs” cause diabetes and memory loss.**

**WARNING: Mainstream doctors are handing out diabetes in a pill.**

**The big international pharmaceutical conglomerates control medical education and ongoing education. They want to protect their massive profits from their most profitable class of drugs. They are educating doctors to hand out statin drugs like candy to everyone. They are even trying to get statins added to our municipal water supplies.**

Diabetes is spreading worldwide at epidemic rates. Anything that helps spread diabetes to more people is nothing short of a disaster. Unfortunately, that hasn't stopped misinformed doctors from passing out diabetes in a pill.

Chances are, you don't need to worry about cholesterol because for most Americans, the problem isn't HIGH cholesterol, It's LOW cholesterol!

**Don't worry about LDL and HDL and look at the only number that matters, total cholesterol. If it's between 200 and 300, you're good. Any lower and you're in heart attack territory.**

(Natural News) “All those doctors and medical experts who have expressed support for handing out statin drugs like candy or adding them to drinking water supplies may want to take a gander at new safety data published by the U.S. Food and Drug Administration (FDA). According to the agency's website, the FDA has issued new labeling guidelines for statin drugs warning users that the medications can cause memory loss, **elevated blood sugar levels, and type-2 diabetes**, in addition to muscle damage and liver disease.”

**Statin drugs harm far more people than they supposedly help, and have a long history of causing diabetes, liver damage, kidney failure, and other serious conditions.**

**Take a statin drug, and your risk of diabetes jumps by 46 percent, or more than DOUBLE the risk that led to the FDA warning.** The drugs

cause diabetes by messing with your body's insulin response. They cut your insulin sensitivity by 24 percent and insulin secretion by 12 percent. That's what leads to insulin resistance and you could become America's next diabetic. If you are already prediabetic or diabetic, your symptoms are worsened.

**The FDA writes "raised blood sugar levels and the development of Type 2 diabetes have been reported with the use of statins".**

Cholesterol is a natural substance produced by our bodies and sent to places where there is inflammation to help ease it. Attacking cholesterol is like “attacking the police for showing up at a crime scene or attacking firemen for showing up at a fire”. The underlying problem is inflammation and you need to discover what is causing the inflammation and deal with that.

**The single most prevalent cause of inflammation comes from taking a shower every day. The showerhead vaporizes the chlorine in the water into a vapor that you breathe in. The chlorine vapor damages your lungs and arteries causing inflammation.**

**The solution is simple ... Get an activated charcoal filter to screw on above your showerhead. It will filter away the chlorine in your shower water.**

**Better yet ... Install a “whole house filter” to eliminate chlorine and other dangerous contaminate in municipal water. Chlorine bleaches your hair and your laundry. It is a deadly poison put in our water to kill pathogens and while it does not kill us humans, it does do damage to us. It is best to filter chlorine away from drinking water, cooking water, and the water in which you bathe. Along the way, you reduce inflammation and the Big Pharma False Need for the most profitable drugs on the planet ... Statin drugs.**

**Patients taking the following statin drugs need to be aware of the potentially life-altering side effects, which includes Diabetes:**

- Altoprev (lovastatin extended release)
- Crestor (rosuvastatin)

- Lescol (fluvastatin)
- Lipitor (atorvastatin),
- Livalo (pitavastatin)
- Mevacor (lovastatin)
- Pravachol (pravastatin)
- Zocor
- Advicor (lovastatin / niacin extended-release)
- Simcor (simvastatin / niacin extended-release)
- Vytorin (simvastatin / ezetimibe)

**STRONG RECOMMENDATION:** Eliminate chlorine in your life and wean yourself off statin drugs, regardless of supposed high cholesterol, diabetes, or any other medical condition. To find a doctor to help you get off statins, read on to the chapter ... [CHOOSE THE RIGHT DOCTOR](#)

# **DANGERS OF INSULIN**

**Favorable Glucose Levels + Excellent Nutrition + Exercise = Healthy & Long Life**

**The best treatment for diabetics is a high nutrient, high protein, low carb, and quality fat diet combined with exercise ... NOT DRUGS.**

**How insulin works** - Insulin is a hormone that comes from a gland situated behind and below the stomach (the pancreas):

- The pancreas secretes insulin into the bloodstream.
- The insulin circulates, enabling sugar to enter your cells.
- Insulin lowers the amount of sugar in your bloodstream.
- As your blood sugar level drops, so does the secretion of insulin from your pancreas.

**The Role of Glucose** - Glucose is a sugar and the main source of energy for the cells that make up muscles and other tissues of the body.

- Glucose comes from two major sources: food and your liver.
- Sugar is absorbed into the bloodstream, where it enters cells with the help of insulin.
- Your liver stores and makes glucose and your muscles store glucose.
- When your glucose levels are low, such as when you haven't eaten in a while, the liver breaks down stored glycogen into glucose to keep your glucose level within a normal range.

Insulin blocks cholesterol removal while simultaneously delivering

cholesterol to cells in blood vessel walls. It promotes the development of atherosclerotic plaque, a precursor for heart disease, heart attacks, and strokes. This dramatically increases the risk of heart disease and strokes in diabetics. Almost 80% of diabetic deaths are because of hardening of the arteries, mainly coronary artery disease.

The more insulin needed, the more dangerous plaque is promoted in the arteries, especially when the amount of circulating insulin is already high.

Insulin increases appetite, fat storage, and weight gain, which furthers diabetic insulin resistance and requires even more insulin. That is a dangerous and deadly spiral for serious and life-threatening diabetic complications.

The low-nutrient processed food, high carb, and high calorie Standard American Diet (SAD) worsens diabetic insulin resistance even more. The SAD diet is especially dangerous to Diabetics.

There is a connection between insulin and cancer. Diabetics on insulin therapy are 30% more likely to develop colorectal cancer, 20% for breast cancer, and a shocking 82% more likely to get pancreatic cancer (the organ that produces insulin).

Because insulin therapy results in further weight gain, giving even more medication to force an overworked pancreas to produce even more insulin is not a good thing. A cruel cycle is perpetuated where a diabetic person requires ever more insulin as they continue to put on more pounds that are added because of insulin use in the first place. Giving overweight diabetic people insulin makes them sicker by promoting more weight gain and causing them to become even more diabetic.

# INSULIN RESEARCH

**Inhalable insulin has been developed:** The original products were withdrawn due to negative side effects.

**Afrezza:** An inhalable insulin developed by [MannKind Corporation](#), was approved by the FDA for general sale in June 2014.

**The Advantage:** Inhaled insulin may be more convenient and easy to use than injections.

**The Danger:** This form of insulin is new to the marketplace, has no track record, and could prove as dangerous or even more dangerous than the withdrawn predecessors.

**RECOMMENDATION:** Don't go here ... It's still insulin and the purpose of this book is to help people avoid or end diabetes so there is no need to use insulin or any other diabetic drugs.



# SUPPLEMENTS FOR DIABETICS

Oxidative stress is central to the damages from diabetes. Diabetics suffer from high levels of free radicals that damage arteries throughout the body. It is important that diabetics understand the need for antioxidant therapy to help reduce oxidative stress and lower the risk of diabetic complications.

Type 1 diabetics may need to be on insulin therapy for life, although the supplements mentioned in this section may help offset some of the complications caused by diabetes and reduce the amount of insulin needed (e.g., reduced antioxidant capacity and glycation) as well enhance glucose metabolism.

Type 2 diabetics can counteract the progression of their disease by improving insulin sensitivity, enhancing glucose metabolism, and attempting to offset the complications of diabetes. The following supplements have been shown to improve blood sugar control or limit diabetic damage:

**Astaxanthin:** This is the monster of all antioxidants. Astaxanthin is found in [microalgae](#), [yeast](#), [salmon](#), [trout](#), [krill](#), [shrimp](#), [crayfish](#), [crustaceans](#), and the feathers of some birds. It provides the red color of salmon meat and the red color of cooked shellfish.

**Alpha Lipoic acid:** As a powerful antioxidant, alpha lipoic acid positively affects important aspects of diabetes, including blood sugar control and the development of long-term complications such as disease of the heart, kidneys, and small blood vessels.

Lipoic acid plays a role in preventing diabetes by reducing fat accumulation. Lipoic acid has been approved for the prevention and treatment of diabetic neuropathy in Germany for nearly 30 years. Intravenous and oral lipoic acid reduces symptoms of diabetic peripheral neuropathy.

**Biotin:** Biotin enhances insulin sensitivity and increases the activity of glucokinase, the enzyme responsible for the first step in the utilization of glucose by the liver. Glucokinase concentrations in diabetics are very low.

**Carnitine:** An extensive body of literature supports the use of carnitine in

diabetes. Carnitine lowers blood glucose and HbA1c levels, increases insulin sensitivity and glucose storage, and optimizes fat and carbohydrate metabolism. Carnitine deficiency is common in Type 2 diabetes.

**Carnosine:** Carnosine is a glycation inhibitor that has been shown to exhibit protective effects against diabetic nephropathy and reduce the formation of AGEs. Diabetics' cells have lower-than-normal carnosine levels, similar to levels in older adults. Carnosine lowers elevated blood sugar levels, limits oxidant stress and elevated inflammation, and prevents protein cross-linking in diabetics and otherwise healthy aging adults. Additionally, carnosine works 'behind the scenes' to offer the following protection (for diabetics) against the physiological destruction caused by high blood sugar:

- Carnosine reduces oxidation and glycation of low-density lipoprotein (LDL), which helps decrease the incidence of diabetes-induced atherosclerosis.
- Carnosine reduces protein cross-linking in the lens of the eye and helps to reduce the risk of a cataract (a common diabetic complication).
- Carnosine supplementation also prevents the microscopic blood vessel damage that produces diabetic retinopathy, a major cause of blindness in diabetics.

**Chromium:** Chromium is an essential trace mineral that plays a significant role in sugar metabolism. Chromium supplementation helps control blood sugar levels in Type 2 diabetes and improves metabolism of carbohydrates, proteins, and lipids. Tomatoes, onions, and greens are high in chromium.

**Coenzyme Q10 (CoQ10):** Improves blood sugar control, lowers blood pressure, and prevents oxidative damage caused by disease. In a controlled human trial, Type 2 diabetics given 100 mg CoQ10 twice daily experienced improved glycemic control as measured by lower HbA1c levels and blood pressure. In another study, CoQ10 improved blood flow in Type 2 diabetics, an outcome attributed to CoQ10's ability to lower vascular.

**Dehydroepiandrosterone (DHEA):** DHEA has been shown to improve

insulin sensitivity and obesity. Although its mechanism of action is poorly understood, it is thought that DHEA improves glucose metabolism in the liver.

Animal studies have also demonstrated that DHEA increases B-cells in the pancreas, which are responsible for producing insulin. DHEA levels are sensitive to elevated glucose, so higher glucose levels tend to be associated with decreased DHEA levels. DHEA is an adrenal hormone that can be converted into either testosterone or estrogen. Studies have shown that testosterone improves insulin sensitivity in men, suggesting that DHEA's conversion into testosterone may be responsible for its beneficial effects in improving insulin sensitivity.

**Essential Fatty Acids:** Omega-3 fatty acids lowered blood pressure and triglyceride levels, thereby relieving many of the complications associated with diabetes. There are two types of essential fatty acids:

- **Omega-3** fatty acids found in marine oil lower blood triglyceride levels, contribute to “thinning” blood, and decrease inflammation.
- **Omega-6** fatty acids. Diabetic neuropathy is a gradual degeneration of peripheral nerve tissue. There is some evidence that GLA, an omega-6 fatty acid, can be helpful if given long enough to work. There is also evidence that GLA is more effective for diabetic neuropathy when combined with lipoic acid.

**Fiber:** Eating a diet rich in high-fiber foods prevents and reduces the harm caused by chronically elevated blood glucose. Fiber is also valuable because it produces a feeling of fullness, reducing the tendency to overeat. Because high-fiber foods are digested more slowly than other foods, hunger pangs are forestalled. For the most part, fibrous foods are healthful (nutrient dense and low-fat). Monitor blood glucose levels closely to assess gains and adjust oral or injectable hypoglycemic agents. Fiber should be added slowly, gradually replacing low-fiber foods, for the following reasons:

- Insulin and prescription drugs may have to be adjusted to accommodate lower blood glucose levels
- Without a gradual introduction of the new material, intestinal distress

could occur, including bloating, flatulence, and cramps.

**Propolmannan:** Used throughout Asia as a source of bulk in the diet, it creates a viscous barrier that impedes carbohydrate digestion, suppressing after-meal blood sugar surges. Propolmannan also slows the passage of food from the stomach into the small intestine, impeding carbohydrate overexposure in the digestive tract. Propolmannan's power to safely suppress postprandial glucose surges has generated compelling results.

**Flavonoids:** Flavonoids are antioxidants that help reduce damage associated with diabetes. In animal studies, quercetin, a potent flavonoid, decreased levels of blood glucose and oxidants. Quercetin also normalized levels of the antioxidants superoxide dismutase, vitamin C, and vitamin E. Quercetin is more effective at lower doses and helps with the diabetes-induced changes in oxidative stress.

**Folate:** Folate and folic acid are part of the B vitamin family. Folate is the natural form found in foods, especially green vegetables and beans. Folic acid is the synthetic form added to food or used in vitamin supplements. There is mounting evidence that synthetic folic acid is associated with increased risk for cancer so it is best to get folate from green vegetables and beans.

**Magnesium:** Diabetics are often deficient in magnesium, which is depleted by medications and the disease process. One double-blind study suggested that magnesium supplementation enhanced blood sugar control.

**N-acetylcysteine:** N-acetylcysteine (NAC) is a powerful antioxidant that is used to treat acetaminophen overdose. Among diabetic rats, it has also demonstrated the ability to protect the heart against endothelial damage and oxidative stress that is associated with heart attacks among diabetics. In one study, NAC was able to increase the availability of nitric oxide in diabetic rats, thus improving their blood pressure as well as reducing the level of oxidative stress in their hearts.

**Silymarin:** In animal studies, silymarin has been shown to improve insulin levels among induced cases of diabetes. A small, controlled clinical study evaluated Type 2 diabetics with alcohol-induced liver failure. Those receiving 600 mg silymarin daily experienced a significant reduction in fasting blood and urine glucose levels. Fasting glucose levels rose slightly during the first month of supplementation but declined thereafter from an

average of 190 mg/dl to 174 mg/dl. As daily glucose levels dropped (from an average of 202 mg/dl to 172 mg/dl), HbA1c also substantially decreased. Throughout the course of treatment, fasting insulin levels declined by almost one-half, and daily insulin requirements decreased by about 24 percent. Liver function improved. A lack of hypoglycemic episodes suggests silymarin lowered as well as stabilized blood glucose levels.

**Vitamin B3:** Vitamin B3 (niacin) is required for the proper function of more than 50 enzymes. Without it, the body is not able to release energy or make fats from carbohydrates. Vitamin B3 is also used to make sex hormones and other important chemical signal molecules. Clinical evidence shows that niacin is both safe and effective for diabetics. There is evidence that niacin reduces the risk of developing Type 1 diabetes. Niacinamide helps restore B-cells, or at least slow their destruction. Because niacin can disrupt blood sugar control in diabetics, individuals taking any form of niacin, including inositol hexaniacinate, must closely monitor blood sugar levels and discontinue treatment in the event of worsening of diabetic control.

**Vitamin C:** Several preclinical studies evaluated vitamin C's role during mild oxidative stress. The aqueous humor of the eye provides surrounding tissues with a source of vitamin C. Since animal studies have shown that glucose inhibits vitamin C uptake, this protective mechanism may be impaired in diabetes. Supplementation with antioxidant vitamins C and E plays an important role in improving eye health. High vitamin C intake depresses glycation, which has important implications for slowing diabetes progression and aging.

Vitamin C, through its relationship to sorbitol, also helps prevent ocular complications in diabetes. Sorbitol, a sugar-like substance that tends to accumulate in the cells of people with diabetes, tends to reduce the antioxidant capacity of the eye, with a number of possible complications.

Vitamin C appears to help reduce sorbitol buildup.

Vitamin C also has a role in reducing the risk of other diabetic complications. In one clinical study, vitamin C significantly increased blood flow and decreased inflammation in patients with both diabetes and coronary artery disease. Three studies suggest that vitamin C, along with a combination of vitamins and minerals, reduces blood pressure in people with diabetes and increases blood vessel elasticity and blood flow.

**Vitamin E:** Vitamin E has been shown to significantly reduce the risk of developing Type 2 diabetes. One double-blind trial found a reduction in the risk of cardiac autonomic neuropathy, or damage to the nerves that supply the heart, which is a complication of diabetes. Additional evidence documented benefits for diabetic peripheral neuropathy, blood sugar control, and cataract prevention. In addition, vitamin E enhances sensitivity to insulin in Type 2 diabetics.

**Botanical Supplements For Diabetes:** Before insulin, botanical medicines were used to treat diabetes. They are remarkably safe and effective. However, because many botanical medicines function similarly to insulin, people taking oral diabetes medications or insulin should use caution to avoid hypoglycemia. Botanical medicines should be integrated into a regimen of adequate exercise, healthy eating, nutritional supplements, and medical support.

**Cinnamon:** Recent research has revealed that regular use of cinnamon can also promote healthy glucose metabolism. A study isolated insulin-enhancing complexes in cinnamon that are involved in preventing or alleviating glucose intolerance and diabetes. Three water-soluble polyphenol polymers were found to have beneficial biological activity, increasing insulin-dependent glucose metabolism by roughly 20-fold in vitro. The nutrients displayed significant antioxidant activity as well, as did other phytochemicals found in cinnamon, such as epicatechin, phenol, and tannin. The problem with long-term cinnamon use is the presence of highly reactive aldehyde compounds. These toxic fat-soluble compounds accumulate in the body over time. An aqueous extract of cinnamon has been identified and through a patented process, delivers cinnamon's beneficial water-soluble nutrients while removing deleterious fat-soluble toxins. In a recent double blind, placebo-controlled trial, a group of individuals (average age 61) with high blood sugar taking 500 mg daily of cinnamon extract experienced an average decline of 12 mg/dl in fasting blood glucose after just two months. It produced a significant decrease in postprandial glucose spikes (by an average of 32 mg/dl) after ingestion of 75 grams of carbohydrates. These findings support previous clinical data on similar cinnamon extracts, in which diabetic patients saw their fasting glucose drop an average of 10.3% after four months.

**Brown seaweed and bladderwrack:** Another approach in managing

glucose levels is to blunt the conversion of starches into their component sugars in the gastrointestinal tract. This can be accomplished safely and effectively by introducing natural enzyme inhibitors that halt carbohydrate metabolism in the gut. The most attractive targets are the sugar-producing alpha-amylase and alpha-glucosidase enzymes. Extracts from a variety of seaweeds have inhibitory effects on these enzymes. Animal studies have revealed that inhibiting these enzymes lowers blood sugar levels. In a recent double blind, placebo-controlled clinical trial, a single dose of 500 mg daily of bladderwrack and seaweed significantly increased insulin sensitivity while inducing a 48.3% decline in postprandial glucose levels in healthy individuals.

**Irvingia gabonensis:** Published studies show that extract of the African mango *Irvingia gabonensis* inhibits **alpha**-amylase-mediated conversion of carbohydrates into sugar. In 1990, researchers studied the effects of Irvingia on eleven human Type 2 diabetics. Compared to baseline, there were significant reductions in blood triglyceride levels (16%), total cholesterol (30%), LDL (39 %), and glucose (38%), while HDL-cholesterol levels were increased by 29% after four-weeks of supplementation. These desirable biochemical effects were accompanied by improved clinical states. Adiponectin is a hormone that plays a critical role in metabolic abnormalities associated with Type 2 diabetes, obesity, and atherosclerosis. Higher levels of adiponectin enhance insulin sensitivity; enhancing insulin sensitivity as we age is important to long-term metabolic health.

**White kidney beans:** Extracts from the common white kidney bean are powerful blockers of the enzyme alpha-amylase. White bean extract shows enormous potential for preventing the blood sugar and insulin spikes associated with many chronic health disorders. Amylase inhibition with white bean extract has proven particularly effective in reducing glycaemia (sugar load in the blood) in studies on diabetic animals. White bean extract has yielded compelling results in human studies. It has been shown to diminish the effects of high-glycemic index foods (like white bread) that are notorious for producing sharp, potentially dangerous postprandial blood sugar spikes, helping to alleviate metabolic burden throughout the body. In one notable study, postprandial blood sugar levels were measured in a group of healthy subjects after consuming 50 grams of carbohydrate in the form of wheat, rice, and other high-carbohydrate plant foods. *Phaseolus vulgaris* inhibited the

average post-ingestion spike in blood sugar by 67%.

**Green coffee extract.** Coffee contains some well-studied phytochemicals such as chlorogenic acid, caffeic acid, ferulic acid, and quinic acid. Some of coffee's most impressive effects can be seen in blood glucose management. Chlorogenic acid and caffeic acid are the two primary nutrients in coffee that benefit individuals with high blood sugar. Glucose-6-phosphatase is an enzyme crucial to the regulation of blood sugar. Since glucose generation from glycogen stored in the liver is often overactive in people with high blood sugar, reducing the activity of the glucose-6-phosphatase enzyme leads to reduced blood sugar levels, with consequent clinical improvements. In another trial, researchers gave different dosages of green coffee bean extract, standardized for chlorogenic acid, to 56 people. Thirty-five minutes later, they gave the participants 100 grams of glucose in an oral glucose challenge test. Blood sugar levels dropped by an increasingly greater amount as the test dosage of green coffee bean extract was raised (from 200 mg to 400 mg). At the 400 mg dose, there was a full 24% decrease in blood sugar—just 30 minutes after glucose ingestion. Green coffee bean extract found in unroasted coffee beans, once purified and standardized, produces high levels of chlorogenic acid and other beneficial polyphenols that can suppress excess blood glucose levels. Roasting destroys much of the coffee bean's beneficial content.

**Garlic:** Allium is the active component in garlic and onions. Allium compounds are sulfur-donating compounds that help reconstitute glutathione, a major internal antioxidant. This mechanism is probably responsible for allium's positive effects. Allium has a number of positive effects that may help reduce the risk of diabetic complications, including the following:

- Reducing the risk of cardiovascular disease, including atherosclerosis
- Decreasing oxidative stress
- Promoting weight loss and insulin sensitivity
- Lowering blood pressure
- Improving cholesterol profile



**Green tea:** The compounds in these plants, including epicatechin, catechin, gallocatechin, and epigallocatechin, are powerful antioxidants, particularly against pancreas and liver toxins. Animal studies have shown that epigallocatechins, in particular, may have a role in preventing diabetes. In studies with rats, epigallocatechins prevented cytokine-induced  $\beta$ -cell destruction by downregulating inducible nitric oxide synthase, which is a pro-oxidant. This process could help slow the progression of Type 1 diabetes. In vitro studies have also shown that green tea suppresses diet-induced obesity, a key risk factor in developing diabetes and metabolic syndrome.

**Vitamin D3:** Vitamin D has far-reaching implications that extend beyond promoting bone health. Over the past 40 years, research has shed light on the intersecting pathways of vitamin D and many other aspects of health. Evidence from animal experiments and human observational studies suggests that vitamin D may help prevent type I diabetes, perhaps by acting as an immune system modulator. Vitamin D appears to limit the expression of certain cytokines, which may prevent the autoimmune attack on pancreatic cells that can lead to diabetes. Human studies suggest that vitamin D may have a protective effect against type I diabetes. In a large-scale investigation, more than 12,000 pregnant women in Finland enrolled in a trial studying the relationship between vitamin D intake and type I diabetes in infants. After one year, children who supplemented with the suggested study dose of vitamin D (2000 IU daily) had a much lower risk of type I diabetes than children who did not supplement. Vitamin D supplementation may reduce susceptibility to type II diabetes by slowing the loss of insulin sensitivity in people who show early signs of the disease. Researchers studied 314 adults without diabetes and gave them either 700 IU of vitamin D and 500 mg of calcium daily or a placebo for three years. Among subjects who had impaired (slightly elevated) fasting glucose levels at the study's onset, those taking the active supplement had a smaller rise in glucose levels over three years than did the controls, as well as a smaller increase in insulin resistance. The researchers concluded that for older adults with impaired glucose levels, supplementing with vitamin D and calcium may help avert metabolic syndrome and type II diabetes.

**Ginkgo Biloba:** Ginkgo biloba extract has been shown to prevent diabetic retinopathy in diabetic rats, suggesting a protective effect in human diabetics. In a preliminary clinical trial, Type 2 diabetics were given ginkgo extract

orally for three months, which significantly reduced free radical levels, decreased fibrinogen levels, and improved blood viscosity. Ginkgo extracts also improved retinal capillary blood flow rate in Type 2 diabetic patients with retinopathy. Ginkgo has also been observed to lower blood glucose levels. It was studied in Type 2 diabetics at a dose of 120 mg for three months. Ginkgo supplementation produced an increase in liver metabolism of insulin and oral hypoglycemic medications, which corresponded to a reduction in plasma glucose levels. Type 2 diabetics with pancreatic exhaustion received the most benefit. Ginkgo does not appear to increase beta cell production; rather it enhances liver uptake of existing insulin, thereby reducing high insulin levels.

**Blueberries:** Native to North America, blueberries have long been used in food preparation and for therapeutic purposes. Many of the health benefits attributed to blueberries have been linked to their potent antioxidant properties. Scientists attribute these powerful antioxidant properties to polyphenols in blueberries known as anthocyanins. Blueberries have been shown to lower baseline blood sugar levels in those diagnosed with Type 2 diabetes by 37%.

**Bilberry:** Studies of diabetic rats show that bilberry decreases vascular permeability. Studies of diabetic mice receiving an herbal extract containing bilberry demonstrated significantly decreased blood glucose levels. A double-blind, placebo-controlled trial of bilberry extract in 14 people with diabetic retinopathy or hypertensive retinopathy (damage to the retina caused by diabetes or hypertension, respectively) found significant improvements in the treated group. Other open clinical trials in humans also showed benefits.

**Under no circumstances should people suddenly stop taking diabetic drugs, especially insulin. However, it is possible to improve glucose metabolism, control, and tolerance with the following supplements:**

- **Astaxanthin**: 4000 mg daily
- **R-lipoic acid**: 240 - 480 mg daily
- **L-carnitine**: 500 - 1000 mg twice daily

- [\*\*Carnosine\*\*](#): 500 mg twice daily
- [\*\*Chromium\*\*](#): 500 - 1000 mcg daily
- [\*\*CoQ10\*\*](#) (in the form of ubiquinol): 100 to 300 mg daily
- [\*\*DHEA\*\*](#): 15 - 75 mg early in the day, followed by blood testing after three to six weeks to ensure optimal levels
- [\*\*EPA/DHA\*\*](#): 1400 mg EPA and 1000 mg DHA daily
- [\*\*Fiber\*\*](#) (guar, pectin, propolmannan, or oat bran): 20 to 30 g daily at least, up to 50 g daily.
- [\*\*Propolmannan\*\*](#): 2 grams twice daily
- [\*\*GLA\*\*](#): 900 - 1800 mg daily
- [\*\*Quercetin\*\*](#): 500 mg daily
- [\*\*Folate\*\*](#): Best obtained from greens and beans
- [\*\*Magnesium\*\*](#): 140 mg daily as magnesium L-threonate; 320 mg daily as magnesium citrate
- [\*\*NAC\*\*](#): 500 - 1000 mg daily
- [\*\*Silymarin\*\*](#): containing 750 mg Silybum marianum standardized to 80 percent Silymarin, 30 percent Silibinin, and 8% Isosilybin A and Isosilybin B
- [\*\*Vitamin C\*\*](#): at least 2000 mg daily
- [\*\*Vitamin E\*\*](#): 400 IU daily (with 200 mg gamma tocopherol)

- [Garlic](#): 1200 mg daily
- [Green tea extract](#): 725 mg green tea extract (minimum 93 percent polyphenols)
- [Ginkgo biloba](#): 120 mg daily
- [Bilberry extract](#): 100 mg daily
- [B complex](#): Containing the entire B family, including biotin and niacin
- [Cinnamon extract](#): 175 mg (Cinnamomum cassia) standardized to 2.5% (4.375 mg) A-type polymers three times daily
- [Green coffee bean extract](#): 200 – 400 mg (standardized to contain chlorogenic acid) three times a day
- [Vitamin D3](#): 2000 - 5000 IU daily
- [Brown seaweed and bladderwrack](#): 100 mg three times a day
- [Irvingia gabonensis](#): 150 mg twice a day
- [White kidney bean](#): 445 mg twice a day
- [Blueberry](#): standardized to contain 50 mg 3,4 – caffeoylquinic (chlorogenic) acid, and 50 mg myricetin) or 22.5 g blueberry bioactive freeze dried powder

# THE STRESS FACTOR

## THE RECENT DISCOVERY ABOUT STRESS

**We have always known that stress can be harmful and even deadly but we now have scientific evidence to confirm why STRESS IS A KILLER.**

**IMPORTANT NOTE:** It has recently been established that stress causes your body's cells to close or shut down. When this happens, your cells can't receive nutrients, will weaken, and become susceptible to disease or die. This explains why some people with the same disease will be healed while others will decline and die. We have always known that stress is a killer but we now have scientific evidence to confirm STRESS IS A KILLER. The body's cells can't absorb the nutrients they need to live and ward off disease when the body is stressed.

If the body's cells close under stress, it means the body's cells cannot receive blood sugar or other nutrients, even if there is adequate insulin to promote blood sugar to the cells. Blood glucose is blocked from the body's cells and results in insulin resistance and high blood glucose. That is the definition of a diagnosis for diabetes. The cells of the body are not responding to insulin produced by the pancreas to get the glucose they need to function.

Stress, in all of its forms, can send blood sugar out of control and this is especially bad if you already have diabetes, are undiagnosed, or are prediabetic.

Stress weakened cells are targeted by opportunistic infections, ailments, and diseases like cancer as well.

When a person is stressed, [blood sugar levels](#) rise, even in people who are not prediabetic or do not have a diabetic diagnosis. Stress hormones like [epinephrine](#) and cortisol kick in and one of their major functions is to raise blood sugar to help boost energy when it's needed most, during times of stress. Stress places you at risk for a prediabetes or diabetes diagnosis and many other health threatening diseases such as cardiovascular disease, heart attack, or stroke.

Removing stress can allow your cells to open and receive the nutrition they

need to flourish, be strong, and fight life-threatening diseases or ailments ... That includes diabetes.

## **STRESS CAN CAUSE DIABETES!**

Your body can thrive in good health and avoid disease and illness or fight disease and illness that has already established itself in your body by flipping the cell's healing switch to ON. You do that by removing stress in all of its forms from your life. Once you have flipped the healing switch on by removing stress, you must provide the body's cells with the good nutrition, **blood sugar**, oxygen, and clean water needed to recover and flourish.

## **STRESS IS A CHEMICAL DISASTER IN THE BODY**

Stress creates an influx of catabolic (destructive) hormones. These hormones can increase fat stored on the body and particularly in the belly region which is a diabetes indicator. Stress triggers the body to store fat. The stress hormone cortisol can increase abdominal fat the body stores. This is due to the number of receptor sites within the fat cells in that region and their sensitivity to cortisol and another fat-related hormone called leptin. These stress hormones also contribute to depression, anxiety, and other emotional conditions that are known diet-killers and most people go off a healthy diet because of an emotional trigger. Diabetes patients need to be on a healthy low carb diet and not going off of it because of emotional triggers from stress.

Stress is a major factor in cardiovascular health and triggers more heart attacks than physical exercise does. Stress is a factor in virtually all disease ... A lack of ease.

### **Here is some more information and facts about stress:**

- Emotional stress depresses the immune system
- Chronic stress causes disease
- Shallow breathing is a sign of stress
- Stress raises blood pressure, heart rate, respiration rate, and muscle

tension

- Stress can stop your body from healing itself
- Meditation, visualization, relaxation exercises, and even listening to relaxing music can reduce stress, blood pressure, heart rate, muscle tension, and can enhance the immune system
- Fight or flight extreme stress can have long-term effects. Digestion shuts down, your immune system does not work as well, and nervous system function can be compromised.
- Personality type can affect how your body deals with stress
- Dominant and aggressive or hostile personalities result in more stressors that can cause disease
- Hostile personalities experience more stress and are 3 to 4 times more likely to have disease and much more likely to die younger
- Low hostile personalities experience less stress and less negative health effects
- Stress adversely affects cholesterol levels
- Everyone is susceptible to stress
- Stress can be the final trigger for a heart attack and is a major risk to cardiovascular health
- Hostile and angry relationships cause major stresses
- Minor stress can make you more efficient but as stress increases, there comes a point when you lose efficiency
- Stress hormones restrict blood flow

**We can purposely control and reduce stress:**

- Listen to de-stressing music
- Laugh and smile

- Speak soft but powerful words
- Reduce or eliminate cell phone and other wireless devices
- Take breaks from work
- Don't read the newspaper or watch the news on TV.
- Have sex
- Conduct random acts of kindness
- Get out of debt
- Drive less
- Don't talk on a cell phone while driving
- Be thankful
- Be light-hearted
- Stay away from psychiatrists or psychologists
- Get rid of your alarm clock
- Use aromatherapy
- Get a pet
- Plant a garden
- Dance and sing
- Do things you love
- Find your life purpose
- Have faith
- Meditate

All these things and more can help to reduce stress and the disease (lack of ease) stress can cause.



## DON'T START YOUR DAY STRESSED

Most people are suddenly awakened to the harsh sound of a loud alarm clock. This shocks the body dramatically and starts the day with stress hormones flowing and that is not a good way to start the day.

**RECOMMENDATION:** *It is important to awaken slowly and gently. There are alarm clocks that awaken you with gentle tones or natural sounds that start low in volume and slowly begin to increase in volume. This small change in the way you awaken can have great effects on your emotions, wellness and even on your body's PH balance.*

**STRONG RECDOMMENDATION:** *Reduce stress at home, work, and play. You should reduce physical, financial, emotional, and all other types stress. You will live longer, healthier, happier and enjoy a more fulfilled life for doing so.*

**Remember that stress is a chemical disaster in your body. Stress can kill by triggering disease or an ailment such as diabetes. Stress can worsen an existing disease or ailment.**

**ULTIMATE HEALTH TIP:** **Flip the good health and healing switch to on by flipping off the stress switch. Allow your body to enjoy optimum health and to heal itself at the cellular level by allowing your cells to absorb nutrients, blood sugar, oxygen, and water so they can thrive. Be certain you are delivering quality nutrients, oxygen, and clean water so the human fire can burn brightly and ailment free.**

## HOLMES & RAHE STRESS SCALE

The Holmes and Rahe stress scale is a list of 43 stressful life events that can contribute to illness.

**To measure stress, total the number of "Life Change Units" that apply to events in the past year of an individual's life. The score will give a rough estimate of how stress affects health.**

**ADULTS**

<b>Life event</b>	<b>Life change units</b>
Death of a spouse	100
Divorce	73
Marital separation	65
Imprisonment	63
Death of a close family member	63
Personal injury or illness	53
Marriage	50
Dismissal from work	47
Marital reconciliation	45
Retirement	45
Change in health of family member	44
Pregnancy	40
Sexual difficulties	39
Gain a new family member	39
Business readjustment	39
Change in financial state	38
Death of a close friend	37
Change to different line of work	36
Change in frequency of arguments	35
Major mortgage	32
Foreclosure of mortgage or loan	30
Change in responsibilities at work	29

Child leaving home	29
Trouble with in-laws	29
Outstanding personal achievement	28
Spouse starts or stops work	26
Beginning or end school	26
Change in living conditions	25
Revision of personal habits	24
Trouble with boss	23
Change in working hours or conditions	20
Change in residence	20
Change in schools	20
Change in recreation	19
Change in church activities	19
Change in social activities	18
Minor mortgage or loan	17
Change in sleeping habits	16
Change in number of family reunions	15
Change in eating habits	15
Vacation	13
Christmas	12
Minor violation of law	11

**Score of 300+:** At risk of illness.

**Score of 150-299:** Risk of illness is moderate (reduced by 30% from the above risk).

**Score <150:** Only have a slight risk of illness.

**A modified scale has been developed for non-adults. Similar to the adult scale, stress points for life events in the past year are added and compared to the rough estimate of how stress affects health.**

#### **NON-ADULTS**

<b>Life Event</b>	<b>Life Change Units</b>
Death of parent	100
Unplanned pregnancy/abortion	100
Getting married	95
Divorce of parents	90
Acquiring a visible deformity	80
Fathering a child	70
Jail sentence of parent for over one year	70
Marital separation of parents	69
Death of a brother or sister	68
Change in acceptance by peers	67
Unplanned pregnancy of sister	64
Discovery of being an adopted child	63
Marriage of parent to stepparent	63
Death of a close friend	63
Having a visible congenital deformity	62
Serious illness requiring hospitalization	58
Failure of a grade in school	56
Not making an extracurricular activity	55
Hospitalization of a parent	55

Jail sentence of parent for over 30 days	53
Breaking up with boyfriend or girlfriend	53
Beginning to date	51
Suspension from school	50
Becoming involved with drugs or alcohol	50
Birth of a brother or sister	50
Increase in arguments between parents	47
Loss of job by parent	46
Outstanding personal achievement	46
Change in parent's financial status	45
Accepted at college of choice	43
Being a senior in high school	42
Hospitalization of a sibling	41
Increased absence of parent from home	38
Brother or sister leaving home	37
Addition of third adult to family	34
Becoming a full-fledged member of a church	31
Decrease in arguments between parents	27
Decrease in arguments with parents	26
Mother or father beginning work	26

**Score of 300+:** At risk of illness.

**Score of 150-299:** Risk of illness is moderate. (reduced by 30% from the above risk)

**Score <150:** Slight risk of illness.

# SAVE YOUR EYES & SLEEP WELL

**Good sleep is important for everyone but especially so for diabetics.**

**Did you know there are dangers of LED screen use that can affect how well we sleep!**

During the day, computer screens look good because they're designed to have the same color temperature as sunlight. However, after the sun has set, you probably shouldn't be looking at daylight color temperatures.

Have you ever noticed how people in front of a computer screen at night have a “blue halo” or an “eerie blue glow”?

Have you awakened and run to your computer to write down that “Great Idea”, and your computer screen blinds you?

Do you ever have trouble getting to sleep or staying asleep after dancing on a keyboard or mouse while staring at an LED computer flat screen for lengthy periods?

**American Medical Association Report** - In 2012, the AMA's Council on Science and Public Health [made this recommendation](#): "Recognize that exposure to excessive light at night, including extended use of various electronic media, can disrupt sleep or exacerbate sleep disorders, especially in children and adolescents".

**What is Blue Light and Ultraviolet Light?** Blue light is part of the visible light spectrum and is emitted by the sun and artificial light sources such as LED's computers, and smart phones. Some types of blue light can be beneficial and help regulate our bodies' internal biological clocks. However, blue-violet light can have a harmful impact on the eyes, specifically the retina. It is also a risk factor for the onset of age-related macular deterioration of the part of the retina responsible for sharp, central vision. Ultraviolet light not only affects the skin by increasing the risk of skin cancer, it can also be dangerous for the eyes. Excessive exposure to UV light without proper protection can lead to cataracts. It can also cause a sunburn on the cornea of the eye (known as photokeratitis), which can lead to temporary blindness.

**Do You Need Protection against Blue and UV Lights?** Blue light is emitted by a plethora of electronic devices including cell phones, tablets, and laptop computers. A recent study found that Americans spend almost 2 ½ hours on their tablets and smart phones every day, meaning protection against blue light is important for anyone using a digital device on a regular basis. Another source of blue light is energy efficient technology in the form of fluorescent light bulbs and LED lights. Most offices and stores use fluorescent light bulbs, thus putting your eyes at risk if unprotected.

It's important to protect your eyes against UV exposure both indoors and outside. Our eyes are exposed to UV radiation 365 days a year, even on cloudy days. In fact, up to 40% of UV exposure occurs when we aren't in full sunlight. UV rays can travel indoors through windows. This is especially dangerous for people who spend a lot of time in their car or near windows in their home or office.

Most people are at risk for overexposure to both blue light and UV light on a daily basis.

**Blue Light Affects Sleep (and here's why):** We know that nighttime exposure to blue light keeps people up late. Blue light from LED screens can possibly harm your eyes because UVB light is in the blue spectrum. Research suggests that an average person reading on a tablet or computer screen or watching a LED HDTV for a couple hours before bed may find that their sleep is delayed by about an hour. It's possible that you're staying up too late and not getting the sleep you need because of your computer, tablet, superphone, or HDTV.

**f.lux fixes this:** It is FREE software you download that makes the color temp of your computer's display adapt to the time of day, warm at night and like sunlight during the day. You could use f.lux because it allows you sleep better, or you could use it because it makes your computer look better. f.lux makes your computer screen look like the room you're in, all the time. When the sun sets, it makes your computer look like your indoor lights. In the morning, it makes things look like sunlight again. Tell f.lux what kind of lighting you have, and where you live. Then forget about it. f.lux will do the rest, automatically.

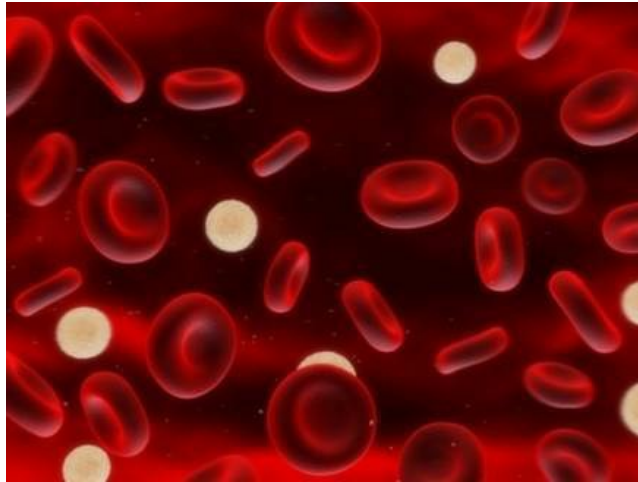
**RECOMMENDATION:** *I've been using f.lux for about 2 years now and*

*I'm typing these words late at night. I know I'm sleeping better and getting sleep that is more restful. I recommend this FREE software for everyone but especially for anyone who puts many hours in front of a computer screen and especially so after the sun has set or before it rises. Try it and see what you think! I also wear Transition glasses that block 100% of UVA & UVB light. The bifocal lower portion of my glasses is NOT set for reading distance (about 18 inches), it is set for my computer screen viewing distance (about 30 inches) to minimize eyestrain. Talk to your eye doctor about computer glasses that block UVB and are set for your computer viewing distance rather than reading distance.*

FREE [Get f.lux Here](#)



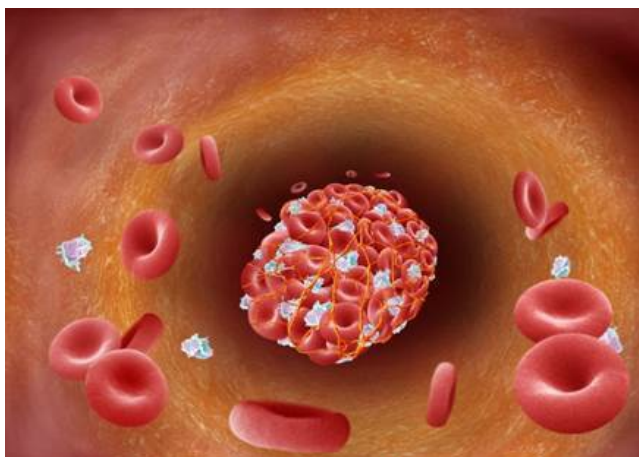
# THE SLIPPERY BLOOD FACTOR



**Red & White Blood Cells**

**The major long-term complications of diabetes relate to blood vessel damage from blood clots.**

People with diabetes are prone to blood clots because of abnormal "stickiness" of their blood platelets. Diabetics tend to have blood containing high levels of a protein called fibrinogen. We all need some fibrinogen, since its job is to clot blood and without it, you could bleed to death from a paper cut. However, having too much fibrinogen can make blood thick or "sticky", causing it to form clots too easily. People with diabetes also tend to have high levels of several other blood proteins that promote the blood clotting process known as coagulation. The "stickiness" causes random blood clots in coronary arteries and small blood vessels (capillaries).



## **A Blood Clot Forming**

About 75% of deaths in diabetics are from blood clotting damage in major arteries that causes heart attack and stroke.

The primary complications of diabetes from blood clotting damage in tiny capillaries include damage to the eyes, kidneys, pancreas, and nerves.

Diabetes also puts you at risk for high blood pressure, which is a major cause of both heart disease and stroke.

Historically, traditional doctors prescribed low dose aspirin or other drugs to thin blood but recent studies have established that this is NO LONGER recommended as this does nothing about the stickiness factor.

This all gives rise to a need to make blood platelets more slippery again to prevent death or harm to the body from sticky blood cells that clot too easily.

**The good news is there is a way to achieve more slippery blood in your veins that is also better at delivering oxygen and glucose to the body's cells. The process actually costs nothing and benefits others who are in need of blood due to injury, surgery, or blood disorders.**

**Quite simply, you become a blood donor and give blood to a local blood bank or hospital on a regular basis.**

**Here are the reasons why becoming a blood donor helps the diabetic have more slippery blood to reduce the chance of arterial damage, stroke, and death:**

- Men have 10-12 pints of blood, women about 8-10 pints, and children under the age of 13 may have around 8 pints or lower.
- New red blood cells are flexible and slippery and stay in circulation for 100 to 120 days before being recycled by white blood cells known as macrophage.
- As red blood cells age, they become less flexible, increasingly stickier, and more likely to form blood clots. They also become- less efficient at their primary job, which is delivering oxygen to the body's cells.

- By giving blood, a person gets rid of some older sticky red blood cells and forces the body to replace them with new more flexible and slippery ones less likely to form clots. You also reduce the recycling load on macrophage, freeing them up to perform their important duties as an important part of the body's immune system. Macrophage remove dying or dead cells, diseased cells, and cellular debris. The new red blood cells are also better at delivering oxygen to the cells so they can burn glucose to fuel the body. This can help improve insulin resistance in diabetes.

**NOTE:** You can also triple new red blood cell production for one full hour by jumping up and down for joy on a rebounder for just two minutes! For more info on the benefits of rebounding, go to the chapter on [EXERCISE](#)

# THE BIONIC PANCREAS

(Coming Soon)

**(Freedom from Testing & Superior Blood Sugar Control)**

**NEW HOPE FOR TYPE 1 PATIENTS:** The “Bionic Pancreas” mimics a real pancreas by automatically delivering both insulin to lower blood sugar and glucagon to raise it as needed.

For the small percentage of diabetics that are Type 1 where the pancreas is not producing any insulin, this could be a significant improvement in blood sugar management. Not only is there insulin management, but glucagon management as well to prevent the also dangerous and opposite condition of too little blood sugar. Type 1 diabetics find it difficult or impossible to exercise or participate in sports because strenuous exercise can trigger dangerous hypoglycemia episodes (blood sugar levels that are too low). Hypoglycemia can result in quick death or a coma. The Bionic pancreas will allow more stable blood sugar management and allow Type 1 diabetics to participate in sports and exercise.

The device marries smartphone technology, a continuous blood sugar (glucose) monitor, and a dual pump to deliver the proper amount of both hormones directly into the bloodstream as needed.

Although the separate components of the device have been available for some time, they work together in an automated system and can be used in a “real world” environment to continuously monitor blood sugar levels.

With diabetics, physical activity can send suddenly drop blood sugar levels dramatically. What a normal body does in response is to secrete glucagon. The Bionic Pancreas does the same thing automatically and without testing.

When blood sugar spikes high, the normal body secretes insulin to deliver blood sugar to the body’s cells. The Bionic Pancreas again does the same thing automatically and without testing.

Information on blood sugar levels is fed to the smartphone “brain”, which makes decisions every five minutes and tells the pumps, via Bluetooth

wireless connectivity, how much insulin or glucagon to deliver. All the guesswork and calculation normally carried out by the patient is handled by the device.

[Click Here for More Info on the Bionic Pancreas - TEDx TALKS \(July 14, 2015\)](#)

# BAD FOOD SCOUNDRELS

I'm talking about family and friends who would push unhealthy or dangerous food or drinks on a diabetic person. It is important for a diabetic to keep their cool in dealing with such individuals while continuing to achieve health goals.

Most of the people who would sabotage a diabetic's healthy eating plan are just jealous or upset that they do not have enough determination, commitment, or even the information to do it themselves or respect a diabetic diet. Be compassionate because we want people to be compassionate in return. Respond to them with statements that describe you and not them. Do not offend anyone, attack them or get upset and you will have kept it positive.

You will not be sabotaging your good efforts by occasionally eating a meal that is not part of your healthy eating plan. It might be a good break from your routine. Don't think that one bad meal is reason to give up on your health goals either. Make grandma happy by eating her lasagna (or whatever) but don't go overboard and keep the portions small. The next day you can move forward with your healthy food plan and not beat yourself up!

**SUGGESTION:** Some people will be a naysayer no matter what you say or do nutritionally. Avoid talking to them about healthy eating habits, continue your positive nutritional actions, and let your positive health results speak for themselves.

# FREE RADICALS

Free radicals are highly reactive and harmful molecules that attack cell membranes, proteins and even our DNA. They cause cells to breakdown, speed the aging process, weaken the immune system, and promote a whole plethora of diseases such as cancer, heart disease, dementia, and are elevated for diabetics.

You can't completely avoid free radicals as the body produces them as a normal metabolic function.

Taking in fewer and healthier calories can reduce your lifetime exposure to free radicals.

**RECOMMENDATION:** Avoid consuming free radicals by avoiding rancid oils and consuming a more plant-based diet that contains more phytonutrients, which are chemical compounds that reduce free radical damage. These are found in green tea, white tea, vitamin C, vitamin E, COQ-10, Selenium, Zinc, Astaxanthin, and foods with high antioxidant content or high ORAC values (discussed later).

# ANTIOXIDANTS

Antioxidants are compounds that deactivate free radicals. Rich sources of antioxidants include blueberries, concord grape, kale, strawberries, spinach, and the amazing spices cinnamon and clove.

**Here are some of the antioxidant compounds, vitamins, vitamin precursors, cofactors, and minerals that help destroy free radicals**

**B Vitamins:** There are a number of vitamins in this family including B1 (thiamin), B2 (riboflavin), B3 (niacin), B6 (pyridoxine), Folic acid (folic acid) and B12 (natural methocobalamin form). Together, they are known as Vitamin B Complex. Vitamin B Complex has been found to be an antioxidant cofactor and this means they play a supportive role in enabling the list of antioxidants that follow to work more effectively.

**Beta Carotene:** This is a precursor to Vitamin A, which means it must be present for Vitamin A to be formed by the body. The best sources include fresh carrots, leafy greens, squash (especially yellow squash such as pumpkin), yams, sweet potatoes, broccoli, peaches, apricots, cantaloupes, and nori (a type of seaweed).

**Vitamin C:** A water-soluble vitamin for which the best natural sources are the citrus fruits (orange, lemon, lime, and grapefruit), tomatoes (technically a fruit), strawberries, leafy green vegetables, broccoli, brussel sprouts, green peppers, and acerola berries.

**Vitamin E:** A fat-soluble vitamin. Good sources include whole grains, dried beans and other legumes, leafy green vegetables and eggs.

**Carotenoids:** These fat-soluble antioxidants increase the number of lymphocytes and natural killer cells in the body. The best sources are fruits and vegetable, especially carrots, kale, tomatoes, and cantaloupes or the red and yellow vegetables.

**Zinc:** Another antioxidant cofactor and an important mineral for your immune function. The average person needs 20 to 50 mg but higher doses can hinder immune function. Meats and whole grains are good sources. Zinc supplements are generally not needed.



**Iron:** An iron shortage increases infection risk by weakening many different types of immune cells but too much iron will impair immune function. Women of childbearing age need 15 mg of iron each day and men need 10 mg. Meats, beans and tofu are good sources. Iron supplementation is a good idea only if you are found to be iron deficient. Many women are iron deficient due to blood loss during menstruation.

**Note:** It is a little known fact that coffee inhibits absorption of iron so it behooves to get your iron level checked if you are a coffee drinker and especially so if you are a pre-menopausal woman who drinks coffee.

**Selenium:** The mineral selenium is yet another hugely powerful antioxidant cofactor that encourages growth of immune cells and stimulates production of antibodies. Whole grains, nuts (especially Brazil nuts), seeds, and seafood are good sources for selenium as well as Selenomax yeast. Most people are deficient in Selenium.

**Coenzyme Q-10 (CoQ10):** CoQ10 supplements can also be extremely helpful supplements to fight free radicals.

**Note:** Coenzyme Q-10 is not readily available in our food sources and is critical for health. It diminishes with age so you should take a supplement dose of 150 to 200 mg to boost this vital nutrient if you are 30 years young or older.

**Astaxanthin:** This is an amazingly powerful antioxidant and this more recently discovered substance is an absolute super star of antioxidants. It is found in small quantities in wild shrimp and salmon. The best source is Krill oil, which is harvested from a tiny Antarctic shrimp, and the very best Krill oil is Neptune Krill Oil, which is produced by a patented process.

A recent study shows how common antioxidants can help beat some of our most common health problems today.

In a placebo-controlled study, Israeli researchers gave 70 patients from their hypertension clinic either a placebo or a combination of some of my favorite antioxidants. The doses were in line with my recommendations of vitamin C (1,000 mg/day), vitamin E (400 iu/day), coenzyme Q10 (120 mg/day) and selenium (200 mcg/day).

The patients were tested at three months and again at six months. In both cases, those who took the antioxidant supplements had improved their blood sugar control. They lowered their blood pressure, had significantly higher levels of HDL cholesterol (good cholesterol), and they had healthier arteries.

# ORAC CHART

An ORAC Chart is an interesting tool to find the antioxidant value of different foods. ORAC stands for Oxygen Radical Absorbance Capacity. ORAC is a method of measuring the antioxidants in food and the higher the score, the more antioxidants a given food will have.

## **Studying the ORAC values of different foods reveals some interesting things.**

Spices have the highest ORAC value of all the foods and that is good news because spices make everything taste better. Cinnamon has an incredibly high ORAC value at 267,536 and has an awesome amount of antioxidant power. Sprinkle it over oatmeal, on toast, over a sweet potato, into a smoothie or stir some into your tea.

I don't know anyone who doesn't like chocolate. Dark chocolate has an ORAC value of 20,823 and milk chocolate has a value of 7,528. As dark chocolate has almost 3 times the antioxidants of milk chocolate, it's safe to say that dark chocolate is the far better choice. Raw broccoli, a vegetable we know and love has an ORAC value of only 1362. Chocolate or broccolis ... which would you rather choose? Please don't think that I'm recommending that you throw out your broccoli and eat a candy bar every day instead. Broccoli has powerful cancer fighting antioxidants that are unique to cruciferous vegetables so broccoli has other advantages.

Comparing ORAC values can give some insights into the health benefits of chocolate. Don't be afraid to eat a little every day. Just don't go overboard and make sure you are eating a dark chocolate with at least 70% cacao and no dangerous sugars or additives.

The closer you get to 100% pure cacao, the more of one of Mother Nature's wonders you'll find - flavonoids. Cacao is rich with flavonoids and has more than red wine and more than green tea, which are known for their flavonoid content - cacao trumps them.

Study after study shows that flavonoids benefit both platelet and endothelial function. Endothelium is the thin layer of cells lining all of your vascular passageways. By supporting them with flavonoids, you're helping to keep

your blood flowing quick and free. It keeps your arteries slick throughout your whole system to keep your blood moving.

A growing number of recent studies are even showing chocolate's role in supporting healthy blood pressure.

We know that dried fruits can be high in sugar, which means you should watch how much you eat, but dried fruits have a high ORAC value. Looking at the comparisons of raw versus dried, the dried fruits had 2 to 3 or even more times the antioxidants than the raw. Dried fruits have more antioxidants because the water has been taken out of the fruit, condensing it and making it smaller. So eating a handful of dried apples pieces means you are eating a bunch of apple, just smaller and condensed. Try mixing a handful of dried cranberries or cherries with a handful of nuts for a healthy snack that happens to be healthy for you.

Raw food diets are popular and eating raw foods has its benefits, but don't throw out your stove or oven just yet. Looking at the ORAC value of a few different vegetables, cooking those vegetables increased the ORAC value. For example, raw red cabbage has an ORAC value of 2252 and cooked red cabbage had a value of 3145. Raw broccoli has a value of 1362 and cooked broccoli had a value of 2386.

Pecans have the highest ORAC value of all the nuts, at a whopping 17,940. Walnuts are second at 13,541. Peanuts have an ORAC value of 3,166. Peanuts are not nuts and are from the legume (beans) family. Peanuts are healthy but the first time I noticed how much higher in antioxidants some of the other nuts were, I decided to start eating other nuts and nut butters more often.

Try Foods You Haven't Eaten or Rarely Eat: Looking at an Oxygen Radical Absorbance Capacity (ORAC) chart can enlighten you that certain foods have more antioxidants than others do, and spices have the highest ORAC values of all.

**The following ORAC values are based on a 100-gram serving by weight:**

Orange 1,819

Dried Apples 6,681

Fuji Apple 2,589  
Apricots, raw 1,115  
Apricots, dried 3,234  
Pear, raw 2,941  
Pear, dried 9,496  
Chokeberry, raw 15,820  
Cranberries, 9,584  
Broccoli, raw 1,362  
Broccoli, cooked 2,386  
Red Cabbage, raw 2,252  
Red Cabbage, cooked 3,145  
Artichokes, cooked 9,416  
Dark Chocolate 20,823  
Milk Chocolate 7,528  
Peanuts 3,166  
Almonds 4,454  
Hazelnuts 9,645  
Pecans, 17,940  
Walnuts 13,541  
Brazil Nuts, 4,805  
Ginger Root, 14,840  
Chili powder 23,636  
Marjoram, fresh 27,297  
Thyme, fresh 27,426  
Black pepper 27,618  
Ginger, ground 28,811  
Mustard seed, yellow 29,257  
Sage, fresh 32,004  
Chocolate, Dutched powder 40,200  
Curry Powder 48,504  
Baking Chocolate, unsweetened 49,926  
Basil, dried 67,553  
Parsley, dried 74,349  
Cumin seed 76,800  
Cocoa, dry powder, unsweetened 80,933  
Turmeric, ground 159,277  
Dried Oregano 200,129

Ground Cinnamon 267,536  
Ground Cloves 314,446

**Here are the ORAC values of some foods ranked per typical serving:**

Apples, Red Delicious, raw, without skin, 1 med 4,727  
Blueberries, raw, 1/2 cup 4,848  
Apples, Golden Delicious, raw, with skin, 1 med 4,859  
Plums, black diamond, with peel, raw, 1 fruit 5,003  
Nuts, pecans 1 oz 5086  
Candies, semisweet chocolate, 1 oz 5,118  
Apples, Gala, raw, with skin, 1 med 5,147  
Prune juice, canned, 1 cup 5,212  
Pears, raw, one med 5,235  
Cranberries, raw, 1/2 cup 5,271  
Apples, raw, with skin, 1 med 5,609  
Artichokes, boiled, 1/2 med 5,650  
Alcoholic drink, wine, table, red, 5 fl oz. 5,693  
Plums, dried (prunes), uncooked, 1/2 cup 5,700  
Candies, chocolate, dark, 1 oz 5,903  
Juice, Pomegranate, 100%, 1 cup 5,923  
Apples, Granny Smith, raw, with skin, 1 med 7,094  
Apples, Red Delicious, raw. with skin, 1 med 7,781  
Elderberries, raw. 1/2 cup 10,655  
Baking chocolate, unsweetened, 1 square 14,479

# RAW FOODS

Raw fruits, vegetables, nuts, and seeds are wonderful sources of good nutrition, vitamins, minerals, and especially digestive enzymes we need to digest our foods.

One of the most fantastic sources of raw foods is sprouts. Especially so if you sprout seeds and nuts at home in clean water. It simply does not get any fresher or more nutritious than when you sprout seeds, nuts and beans then eat them at their freshest at home. This is better than knowing a farmer because you are the farmer and harvesting your live crop fresh to the table.

Cooking food will destroy most of the valuable vitamins, enzymes, and nutrients. Digestive enzymes are destroyed at a mere 118 degrees. Vitamins and other nutrients are destroyed at temperatures over 140 degrees

Lightly steaming vegetables but leaving them firm is better than fully cooked, as is a quick sauté that leaves vegetables firm.

It is best to eat organic raw foods, as the nutritional value is much higher than typical grocery store foods force grown in depleted soils with dangerous chemicals.

Don't mix cooked food with raw food as this produces acid in the stomach. This acid does not mix well with the raw food and will create indigestion. Most raw foods are very perishable. When raw foods are exposed to temperatures above 118 degrees, they start to break down and the important digestive enzymes are destroyed.

One of the most important constituents of foods, which do break down, is enzymes. Enzymes help us digest our food. Once they are heated above 118 degrees, their structure changes and they are no longer able to provide the function for which they were meant.

Cooked foods contribute to chronic illness because their enzyme content is destroyed and this requires our body to make its own enzymes to process the food.

Digesting cooked food uses valuable metabolic enzymes to help digest your

food.

Digestion of cooked food demands much more energy than digesting raw food.

In general, raw food is so much more easily digested that it passes through the digestive tract in 1/2 to 1/3 of the time it takes for cooked food to pass.

Eating cooked or canned enzyme-dead foods places a burden on your pancreas and other organs and overworks them, which eventually exhausts these organs. Many people gradually damage their pancreas and progressively lose the ability to digest their food after a lifetime of eating processed foods.

You can steam and blanch foods if you want your food warm. Use a food thermometer and cook them no higher than 118 degrees Fahrenheit. Up to this temperature, you won't be doing too much damage to the enzymes in food.

You can taste the difference with organically grown raw foods as there is simply so much more flavor to organic food. Our foods today that are force grown with chemicals in depleted soils can contain just a small fraction of the nutrition of the same organically grown food from undepleted rich soil. It is difficult to get good nutrition from our foods today because they contain a small percentage of the nutritional value of organic foods. You have to eat a lot more to get the same nutritional value.

The sad reality is that most people eat too many calories and are still undernourished.

**RECOMMENDATION:** Eating organic raw food is so much healthier and more nutritious and you have a better chance of delivering complete nutrition to your body.



# NUTS & SEEDS

Eat a variety of raw and preferably organic nuts and seeds (raw means uncooked and unroasted). Do not eat roasted, dry roasted and nuts or seeds cooked in oil.

Raw nuts and seeds make great between meal snacks.

Even better, you can sprout raw nuts, seeds, and legumes (beans) for even more nutritional benefits.

**SUGGESTION:** Ideally, buy your raw nuts and seeds in the shell as they keep more nutrients.

# SPROUTING

*I can't possibly say enough about the nutritional value of sprouts.*

Sprouts are wonder foods and all of us can profit from the boost to good health sprouts can provide.

They are the freshest, most concentrated and nutritious raw food that you can eat.

Sprouts have antioxidants and enzymes that help digestion and absorption of nutrients.

By sprouting seeds, nuts, and beans at home in clean water, you are getting nutritious food without any chemicals, pesticides or other toxins. Nothing is fresher than just sprouted seeds, beans, and nuts freshly harvested and straight to your plate. That's as organic and as fresh as it gets folks.

There is an amazing increase in nutrients in sprouted foods when compared to their dried embryo. In the process of sprouting, the vitamins, minerals, and protein increase substantially with a matching decrease in calories and carbohydrate content.

**EXAMPLE: The changes found in sprouted mung beans when compared with the figures for the beans in the dried state are as follows:**

- Energy content - calories decrease 15%
- Total carbohydrate content decreases 15%
- Protein availability increases 30%
- Calcium content increases 34%
- Potassium content increases 80%
- Sodium content increases 690%
- Iron content increases 40%
- Phosphorous content increases 56%

- Vitamin A content increases 285%
- Thiamine or Vitamin B1 content increases 208%
- Riboflavin or Vitamin B2 content increases 515%
- Niacin or Vitamin B3 content increases 256%
- Ascorbic acid or Vitamin C content sees a massive and infinite increase

The increase in protein availability is of great significance as it is a valuable sign of the heightened nutritional value of a food when sprouted.

The simultaneous decrease in carbohydrate content shows that many carbohydrate molecules are broken down during sprouting to allow absorption of atmospheric nitrogen and reforming into amino acids. The resultant protein is the most easily digestible of all proteins available in foods.

The remarkable increase in sodium content supports the view that sprouted foods offer exceptional nutritional qualities. Sodium is essential to the digestive process within the gastro-intestinal tract and to removing carbon dioxide.

With the great increase in vitamins, sodium materially contributes to the easy digestibility of sprouts.

Dried seeds, grains, and legumes do not contain recognizable traces of ascorbic acid (vitamin C), yet when sprouted, they reveal significant quantities, which are important in the body's ability to metabolize proteins. The infinite increase in ascorbic acid stems from their absorption of atmospheric elements during growth.

Sprouts have several other benefits. They supply food in predigested form. The food has already been acted on by the enzymes and made to digest easily. During sprouting, much of the starch is broken down into simple sugars such as glucose and sucrose by the action of the enzyme 'amylase'. Proteins are converted into amino acids and amides. Fats and oils are converted into more simple fatty acids by the action of the enzyme lipase.

During sprouting, beans lose their objectionable gas producing quality.

Sprouts contain much fiber and water and are therefore helpful in overcoming constipation.

Sprouts are an inexpensive method of getting a high concentration of vitamins, minerals, and enzymes. They have in them all the constituent nutrients of fruits and vegetables and are live foods.

Eating sprouts is the safest and best way of getting the advantage of both fruits and vegetables without contamination and harmful insecticides. It should be ensured that seeds and dried beans are bought from a store where they are fresh, unsprayed, and packaged as food.

Sprouts are not only a low cost food but are also tasty and easy to grow. Children and the elderly can easily do it.

Sprouts are very nutritious because they contain all the elements a plant needs for life and growth. The endosperm of seed is the storehouse of carbohydrates, protein, and oil. When the seed sprouts, these become predigested amino acids and natural sugars on which the plant embryo feeds to grow.

The vital nutrition in sprouts can retard the aging process.

Sprouts also contain large amounts of male and female hormones in their most easily assimilated form.

Research shows that sprouts are among the highest for all foods in vitamins.

Sprouts provide all the essential vitamins and minerals.

All edible grains, seeds, and beans can be sprouted.

**Alfalfa is the king of sprouts.** Grown as a plant, its roots can reach 40 feet into the subsoil to bring up valuable trace minerals of which manganese is especially important to health, digestion, and is a part of human insulin. Apart from minerals, alfalfa is also a rich source of vitamins A, B, C, E, K, and amino acids.

# HOW TO SPROUT

A good variety of seeds should be used for sprouting. It should be ensured the seeds, legumes, or grains are of the sprouting type.

Small seeds are soaked for five or six hours, medium size for eight hours and beans and grains for 10 to 12 hours.

After Soaking, the seeds should be rinsed and the water drained off.

Not more than one-eighth of the sprouting container should be filled with the seeds for sprouting. Soaking makes the seeds, grains, or legumes fatty, pulpy, and full of water. Be sure the sprouting container has enough room for the seeds to expand during sprouting. They will expand about eight times their original size.

The sprouting container should be kept in a place that is not exposed to chill or hot drafts. It should also be ensured the mouth of the sprouting container is not completely covered to allow air in.

The seeds should be rinsed and water drained off three times each day until they are ready to eat.

The seeds will germinate and become sprouts in two or three days from start of soaking, depending on temperature, humidity, and type of seed.

Care should be taken to ensure that sprouts do not lie in water. They should be kept well drained to prevent souring.

Sprouts are at their peak flavor and tenderness when tiny green leaves appear at the tips. Their nutritional value is also at peak.

To keep freshness and nutritional value, sprouts should be refrigerated if they cannot be consumed immediately. Sprouts can be kept for a week in this way.

Beware that seeds packaged for planting purposes may contain mercury compounds or other toxic chemicals.

*My favored containers for sprouting are EASYSPROUT containers. They also serve as storage containers in your refrigerator by changing the perforated lid for a solid lid after sprouting is complete.*

[CLICK HERE to be taken to EASYSPROUT on Amazon.com](#)

*I sprout alfalfa and broccoli seeds together. Another favorite mixture is to sprout about 20 different kinds of beans and legumes together at once for a widely mixed variety of sprouts to use in or as a salad or add to soups or in sandwiches or rollups.*

You can use sprouts anywhere you would use lettuce. You can make salads with just sprouts, add them to a leafy salad for enhancement, or use them as a colorful and edible accent on other foods.

*I like to sprout raw almonds and other nuts as snacks. You can also sprout wheat, rye and other grains to make nutritious sprouted bread. Try blending some sprouts into a smoothie as a super healthy addition.*

**RECOMMENDATION:** Absolutely start sprouting or buying fresh sprouts to add to your diet. Fresh and clean produce does not get any better when it comes to both nutrition and freshness, as it does when you grow and harvest sprouts at home.

# FRESH FOODS

Organic fresh foods are by far the best. Most of our fresh foods today are force grown from genetically altered seeds in depleted soils with added pesticides and other toxins and chemicals that have collected in the soil. then they are irradiated to further decrease nutritional value.

**NOTE:** The typical piece of produce is sprayed with dangerous chemicals 10 times to produce it.

Canning in any form (even at home) will destroy most of the vitamins, enzymes, and nutritional value.

Freshly picked is best, as nutritional value will be lost over time spent in storage, even in the refrigerator. You can grow fruits and vegetables at home, sprout, visit farmer's fruit stands, or attend farmers markets to get the freshest produce possible.

Buying food items in cans or jars lacks in nutrition and canned goods are usually loaded with salt, sugar, preservatives, and dangerous flavor enhancers.

**The process of freshness goes from freshly picked fruits and vegetables, to frozen foods, and down to canned foods. Sitting on the shelf or in the refrigerator over time loses even more nutritional value.**

Fresh picked produce will immediately begin to lose some of its nutrients. Fresh produce will lose half or more of its vitamins within the first two weeks but if not kept chilled or preserved, the fresh vegetable or fruit will lose nearly half of its vitamins within the first few days.

How food is cooked affects the nutrient value. Vegetables boiled for longer than necessary and in large amounts of water lose much of their nutritional value compared to those lightly steamed.

**RECOMMENDATION:** When we pick fresh vegetables or fruit at the farm or fresh picked at a farmer's market, we are getting produce that is more nutritious than available at a supermarket, frozen, or canned. If you cannot buy fresh organic foods, at least buy frozen. Make canned foods your last

choice or preferably avoid canned foods altogether.



# WHITE POISONS

The “White Poisons” are the natural substances that food conglomerates process and strip of their nutrient value in the process. They include white sugar, white flour, white processed salt, and white homogenized dairy products. This includes all of the nutritionally deficient products made from them such as white bread, etc. The natural color and nutrients are gone and they have been bleached to white with dangerous and harmful chemicals.

**Do not eat white processed flour:** It comes from GMO seed, has been chemically treated in the growing process, stripped of all its natural fiber and nutrients, and chemically bleached to make it a pretty white. Enriched flour on the food label does not mean a better flour, it means it has been processed and the nutritional value has been removed so please don't be fooled by this misleading marketing tactic. White flour mixed with water makes paste. You use it to make paper-mache and it turns hard as a rock. That's what happens when you eat it. It is an unnatural product the body does not know how to digest. White flour has little nutritional value, no life force, spikes your insulin, and causes constipation. Instead, use organic whole-wheat flour that has been minimally processed or other whole grain flours or grind your own. The food producers try to pass this white poison flour off to us by making us think it is better and calling it “enriched flour”. It is not enriched in any way, it has been stripped, so don't fall for this marketing ploy.

**Do not eat white processed sugar:** White table sugar is grown with dangerous chemicals, processed, stripped of all its nutritional value, and heated which destroys any living vitality that it once had. White sugar is a product that has such powerful adverse affects on the body it could be classified as a drug. White sugar is poison and the chemicals used to grow sugarcane are known to cause cancer in sea turtles. Those poisonous chemicals used in the growing remain in what you buy in the store.

Sugarcane grown organically then pressed and dried creates pure unprocessed living sugar. You can buy this in health food stores. It is somewhat healthy and provides some nutritional value.

Stevia and some other more healthy sweeteners are covered further along.

**Do not eat white processed salt:** White table salt is not healthy. Please substitute natural sea salt and do try to minimize your salt consumption. Recognize that 85% of the salt in our bodies does not come from the saltshaker. The salt has been added to our foods during processing by the manufacturer.

**Do not consume supermarket milk and other homogenized dairy products:** Supermarket milk is from cows fed an unnatural diet, deficient in health. It is full of hormones, steroids, immune system destroying antibiotics, and is not good for you. USDA organic milk is better because some of the toxins have been avoided but it is still homogenized or pasteurized and that destroys the natural digestive enzymes and other nutritional value. Whole organic raw milk is best if you can find it but that is difficult to find in most states unless you know a farmer. In Florida for example, the sale of raw milk for human consumption is illegal. Some health food stores and farmers get around this silly law by selling raw milk for pet consumption.

**Do not consume processed foods made with White Poisons:** I'm talking about white bread and almost any food that comes in a can, package, or jar produced by the major food conglomerates.

# AVOID SOY & SOY PRODUCTS

**Soy has been heavily promoted by the soybean industry as being "the perfect food". The truth is it is more like "the perfect storm" for anyone with diabetes.**

**There's NOTHING even remotely healthy about soy products of all types. There are billions of dollars of marketing behind Soy to try to scam you into thinking processed soy is a health food when it is not.**

Beyond the possible thyroid problems that soy can create for many people, soy has many anti-nutrients such as phytates, lectins, oxalates, and protease inhibitors that can be detrimental if over consumed.

Soy can also contain high levels of certain heavy metals, is one of the most allergenic foods on earth, and has one of the highest levels of pesticide residues of any food. Soy can also create a hormonal mess in the bodies of both men and women by giving a hidden and deadly estrogen boost with every unhealthy meal due to excess estrogenic compounds.

Soy will give you more belly fat.

The vast majority of soy is produced from Genetically Modified seed also known as GMO or Genetically Modified Organism.

Soy is thyroid toxic. Isoflavones in soy foods block receptors for thyroid hormones and causes people to become hypothyroid. Since lowered thyroid function raises blood sugar and leads to weight gain, lowering thyroid by eating too much soy is the last thing anyone with diabetes needs to do to themselves. For people who are already taking thyroid hormones, soy makes it necessary to take a higher dosage to get to a healthy hormone level than if they did not eat soy.

Soy contains too much manganese, a mineral that can build up to toxic levels in people.

Phytates in soy foods block the absorption in the gut of other minerals that your body needs. There's some evidence that toxins in soy damage the lining of the digestive tract. This causes "leaky gut syndrome" where the damage to

the gut allows larger proteins to enter the blood stream where they provoke allergic reactions that lead to severe food allergies. It is possible that the huge amounts of soy that have invaded processed foods is one reason for the spike in Type 1 diabetes which is increasingly seen as being linked to gluten intolerance. With a leaky gut, gluten is more likely to get into the bloodstream, provoke the formation of the anti-gluten antibodies which may also be attacking the pancreas.

Soy also mimics estrogens. Eating a lot of soy foods can decrease androgen levels in males and lead to “erectile dysfunction” and the unwanted growth of breast tissue.

Some mainstream research has found higher levels than normal of dementia in populations who eat a lot of tofu. There's also there's some evidence that soy promotes hormone sensitive cancers and gut cancers.

Avoiding soy is not easy, especially if you are trying to cut back on carbohydrates and looking for sources of protein rich food. Soy hides in many foods under names like "textured vegetable protein" and "hydrolyzed plant protein". It's the main ingredient in many "protein" bars. It's in all high protein breakfast cereals. It is often used as an extender in restaurant meats.

There's too much evidence that the only real benefit soy products provide is for food processors who get high profits from a cheap raw material.

**Beware Industry Sponsored Soy Research.** There is a lot of misleading research published about the health benefits of soy. Much of it is funded by companies that produce soy Frankenfoods. The hallmark of deceptive food research is that a claim will be made that the food "prevents diabetes", but this claim is not based on tests where people are given the food and then had their blood sugars tested. Instead, researchers will find that the food contains some substance like a phytochemical, and extrapolate from the presence of this phytochemical that the soy food would have the anti-diabetic properties.

Studies that link soy intake to a reduced risk of diabetes generally refer to the intake of the kind of soy foods (tofu, etc.) which are sold at expensive "health food" stores. Consumption of these foods is a socio-economic indicator which points to higher income and education levels, which are independently associated with lower risks of diabetes for reasons unrelated to soy. There are

NO studies showing that higher intake of processed foods with soy additives is linked to any health benefits. These processed foods and the fast food "meats" where soy protein has been added as extenders are where most people get their major soy exposure, not tofu.

**RECOMMENDATION:** *Please avoid all soy products including soy milk, tofu, and even including organic soy products.*

# JUICING

**Buy and use a juice machine. It is one of the best investments you can make for better nutrition and health.**

**Here is a short blurb about how powerful juicing was for me personally:**

*When I first got seriously into nutrition about 32 years ago, I spent a couple of years trying to bring my body chemistry into balance. I knew the minerals I was deficient in and what ratios were out of balance because of hair analysis (more on Hair Analysis in that chapter). I tried to use supplements to bring my body chemistry into balance. I was taking about 30 supplements 3 times a day and nothing much happened. The problem was that your body does not absorb artificial vitamins and minerals very well. It is far better to get your nutrition from whole foods and get the beneficial cofactors that also come from consuming real food plus the ones science has not yet discovered.*

*When I started juicing, I ended up consuming a lot more fresh fruit and vegetables. My body was finally able to assimilate the vitamins and minerals it had been missing from the supplements but did absorb by juicing real food. My health and vitality improved dramatically within just a few weeks and my body chemistry came into balance. My results were quite remarkable and I stopped taking all those expensive vitamins and supplements. I saved a lot of money too.*

***I can't possibly say enough about the benefits of juicing.***

**A simple prescription for optimum health could be just two things:**

1. Start juicing
2. Get regular exercise.

**Juicing is highly concentrated pure nutrition and here are some other important factors to consider when it comes to juicing:**

- Juicing gives you the nutrition of fresh, raw, and natural vegetables and fruits in a quantity you could not even begin to consume if you tried to eat the whole fruits and vegetables.

- Organic produce has up to ten times the vitamins and minerals as non-organic, and has little or none of the poison residues of chemical fertilizers, pesticides, fungicides, and more.
- It is almost impossible to get the amount of vitamins, minerals, and enzymes that you need by simply eating today's food that is force grown with toxic chemicals in depleted soils.
- The drugs and toxins you take in with commercially produced non-organic fruits and vegetables also limit your ability to absorb nutrients making the situation even worse.
- Even if you ate only raw organic fruits, vegetables, nuts and seeds, your body would still probably have nutritional shortages.
- The best way to get the nutrition you need is to buy a quality juice machine and make fresh juice using organic fruits and vegetables. Drinking two or three glasses of fresh juice gives your body a huge amount of living enzymes. You also get vitamins and minerals in the natural state with all the cofactors and in the proportion that nature intended.
- Juicing is the cheapest and most economical method to preserve your health today.
- The best time to take a juice drink is in the morning and during the evening.
- Freshly made juices from vegetables and fruit contain far more vitamins, minerals, and natural enzymes than any canned or store-purchased juice.
- When making juice, always include dark leafy vegetable such as spinach, broccoli, cabbage, or beet tops.
- Within ten minutes after consuming, fresh juice is absorbed into the bloodstream. This is an advantage to drinking freshly juiced vegetables compared to eating fresh vegetables and fruit that take much longer for your digestive system to process. You get quick energy.

- Eating solid foods can take several hours to digest, while a fresh fruit or vegetable drink is absorbed quickly into the system. The fiber is lost due to the juicing process but a higher amount of nutrients goes into the body.
- Fruits and vegetables these days contain a small fraction of the nutritional value of our fruits and vegetable from 50 years ago. Our foods today are force-grown in depleted soils with pesticides, fertilizers and other chemicals that are harmful to us.
- Everyone should eat five portions of vegetables each day and four portions of fruit each day. It is difficult to achieve this without the benefits of a juicer that can concentrate all that good nutrition into a glass or two of juice.
- Drink the fresh juice immediately as it will quickly lose nutritional vitality and spoil.
- Supermarket juices are full of sugars and preservatives and are not nearly as nutritious as fresh made juice and they have been pasteurized which destroys natural enzymes, vitamins, and co-factors.
- Always juice the entire fruit and vegetable, skin, core, stem ... every part.
- Always scrub and wash the fruits and vegetables you juice to remove any pesticides, dirt, wax, etc. on the skin or surface. You can also buy an ultrasonic cleaner with ozoneator to cleanse your fresh and even organic fruits and vegetables.

**RECOMMENDATION:** *Buy and use a juicer with the best home juicer being the Breville 800JEXL Juice Fountain Elite (1000 watt) but it comes with a healthy price of about \$400 (worth it I think). For a quality but much more economical juicer, I recommend the Jack LaLane juicer or the more economical juicers in the Breville lineup.*



# APPLE CIDER VINEGAR TRICK

Apple Cider Vinegar (ACV) is made from fermented apples (organic preferred). Fruit sugars are consumed by beneficial bacteria and soured into vinegar. The result is a pale-amber cloudy liquid with a sweet-sour aroma and taste. ACV is full of probiotic cultures and other beneficial compounds.

Traditional uses of apple cider vinegar are numerous. To name a few, it has been used to improve digestion, aid in flu prevention, reduce inflammation, regulate pH balance, alleviate allergy symptoms, ease nausea and heartburn. It is a staple in detox regimens. ACP is used for a number of skin conditions, such as reducing acne, and smoothing wrinkles.

There is extensive evidence to support using apple cider vinegar to control blood sugar levels. Historical records show that western medical doctors used vinegar for many ailments, including diabetes. In the late eighteenth century, the production and marketing of blood sugar-lowering drugs began to take place. The natural wisdom of medicating patients with vinegar was pushed aside in favor of drugs.

Multiple studies have found that ACP can help lower blood sugar levels. While dietary changes have been shown to be the most effective in reversing diabetes, natural remedies such as apple cider vinegar can prove beneficial as a supplement to a sound nutritional regime.

One study conducted at the Nutrition Department of Arizona State University by doctors Carol S. Johnston and Andrea M. White, PhD, surveyed 11 people afflicted with type 2 diabetes. The researchers found that taking two tablespoons of apple cider vinegar right before bed lowered the blood sugar levels of these individuals by four to six percent by morning.

The way in which apple cider vinegar works in the body is complex and not completely understood by scientists. Some experts think it slows the absorption of carbohydrates into the blood by delaying the breakdown of starches into sugars. This means it would have a similar function to the prescription drug Acarbose (sold under the brand-name Precose).

However, other studies have reported that ACV helps lower the post-meal blood sugar of subjects with a high level of insulin resistance. This suggests

that the vinegar improves hormonal insulin sensitivity, which is a similar mechanism to a medication called Metformin.

Finally, the research showing that an evening dose of ACV results in lower morning levels of blood glucose would suggest that apple cider vinegar might encourage the healthy production of insulin, which is similar to the effect of a drug called Nateglinide (sold as Starlix).

This is a common phenomenon observed about natural medicines. They tend to have an adaptable and “intelligent” way of working in the body, where their complex mechanisms are able to recognize what is needed and work in synergy with what is there. This is in contrast to pharmaceutical drugs, which exert a specific effect regardless of what a person’s body might need. This makes the prescription of pharmaceuticals a difficult and risky practice, because it’s not always possible to analyze and diagnose exactly which mechanism needs to be modified, and to what extent. In this way, apple cider vinegar seems to start or continue where the body left off, adapting its function to what is needed. This is why the use of apple cider vinegar has few or no negative side effects. The same cannot be said for pharmaceuticals, which have been known to cause a range of side effects from skin rashes, weight gain, kidney complications, stomach issues, a risk of liver disease, and swelling of the legs. Some people also experience dizziness, shivering, and cold sweats with certain medications. Many diabetes sufferers must take more than one type of drug, meaning that side effects can be unpredictable.

**Apple cider vinegar can cost as little as two cents per dose, making it one of the most affordable and cost-effective diabetes therapies available today.**

A study performed at Tokyo University, Japan, discovered that the acetic acid found in vinegars inhibits the activity of carbohydrate-digesting enzymes, including sucrase, maltase, lactase and amylase. This inhibition results in select sugars and starches passing through the digestive system without being digested and having less impact on blood sugar levels. When the starches pass through undigested, they end up feeding beneficial gut bacteria, which has further health benefits.

Experts have also said that ingesting apple cider vinegar may “turn on” genes that help to break down fats. Since obesity is often tied with prediabetes and

type 2 diabetes, this would have a beneficial effect for diabetes sufferers.

**NOTE:** When choosing an apple cider vinegar, find one that is organic and unpasteurized. The pasteurization process can destroy many of the health benefits. Organic unpasteurized apple cider vinegar has a cobweb-looking solid floating inside and is known as the “mother of vinegar”. This is natural cellulose produced by the vinegar bacteria. Mother of vinegar is harmless and lets you know that the vinegar is actually unpasteurized. Most vinegar manufacturers today pasteurize the vinegar and this destroys the mother of vinegar and a many of the beneficial nutrients. If you don’t wish to consume the live culture, simply pour the vinegar through a strainer to remove the pieces from the liquid.

**Research supports using natural remedies such as raw apple cider vinegar along with a high-quality, real-food diet to reverse prediabetes and full-blown chronic diabetes.**

**RECOMMENDATION:** Use a tablespoon of raw organic apple cider vinegar in a small glass of water three times per day. Take each dose a half hour before meals and this should have a beneficial effect on both digestion and blood sugar levels. This simple therapy has been shown to help those with both Type 1 and Type 2 diabetes. It can also be a valuable preventative measure for the millions of people exhibiting prediabetes symptoms.

# READING FOOD LABELS

Over 1500 substances are allowed to be put into food and do not have to be listed on the ingredient label. These labeling omissions have been legally lobbied for and allowed by the government agencies that are supposed to protect us so it is truly “buyer beware”.

Only you can protect yourself as the food conglomerates are only interested in profits and not your health! The regulatory agencies that should protect us are corrupted.

Even if you read the ingredient list on the package, there is an excellent chance the food itself has been produced with harmful chemicals. Harmful chemicals have also been added during processing that are not disclosed in the ingredients list. Some of those 1500 undisclosed but allowed additives are in there too.

Virtually all food you buy at the supermarket that comes in a package, can, or jar is loaded with dangerous chemicals.

Please do not believe what the fancy packaging says on the front side, as the food companies are only interested in profits and getting you to buy the food. They are permitted to legally lie, deceive, and mislead you to entice you to buy their product.

If you must buy something in a box, jar, can, or package, buy something that was produced by hand in a very small facility.

Also, look for the words "USDA organic" and read the ingredient list.

It still may not be great, but at least it's better than buying mass-produced non-organic products.

Please do not be deceived by the words "natural", "fat free", “free range”, “reduced fat”, “organic”, "sugar free", "low carbs", "light", "healthy", “no trans fat”, etc. on the front of the package. The food industry has lobbied Congress to allow these words to be put on virtually anything. These words on the front of the package are meaningless, deceptive, and meant to mislead.

## FOOD LABELING TRICKERY & LOOPHOLES

**TransFat Loophole:** If the transfat totals less than one half gram per serving and no label claims are made about fat, fatty acids or cholesterol, trans fat information does not have to be listed. Trans fats can be included but labeled as zero and the food advertised as having zero trans fats when that simply is not true. The ugly reality is that a real serving is multiples of the purposely very small serving size will deliver multiple grams of trans fats when even one gram is dangerous to your health.

**Organic Loophole:** In October 2005, the Agricultural Appropriations Conference Committee voted to allow synthetic ingredients into foods labeled “organic”. Therefore, food items may be considered and labeled organic when they contain synthetic additives.

**Low Fat Loophole:** To label a product “Low Fat”, it must have 25% less fat calories than the regular product. If the regular product has ludicrous amounts of fat, there will still be too much fat. Read the label and you will discover that calories from fat is high in these products.

**Free Range Loophole:** The legal standard of “free range” is the chickens have access to outside areas. This legal standard is typically met by leaving a small door in the chicken coop open for a few minutes each day and so very few chickens take advantage to flee the chicken coop. The chickens truly aren’t free to leave the coop, as they generally aren’t even aware that they have a very brief opportunity to do so. The words “free range” on a package of eggs is really quite meaningless given this deceitful practice to increase profit by selling you a benefit that is not delivered. The chickens are not free roaming and are not fed a natural diet either. Try to get your eggs from truly free roaming chickens that are fed a 100% natural diet.

**Seafood Loophole:** Most shrimp and many other types of seafood are now imported from other countries and are farm grown. Seafoods are also exempt from food labeling and are truly dangerous to your health. Most are laden with all kinds of toxins and are extra dangerous to your health.

**Food Label Loophole:** The USDA definition exempts foreign food from labeling. This includes over 60 percent of pork, the majority of frozen vegetables, an estimated 95 percent of peanuts, pecans, and macadamia nuts.

Multi-ingredient fresh produce items such as fruit salads and salad mixes are also exempt. The sad thing is that domestic producers are NOT exempt when foreign producers ARE exempt!

Exempting foods from this basic labeling requirement because one ingredient has been added or because something has been roasted or cooked should not occur. Consumers have a right to know where their food comes from and how it has been processed. USDA should be standing up for those rights and NOT caving in to pressure from our trading partners and the multi-national food conglomerates.

**Meaningless Words:** Organic is not tested or certified and there are no standards except the USDA standard, which is full of loopholes. Natural, All Natural, Healthy, Heart Wise, and a whole bunch of other claims made on the front of a food package are all deceitful lies. There are no legal standards for these words and manufacturers use such words to deceive the public. Adding insult to harm being done by these packaging lies, food manufacturers are permitted to do so.

**IMPORTANT NOTE:** *Assume that all claims made on the front of a food package are LIES!*

## **FOOD INGREDIENT LIST**

Ninety five percent of the foods you should be eating do not have food labels!

These are the single ingredient mono-foods (one ingredient only) made by Mother Nature.

Whole foods you should be eating include organic vegetables & fruits, wild meats, kosher meats, organic meats, and organic eggs from truly free roaming chickens (without added hormones, steroids, or antibiotics). Organic foods produced purely by Mother Nature and are not tampered with by man in any way do not have ingredient list food labels.

Please be aware that farm raised fish, any dairy products, or other food that is pasteurized, irradiated, sprayed with pesticides, other toxins, is not good for you, and you should not buy it.

**When it comes to processed foods in a package, can, or jar that has a food label ingredients list, you should first ignore anything stated on the front of the package as a complete lie. Assume the opposite is the truth. Recognize that 95% of packaged and processed foods are foods you should never eat. Assume you will put it back on the shelf after reading the ingredient list as follows:**

If you see sugar amongst the top few ingredients or more than one type of sugar, don't buy it. This includes cane sugar, sugar beet sugar, corn syrup, high fructose corn syrup, dextrose, maltose, lactose, sucrose, sorbitol, xylitol, or any other word that ends in "itol" or "ose".

If there are any trans fats (hydrogenated oils or partially hydrogenated oils) in any amount whatsoever, don't buy it. This also includes food packages labeled as "zero trans fats" due to the "transfat loophole" allowing a zero transfat claim based on under one half gram of transfat per small serving size ... Who eats a small serving of just a couple of potato chips?

If there are any oils besides coconut oil, palm oil or extra virgin olive oil, don't buy it. This includes soybean oil, canola oil, cottonseed oil, flax oil, any other oil and especially trans fats or "partially hydrogenated vegetable oil"

If there is any flour, that is not "whole flour", or you see the word "enriched" or "refined" to describe a type of flour, don't buy it.

It's simple but you will have to do a lot of reading (of food labels). You will put at least 95% of packaged and processed foods back on the shelf if you follow these few simple rules.

**Serving Size:** It is important to pay attention to the serving size, including the number of servings in the package and compare it to how much you actually eat. The size of the serving on the food package determines the nutrient amounts listed on the top part of the label. For example, if a package has 4 servings and you eat the entire package, you quadruple the calories, fat, etc. that are listed on the label.

Do not confuse portion size with serving size. For example, a slice of bread is a serving size of one on the food label. If you eat a sandwich with 2 slices of bread, you have had 2 servings of bread in your portion.

**Ingredients:** Each product should list the ingredients on the label. They are

listed from largest to smallest amount (by weight). This means a food contains the largest amount of the first ingredient and the smallest amount of the last ingredient.



# **DANGEROUS GENETICALLY MODIFIED FOODS TO AVOID**

We don't hear a lot about genetically modified foods that have quietly made their way into our food supply in a big way. There have been no official scientific studies done on GMO (Genetically Modified Organism ) foods and humans, but some of the reports about negative effects these foods have had on animals are tremendously scary.

One type of genetically modified corn brought onto the market in the late 1990's has had a gene inserted into it which produces a toxin called Bt toxin. This toxin actually causes the stomachs of certain insects to break open when ingested, and the insect dies. The biotech firm that produces this genetically modified product insists that Bt toxin does not harm the digestive system in mammals. However, there are peer-reviewed studies showing that Bt-toxin does bind with mouse small intestines and with intestinal tissue from rhesus monkeys. Nobody knows what happens with humans!

You should think twice about that next drink sweetened with high fructose corn syrup, or that next basket of tortilla chips made with GMO corn.

It was reported that doctors in a hospital in Quebec (Canada) actually found Bt toxin in the blood of 93% of pregnant women tested, 80% of their babies, and almost 70% of non-pregnant women. If this toxin can cause the stomachs of insects to rupture, what does it do to humans? At the very least, it seems it could cause more digestive problems, allergies, autoimmune reactions, and other health issues. The American Academy of Environmental Medicine states that several animal studies showed serious health risks from eating genetically modified foods including: "...infertility, immune dysfunction, accelerated aging, irregular DNA, insulin instability, and changes in liver, kidney, spleen and the gastrointestinal system". There is a definite association between genetically modified foods and disease confirmed by several animal studies.

The recommendation of the AAEM is that physicians advise patients to avoid all GM foods, and to consider that GM foods could potentially be connected to certain health issues in patients and that GM foods need further testing to

be considered safe for human consumption. Genetically modified foods now contain new and unknown toxic substances that have NEVER been present in nature before.

We have no way of knowing what kinds of long term effects they will produce in humans, but they certainly seem to have negative effects on animals based on some studies. Because genetically modified foods contain some scientifically modified proteins, they tend to cause more allergies in people. When GM soy was introduced in the UK, allergic reactions to soy increased 50% or more. Food allergies seem to be increasing in the US as well and this could be from GM foods?

**NOTE:** There is no way of knowing what kinds of health issues genetically modified foods can produce because no long-term studies have been done. We need to protect our own health and avoid becoming guinea pigs in a world-wide biological experiment.

**The most common genetically modified foods are:**

- Soy
- Corn
- Wheat
- Cottonseed Oil
- Canola Oil

**According to *Natural News*, 90 percent of all canola, 88 percent of all corn, 90 percent of all cotton, and 94 percent of all soy grown in the U.S. today are of genetically-modified origin.**

Keep in mind that you might be eating GM foods the next time you're munching some corn chips, corn flakes or other corn cereals, soy milk or any soy products like tofu, soy protein, anything sweetened with [high fructose corn syrup](#) (in almost ALL processed foods) or any foods fried in soybean oil, corn oil, cottonseed oil, or canola oil, which is virtually anything that's fried at a typical restaurant.

There's no valid reason to eat these foods, as they offer nothing nutritionally,

while only causing health problems.

The list of genetically modified foods can also include sugar from sugar beets, Hawaiian papaya, some types of zucchini, and crookneck squash. These are minimal compared to the **massive amounts** of soy, corn, cottonseed or canola oil and wheat that are in our food supply.

Conventionally raised meat, dairy products, farmed fish and commercial eggs are also fed with GM feed, mostly from corn and soy. Scientists are still uncertain whether eating animals that fed on GM crops can have health consequences for humans. I'd rather not be part of the experiment.

Always buy organic meats, wild caught fish, or [100% grass-fed meat](#) (and grass-finished) to avoid this.

Aspartame and NutraSweet have also been created with GMO's. [Artificial sweeteners](#) are extremely unhealthy anyway, but here is just one more reason to avoid them!

Besides the health issues that have surfaced so far, genetically modified foods are a big unknown. These new forms of food could potentially lead to serious health issues, cancer or even some new diseases that modern medicine has never seen before. As one biotech scientist in an article published in the International Journal of Biological Science said, "For the first time in the world, we've proven that GMO's are neither sufficiently healthy nor proper to be commercialized."

**It's estimated that there are approximately 30,000 products on grocery store shelves that may be genetically modified.**

**It is estimated that 85% of the calories we humans consume come from three sources either directly or are produced using these same three sources:**

1. Wheat
2. Soy
3. Corn

**All three of these are predominately Genetically modified sources!**

**STRONG RECOMMENDATION:** *AVOID ALL GENETICALLY MODIFIED FOODS AND AVOID FOODS PRODUCED WITH OR FROM GENETICALLY MODIFIED FOODS. THEY WILL MAKE YOU FAT (carbs and unhealthy fats) AND THEY MAY CAUSE YOU SERIOUS HARM!*

# HAIR ANALYSIS

The scientific basis of hair analysis is simple. When new hair cells are forming in the hair follicle, they take in traces of substances going through the blood stream of the individual. As hair grows, the new cells push the older ones out of the bulb. As cells come out of the bulb, they die, harden to become your hair and thus create a long lasting record of whatever was in the blood of the person when they were forming.

Besides the hair strand itself, the sebum that coats the hair also contains traces of the drugs and minerals flowing through the body. Hair can thus keep a more long-lasting record of what passes through the body of an individual than either blood or urine, the body fluids usually used for such tests by medical practitioners. Blood and urine do not give a long-term indication and only provide a snapshot of the level of minerals and drugs in the blood stream at the time the blood or urine sample was taken.

Hair analysis gives a longer-term indication of mineral and drug levels much more like a moving picture than a snapshot in time. Hair near the scalp shows a more recent period and hair an inch from the scalp might have been grown several months in the past and indicates levels from that period.

Your hair reflects the mineral content of the body's tissues. If a mineral deficiency or excess exists in the hair, it usually indicates a mineral deficiency or excess within the body.

**Examples:** If your hair reveals elevated calcium level two or three times normal, then your calcium level within the body may be elevated also. If this is the case, a strong tendency exists for arteriosclerosis (hardening of the arteries due to calcium plaques). If your calcium level is low, then a tendency exists toward osteoporosis (demineralization of bone), increased tendency to bone fractures, dental caries, periodontal disease, muscle cramps, and more.

**WHY TEST FOR MINERALS?** Various mineral imbalances, as revealed by hair analysis, often lead to metabolic dysfunctions before any symptoms become obvious. Minerals are the "sparkplugs" of life. They are involved in almost all enzyme reactions within the body. Without enzyme activity, life ceases to exist. A trace mineral analysis is preventive diagnostic tool as well

as being useful as a screening tool.

**WHO NEEDS A HAIR ANALYSIS?** Anyone who is in ill health and no explanation can be found or when the cause seems to be found but the treatment is not effective. Even if someone is not experiencing a severe problem, abnormal changes in body chemistry and nutritional deficiencies may result in subtle changes in the body such as:

- White spots in fingernails - indicates a possible zinc deficiency.
- Longitudinal ridging in nails - indicates an iron deficiency.
- Brittle hair and nails - calcium and copper imbalance.
- Deep grooves across nails - calcium deficiency.
- Stretch marks - zinc deficiency.
- Lack of growth - zinc deficiency.
- Mood swings - possible toxic metal accumulation such as lead, mercury, or cadmium.

### **Common Causes Of Mineral Imbalance:**

- Improper diet - such as excessive intake of refined carbohydrates and sugars, strict vegetarian diets, or other exclusive diets.
- Taking vitamins and minerals which are not compatible with current body chemistry.
- Medications
- Birth control pills
- Stress
- Accumulation of toxic metals from the environment, job, or hobby.
- Inheritance of mineral patterns from parents.

**IMPORTANT NOTE:** *Hair analysis is an invaluable screening tool, which allows a correct program of diet and supplementation to be designed for*

*each individual's specific needs. Never before has there been available a metabolic blueprint with such a degree of applicable scientific accuracy.*

### **Important Mineral Facts You Should Know:**

- Too much copper often causes women's pre-menstrual headaches.
- Lead, aluminum, cadmium, or mercury poisoning can cause arthritis-like pain and/or chronic fatigue.
- Eating the wrong diet can contribute to conditions such as constipation, diverticulitis, and heart disease.
- Taking too much of any one vitamin or mineral can be harmful.
- Too much vitamin C can make an infection worse in certain metabolic types.
- Hair analysis is the most efficient means of discovering exactly what vitamins and minerals a body needs and what ratios of minerals are out of balance.
- Adolescent acne may be caused by lead or copper poisoning as well as a zinc deficiency.
- Roughly 80% of our population lacks the necessary enzymes and natural stomach acids to digest their food properly.
- Hyperactive children often have too much lead in their systems.
- Obesity is frequently caused by chronic blood sugar problems.
- Mercury toxicity in the mother's system can kill an unborn child.
- Magnesium supplements may prevent brain damage of alcoholics.
- The male prostate gland contains more zinc than any other organ in the body. Because of this, satisfactory zinc levels are important for male potency.
- Diuretics, often prescribed for patients with high blood pressure and heart trouble, can decrease your potassium supply.

- High levels of copper and iron in the body tissue can cause migraine headaches and schizophrenia.
- Adequate zinc intake helps to regulate blood sugar levels.
- Lead toxicity is linked to multiple sclerosis.
- Zinc deficiency can retard bone development and produce malformed sex organs.
- Doctors often diagnose heart attacks by the amount of the mineral manganese in the body.
- Chromium, magnesium, manganese, and vitamin B6 deficiency are related to diabetes.
- Vitamin C, B-complex, zinc, and manganese are used to treat schizophrenia.
- Vitamin B2, folic acid, vitamin E, zinc, and chromium are important for users of birth control drugs.
- Magnesium deficiency is related to epilepsy, leukemia, heart disease, and kidney disorders.
- Many women in the USA are suffering from iron deficiency anemia.
- Beryllium, lead, cadmium, nickel, and arsenic poisoning can cause cancer.
- The mineral lithium is used to lessen many of the problems associated with manic-depressive illness.
- And so much more!

**PERSONAL NOTE:** *Twice in my life, I have suffered chronic fatigue and debilitating joint pain that my family doctors at the time diagnosed as Arthritis. In each instance, I used hair analysis to identify my true and underlying problem, which was heavy metal poisoning. The first time was lead poisoning (Age 27) and the second was cadmium and aluminum poisoning (Age 31). After chelation with liver and kidney cleanses to flush the dangerous metals away, my body chemistry returned to balance. I also*



*removed the environmental and workplace exposures I had to these metals. Amazingly, my severe and incapacitating arthritis symptoms magically disappeared and my energy returned. Had I not resorted to Hair Analysis, I might have resigned myself to a lifetime of suffering from arthritis that I DID NOT HAVE but the docs had diagnosed me as having. In both instances, the family physicians that had both diagnosed arthritis were amazed. They could not explain my miraculous recovery. When I informed them “I had heavy metal poisoning diagnosed by hair analysis”, they both informed me “this is dangerous quackery that had nothing to do with my unexplainable recovery” ...*

**DEFINITELY, THEY WERE UNINFORMED, BIASED, AND ...  
WRONG!**

*More recently (age 64), I noticed that I was feeling somewhat fatigued, low energy, lack of stamina, and just generally a case of the “blahs”. It would have been simple to write my mild symptoms off to aging but I decided to see how my body chemistry looked and did hair analysis again. I wasn’t surprised to discover my old nemesis, heavy metal poisoning, was back again. I had somewhat high levels of lead, cadmium, aluminum, and now mercury too (no doubt from the 60% mercury in the dental fillings I had in my childhood). I also had some mineral deficiencies throwing my overall body chemistry out of balance. I began a gentle chelation therapy using inexpensive EDTA supplements to flush the heavy metals out of my body. I used mineral supplements to help bring my mineral ratios back into balance. Suffice to say, in just a few weeks, I was back to my energetic, enthusiastic, and disgustingly positive self again. The blahs were banished and given the directive ... “Never Return”.*

**NOTE:** *Big Pharma controls medical education and has endeavored to discredit hair analysis for decades and there is much confusing information out there in Internet Ville.*

**IMPORTANT NOTE:** Never be afraid to seek a second opinion or to use independent diagnosis tools such as hair analysis. Most medical doctors prescribe medications that only treat symptoms and maximize profits from drugs rather than discover root causes and reverse them to avoid drugs. Medical professionals “practice medicine” and it is NOT an exact science. Medical professionals often misdiagnoses ailments or disease. Typically,

symptoms are treated with drugs and there is no effort made to find and correct the root cause and thus avoid drugs. You as an individual are solely responsible for your health and you should be as informed as possible before making health related decisions.

**Hair analysis is an important tool to become more informed about your body's chemical balance and to avoid or reverse ailment or disease (a lack of ease) without the need for drugs. If your doc does not believe in the benefits of hair analysis as a diagnostic tool, find a Naturopathic or Integrative Health doctor by clicking to the chapter ... [CHOOSE THE RIGHT DOCTOR](#)**

# **BLOOD SUGAR SELF-TESTING**

**(BONUS: How to Keep Diabetes OFF Your Medical Records)**

**How to Lower Blood Sugar**

**How to be Drug Free**

**How to End Blood Sugar Testing**

**How to Get Your Custom Diabetes Diet**

**A diabetes diagnosis entered into your medical and insurance records could make it impossible or more expensive for you to buy health insurance or life insurance.**

Doctor testing might be unwise if you fear getting a “diabetes” or “prediabetes” diagnosis on your medical records.

It is easy and inexpensive to self-test at home without the risk of a "diabetes" diagnosis written into your medical records. Simply use a low-priced blood glucose meter to test your fasting and post-meal blood sugar yourself. You do not need a prescription to buy the meter or test strips.

If prediabetes or diabetes has already been entered into your medical records, you can use the blood sugar self-testing that follows as well as the wealth of other info in this book to lower your blood sugar levels to normal ranges.

Once you’ve achieved that, you go see your doctor for testing to verify that you are NO LONGER DIABETIC or PREDIABETIC. Be certain that your doc enters the good news into your medical records.

## **How to do a Post-Meal Blood Sugar Test at Home**

1. Borrow a test meter from a friend or family member or buy an inexpensive meter and test strips at a drug store, department store like Walmart, or online at Amazon.com.

Many new meters come with included test strips, lancets, and a lancing device. Check to see if the meter includes test strips and

lancets. If not, buy the smallest package available. Test strips are only good for about 3 months after opening the container, so don't buy more than you need for a couple tests with ten strips being more than enough for a single person with this home test. If you wish to do additional testing to see how your body reacts to specific foods or meals, purchase additional test supplies to do that.

Each meter is different so read the instructions for the meter and learn how it works. Practice a few times before running an actual test.

**NOTE:** If only testing one person's blood, reuse the same lancet to prick your finger many times. They do get dull and one only needs to change the lancet when pricking a finger hurts more than usual. NEVER share lancets with anyone else.

**NOTE:** Blood sugar levels from a doctor or hospital lab report are "plasma glucose" and these readings are 10-12% higher than glucose levels reported from a test meter that uses "whole blood-based" testing. Most home testing meters today are "plasma glucose" and should give similar readings to lab test results. Check your meter and if it is "whole blood", add the 10-12% correction for comparable readings.

*My "TRUEresult" Blood Glucose starter kit only cost \$5.94 including shipping from Amazon.com. It came with the meter, 10 test strips, 10 lancets, lancing device, logbook, manual, and a nylon case to hold everything.*

Here's a clickable link to find blood glucose meters on Amazon.com:  
[Blood Glucose Starter Kit](#)

2. The morning of test day, after waking up but before eating anything, wash hands with warm water and soap. Lance a fingertip, test blood sugar with the test meter and record the result. This is the "Fasting Blood Sugar".



Many find the least painful spot for a blood sugar test is the side of your finger and testing on the pad of the finger hurts more. Many find that the pinkie finger has the best blood flow. Many only use the pinky and ring fingers on both hands for testing. Each individual will have to discover what works best for themselves through experimentation.

Adjust the depth of the lancet device to the shallowest depth before testing. That's normally "1" on most lancets. If the setting is too shallow to draw blood, adjust one notch and try again. There is no need to dab skin with alcohol before testing and alcohol over time will dry out and toughen skin, making it harder to draw blood. If hands are dirty, wash them. If there is an unexpectedly high reading, wash hands and test again. A tiny bit of sugar on the test finger can cause dramatically high readings.

**Reusing Lancets:** If only one person using the lancet device there is no need to use a fresh lancet for each test. Many change about once a month. Some people report changing theirs even less frequently.

**Never Share A Lancet:** If a lancing device is shared, each person must use a fresh lancet each time and safely dispose of it immediately. Do this to avoid transmitting any blood borne diseases (including ones neither person may know exist). **Never violate this policy!**

**Disposal of Test Strips** - Blood products are classed as medical

waste. If there is no access to a red bio-waste container, make one out of an old detergent bottle. When filled, tape the top closed and mark the container "Caution: Medical Waste." Dispose of it according to your local trash ordinances. Here's a link that shows some of the inexpensive medical waste disposal units you can buy: [Sharps Disposal Units on Amazon.com](#).

3. Note the time, start a timer, or set an alarm as you begin eating something containing 60 to 70 grams of fast-acting carbohydrate. A large bagel makes a good test food. If wheat is something you can't eat, a large eight-ounce boiled potato or a cup of cooked white rice works fine. Check the food label to see how many grams of carbs there are per serving and adjust your consumption to be in the 60 to 70 gram range. Avoid eating any fats with your test food such as butter, margarine, cheese, peanut butter, cr me cheese, etc. Fats can slow the action of carbohydrate digestion.
4. One hour after starting to eat, wash hands again or if on the go and can't, use an alcohol swab to sterilize the fingertip drawing a drop of blood from. Test blood sugar again with the meter, and record the result.
5. Two hours after starting to eat, wash hands or use an alcohol swab, test a second time, and record the result.
6. At three hours, test and record blood sugar a third and final time.

Testing is done and you can eat whatever you want.

**What Test Meal Numbers Mean and Understand The Meter's Margin of Error:** A test meter may not be as accurate as a lab-drawn test would be. Figure a plus or minus 5% error ... Or ... You can purchase a calibration solution to check your meter's accuracy.

**EXAMPLE:** If a test got 82 for fasting blood glucose, the results might actually be plus or minus 5% (78 to 86) if tested by a lab.

**NOTE:** *I tested both of my test meters with a calibration solution and both were accurate with zero error and therefore as accurate as lab results would have been. I strongly suggest you calibrate your test meter with a calibration solution that you can purchase in addition to a test meter, test strips, lancets, and lancet device.*

**NOTE:** Blood sugar levels discussed in this book refer to “plasma glucose” meter readings, which are the kind of readings you get from labs and from all meters now sold in the US. Some meters sold elsewhere in the world, especially in the UK, still use “whole blood” readings. If you are using one of these, multiply the numbers in this book by 1.12 to get “plasma glucose” equivalents.

**Special Consideration if Eating A Low Carb Diet:** If eating a low carbohydrate diet, especially a diet with less than 75 g of carbs per day, post-meal test results will be somewhat higher than if eating over 150 grams per day of carbohydrates. That’s why a post-meal glucose tolerance test ordered by a doctor has a person eat 150 grams of carbs during the three days before the test to get a valid result.

Since this is an informal test and a person may not want to stop a low carb diet, it is possible to make an adjustment to the post-meal test results. The adjustment will account for the fact that a low carb diet temporarily raises post-meal values when someone eats an unaccustomed large dose of carbohydrate. To make this correction, subtract 10 mg/dl from any post-meal result that is over 140 mg/dl at 2 hours. This is a rough estimate but it is close enough for home testing.

## **Understanding Test Results:**

**Normal Blood Sugar:** If the blood sugar reading remained under 100 mg/dl at the one-hour test and all the later tests, this is excellent blood sugar and there is no need to worry about it. Testing is done with no need for any additional testing.

If blood sugar is under 140 mg/dl an hour after eating the carbs and if below 120 mg/dl after two hours, most health authorities would say this is normal. These numbers, 140 mg/dl at 1 hour and 120 mg/dl at two hours after a meal are what the Joslin Diabetes Clinic of Harvard Medical School defines as the

upward limit of "normal."

If blood sugar is at the very top of this normal range, near 140 mg/dl (7.7 mmol/L) and near 120 mg/dl at two hours, there may be a slight amount of either beta cell dysfunction or insulin resistance going on. If at the high end of the normal range, especially if noticing weight gain happens more easily, it would be a good idea to cut back on the amount of carbohydrate eaten and begin a regular exercise program.

**Impaired Glucose Tolerance (pre-diabetes):** If blood sugar rose to over 140 mg/dl at one hour or stayed above 120 mg/dl at two hours, this is what doctors call "impaired glucose tolerance" or IGT. Another name for this condition is "prediabetes".

**NOTE:** The readings given below are lower than the readings doctors use to diagnose impaired glucose tolerance using a lab glucose tolerance test. That is because blood sugar does not rise as high after you eat a food that needs to be digested as it does when drinking pure glucose on a doctor administered glucose tolerance test.

If blood sugar stays above 140 mg/dl two hours after eating, this is definitely pre-diabetic using the criteria set by the American Diabetes Association.

**If there is impaired glucose tolerance, please don't ignore it. The excess glucose molecules will bond to body proteins, deposit themselves in the arteries, damage the kidney, clog up retinal capillaries, and cause nerve function to deteriorate. Among other things, this can also cause impotence and pain. Continue on this path and in a few years, you'll be one of those people with "newly diagnosed" diabetes. You will have established, serious, and perhaps irreversible long-term complications.**

On a happier note, if finding blood sugar abnormality at this point, there is an excellent chance to manage blood sugar through losing weight, reducing carbohydrates, and adding exercise. It is possible to never see your blood sugar levels deteriorate further and even improve them. It is possible to avoid a diabetic or pre-diabetic diagnosis, the accompanying complications, and the medical treatment expenses.

If there is impaired glucose tolerance, discuss this with a doctor. If he or she



says "don't worry about it", or something similar, it's time to find another doctor. Find a doctor who is more up-to-date with both medical and natural options. Such a doctor will help to manage blood sugar to avoid heart disease and the host of other complications that have been [linked to prediabetic blood sugars](#).

**NOTE:** If a person waits for a diabetes diagnosis before taking action, it is often too late. By the time fasting blood sugar has reached 126 mg/dl (7.0 mmol/L) (the level at which most doctors will diagnose diabetes) at least half of the pancreas beta cells may be dead and they may not be able to regenerate.

**A beneficial strategy using a blood sugar meter to learn what to eat to get back to normal blood sugar levels is covered in the next chapter.**

**Diabetes:** If blood sugar went over 200 mg/dl (11.1 mmol/L) at any time during testing, this is a diabetic blood sugar level and consultation with a good doctor should be done as soon as possible. Two random tests results of 200 mg/dl are considered diagnostic of diabetes according to the Diagnostic Criteria for Diabetes Mellitus published by the highly conservative American Diabetes Association.

**NOTE:** If a doctor says, "Let's check it again in a couple or a few months" and does not suggest taking a more aggressive approach with lifestyle changes, it's time to find a new doctor. Kidneys, heart, nerves, and vision are now at serious risk. A doctor who is supportive of your desire to reclaim your health will prescribe a meter for you (this means your health insurance will pay for the meter and test strips). The test meter will allow an individual to discover the most effective meal plan and exercise for lowering blood sugar, which is covered in the coming chapters.

**Low Blood Sugar (Hypoglycemia):** If blood sugar goes up at one hour and then drops below 70 mg/dl (3.9 mmol/L) at the two or three hour test, this is known as "reactive hypoglycemia". What happened is after eating the carbs, blood sugar went up but the body cranked out too much insulin to bring it back down. The high dose of insulin resulted in low blood sugar. This can also be an early warning sign that someone might be headed for diabetes, though it may take 10 years or longer for it becomes apparent. Even if someone doesn't progress to diabetes, reactive hypoglycemia can be a sign of

insulin resistance and the cell's resistance to insulin is forcing the body to secrete excessive insulin that is driving blood sugar low. Insulin resistance, with or without diabetes, can be an advanced warning for heart disease. Absolutely discuss this result with your doctor. Eating a high protein diet is a good way to control hypoglycemia (means lower carb too). It is important to cut back on the amount of carbohydrates you eat, as it is carbs that cause the spike in insulin that drops your blood sugar too low.

### **After You Have Tested**

Once doing the above "baseline" post-meal blood sugar test and if the results are anything but normal, rerun the same testing every three months. Do this to see how blood sugar control is progressing. If blood sugar test levels are steadily going up, test after test, it is time to find a good doctor. If test levels are improving, you'll know it and no doubt feel better too.

If there are abnormal post-meal tests, ask a doctor to run an Hba1c test at least once a year and have him tell you the number you got on the test. Ignore whether or not your test meets the lab definition of "diabetic" which is FAR too high. Instead, track whether the Hba1c test result is staying the same or rising. If Hba1c goes over 5.7%.which most Endocrinologists consider to be the level at which diabetes becomes a possibility, it's time to get serious about lowering your blood sugar.

Most people with mild blood sugar abnormalities can achieve normal blood sugar through cutting out excess carbohydrates from their diets, especially fast-acting ones like those in soda, candy, cake, bread, white flour, and in starchy foods like potatoes or white rice.

Use a test meter to determine how much carbohydrate and which foods can be eaten without causing a blood sugar spike. Ideally it's desirable to have blood sugar drop below 100 mg/dl an hour after eating (or sooner) and then to stabilize somewhere between 70-90 mg/dl (3.8-5 mmol/L). Remember that the lower post-meal blood sugar, the lower the risk for heart attack and the other "diabetic" complications that research shows actually start when blood sugars rise into the "prediabetic" range.

**Get Quality Rest:** Most people do not get enough sleep to allow the body to rejuvenate each night.

# YOUR CUSTOM DIABETES DIET

[PLEASE: Start This Chapter by Clicking This Link to Watch a Short Video About a Superior Approach to a Diabetes Diet](#)

**A “Diabetes Diet” is much easier and different from a “Weight Loss Diet”.**

**Weight Loss Diets Usually Fail but a Diabetes Diet Can't Afford To Fail:**  
The Stakes are far too High when your life is at stake.

**Did your spirit sink when you learned the best way to control diabetes is with "diet"?** Almost everyone diagnosed with Type 2 diabetes has a long history of trying to diet weight away and failing repeatedly. If a diabetic believes that their health depends on more dieting ... It's easy to give up hope ... THERE IS HOPE!

**Take heart in knowing that diet success is possible and even likely with a Diabetes Diet.**

**Because a diabetes diet is different from a weight loss diet, it is much easier to succeed.** The focus of a diabetes diet is not to lose weight. Rather, it is to bring high post-meal blood sugar levels down into the normal range. A diabetic can eat as much food as they want, as long as the food eaten doesn't spike blood sugar.

In fact, those who adopt a diabetes diet will probably find themselves also losing weight. This is because high blood sugars make us more insulin resistant and that causes weight gain. There is another reason a diabetes diet can help to lose weight. Lowering blood sugar after meals stops the overwhelming hunger that comes with blood sugars that go high and drift back down. When a person isn't starving all the time, losing weight is much easier.

Anyone can eat a successful diabetes diet that gives back health. More importantly, it is possible to eat a diabetes diet year after year out without making oneself crazy or feeling continually deprived.

**Your Personal Custom Diabetes Diet is All About Carbohydrates.**

## How to Get Your Blood Sugar Under Control.

**The strategy is so simple. You use a blood sugar meter to test blood sugar levels after each meal and eliminate from your diet the foods that raise your blood sugar over 140 mg/dl at one hour, 120 mg/dl at 2 hours, and 100 mg/dl at 3 hours. It's that eloquently simple!**

It's the carbohydrates eaten that raise your blood sugar. If you discover and cut back on the specific foods that spike your blood sugar, your blood sugar will never spike up.

Most people can achieve this level of control with dietary control alone that is NOT difficult and can even be pleasurable. You know you are eating healthy and eating the foods you love that don't spike your blood sugar.

Solid research has proven that it is not eating fats that raise cholesterol, but eating carbohydrates which convert into dangerous triglycerides. So while it is true that eating fats along with carbohydrates is not unhealthy, the less carbohydrate you eat, the more protein and fat you can eat.

**How to Lower High Fasting Blood Sugars? ... Take the Load Off Your Beta Cells at Meal Time.** If your beta cells aren't spending four or five hours trying to bring down a very high post meal blood sugar, they should be able to secrete enough insulin to bring down fasting blood sugar levels. A high nutrient, low carb, high protein, and quality fat diet can even help regenerate a compromised pancreas to produce more insulin.

**Try a Before-Bed Snack.** Many people find they can reduce their fasting blood sugar by eating a small snack before bed. Some people use a protein snack, which can be thought of as "slow release carbohydrate" since about 60% of protein turns into carbohydrate over a seven-hour period. Others find a couple crackers or a pretzel helps. Use your test meter to discover what works best for your body.

You can dramatically lower blood sugar using these simple techniques. Unlike other strategies, this one does not tell you what to eat. Instead, it teaches you how the meals you currently eat affect your blood sugar levels and guides you through the process of adapting those meals so they will be more blood sugar friendly. Try it for a week and you'll see how well it works.

**Step 1: Eat what you've been eating and write it down.** Eat normally, but use your blood sugar meter to test yourself at the following times. Write down what you ate and what your blood sugar results were in a diary, or start a spreadsheet to track your results:

- Upon waking (fasting)
- Just before eating a meal or snack
- One hour after each meal or snack
- Two hours after each meal or snack
- Three hours after each meal or snack if your blood sugar levels have not returned to normal levels at two hours
- Four hours after each meal or snack if your blood sugar levels have not returned to normal levels at three hours

You will discover how long after a meal your highest reading comes, and how quickly you return to "normal". You will likely learn that a meal including bread, fruit, or other starches and sugars (carbohydrates) gives higher readings over a longer time.

**Step 2: Cut back on carbohydrates:** Adjust your meals to eliminate the specific breads, cereals, rice, wheat products, potatoes, and fruit that spikes your blood sugar. Get your carbohydrates from veggies. Test your modified meals using the same schedule above. See what impact you make on your blood sugar by eliminating the specific high carbohydrate meals, foods, and snacks that spike your blood sugar.

The closer you get to non-diabetic readings, the more likely you will avoid horrible complications.

**Here's what doctors currently believe to be non-diabetic readings:**

- Ideal Fasting Blood Sugar 70 to 90 mg/dl
- Marginal Fasting Blood Sugar Under 100 mg/dl
- One hour after a meal Under 140 mg/dl

- Two hours after a meal                      Under 120 mg/dl
- Three hours after a meal                      Under 100 mg/dl

The American College of Clinical Endocrinologists recommends that people with diabetes keep their blood sugars under 140 mg/dl two hours after eating. If you can do better than the maximum, you should go for it.

When you achieve normal blood sugar targets, you can try adding back some carbohydrates, making sure to test after each meal. Stop adding carbohydrates as soon as you get near your target blood sugar levels.

Recent studies have shown that your "after meal" numbers are those most indicative of future complications, especially heart problems.

**Step 3: Test ... Test ... Test:** You're not in a race or a competition with anyone and you are learning about your individual body. Adjust your food plan to learn which foods cause blood sugar spikes and the foods that cause cravings. Discover which foods give you healthy blood sugar levels.

If a certain food raises your blood sugar over the targets you are aiming for, that food should NOT be part of your personal diabetes food plan. Your blood sugar meter will tell you what the best "diabetes diet" is for YOUR body. Use it to regain your health!

**NOTE:** *Unlike most authors who give you a recommended diet plan, I'm not giving you a specific diet to follow. I'm advising you on how to discover a personal diabetic diet for your specific body chemistry ... Everyone is different so you want to discover what is best for YOU and NOT for someone else.*

**PERSONAL NOTE:** *I discovered using this custom diet approach that for myself personally, wheat and all products containing wheat (bread, pasta, etc.) was particularly bad. Rice and products containing rice were also bad for me. However, corn was OK for me and particularly organic corn. All types of sugars were bad for me including honey, malt, and molasses, but especially high fructose corn syrup which is in almost all packaged food products. Fresh fruit and melons were OK for me in small amounts but canned varieties were not*

*My custom diet is quite simple ... I eliminated all foods containing wheat and rice. I added more meals containing corn (corn tamales, corn tortillas for sandwiches as a wrap, but NOT corn chips). I learned that I could eat some high fat items such as hot dogs. I learned that high protein was excellent ... Organic eggs (eggs are the gold standard for protein), organic meats, kosher meats, meats from mother nature (wild meats such as mahi mahi, tuna, and bison). YOUR MILEAGE IS GOING TO VARY SO TEST TO DISCOVER YOUR OWN PERSONAL DIABETIC DIET AND NEVER SEE HIGH BLOOD SUGAR LEVELS AGAIN ... FOREVER!*

**Once you've discovered your own personal diabetic diet ... You can:**

- Lower your blood sugar to normal (even after meals)
- Be diabetes drug free (no more terrible side effects from meds)
- No need for needles (insulin injections)
- End testing
- Avoid terrible diabetes consequences (blindness, amputation, heart disease, stroke, cancer, neuropathy, etc.)
- Keep diabetes off your medical records or force your doctor to note you as "CURED"

**START TESTING NOW SO YOU CAN DISCOVER YOUR PERSONAL BEST DIABETIC DIET:**

- Live longer
- Reverse or avoid diabetes and be disease free
- Live a higher quality of life

# WHAT TO SUBSTITUTE WHEN YOU ARE CUTTING CARBS

In general you want to increase protein, reduce carbs, and substitute health beneficial oils.

If you are cutting back on carbohydrates to lower your blood sugar, here are some ideas to get you started.

**Pancakes:** Whey Protein powder can be used to make pancakes. Add some low carb strawberries or raspberries (frozen works great) and you've got a delicious breakfast.

**Potatoes:** A great substitute for mashed potatoes can be made by steaming or boiling cauliflower and pureeing it in a food processor. Add some cream or half and half, butter, or salt. It doesn't taste like cauliflower.

**Rolls:** If you can eat gluten, you can make delicious rolls that are very similar to popovers using the Magic Rolls recipe. You can find it [HERE](#) in the Eades' Low Carb Comfort Food Cookbook. Search for "Magic Rolls". It's on page 22. Make extra, put them in a plastic bag, and freeze for later.

**Veggies:** Here's a list of some healthy low carb vegetables. Eat a few servings every day:

- Romaine lettuce
- Boston lettuce
- Cabbage
- Brussels sprouts
- Red Lettuce
- Mesclun mix
- Green beans
- Artichokes
- Avocado
- Asparagus
- Broccoli
- Cauliflower
- Cucumbers



- Eggplant
- Olives
- Spaghetti squash
- Acorn squash
- Butternut squash (small amounts)
- Small amounts of fresh red, orange, or green pepper
- Small amounts of zucchini

**Wraps:** Use lettuce or cabbage leaves to make wraps. Green romaine leaves work very well. There are "low carb" tortillas on the market, but they are full of thyroid toxic soy and may still have more carbohydrates in them than you want to eat.

**Berries:**

- Strawberries
- Raspberries
- Blackberries
- Blueberries
- Frozen berries are great as long as you check the labels and buy the those that are not frozen in sugar

**Pasta Substitute:** For a meal involving a sauce, instead of pasta with 50 gm of carbs per tiny 2 ounce serving, put the sauce over a pile of lightly steamed zucchini strips made with a vegetable peeler or use spaghetti squash.

**Snack Food:** Raw sunflower seeds, peanuts, and nuts make a good "finger food" snack that is low carb, quality fat, and high protein. You can make crispy snacks by baking slices of pepperoni until they become crispy. You can make crisps out of cheese by baking small pieces of sliced cheese on waxed paper.

**Pizza:** Get a meat/veggie combo and just eat the toppings. Some people make "meatza" using a thin lining of pepperoni as the bottom crust when they make pizza at home.

**Chinese:** At Chinese restaurants, avoid foods with a sugary, starchy, or deep-fried coating. You must not eat the rice, noodles, and fortune cookies if you want to avoid damaging blood sugar spikes.

**Other restaurants:** Besides the obvious "chunk of meat" entries try the steak "bistro" salads or Caesar salads with grilled chicken or shrimp (not fried!). Avoid any salad where you can't add the dressing yourself, as some chains will serve you bits of lettuce drenched in sugar when you order "salad". Stick with blue cheese, Parmesan pepper corn, or classic Italian dressing. Many flavored vinaigrettes are full of sugar. Be aware that some steakhouse chains sprinkle MSG on their steaks, which may improve flavor but leaves you ravenously hungry an hour later. If you notice you are hungry after eating at a steakhouse, cross it off your list. Besides making you hungry, MSG has been shown by reliable research to cause weight gain independent of caloric intake.

**Nuts and Seeds:** Almonds, walnuts, pecans, sunflower seeds, pumpkin seeds, etc., are low carb in reasonable quantity and full of very healthy oils that lower cholesterol. Eat them raw for best nutritional value as cooking, roasting, or broiling at any temperature over 116 degrees destroys the natural digestive enzymes and at 140 degrees, you destroy the natural vitamins.

**Breakfast:** Most "low carb" cereals are full of soy, which is not good for your thyroid. Ground flax meal makes a very serviceable hot cereal, similar to Wheatena. Just add boiling water. A half scoop of whey protein powder adds protein. For additional flavor, stir in nuts, or flaked sugar free coconut. If you must eat boxed cereal, stick to high bran cereals, but read the labels carefully. Instead of using milk, which is full of fast carbs, try using a little Lifeway Kefir. Most people are at their most insulin resistant at breakfast, so you will get better blood sugars by eating the classic eggs and meat breakfasts without toast and potatoes.

**What to Eat When Money is Tight:** Starchy foods are cheaper than high quality food that will keep your blood sugar down, but it is possible to eat a budget low carb diet, too. You'll find some helpful tips on this discussion thread at [Low Carb Friends: Need Low Carb Recipes for the Jobless Poor](#)

**Avoid Products Labeled "Low Carb":** Most products labeled as "Low Carb" aren't. Using a variety of bogus tricks, food manufacturers sell a lot of products, like Atkins Advantage bars that are full of sugar, alcohols, glycerin, and supposedly "resistant starches" that will raise blood sugar, often dramatically. The troublesome sugar alcohols include Maltitol and Lacitol.

**Avoid Sugar Free and So-called "Diabetic" Foods:** These foods may be free of sucrose, but they are full of sugar alcohols that will raise blood sugar. Many of them are also full of flour which will turn right into blood glucose as soon as it hits your digestive tract. The deceitful people who run the companies that sell "Diabetic" foods full of flour and starch in the pursuit of profit by harming diabetics need to be put out of business.

# DIABETES RECIPES

**CLICK ON THE ACTIVE LINKS BELOW FOR LOTS OF GREAT RECIPES**

Check out the recipes at [Lamson Adventures Carb Controlled Recipes](#) [Linda's Low Carb Menus & Recipes](#). It provides many whole days' of menus all with recipes. The recipes come with beautiful photos and very clear menu directions.

**More recipes from the Great Days of The Newsgroups** You'll find many useful recipes at [Cam MacDonald's Low Carbohydrate Recipe](#) web site.

# SUGARS & SWEETENERS



**Eliminate “Fast Acting” sugars that “spike blood sugar” ... Use the natural calorie-free sweetener Stevia instead.**

Sugars are “food for bad bacteria” as well as many diseases and ailments such as Heart Disease, Cancer, and Diabetes. A liquid form of pure 100% Stevia is better than powdered forms as there are anti-caking ingredients in powdered forms. Stevia is about 400 times sweeter than sugar so a few drops go a long way.

You can use Stevia anywhere you would use sugar or other forms of sugar such as high-fructose corn syrup, honey, molasses, agave nectar, malt, etc. Stevia will NOT spike your blood sugar.

***You can find my favorite Stevia brand by Now Foods on Amazon.com:***

**[CLICK HERE](#)**

**Be certain you are getting 100% pure Stevia:** Some unscrupulous

marketers try to swindle you by putting a little Stevia into a sugar like dextrose or even worse, an artificial sweetener like Nutrasweet, Equal, Sweet 'N Low, Splenda, etc. As you are trying to avoid sugar, read that package ingredients label. Anything ending with “ose” on the end of the name is a sugar (fructose, high fructose corn syrup, sucrose, dextrose, etc.). The powdered forms of Stevia are where most of the fraud is. There should be NO sugars and NO artificial sweeteners on a Stevia food label.

**Sugars to avoid also include things like molasses, honey, malt, agave nectar, and sweet fruits.**

**Remove artificial sweeteners and use natural caloric free Stevia instead.**

Manmade artificial sweeteners are even more deadly than genuine sugars and you should avoid them. While they contain zero calories, they mess with your brain and trigger signals that cause you to eat more calories later and gain weight!

# HEALTH BENNEFICIAL FATS

Fats taste good to us humans and while they are higher in calories than carbs or proteins, “quality” fats are health beneficial and do not trigger blood sugar spikes like simple carbs (sugars) or complex carbs (bread, pasta, potatoes, etc.).

It is important to distinguish between health beneficial fats and harmful fats that cause us harm.

**Substitute health beneficial oils such as Virgin Coconut Oil and cut out unhealthy oils such as canola, soy, and all vegetable oils.**

While extra virgin olive oil is health beneficial, there is much fraud with substitution of oils that are not health beneficial or cutting the olive oil with harmful vegetable oils.

**Avoid fried foods unless you fry them at home in health beneficial coconut oil.**

**STRONG RECOMMENDATION:** *Use “Extra Virgin Coconut oil” and no other oils*

# AMAZING WATER CURE

*I have much important information to share about the water we consume and bathe in that nourishes and affects us humans in so many ways.*

Diabetics are especially susceptible to dehydration, as the body will steal water from the cells in an attempt to dilute high blood sugar. This lowers every cell's ability to function properly and metabolize sugar which increases blood sugar levels.

Water drives our climates and it covers most the surface of our planet. Water is the life force of our planet and for all the animals and plants that Nature and planet Earth supports.

Water is something we humans are mostly made of and it is essential for life. You might live for a month without food but we humans would perish in a few days without water. Water is consumed by drinking. It is in our drinks as well as our foods, and it is even absorbed by our skin when bathing or swimming.

Water is a most important part of good nutrition, good health, and quality life.

You should water the human daily. Many sources recommend that you drink at least 2 quarts of water every day (eight 8-ounce glasses). ***That hard rule is a bit naïve and silly.***

You might need to drink more if you live in a hot climate or sweat a lot at play, work, or exercise. Clearly, a man who weighs 190 pounds needs more water than a woman who weighs 110 pounds. You should be drinking enough water to make your urine clear or nearly clear and not yellow. To put that another way, if your urine is yellow, you're not drinking enough to eliminate bodily wastes so increase your water intake.

Your intake of juice, coffee, tea, alcohol, pop (hopefully not) or any other drink should not be counted as part of your total water intake ... It is in addition to your clean water intake.

**NOTE:** Alcohol dehydrates you so you will need even more water if you



partake which a diabetic ... Should Not!

**PERSONAL NOTE:** *First thing on rising, I go to the kitchen and set out my daily requirement of water in one-quart bottles that I can carry with me or leave on the counter or distribute. After filling my water bottles, I start the day with my first 12 or 16 ounces of water that includes a squeeze of fresh lemon juice... a daily ritual. I will take one bottle to my desk if I'm writing or working at the computer or to the garage if I'm spending time there or wherever I may go. I try to have water readily available so I can constantly be taking sips of water throughout the day.*

**MINIMUM WATER RECOMMENDATION:** Divide your body weight in pounds by two and drink that many ounces of pure filtered water each day as a minimum in addition to any other fluids you take in. Drink more if you sweat heavily from exercise or work or spend a lot of time outside in hot climates. You can read more about filtered water in the sections that follow this section.

**Example:** For a 150-pound person, 150 divided by two is 75 and that is the minimum number of ounces of pure filtered water that person should consume each day.

Most people do not drink enough water to help the body with its job to purge toxins and can fall ill or become chronically fatigued because of this. Drinking alcohol will contribute to dehydration and can make the situation even worse.

Consuming adequate amounts of water may be all it takes to restore energy, health, vitality and/or cure a mysterious ailment you've been suffering from to start feeling better again. Remember, the coffee, tea or other drinks don't count as part of your daily water intake and you should drink at least half of your body weight in ounces of water each day.

**NOTE:** *This is a lifetime sentence for your good health dear reader and not just a short-term fix. Any other fluids such as coffee or tea would be in addition to your minimum intake of water and don't count as part of your minimum water intake. Try the water cure for what ails you. It can't hurt and the cost of water is a bargain price for treatment, even if you buy expensive bottled water.*

**WATER CURE:** *Drink at least one-half of your body weight in ounces of filtered water each day for the “amazing water cure” to take effect.*

# ALCOHOL & DIABETES

**The American Diabetes Association recommends that you ask yourself three basic questions:**

1. Is your diabetes under control?
2. Check with your healthcare provider. Do you have health problems that alcohol can make worse, such as diabetic nerve damage or high blood pressure?
3. Do you know how alcohol can affect you and your diabetes?

**NOTE:** When drinking an alcoholic beverage, the alcohol moves quickly into the bloodstream without being metabolized in your stomach. Within five minutes of having a drink, there's enough alcohol in the bloodstream to measure. Alcohol is metabolized by the liver and it takes approximately two hours to metabolize one drink. If you drink alcohol faster than your body metabolizes it, the excess alcohol moves through your bloodstream to other parts of your body, particularly your brain. If you've ever gotten a "buzz" when drinking alcohol, that's why.

If you're on insulin, or certain oral diabetes medications, such as a sulfonylurea (glipizide, glyburide) or meglitinide (Prandin) that stimulate the pancreas to produce more insulin, drinking alcohol can cause a dangerous low blood sugar because your liver has to work to remove the alcohol from your blood instead of its main job to regulate your blood sugar.

- Consult your physician and follow his or her advice as alcohol can worsen diabetes complications.
- Monitor your blood sugar before, during, and after drinking alcohol. Remember to check before going to bed.
- Alcohol prevents your liver from doing its job. When you drink alcohol, your liver has to work to remove it from your blood instead

of working to regulate blood sugar. For this reason, you should never drink alcohol when your blood glucose is already low.

- Never drink alcohol on an empty stomach because food slows down the absorption of alcohol into the blood stream.
- Avoid binge drinking. The American Diabetes Association suggests men have no more than two drinks a day, and women one, the same guidelines as for those without diabetes.
- Alcohol can cause hypoglycemia. Within a few minutes of drinking alcohol, and for up to 12 hours afterward, alcohol can cause your blood glucose level to drop. After consuming alcohol, always check your blood glucose level to make sure it is in the safe zone. Always carry along glucose tablets or another source of sugar. Glucagon shots will not work in this case.
- Don't mix alcohol and exercise because physical activity and alcohol will increase your chances of getting low blood sugar.

**NOTE:** The symptoms of too much alcohol and low blood sugar can be very similar, i.e. sleepiness, dizziness, and disorientation. You don't want others to mistakenly confuse hypoglycemia for drunkenness. Alcohol and diabetes is another reminder that it's always a good idea to wear a diabetes medical I.D.

# FAT BURNING FOODS FOR WEIGHT LOSS

**Protein:** All protein is thermogenic and needs a lot more energy and time for your body to break down and digest. Up to 30% of the calories you take in with any protein will be needed just for digestion and it takes much longer to digest than fats or carbs. In contrast, it only takes 2% of sugar calories to digest and it is either quickly used for energy if needed and if not, blood sugar levels rise and it is mostly stored as fat in all the wrong places. With Protein, you feel full longer and you get a 30% calorie burn-off just to digest it so much fewer calories are put into your body after digestion than with the same amount of fat or carb calories taken in.

**Oatmeal:** Oatmeal will help you reduce fat levels by providing sustainable energy and keeping you full so you don't over eat mid-morning. Oatmeal is full of fiber to help preserve your insulin levels throughout the day and is the breakfast of weight-loss champions.

A key to losing fat is to keep insulin levels lowered because insulin moves fat into storage more easily and this is especially so if you do not weight train regularly.

Start each day with a bowl of oatmeal (not the sugary packages) or my health cereal using oatmeal baby cereal. Use raw milk, almond milk, rice milk, or kefir with stevia to sweeten. Complete your breakfast with a couple scrambled or poached eggs and Rooibos herbal tea or fresh juice. Never use soy milk.

**Cold Water:** This tip may not work miracles but everything has a cumulative effect. Studies have shown that cold water can increase your metabolic rate, as you must burn calories to warm the water to body temperature so it can pass from your stomach. You can also rely on water's other advantages. Water keeps you hydrated assists with energy absorption and water is needed to burn fat. Staying hydrated will also help you keep your overall calories lower. Drink chilled water as soon as you arise in the morning and 20 to 30 minutes before your meals on an empty stomach. This should allow enough time for your body to warm the chilled water and let it

pass from your stomach before eating. Try to drink one-half of your body weight in ounces of water each day and other beverages do not count as part of this total.

**Eggs:** Studies have shown that eating two eggs for breakfast instead of calories from bagels or toast, reduced appetite and calorie intake for up to 24 hours. Those who eat eggs for breakfast instead of bagels or toast lost substantially more fat. The muscle-building power of the protein found in eggs is awesome because of its superior amino acid profile. It is important to add lean muscle from weight training so your body burns more calories 24/7 and the egg is a great protein source. The fat in the yolk of the egg is the healthiest part of the egg and aids with slower digestion and reduces hunger. Egg Yolks contain more than 90% of the calcium, iron, phosphorus, zinc, thiamin, B6, folate, and B12, and panthothenic acid of the egg. In addition, the yolks contain All the fat-soluble vitamins A, D, E, and K in the egg, as well as All the essential fatty acids (EFAs). In addition, the protein of whole eggs is more bio-available than egg whites alone due to a more balanced amino acid profile the yolks help to build.

In fact, egg whites are almost lacking of micronutrients compared to egg yolks.

It is a popular myth the yolk is not healthy but it is the healthiest part, so don't buy into the myth, and keep the egg yolks when you eat eggs.

Be sure to choose free-range organic eggs instead of normal grocery store eggs. This is similar to the grass-fed beef scenario and wild vs. farm raised fish scenario. The nutrient content of the eggs and the balance between healthy omega-3 fatty acids and inflammatory omega-6 fatty acids (in excess) is controlled by the diet of the hens. Chickens that are allowed to roam free outside and eat a more natural diet will give you healthier, more nutrient-rich eggs with a healthier fat balance compared with your typical grocery store eggs

**Coconut Oil, Palm Oil, Macadamia Oil, & Extra Virgin Olive Oil:** Your body cannot live without certain foods and “good fat” is one of them. These healthy oils can increase the activity of certain chemicals called “uncoupling proteins”. These chemicals effectively “tell” the body to burn excess calories, rather than store it.

**Tip:** The easiest way to add extra virgin Olive oil, Coconut oil, Palm oil, or Macadamia oil to your diet is to add a tablespoon to your protein shakes. Mix it one-to-one with balsamic vinegar and use it instead of those high-fat and high-carb salad dressings.

**Avocados:** Even though typically thought of as a "fatty food", it's all healthy fats! Not only is this fruit (avocados are technically a fruit) super-high in healthy monounsaturated fat but also full of vitamins, minerals, micronutrients, antioxidants and they are also a great source of fiber!

Guacamole is one of the most delicious toppings ever created and is one of the healthiest toppings you can use on your foods. Just make your own homemade guacamole or if you choose a store bought guacamole, make sure it doesn't have other unhealthy additives such as soybean oil or canola oil or added sugars or creams. You want a guacamole that is just avocados, garlic, tomato, onions, and spices.

Try sliced avocados or guacamole on sandwiches, burgers, scrambled eggs, or omelets, in salads or as a side to just about any meal.

The quality dose of healthy fats and other nutrition you get from avocados helps your body to keep proper levels of hormones that help with fat loss and muscle building. In addition, since avocados are a filling food, eating them helps to reduce your appetite in the hours after your meal.

**Nuts:** Walnuts, Almonds, Pecans, Macadamia, etc, are yet another "fatty food" that can help you burn fat! Although nuts are between 75-90% fat in terms of a ratio of fat calories to total calories, these are healthy fats. There are high levels of nutrition such as vitamins, minerals, and antioxidants. Nuts are also a good source of fiber and protein, which of course, you know helps to control blood sugar and can aid fat loss.

Nuts also help to keep good levels of fat burning hormones in your body as well as helping to control appetite and cravings so you essentially eat less calories overall, even though you're consuming a high-fat food. Eat a handful of almonds, pecans, or walnuts about 20-30 minutes before each meal... this lowers my appetite due to the healthy fats, protein, and fiber and allows you to eat fewer calories during each main meal of the day.

Try to find raw nuts instead of roasted nuts if you can as it helps to preserve

the quality and nutritional content of the healthy fats that you will eat. Also, try to broaden your horizons beyond the typical peanut butter that most people eat, and try almond butter, pecan butter or macadamia butter to add variety to your diet.

**Berries:** All types of berries are a powerhouse of nutrition packed with vitamins and minerals and berries are some of the best sources of antioxidants. Berries also pack a healthy dose of fiber, which slows your carbohydrate absorption and digestion rate, and controls your blood sugar levels to help prevent insulin spikes, which can stimulate fat gain.

**Grass-fed beef or bison (NOT your typical grocery store beef):** Most people think red meat is unhealthy for you but that's because they don't understand how the health of the animal affects how healthy the meat is for your consumption. An unhealthy animal provides unhealthy meat and a healthy animal provides healthy meat. Typical beef or bison that you see at the grocery store is raised on grains, mostly corn and sometimes soy too. Soy and corn are NOT the natural diet of cattle or bison and therefore changes the chemical balance of fats and other nutrients in the beef or bison. Cattle are meant to eat grass and forage. The practice of feeding cattle grains causes digestive system problems in the cattle (one of the main reasons for e-coli), and makes the cattle sick. This requires the use of antibiotics in the cattle. Problems with e-coli and other sickness is not typically a problem in cattle that eat grass and other forage.

Grain-fed beef and bison are WAY too high in omega-6 fatty acids and WAY too low in omega-3 fatty acids from the distorted nutrition ratios in their feed. Conversely, grass-fed beef from cattle and buffalo (or bison) that were raised on the natural foods that they were meant to eat in nature (grass and other forage), have much higher levels of healthy omega-3 fatty acids. They have lower levels of inflammatory omega-6 fatty acids compared to grain fed beef or bison.

Grass fed meats also typically contain up to 3 times the Vitamin E as in grain fed meats.

Grass-fed meat from healthy cattle or bison also contains a special healthy fat called conjugated linoleic acid (CLA) in MUCH higher levels than grain-fed meat. In fact, when cattle are fed grains instead of grass, the healthy CLA fat



almost disappears from the meat. CLA has been proven in scientific studies in recent years to help in burning fat and building lean muscle. These benefits are on top of the fact that grass-fed meats are some of the highest quality proteins that you can eat.

Grass-fed meats are a little harder to find, but just ask your butcher or find a specialty grocery store and they usually have cuts available.

# DIABETES DIET & LIFESTYLE

The important goal of any diabetic is to achieve a “low body fat percentage”. This is best achieved by nutritional excellence and regular exercise. The reward is the reversal of diabetes, avoidance of all diseases, plus a longer, healthier, and more fulfilling life.

*That's what I call ... WIN ...WIN ...WIN.*

A dietary approach to diabetes has a much greater chance for success by also paying attention to the lifestyle risk factors. The important lifestyle factors to address are a nutritious diabetic diet, lack of daily exercise, smoking, stress, and lack of sleep.

Diabetes can shorten life and impact the remaining years with pain and suffering but there is a simple answer to a longer and more fulfilling life.

Be aware that when a person has become diabetic, the tendency to become diabetic again remains if you return to unhealthy eating, regain weight, cease exercise, resume smoking, increase stress, or fail to get quality rest.

## WHAT A PREDIABETIC CAN EXPECT:

- No dangerous highs or lows in blood sugar
- Need for insulin avoided
- Need for any diabetic medications avoided
- Lean, stable, and normal body weight achieved
- Normal lifespan without disease (a lack of ease)
- Avoidance of diabetes and diabetic complications
- Diabetes free for life
- Complete health and wellness
- Increased energy and stamina

## **WHAT A TYPE 2 DIABETIC CAN EXPECT:**

- No dangerous highs or lows in blood sugar
- Need for insulin eliminated in one week
- Reduction in diabetic medications by 50% in first week
- Further medication reduction or complete elimination in four weeks
- Lean, stable, and normal body weight achieved
- Normal lifespan without disease (a lack of ease)
- Diabetes reversal and avoidance of diabetic complications
- Diabetes free for life
- Complete health and wellness
- Increased energy and stamina

## **WHAT A TYPE 1 DIABETIC CAN EXPECT:**

- No dangerous highs or lows in blood sugar
- Reduction in medications by 50% or more
- Lean, stable, and normal body weight achieved
- Normal lifespan without diabetic complications
- Increased energy and stamina
- For those with some pancreas function remaining, pancreatic recovery and diabetes reversal, as well as complete health and wellness without insulin is possible

# THE HEALTHY KITCHEN

## IT IS IMPORTANT TO MAKE YOUR KITCHEN HEALTHY:

- Dispose of the unhealthy high carb foods and fast acting carbs (sugars) you should no longer be eating.
- Provision your refrigerator, cupboards, and pantry with the diabetes healthy foods and meals you've discovered in the earlier chapters by using your test meter.
- If you live with people who won't go along with the excellent nutrition of your healthy diet plan, separate the storage areas for your food.
- If need be, put a big label on your separate food storage areas with your name and stating "Don't Touch".
- Post a list of the unhealthy foods you should no longer eat on your refrigerator and elsewhere to remind yourself and people you live with that you need to avoid these dangerous foods.
- If you do live with other people, seek their help and give them permission to remind you if need be to "Never let you eat food that is not a part of your diabetes diet plan"

# EXERCISE

Exercise is necessary for good health and there are no Magic Pills to replace the body's need for quality exercise. Numerous studies have shown that those who exercise regularly have much lower insulin levels and greater insulin sensitivity than those who don't. That means a much lower risk for Diabetes which has become epidemic in recent years as our population has become more and more sedentary and overweight.

**Exercise is especially valuable for those with the highest risk factors for Diabetes and heart disease.**

**Exercise actually lowers your blood sugar so it is important for diabetics to reverse blood sugar to normal levels without the need for medications.**

Nothing ages us humans faster than the lack of regular and effective exercise. Lack of exercise is truly a "use it or lose it" scenario. Without regular and effective exercise, fatigue grows, muscles atrophy away, bones weaken and get brittle, skin sags, posture stoops, joints creak, and increasing amounts of blubber drag us down. Chronic fatigue becomes an ever more constant companion and eventually fear for life can set in. Our health continues to decline and we become ever more easily injured and vulnerable to diseases due to the declines in our overall fitness.

The less you exercise your body, the faster your body will decline. It is important to note that not all exercises are created equal. Many forms of exercise may at best put you in a holding pattern, while other forms of exercise might even make any health issues you face worse.

If you like sweets or carbs, you know you should keep them to a minimum but the best time to eat them is right after exercise when your blood sugar is lower and needing replenishment. Another time would be after full body weight training when your muscles need to replace glucose burned. Exercising for your sweets is so much healthier than eating lots of sweets, being sedentary, and packing on pounds of body fat in all the wrong places.

A variety of exercise is better than a single form of exercise but any exercise is better than little or none. Using a variety of exercises can keep you from getting bored and not exercising.

One can incorporate exercise into the work environment. Take stairs rather than an elevator or escalator and you can exercise during a break or go for a walk during lunch.

Do some form of aerobic exercise (walking, swimming, cycling, dancing, etc.) on a daily basis and preferably in the morning. Our bodies were meant to be active every day and when we are active, our metabolism soars and burns more calories.

The best thing you can do for exercise benefit both short and long term is to build more muscle using weight training. Do no more often than once every 3 days for a younger person and at 4 or 5-day intervals for the more elderly to allow recovery time and for new muscle tissue to grow. More frequent weight training does not allow enough recovery time and can cost you muscle. Toned muscles and more muscle will make your metabolism soar to burn more calories 24/7/365 ... Even while you sleep. Aerobic calorie burning stops the moment you get off the treadmill or bicycle and does not build significant amounts of muscle.

Be more active by parking as far from the store as you can rather than looking for the closest parking spot when you go shopping. Use stairs rather than an elevator, a broom rather than a blower, mow your lawn with a push mower rather sitting on or following a self-propelled mower. Find the "more strenuous" way to do things.

I use a combination of walking, bicycling, rebounding, swimming, strength training, and mowing the lawn with a push-type mower rather than self-propelled mower.

**Walking:** Walk at least 30 minutes each day if you can (an hour is even better) or do some other form of gentle exercise such as swimming, rebounding, or riding a bicycle. You can do this in parts. Park further away from your job and walk further to and from your car. Walk to lunch rather than drive your car. Go for a walk at sunrise or sunset and enjoy Mother Nature's vistas. Walk to the store to go shopping. You can carry some small hand weights for an upper body workout as you go. *I have a 60 pound weighted vest I can wear when I take a walk to get more of a workout and burn more calories.*

**Bicycling:** I like to ride a bicycle because it is low impact to the joints and a

good aerobic and cardiovascular exercise as long as you take it easy. A huge advantage of riding a bicycle is that you can burn more calories than any other form of exercise except cross-country skiing. This is because you are using the body's largest muscles in your legs that burn more calories.

Once you've achieved reasonable fitness levels, you can start doing sprints and interval training to maximize your exercise benefits. One can get the same benefit from a stationary bicycle but riding a real bicycle lets you see the sights along the way. It can even be a social activity if you join and ride with a club or friends.

As bicycling burns more calories than any other form of exercise except cross-country skiing, it is a good way to lose weight or preserve your weight without the need to diet.

Bicycle roads, paths, lanes, and routes are already there to use free and there is no user fee so why not take advantage.

Consider riding a bicycle to and from work or school or drive part way and bicycle the rest if you have a longer commute. You can also ride a bicycle to go shopping if you have attached some means to carry your purchases to your bicycle or even a backpack can work.

**Swimming:** No other form of exercise tones every muscle in your body like swimming does except for rebounding.

I use a different stroke for each lap and alternate crawl, breaststroke, sidestroke (both sides) and elementary backstroke to make sure I tone every muscle and I don't get bored with just one stroke.

**Caution:** Avoid swimming pools with chlorine. Find a pool without chlorine or swim in a clean lake or clean ocean.

**Jumping Rope:** Much better to do rebounding instead of this high impact exercise ... see the next section.

**Weight Training:** This is so important! I've given weight training a special section coming up a couple of sections down and after Rebounding.

**Rebounding:** This is so very special! I've given rebounding a special section coming up NEXT.

**Rather than dependency on drugs, the best approach to avoid or reverse diabetes is to focus on the intelligent use of both diet and exercise.**

Exercise is an essential component to facilitate weight loss and make you healthier. It is hugely important if you want to be successful at avoiding diabetes and even more so if you wish to reverse diabetes.

The worse your physical condition, the more often you need to workout. You will have to build up your tolerance for exercise if you are in poor physical shape and can't exercise much at one time. Exercise in frequent short spurts throughout the day. Over time, you will be able to extend the duration and intensity of your workouts.

Low intensity calorie burning or cardio exercise such as walking, jogging, swimming, biking, etc., that do not build muscle are not sufficient. It is important to do weight training as well to build more muscle. Muscle burns more calories than fat does 24/7/365. Building muscle will give men that muscular appearance women adore and enhance the curves in women that men love. We all begin losing muscle at the rate of ½% to 1% per year starting in our twenties. This is part of why most gain weight as our metabolism is slowing down, we also have less muscle that burns more calories.

***I'm not going to waste your time by recommending cardio exercise that is boring and does not burn many calories and calorie burning that ends when you stop the activity. I will not recommend an inefficient strength-training regimen that does not build much muscle and risks injury.***

***I'm going to advise two specific forms of exercise few know about and use. The diet and exercise industry does not want you to know about them because they want to protect their massive profits with diet and exercise programs that fail so you'll keep coming back for the next fad diet, program, and exercise device.***

***How about a cardio exercise, that is FUN and burns far more calories. You can do it in the comfort of your home in as little as two minutes! It delivers an amazing bunch of other health benefits too ... Read on:***





## REBOUNDING



### Jumping Up and Down for Joy on a Mini Trampoline!

While it is possible to use brisk walking, jogging, swimming, etc., to achieve exercise and weight loss goals, rebounding is the far more intelligent choice. Rebounding gives faster results and many other health benefits that no other form of exercise can deliver.

**Faster Calorie Burning:** If weight loss is your goal as it is for most diabetics, rebounding can burn more calories. Research shows that rebounding can burn calories:

- 11 times faster than walking
- 5 times faster than swimming
- 3 times faster than running

**Rebounding is fun ... Just ask any kid if jumping up and down is FUN ... *Save the beds!***

# Testimonials

*"Rebounding strengthens every organ in the body. Please take the time to pursue this life-enhancing form of exercise."*



*-Anthony Robbins*

**Rebounding can be a lifesaver for diabetes patients or people suffering from virtually any form of disease.**

**A Major Benefit To Fight All Disease And Illness:** During rebounding, the white blood cells of the immune system triple their activity and this huge elevation in activity lasts for about an hour. These specialized cells play a major role in the body's defense against illness and disease. Their activity increases for a full hour as they perform their tasks of destroying and expelling cancer cells, other diseased cells, harmful microbes, and dangerous toxins, spending themselves in the process. An hour after rebounding for as little as two minutes, the white blood cell activity returns to normal. Short two-minute rebound sessions done repeatedly throughout the day or done hourly would be best and increase the demand for white blood cells. Each rebounding session repeats the process of cleansing, strengthening, and the flushing away of spent disease cells and other toxic waste.

**Important Note On Flushing The Immune System:** Rebounding does something no other form of exercise can achieve. Rebounding is the most efficient and forceful means of flushing the lymph system while stimulating the immune system. The lymphatic system is the most important detoxification system in the body and a primary part of the immune system. It defends against cancer, heart disease, and other ailments. The lymph system

has nearly four times the volume of fluid as there is for blood. It helps with digestion, heart function, inflammation, auto-immunity seen in Type 1 diabetes, infection, immunity, spread of infection, protein balance and more.

It takes just two minutes of gentle rebounding to flush the entire lymphatic system, while strengthening and cleansing your cells and flushing your lymph nodes. Your lymph system has no pump and works by gravity, so each rebound pumps your lymph system to help flush toxins from your body. In today's inactive society, the lymph system most often does not get flushed. It takes physical activity with gravity changes to flush the lymph system as there is no pump like the heart for cardiovascular system to pump blood.

**Important Note To Rebuild Health:** A therapeutic strategy to rebuild health would be to rebound for two minutes every waking hour, or as many times a day as possible. Two minutes of gentle bouncing repeated throughout the day is more effective for healing than one longer session. Repeated short sessions aid an active immune system, oxygenate cells, strengthen cells, and continuously cleanse the lymph system. Therapeutic rebounding has been shown to reduce cancerous tumors and improve or heal a host of other ailments. Just step aboard a rebounder for two minutes as often as you can or whenever you are passing by it. You can rebound while watching TV or listening to music.

*Those who are too weak to exercise or have difficulty standing or balancing can use a stabilizer bar, which is available with most quality rebounders for you to hold onto to aid with balance. You can also do as I did in the beginning and position your rebounder next to a vertical pole you can hold onto or grab onto for stability as needed. This enables a weak individual to feel secure while gently bouncing. It would be important to begin slowly and gradually increase to two minutes then add multiple two-minute sessions per day. I simply positioned my rebounder next to one of the poles supporting the roof over my patio and held on to it in the beginning. My balance quickly improved and in a few days, I no longer needed to hold onto my support pole for balance. A chair, doorframe, or other stable item can help you with your balance until you no longer need it because your balance is improved.*

Rebounding flexes all 638 muscles in your body and tones all of them ... There is no other form of exercise that can achieve this.

Rebounding oxygenates all of your cells.

Gravity changes from rebounding helps with Osteoporosis and bone density improvement.

**Here are a couple of quotes from studies done by our space program, NASA:**

- 1. “The most efficient and effective exercise yet devised by man”**
- 2. “68% more efficient than jogging”**

Fights fatigue by strengthening the glandular system. There is an increase in the abilities of the thyroid gland, the pituitary gland, and adrenals.

Rebounding has a natural analgesic effect on the body, which helps to relieve joints and pain in the neck, back, and head through the increase of circulation and oxygen flow.

Rebounding can strengthen a weak back.

Conditions and strengthens the heart and this allows the resting heart to beat less often. This results in a stronger surge of blood through the veins. Especially important to a diabetic as heart disease is a major risk.

It provides an effective “low impact” exercise that is especially important for those with less mobility or undergoing rehabilitation.

Rebounding lowers high cholesterol and triglyceride levels. These are important factors for diabetics.

It increases metabolism, and this causes the body to burn more calories for weight loss or maintenance. This is also important for diabetics.

Rebounding releases endorphins, the body’s natural feel good hormones and painkillers.

One primary cause of aging is the declining performance of the heart and circulatory system. Rebounding is effective in increasing the performance of both the heart and the circulatory system and this slows the aging process. Again, this is important for diabetics.

Rebounding improves digestion, relaxation, sleep patterns, nerve impulses, and muscle fiber. Quality rest is important for diabetics. Important for diabetics because nerve damage is a major complication of diabetes.

Rebounding can reduce blood pressure by boosting the muscle tone of the middle arterial muscles and overall improvements to the circulatory system. Yep, it's important to diabetics.

Burns more calories than jogging or running without the impact to your joints. High impact exercise like jogging, jumping, or racquet sports can cause stress to the joints. Stress of any kind is important for the diabetic to avoid.

**STRONG RECOMMENDATION:** *I recommend rebounding for diabetes patients because no other form of exercise can do so much in so many ways. By multi-tasking rebounding in the many ways noted above, you too can achieve the many health benefits. **No other form of exercise can do so much for you and it is FUN.***

**You can easily do rebounding at home with an inexpensive rebounder that beats spending money for a gym membership big time.**



## **SLOW MOTION WEIGHT TRAINING**

There is a superior way to do strength training to build muscle mass that removes the chance for injury. That is the “Slow Motion” method where you lift somewhat heavier weights to muscle exhaustion with deliberately slow and gentle motion. About 10 seconds up and 10 seconds down for just four to six repetitions with no extra sets.

**I’ll cover that last part again for emphasis ... four to six reps and only one set!**

The fitness and weight loss industries don’t want you to know about Slow Motion strength training as it would cut their profits dramatically but I’m here to expose the truth to you. They want you coming back repeatedly to waste your money on worthless supplements and spending your dollars on monthly gym memberships.

**The benefits of the Slow Motion method of strength training are as follows:**

**Greater muscle mass and strength gains in a much shorter period with much less time spent working out.**

*I know that sounds too good to be true but believe me it is true. I’m a walking and talking testimonial for Slow Motion strength training because of the amazing results I have personally achieved. Please read on to my testimonial.*

With greater muscle mass achieved quicker, your body will burn more calories even at rest. It will be easier to keep your weight or to burn fat away faster if you want to lose weight.

It strengthens your bones without the need for drugs as only strength training

and rebounding can do. This eliminates your chance for having osteoporosis and you can reverse an osteoporosis condition. Not only does the human lose muscle with age, we lose bone density too. We start losing both bone density and muscle around age 25 at the rate of about one-half to one percent per year. This is increasingly harmful, as we get older and especially so for women who are more prone to osteoporosis (bone density loss) than men.

Strength training improves circulation, blood sugar levels, and gives your body a better response to insulin that improves blood pressure, cholesterol, and triglycerides. This means you can forget about diabetes or wean yourself off the dangerous drugs if you have diabetes. You can also avoid or wean yourself off dangerous Statin drugs for cholesterol.

Much safer and less likely to injure as the slower motions of Slow Motion strength training hugely reduce momentum, gravity, and quick repetition stresses. These forces can injure your ligaments, tendons, and joints.

**NOTE:** The ligament and tendon connective tissues do not heal if injured in conventional strength training.

With a much lesser chance for injury, even the elderly and young can do Slow Motion strength training safely and in the convenience and privacy of home too.

Shorter workouts save you time and are more efficient because you can complete a full body Slow Motion workout in less than 30 minutes. It would be at least three hours of time in multiple workouts over a longer period to achieve the same results with conventional strength training. You can gain significantly more muscle in the same period than you can with conventional strength training.

Slow motion is more effective as without the quick and snappy movements, all of your muscle fibers are recruited and trained. With conventional weight training, a much smaller percentage (only one of the four muscle types) is recruited. I have more detail on this further on.

You can reduce or remove the need for cardio training as well, because you will get a cardio workout while doing the Slow Motion method. You will get a superior interval cardio workout!

We need exercise that exhausts our muscles so our bodies can rebuild stronger muscles. We do not need exercise that stresses our joints and connective tissues that do not rebuild if injured. Our joints, ligaments, and tendons simply are not meant for the kinds of stresses you get with rapidly done high repetition and multiple set conventional strength training.

**NOTE:** It is notable that cardio trainers (joggers, etc.), are likely setting themselves up for long-term chronic joint and connective tissue problems. A large percentage of regular joggers develop serious issues in just three short years of pavement pounding. I'm not saying you should give up tennis, basketball, or other activities you enjoy or use to relieve stress. Please open your eyes to the possibility for long-term problems with any high-impact or quick sudden movement sport and that includes golf. The walking is good but the sudden swing at that annoying little ball with a golf club is not so good.

Strength training kicks your fat-burning metabolism into high gear and the increased muscle mass you are building burns more calories even at rest. Cardio exercise stops burning calories the moment you get off the treadmill. Cardio does little to change your body composition because it does not burn much fat, build muscle, or boost your metabolism.

**The message is simple yet STRONG for Slow Motion Weight Training with the following advantages**

- General fitness
- Muscle mass gain
- Weight loss or maintenance
- Long-term 24/7/365 calorie burning
- Bone density improvement
- Dramatic decrease of the chance for injury or long-term disability
- Less time spent working out
- Cardio fitness too

**You can easily do Slow Motion Weight Training at home with**

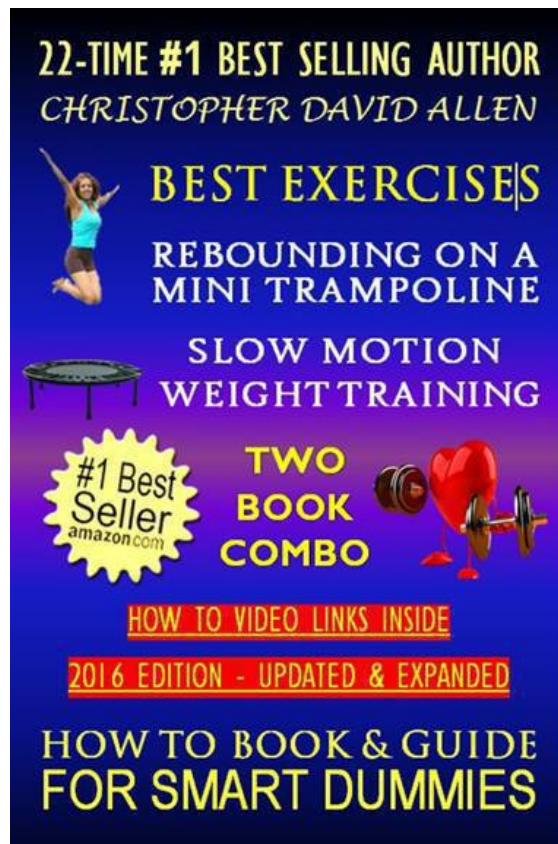


**improvised weights or a cost effective pair of adjustable dumbbells. For more details, see the recommended book at the end of this chapter.**

**FORGET CARDIO - GET OFF THE TREADMILL AND START BUILDING MUSCLE MASS!**

**DO IT USING THE SLOW MOTION STRENGTH TRAINING METHOD!**

# RECOMMENDED EXERCISE BOOK



[CLICK HERE](#) for more info about Rebounding, Slow-Motion Weight Training, equipment choices, and with active links to workout videos included

# **STRENGTHEN THE IMMUNE SYSTEM**

A strong immune system is simply “PRICELESS”, because your life is at stake.

Most people don't understand or appreciate how important a strong immune system is to good health and they have no idea how to build and keep a strong immune system.

**60% to 80% of your immune system is actually located in your gut in the form of good bacteria. You cannot be healthy if your gut is loaded with bad bacteria or has inadequate amounts of good bacteria.**

A weak immune system opens you up to countless illnesses and diseases that can range from a cold or flu to the needless suffering of diabetes or the devastating and life threatening diseases such as cancer or heart Disease.

To gain a better appreciation for your immune system, you need to understand everything it does for you on a continuous basis. Your immune system has two primary ways in which it acts to protect you. Those are Cell Mediated Immune Response and Humoral Immune Response. Both work in quite specific ways to help your body to avoid succumbing to disease and sickness.

Cell Mediated Immune Response works by involving the protective actions of some specific cell types that are an active part of your immune system:

Your T-lymphocytes (T Cells) are activated and these are a type of white blood cell that attacks and destroys dangerous pathogens like viruses, fungi, harmful bacteria, and tumor antigens.

It triggers your natural killer cells that fight tumors and viruses and macrophages, which are large cells that surround and eat disease-causing organisms.

Cytokines are secreted which are proteins that activate your macrophages and natural killer cells. Cytokines are also important for the healing of wounds and quashing any inflammation in your body.

Humoral Immunity involves your antibody and antigen reaction to harmful

antigens and other dangerous invaders. Your body produces special proteins known as antibodies to fight antigens or invaders such as viruses, bacteria, and toxins. When your body detects invader antigens, your antibodies attack and attach to the surface of invading antigens to destroy them.

Stress is a huge factor for the strength of your immune system and I mean all kinds of stresses including emotional, financial, physical, and dietary stresses. Stress can depress your immune system and lead to sickness and disease (a lack of ease) of all kinds.

Your internal protection system is not something you want to ignore.

It's not just about avoiding a cold or flu because your life depends on your immune system's ability to fight off killer diseases like cancer and heart disease or long term and life shortening disorders like diabetes.

Research has shown there are many effective ways to bolster your immune system and make sure it stays in top form. For example, probiotics and prebiotics have been shown in recent studies to enhance both Cell Mediated and Humoral immune response and activate your immune system cells.

**There are many more positive things throughout this text that will strengthen your immune system function that can improve the quality of your life and extend your longevity well beyond the norm. I'm defining quality of life to be more vitality, much less sickness for shorter periods, and life extension because of a strong immune system's ability to ward off damaging, disabling, and killing diseases.**



**To rebuild an immune system ravaged by diabetes and other factors -  
Consume one quart of Lifeway Kefir per day.**

**To keep a strong immune system - Consume two quarts of Lifeway Kefir per week.**

**To find a source near to you, go to the Lifeway Kefir Website:**

<http://lifewaykefir.com/>

Lifeway makes various flavors in these fermented liquid yogurts that are like a smoothie. There's protein for muscle and cellular growth, and 12 beneficial probiotic bacteria added to help strengthen your immune system and improve digestion. Read all four sides of the bottle labeling ... You will be very impressed.

Antibiotics kill all the good bacteria in your gut that are responsible for 60% to 80% of your immune system and your body's natural ability to fight all diseases and ailments. The probiotics in Lifeway Kefir can restore a healthy immune system to keep them away.

You will find Lifeway Kefir in the refrigerated dairy section near to coconut milk and almond milk products.



**Switch to organic meats, dairy products, and eggs from free-roaming animals raised on a natural diet and WITHOUT Antibiotics, Steroids, or Hormones.**

Our meat and dairy products today come mostly from animals that are pumped full of antibiotics to ward off diseases in the animals. Read that package label to see that your meats, dairy products, and eggs come from animals raised without antibiotics that destroy your immune system on a continual basis.

***Mother Nature is Always Best:*** My personal favorite meats are wild Mahi Mahi and wild Alaskan Salmon (never farmed salmon). My dairy products ...

*Lifeway Kefir. My eggs come from a private farmer who raises free-roaming chickens, using natural non-GMO feed, and NO Antibiotics, or Steroids, or Hormones.*



**Eliminate sugars and use the natural calorie-free sweetener Stevia instead.** Sugars are “food for bad bacteria” like superbugs such as MRSA, and many diseases such as cancer, heart disease, and ailments like diabetes. A liquid form of pure 100% Stevia is better than powdered forms as there is an anti-caking ingredient in powdered forms and frequently cut with a sugar like dextrose. Stevia is about 400 times sweeter than sugar so a few drop go a long way.

*You can find my favorite Stevia brand by Now Foods on Amazon.com:*

[CLICK HERE FOR STEVIA](#)

**Be certain you are getting 100% pure Stevia:** Some unscrupulous marketers try to swindle you by putting a little Stevia into a sugar like dextrose. As you are trying to avoid sugar, read that package ingredients label. Anything ending with “ose” on the end of the name is a sugar (fructose, high fructose corn syrup, sucrose, dextrose, etc.). The powdered forms of Stevia are where most of the fraud is.

**Sugars to avoid also include things like molasses, honey, malt, agave nectar, and sweet fruits.**

**Remove artificial sweeteners and use natural caloric free Stevia instead.** Artificial sweeteners are more deadly than genuine sugars and you should avoid them. They cause you to eat more calories later and gain weight!

***The late and great Jack LaLanne said it best ... “If man made it ... Don’t eat it ... Don’t put it on your skin”.***

**Substitute health beneficial oils such as Virgin Coconut Oil and cut out unhealthy oils such as canola, soy, and vegetable oils.**

**Avoid fried foods unless you fry them at home in health beneficial coconut oil.**

# ANTIBIOTIC DANGERS

If you have ever taken a single dose of antibiotics any time in your life, you probably have a candida yeast overgrowth in your body. This overgrowth is most common in the intestine but it can infiltrate your entire body. This overgrowth can be the cause of every symptom you can possibly imagine including headaches, gas, bloating, indigestion, heartburn, nausea, allergies, asthma, fibromyalgia, arthritis, **diabetes**, constipation, yeast infections, dandruff, acne, bad breath, fatigue, depression, stress and on and on. Doing a program that removes the excess candida from your body is one of the backbones of good health.

The most common side effect of excess candida is the inability to lose weight and this is important for those with diabetes. People who remove excess candida almost always lose weight without even trying. Candida also causes food cravings and can make you eat when you're not hungry. When candida is normalized, a person's appetite can be dramatically reduced so that you're just simply not that hungry.

**NOTE:** The human skin produces bacterial fighting proteins. If we disturb the balance of microorganisms on the skin with antibiotic creams, hand lotions, wipes, etc., it affects the body's ability to fight the bacteria and can even lead to more skin infections. In most cases, you only need to wash a skin wound with regular soap and NOT antibacterial soap. There are times that the body's immune system is not strong enough and an oral antibiotic is then needed to assist the body but there are natural antibiotics available that are more effective than medical prescription antibiotics.

**Immune System:** The human body has the most Natural Antibiotics. We have live bacteria in our intestines to help with digestion and keep the body healthy. These bacteria also fight invading bacteria, but they are destroyed when we take prescription antibiotics. We then have to take other products to restore the balance. We should therefore avoid the use of antibiotics and build our immune system instead. We can make use of supplements such as Vitamin C, Echinacea, Zinc, prebiotics, probiotics and kefir (discussed separately) with active cultures to boost the immune system while crowding



out bad bacteria.

### **Natural Antibiotics to fight bacteria and infections:**

**Vitamin C:** It helps to build the immune system by increasing the production of white blood cells to fight infections.

**Echinacea:** An herb supports the lymphatic system and acts as a blood purifier. It is useful against skin disorders.

**Zinc:** A mineral helps to build resistance against infections.

**Garlic:** One of the best Natural Antibiotics available to us. It kills infecting bacteria and protects the body from poison that causes infections. It has similarities to penicillin and other antibiotics. It also builds the immune system and is so effective the blood of garlic eaters can kill bacteria. Garlic may be used to treat minor infections of the ear, mouth, and throat.

**Carob Powder:** Rich in tannins and works well against diarrhea.

**Aloe Vera:** Has antiseptic and antibacterial properties that help in the treatment of sore throats, to prevent skin cancer, restore damaged tissues, sunburns and disinfect the skin.

**Grapefruit Seed Extract:** A disinfectant that can be used to reduce skin rashes. It kills bacteria such as Strep, Staph, and Salmonella.

**Honey:** Effective against bites, stings and cuts. Honey is better than pharmaceutical antibiotics against certain strains of bacteria such as Salmonella and can completely stop the growth of wound infecting bacteria. It is also used for treating asthma and breathing related conditions.

**Colloidal Silver:** It prevents the growth of resistant strains of disease causing bacteria. It repairs damaged tissue and can be used internally as well externally. It can be used for treatment of viral infections, sore throat, diarrhea, allergies, menstrual pains, and colon spasms. Colloidal Silver helps in faster healing of cuts and bruises. It is a safe product but overdose and long-term use may result in silver build-up in the body that leads to a gray color skin.

**Tea Tree Oil:** Contains antiseptic compounds that act as skin disinfectants. It is used in treating ringworm, fungal infections of the toenails, yeast infections, bad breath, and acne.

**Molkosan:** Molkosan is derived from whey, a byproduct of cheese and is used against fungal infections.

**Bitter Melon:** This fruit is used against gastrointestinal infections and serves to lower blood sugar levels of diabetics.

**Olive Leaf Extract:** Olive leaves have strong anti-bacterial and anti-viral qualities. It acts as a broad type antibiotic and is used in treatment of fungal or yeast infections, fatigue, and allergies. It is effective against colds and flu. There are reports of its effective use in blood sugar regulation and in treating high blood pressure.

**Slippery Elm:** Used against gastritis, indigestion, mucous build-up, and bronchitis and bleeding from the lungs.

**Neem:** Derived from the Neem plant. It contains antiseptic, antiviral, and antipyretic characteristics and is a good blood purifier.

**These are some of the Natural Antibiotics that we can use instead of the pharmaceutical prescribed drugs. They are effective and serve to build the immune system. Medicinal antibiotics will destroy your immune system by killing off the beneficial bacteria in your gut ... 60% to 70% of your immune system is based on good bacteria in the gut.**

# MENTAL ATTITUDE & BELIEF SYSTEMS

Our state of mind can have a great effect on our physical well-being and the results we achieve in life. The top #1 reason most people fail at anything is poor “Mental Attitude” about what they “Believe” they can achieve. A significant part of a poor mental attitude can be as simple as the lack of specific knowledge needed to achieve a goal.

A person with a positive mental attitude and strong belief system will have absolute dedication and motivation to pursue whatever is necessary to achieve a desired goal.

**“A Goal is a Dream ... with a deadline attached”, (anonymous).**

**“When you think you can or can’t do something, either way, you are right”, (from a fortune cookie).**

Positive Mental Attitude (PMA for short) and Belief Systems (BS for short) are so incredibly important. One can take positive actions towards a positive result or one can hold negative beliefs, not take action, and dwell in the less than positive results.

Those who believe and try, can succeed while those who never try or don’t believe they can succeed or let fear rule, will never succeed for lack of even trying.

People who are positive and upbeat attract positive results and positive upbeat people to their lives. Negative people tend to get negative results and repulse positive and upbeat people.

Even not believing in something is a belief ... but now BS would stand for Bull Shit rather than Belief System.

Start removing the negative factors you face in your life and dealing with the negative people in your life as you start adding positive factors and positive people to your life. You’ll be amazed at the varied positive effects this can have.

Mind over matter is quite real and the placebo effect is a perfect example. Typically, in double blind studies, about 20 percent of the people who got the fake pill actually have positive results. They believe that the pill is helping and so it does. Just the belief that something can work makes it possible and is part of the mind over matter effect that definitely does work in our lives and even miracles are possible if your belief is strong enough.

The holistic view of health holds that human beings are more than just the physical body. Our emotions, mind, thoughts, attitudes, heart, and our spirit play a vital role in our health in many ways:

- Mood and mental attitude can alter the course of a disease.
- Stress related hormones weaken the immune system.
- The brain produces mind directed chemicals that communicate with the immune system.
- The immune system creates chemicals that communicate with the brain.
- The mind can “will” changes in the body.
- Cultivate a positive mental attitude and if life hands you a lemon, you make lemonade.
- When something bad happens, there is an opportunity for something good so start looking for that opportunity.
- When one door closes, another opens so seek it out and pass through it.

Having faith or belief in something causes direct and measurable positive effect in our bodies. A placebo may not have a positive effect in and of itself but the belief that it can has been validated with significant positive results repeatedly. Your faith and beliefs are incredibly important and can bring to reality incredibly positive results. I try not to repeat myself but this is important and I want to stress this again ... your belief system is hugely powerful and important in every aspect of your life ... again ... even miracles are possible!

An individual's Belief System is always valid and no other individual's

Belief System or group of individual's beliefs invalidates any individual's Belief System. You are also entitled to change your Belief System as much or as often as you like. One individual might hold as part of his or her Belief System that the only cure for a headache is "days of suffering". That same individual might later change his or her belief to a headache can be cured by "meditation and relaxation in 20 minutes". Changing your Belief System is a good thing as long as you change it for the better and it is a fantastic thing to recognize you always have room for improvement.

**Vision Board:** Cut out or make images of the things you want to have in life and attach them to a vision board or vision door or vision wall where you will see your visions frequently. Not just material things, or health goals, but perhaps a degree or job you would like to have or income level you would like to achieve. If you want a certain car, attach a picture of the car you want and so forth. If you want to lose weight, clip a photo of the body you want and post on your vision board. Next to each visual for something you want, write down a date so your vision has a deadline by which you wish to obtain your vision. It has now become a goal because you have attached a date by which to achieve your goal. Also, write out the steps you need to take to reach your goals. Start working against the steps and checking them off as you achieve them. Simply complete each of the steps and you will achieve your goal.

# DIABETES COMPLICATIONS TO AVOID

All forms of diabetes, including undiagnosed prediabetes, increase the risk of long-term complications. These typically develop after many years but may be the first symptom in those who have been prediabetic or diabetic for years but undiagnosed.

Patients with diabetes have higher death rates than people who do not have diabetes regardless of sex, age, or other factors. Heart disease and stroke are the leading causes of death in diabetes patients. All lifestyle and medical efforts should be made to reduce the risk for these conditions.

The major long-term complications of diabetes relate to [blood vessel](#) damage. Diabetes doubles the risk of [cardiovascular disease](#) and about 75% of deaths in diabetics are from coronary artery disease. Other [causes](#) of death are [stroke](#), and [peripheral vascular disease](#).

The primary complications of diabetes due to damage in small blood vessels include damage to the eyes, kidneys, and nerves.

## LOW BLOOD SUGAR EMERGENCY (Hypoglycemia or Insulin Shock)

Hypoglycemia occurs if blood glucose levels fall below normal (below 70 mg/dl),

[Low blood sugar](#) is common in persons with Type 1 and Type 2 diabetes using insulin therapy and drugs. Most cases are mild and not considered medical emergencies. Effects can range from [feelings of unease](#), sweating, trembling, and increased appetite in mild cases.

Hypoglycemia may also be caused by insufficient intake of food, or excess exercise or alcohol. Usually, the condition is manageable.

Mild hypoglycemia is common among people with Type 2 diabetes, and

severe episodes are rare, even among those taking insulin. Still, all patients who intensively control blood sugar levels with diabetic medications, should be aware of warning symptoms. Mild cases are self-treated by eating or drinking something high in sugar. Mild cases do not necessarily cause symptoms in all patients.

Diabetics (usually with Type 1) may also experience episodes of [diabetic ketoacidosis](#). This is a metabolic disturbance characterized by nausea, vomiting, [abdominal pain](#), the smell of [acetone](#) on the breath, deep breathing known as [Kussmaul breathing](#), and in severe cases a decreased level of consciousness or coma.

Hypoglycemia can be severe or life threatening, particularly if the patient fails to recognize the symptoms, especially while continuing to take insulin or other hypoglycemic drugs. Severe cases can lead to unconsciousness and must be treated with intravenous glucose or [injections with glucagon](#).

**Mild symptoms usually occur at moderately low and easily correctable levels of blood glucose and include:**

- Sweating
- Trembling
- Hunger
- Rapid heartbeat

**Risk Factors for Severe Hypoglycemia:**

- Patients attempting tight control of blood glucose and HbA1c levels
- Long-term diabetes
- Patients who do not comply with treatment (underinsured, uninsured, have psychiatric disorders, or poorly educated about diabetes)

- Infections such as stomach flu or respiratory illnesses

**In more serious cases, symptoms include:**

- Weakness
- Disorientation
- Combativeness
- [Confusion](#)
- Changes in behavior
- [Unconsciousness](#)
- [Seizures](#)
- Coma
- Permanent [brain damage](#)
- Death

**Hypoglycemia unawareness:** Hypoglycemia unawareness is a condition in which people become insensitive to hypoglycemic symptoms. It affects about 25% of patients who use insulin, nearly always people with Type 1 diabetes. In such cases, hypoglycemia appears suddenly, without warning, and can escalate to a severe level. Even a single recent episode of hypoglycemia may make it more difficult to detect the next episode. With vigilant monitoring and by rigorously avoiding low blood glucose levels, patients can often regain the ability to sense the symptoms. However, even very careful testing may fail to detect a problem, particularly one that occurs during sleep.

### **DIABETIC KETOACIDOSIS (DKA)**

DKA is a life-threatening complication caused by insulin deficiency. Until recently, it was a complication almost exclusively of Type 1 diabetes. In such cases, it is nearly always due to noncompliance with insulin treatments.



However, DKA is being reported increasingly in patients with Type 2 diabetes. It is not clear what causes total insulin depletion in these patients.

**Diabetic ketoacidosis signs and symptoms often develop quickly, sometimes within 24 hours. For some, these signs and symptoms may be the first indication of having diabetes. Symptoms include:**

- Excessive thirst
- Frequent urination
- Nausea and vomiting
- Abdominal pain
- Weakness or fatigue
- Shortness of breath
- Fruity-scented breath
- Confusion

**More-specific signs of diabetic ketoacidosis, which can be detected through home blood and urine testing kits include:**

- High blood sugar level (hyperglycemia)
- High ketone levels in your urine

**If you feel ill or stressed or you've had a recent illness or injury, check your blood sugar level often. You might also try an over-the-counter urine ketones testing kit. Contact your doctor immediately if:**

- You're vomiting and unable to tolerate food or liquid

- Your blood sugar level is higher than your target range and doesn't respond to home treatment
- Your urine ketone level is moderate or high

**Seek emergency care if:**

- Your blood sugar level is consistently higher than 300 milligrams per deciliter (mg/dL), or 16.7 millimoles per liter (mmol/L)
- You have ketones in your urine and can't reach your doctor for advice
- You have multiple signs and symptoms of diabetic ketoacidosis — excessive thirst, frequent urination, nausea and vomiting, abdominal pain, shortness of breath, fruity-scented breath, confusion

**IMPORTANT NOTE:** Untreated diabetic ketoacidosis can be fatal.

## **HYPERSOMOLAR NONKETOTIC STATE (HNS)**

(HNS) is a dangerous form of [diabetic coma](#). This state is also known by some other terms like hyperosmolar hyperglycemic nonketotic coma (HHNKC) or hyperosmotic non-ketoic acidosis (HONK).

This complication may arise in persons having Type 1 or [Type 2 diabetes](#). In HNS, the level of [blood sugar](#) continues to rise, and the body tries to get rid of the excess sugar in the blood by passing more urine. The feeling of thirst continues despite intake of more than usual water or other liquids. If sufficient water or liquids are not consumed, the body becomes dehydrated. HNS develops over a period of time lasting several days, weeks, and even months.

**It is essential to understand the signs and symptoms of HNS as neglecting it may lead to more serious complications. Some major signs of HNS are:**

- Level of [Blood sugar](#) beyond 600 mg/dl, which continues to hover over

this level.

- Continuous feeling of being thirsty which does not get quenched despite taking sufficient water and other liquids though after a time (days or weeks) this may disappear.
- Dry skin that does not sweat; parched mouth; and weakness affecting a side of the body.
- Fever with temperature generally of over 101 degrees Fahrenheit.
- Confusion while awake including hallucinations; and sleeplessness.
- Weakening of the vision.



## HEART DISEASE

**Heart disease and diabetes are linked and diabetics tend to get heart disease early in life. They usually develop heart disease before a diabetes diagnosis is even made.**

There is an association between high blood pressure (hypertension), unhealthy cholesterol levels, and diabetes. Research suggests that high LDL (“bad” cholesterol) levels, low HDL (“good” cholesterol) levels, and high triglyceride levels may interfere with insulin regulation.

Hypertension is more common in patients with diabetes than those without the condition.

People with diabetes are more likely to have heart problems, and die from heart complications. Heart attacks account for 60% and strokes for 25% of deaths in patients with diabetes.

### **Diabetes affects the heart in many ways:**

- Both Type 1 and 2 diabetes speed the progression of atherosclerosis (hardening of the arteries). Diabetes is often associated with low HDL ("good" cholesterol) and high triglycerides. This can lead to coronary artery disease, heart attack, or stroke.
- Impaired nerve function (neuropathy) associated with diabetes also causes heart abnormalities.
- Women with diabetes are at particularly high risk for heart problems and death from heart disease and overall causes.

The buildup of plaque and cholesterol known as arteriosclerosis is a condition caused by too many calories eaten. Eating the low micronutrient food of the Standard American Diet (SAD) provides inadequate nutrition and promotes excess calorie consumption leading to being overweight or obese. Low macronutrient food (processed food) also increases oxidative stress (free radicals) and inflammation, which further promotes arteriosclerosis. Other causes of inflammation in the body such as showering in chlorinated municipal water also contribute to inflammation. The chlorine is vaporized by the showerhead and chlorine vapor is inhaled. The chlorine results in scarring of the lungs and arteries (inflammation).



## **OBESITY**

Diabetes includes linkage to diet and being overweight or obese and the need to lose weight.

The Standard American Diet (SAD) has resulted in a nation where 86% of the population is overweight or obese. The cascade of negative factors from the low nutrient, high carbohydrate, low protein, and bad fat SAD diet is what triggers the high incidence of heart disease (the #1 killer), cancer (the #2 killer), diabetes (the #7 killer), and all other diseases (a lack of ease).



## **NEUROPATHY (Nerve Damage)**

**Damage to the nerves of the body, known as [diabetic neuropathy](#), is the most common complication of diabetes. Neuropathy refers to a group of disorders that affect nerves.**

Neuropathy means "sick nerves". It is an early complication of diabetes, which starts to occur in people who have blood sugars most doctors dismiss as "normal" or "mildly pre-diabetic". We know that diabetic nerve damage starts when blood sugars spike over 140 mg/dl.

Because nerves are damaged by “mildly elevated” blood sugar levels that most doctors ignore, almost half the people with Type 2 diabetes already have detectable neuropathy by the time they are diagnosed. Many people never diagnosed with diabetes but have higher than normal blood sugars also get diabetic neuropathy. It is a major cause of the impotence so common among men in their 40s and older.

The pain of neuropathy usually starts out in the feet. It feels like tingling or burning. Some people describe it as feeling like there is something in their shoe between their toes when there isn't anything there.

**The two main types of neuropathy are:**

- **Peripheral** (affects nerves in the toes, feet, legs, hand, and arms)
- **Autonomic** (affects nerves that help regulate digestive, bowel, bladder, heart, and sexual function)

**Peripheral neuropathy affects sensation. It is a common complication that affects nearly half of people with Type 1 or Type 2 diabetes after 25 years. The most serious consequences of neuropathy occur in the legs and feet and pose a risk for ulcers and, in unusually severe cases, amputation. Peripheral neuropathy usually starts in the fingers and toes and moves up to the arms and legs. Symptoms include:**

- Tingling
- Burning sensations

- Weakness
- Loss of the sense of warm or cold
- Numbness (if the nerves are severely damaged, the patient may be unaware that a blister or minor wound has become infected)
- Deep pain and altered pain sensation
  - Muscle weakness
  - Muscle wasting

**Autonomic neuropathy can cause:**

- Digestive problems (constipation, diarrhea, nausea, vomiting)
- Bladder infections and incontinence
- Erectile dysfunction
- Heart problems. Neuropathy may mask angina, the warning chest pain for heart disease and heart attack. Patients with diabetes should be aware of other warning signs of a heart attack, including sudden fatigue, sweating, shortness of breath, nausea, and vomiting.
- Rapid heart rates
- Lightheadedness when standing up (orthostatic hypotension)

**Blood sugar control is an essential component in the treatment of neuropathy. Studies show that tight control of blood glucose levels delays the onset and slows progression of neuropathy. Heart disease risk factors may increase the likelihood of developing neuropathy. Lowering**

**triglycerides, losing weight, reducing blood pressure, and quitting smoking may help prevent the onset of neuropathy.**

Diabetes-related foot problems (such as diabetic foot ulcers) may occur, and can be difficult to treat, occasionally requiring amputation.

One characteristic of diabetic neuropathy that differs from similar nerve pain caused by disc problems in the back, is that it is usually symmetrical (occurs in both feet).

Less common, diabetic neuropathy can cause problems in the hands and arms.

**Nerves affected by neuropathy eventually become numb. When examined after a diabetes diagnosis, the doctor should test your feet with a tuning fork or a thin filament that looks like fishing line to see if you have dead nerves in your feet you may not have noticed. Dead nerves are an important finding that tells a doctor you are at risk for serious infections. If a doctor does not test you for neuropathy when you are diagnosed with diabetes consider finding a better doctor who will do this test.**

**Neuropathy Affects More Than Just Your Feet.** The presence of neuropathy in your feet suggests other nerves in your body are under attack. Most notable are those that control sexual response and those of the autonomic system which control functions like blood pressure, heartbeat, and gastroparesis, which is a condition where food no longer moves through the digestive system in a normal way.

**The more years with high blood sugars, the more likely it is to develop impotence (both male and female). Food can get stuck in the stomach due to non-responding valves.**

Another nerve that gets damaged by high blood sugars is the *vagus nerve*, a vital nerve that connects your brain to almost all of the rest of your body and which regulates the immune system. This is why people with diabetes have trouble fighting infections since a weakened vagus nerve may not signal the immune system when your body is under attack.

The vagus nerve regulates heartbeat and this explains the high incidence of



fatal heart attack in people with diabetes, who have abnormal heartbeats, which cause sudden death.

**Neuropathy Leads to Amputation.** The pain of neuropathy in the feet is unpleasant, but suppressing the pain with drugs, or waiting until the nerve becomes numb only deals with the pain and doesn't cure the underlying process causing that pain. With neuropathy, nerves are failing because the tiny blood vessels that supply the nerves are being clogged and dying. This means that soon they won't be able to bring infection fighting white blood cells to infected tissue. Once that happens, it is almost impossible to keep an infection from leading to gangrene. This is why people with diabetes end up with amputated feet and legs.

**Neuropathy CAN be Stopped and Even Reversed.** Don't settle for drugs that only numb the pain. Eliminate the high post-meal blood sugars that cause neuropathy and your nerves can regenerate!



### **KIDNEY DAMAGE**

Damage to the kidneys can lead to tissue scarring, urine protein loss, and [chronic kidney disease](#), requiring [dialysis](#) or [kidney transplant](#).

**There is no agreement as to why this occurs. Some factors that promote kidney failure are:**

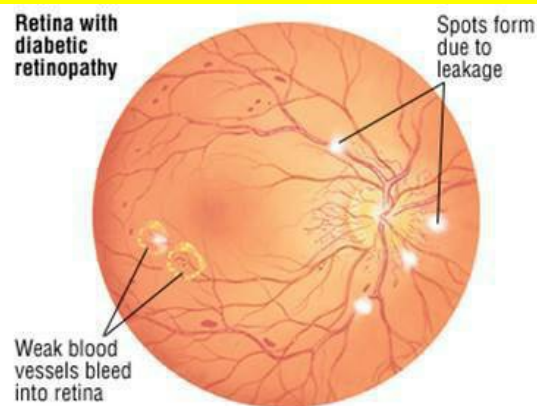
- **High blood pressure.** When blood pressure is high, large protein molecules, including those that are glycosylated (covered with sticky

excess sugar molecules) are pushed through the pores of the kidney's filtration units, damaging them.

- **High blood sugar.** When normal glucose regulation fails, the kidneys must remove excess glucose from the blood, leading to high concentrations of glucose in the kidneys. These glucose molecules clog up tiny capillaries in the kidneys as they do those elsewhere in the body. Eventually this clogging destroys the glomeruli, the filtration units of the kidney.

Kidney damage is a serious complication of diabetes. With this condition, the tiny filters in the kidney (called glomeruli) become damaged and leak protein into the urine. Over time, this can lead to kidney failure. Urine tests showing microalbuminuria (small amounts of protein in the urine) are important markers for kidney damage.

Chronic or permanent kidney failure occurs in about 20% to 40% of patients with diabetes. If the kidneys fail, dialysis is required. Symptoms of kidney failure may include swelling in the feet and ankles, itching, fatigue, and pale skin color.



## DAMAGE TO THE EYES

Damage to the eyes is known as [diabetic retinopathy](#). Retinopathy means "sick retina" and it is among the most terrifying of diabetic complications. Diabetic retinopathy is caused by damage to the tiny blood vessels that nourish the retina. Retinopathy can result in gradual vision loss and [blindness](#).

Diabetes accounts for thousands of new cases of blindness annually and is the leading cause of new cases of blindness in adults age 20 to 74. People with diabetes are also at higher risk for developing cataracts and certain types of glaucoma, such as Primary Open Angle Glaucoma (POAG). The risk for POAG is especially high for women with Type 2 diabetes.

Retinopathy generally occurs in one or two phases:

- The early and more common type of this disorder is called *nonproliferative or background retinopathy*. The blood vessels in the retina are abnormally weakened. They rupture and leak, and waxy areas may form. If these processes affect the central portion of the retina, swelling may occur, causing reduced or blurred vision.
- If the capillaries become blocked and blood flow is cut off, soft, "woolly" areas may develop in the retina's nerve layer. These woolly areas may signal the development of *proliferative retinopathy*. Often there are no symptoms of progressing retinopathy. In this more severe condition, new abnormal blood vessels form and grow on the surface of the retina. They may spread into the cavity of the eye or bleed into the back of the eye. Major hemorrhage or retinal detachment can result, causing severe visual loss or blindness. The sensation of seeing flashing lights may indicate retinal detachment.

What happens in retinopathy is that, with continual exposure to high blood sugars, tiny blood vessels start to grow in a disordered and out of control fashion in the retina (the part of the eye where nerves transmit light images to the brain). Unlike healthy vessels, these diabetic blood vessels have weak walls, and eventually they burst, releasing blood into the eye. If left untreated, these overgrown vessels eventually destroy the retina's ability to transmit images to the brain, resulting in permanent blindness.

Prolonged high blood sugars can cause glucose absorption in the [lens of the eye](#), which leads to changes in its shape, resulting in vision changes, cataracts, or vision loss.

The longer a person has diabetes, the more likely they will develop diabetic retinopathy.

If left untreated, diabetic retinopathy can cause blindness.

Symptoms of diabetic retinopathy include:

- Seeing spots or floaters
- Blurred vision
- Dark or empty spot in the center of your vision
- Difficulty seeing well at night

There are various terms doctors use to refer to retinopathy. One is "proliferative retinopathy" referring to the way that the tiny blood vessels proliferate. Another is "macular edema" referring to swelling in the part of the retina that gives us central vision. The diabetes drugs Actos and Avandia have been found to cause an increase in macular edema which is a major reason they are probably the last drug anyone with diabetes should be taking.

Doctors currently treat retinopathy by using lasers to zap shut bleeding or swollen blood vessels in the eye. This helps retain vision, though it cannot restore vision that has been lost. Over time if blood sugars continue to be high--200 mg/dl (11 mmol/l) or more-- vision will deteriorate despite with this treatment.

The only way to reverse retinopathy is to get blood sugars down to normal levels, not the levels flagged as "good for diabetics" but normal levels. That is because recent research has found retinopathic changes happening in the eyes of 1 out of every 12 people diagnosed with *prediabetes*, so just getting your blood sugars to the mediocre levels most doctors suggest for people with diabetes (well within the prediabetic range) is NOT enough.

Everyone with diabetes should have a comprehensive dilated eye examination once a year. Early detection and treatment can limit the potential for significant vision loss from diabetic retinopathy.



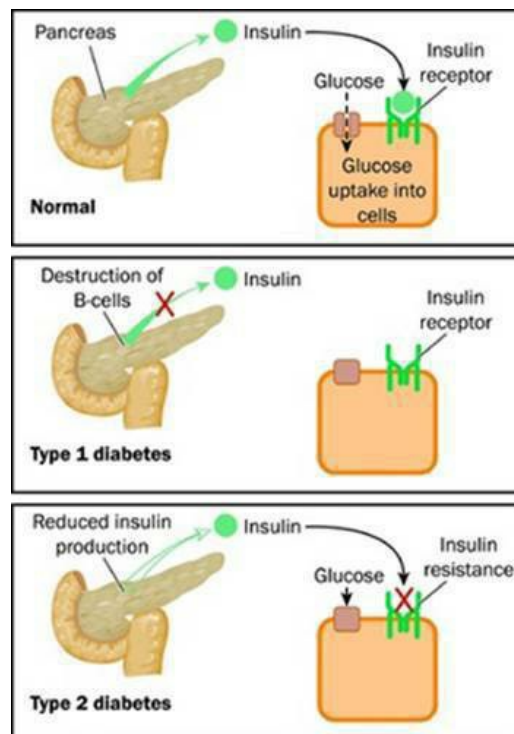
## PANCREAS DISORDERS

The pancreas maintains the body's blood glucose (sugar) balance.

Primary hormones of the pancreas include insulin and glucagon, and both regulate blood glucose.

Diabetes is the most common disorder associated with the pancreas.

The pancreas is unique in that it's both an endocrine and exocrine gland. The pancreas has the dual function of secreting hormones into blood (endocrine) and secreting enzymes through ducts (exocrine).



The pancreas belongs to the endocrine and digestive systems—with most of

its cells (more than 90%) working on the digestive side. However, the pancreas performs the vital duty of producing hormones—most notably insulin—to maintain the balance of blood glucose (sugar) and salt in the body.

Without this balance, your body is susceptible to serious complications, such as diabetes.

### **Anatomy of the Pancreas**

The pancreas is a 6 inch-long flattened gland that lies deep within the abdomen, between the stomach and the [spine](#). It is connected to the duodenum, which is part of the small intestine.

Only about 5% of the pancreas is comprised of endocrine cells. These cells are clustered in groups within the pancreas and look like little islands of cells when examined under a microscope. These groups of pancreatic endocrine cells are known as pancreatic islets or more specifically, *islets of Langerhans* (named after the scientist who discovered them).

### **Hormones of the Pancreas**

The production of pancreatic hormones, including insulin, somatostatin, gastrin, and glucagon, play an important role in maintaining sugar and salt balance in our bodies.

### **Primary hormones secreted by the pancreas include:**

- **Gastrin:** This hormone aids digestion by stimulating certain cells in the stomach to produce acid.
- **Glucagon:** Glucagon helps insulin maintain normal blood glucose by working in the opposite way of insulin. It stimulates your cells to release glucose, and this raises your blood glucose levels.
- **Insulin:** This hormone regulates blood glucose by allowing many of your body's cells to absorb and use glucose. In turn, this drops blood glucose levels.
- **Somatostatin:** When levels of other pancreatic hormones, such as

insulin and glucagon, get too high, somatostatin is secreted to maintain a balance of glucose and/or salt in the blood.

- **Vasoactive intestinal peptide (VIP):** This hormone helps control water secretion and absorption from the intestines by stimulating the intestinal cells to release water and salts into the intestines.

### **Diseases and Disorders of the Pancreas**

Problems in the production or regulation of pancreatic hormones will cause complications related to blood sugar imbalance.

Of all the diseases and disorders of the pancreas, the most well-known is diabetes.

- **Type 1 diabetes:** If you have Type 1 diabetes, then your body doesn't produce enough or any insulin to handle the glucose in your body. Insulin deficiency causes a range of [complications](#), so most people with Type 1 diabetes have to take insulin to help their body use glucose appropriately.
- **Type 2 diabetes:** Type 2 diabetes is much more prevalent than Type 1. People with Type 2 diabetes may be able to produce insulin, but their bodies don't use it correctly. They might also be unable to produce enough insulin to handle the glucose in their body. Lifestyle choices play a major role in managing and preventing Type 2 diabetes.

### **Other common diseases and disorders associated with the pancreas are:**

- **Hyperglycemia:** This condition is caused by abnormally high blood glucose levels. It can be caused by overproduction of the hormone glucagon. To learn more, read our article about [hyperglycemia](#).
- **Hypoglycemia:** Conversely, hypoglycemia is caused by low blood glucose levels. It is caused by a relative overproduction of insulin. To learn more, read our article about [hypoglycemia](#).

Despite the fact that the great majority of pancreatic cells are devoted to digestive function, the endocrine cells play a major role in your overall health. By regulating your blood sugar levels, the pancreatic hormones are directly related to some of the most common diseases of today, including diabetes.

## **DIABETIC TENDON PROBLEMS**

People with diabetes are much more prone to develop problems with tendons. This is probably because the blood supply to tendons is normally pretty sparse, so very early diabetic changes in blood vessels may show up first in tendons.

Another possible explanation may be that high blood sugars may cause abnormal thickening of tendons. This was demonstrated in a study published in the journal, *Diabetes Care*.

Some common forms of tendon damage that are more common in people with diabetes and prediabetes are carpal tunnel syndrome, tarsal tendon syndrome (a form of carpal tunnel that strikes the feet) and frozen shoulder.

[Carpal Tunnel May Predict Diabetes \(WebMD\)](#)

Unfortunately, few doctors in general practice are aware of this Diabetes-Tendon connection.

## **FOOT ULCERS & AMPUTATION**

About 15% of patients with diabetes have serious foot problems. They are the leading cause of hospitalizations for these patients.

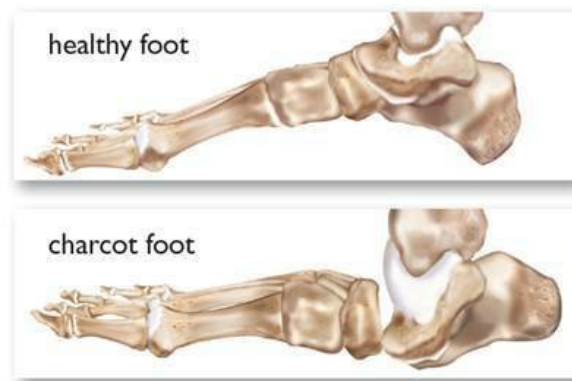
Diabetes is responsible for more than half of all lower limb amputations performed in the U.S. Each year there are about 88,000 non-injury amputations, 50 - 75% of them due to diabetes. About 85% of amputations start with foot ulcers, which develop in about 12% of people with diabetes.

Those most at risk are people with a long history of diabetes, and people with diabetes who are overweight or who smoke. People who have the disease for more than 20 years and are insulin-dependent are at the highest risk. Related



conditions that put people at risk include peripheral neuropathy, peripheral artery disease, foot deformities, and a history of ulcers.

In general, foot ulcers develop from infections, such as those resulting from blood vessel injury. Foot infections often develop from injuries, which can dramatically increase the risk for amputation. Even minor infections can develop into severe complications. Numbness from nerve damage, which is common in diabetes, compounds the danger since the patient may not be aware of injuries. About one-third of foot ulcers occur on the big toe.



## CHARCOT'S FOOT

Charcot's Foot is a foot complication caused by clogged blood vessels. It is one of the more serious diabetic complications that afflicts those who have experienced years of exposure to very high blood sugars, and one that few people know about, including many doctors.

In this condition, the long bones of the foot which have been deprived of nutrients because of damage to the circulatory system (and possibly to the nerves) break, causing the foot to collapse. This condition is crippling and can lead to gangrene because damage to the circulatory system also keeps the immune system from sending infection-fighting cells to the foot.

Charcot foot or Charcot joint (medically referred to as neuropathic arthropathy) occurs in up to 2.5% of people with diabetes. Early changes appear similar to an infection, with the foot becoming swollen, red, and warm. Gradually, the affected foot can become deformed. The bones may crack, splinter, and erode, and the joints may shift, change shape, and become unstable. It typically develops in people who have neuropathy to the extent that they cannot feel sensation in the foot and are not aware of an existing

injury. Instead of resting an injured foot or seeking medical help, the patient often continues normal activity, causing further damage.

Charcot foot is initially treated with strict immobilization of the foot and ankle; some centers use a cast that allows the patient to move and still protects the foot. When the acute phase has passed, patients usually need lifelong protection of the foot using a brace initially and custom footwear.

People with diabetes are prone to foot problems because the disease can cause damage to the blood vessels and nerves, which may result in decreased ability to sense trauma to the foot. The immune system is also altered, so that the patient cannot efficiently fight infection.

from the toll high blood sugars take on the tiny capillaries that carry blood, oxygen, and immune system cells throughout all our tissues, including our nerves, bones, tendons, kidneys, and retinas.

Prolonged exposure to high blood sugars cause sugars to bond to the walls of tiny blood vessels which stiffen and narrow to where blood and immune system cells can't pass through them. Over time capillaries become incapable of carrying nutrients to the cells. Nerves die when capillaries don't bring them enough oxygen and nutrients. Tendons become brittle, kidneys stop filtering our urine, retinas grow a tangled network of fragile new blood vessels to replace the ones that don't work which rupture, causing blindness, and feet become gangrenous.

Keeping blood sugars under 140 mg/dl at all times will prevent this and other complications from developing.

For someone who has had diabetes for a decade or more and have been a victim of mediocre care allowed maintaining fasting blood sugars well over 140 mg/dl and A1cs above 7% or worse, damage to bones may be underway. If so, take foot pain seriously and get help. Many family doctors are not familiar with this complication and may ignore it until you have no option left but amputation.

Even if your foot has progressed to where you have been told you need an amputation because of the damage to your bones, there are clinics that specialize in preventing amputation, and they are having success in treating

Charcot's Foot with new treatments that can preserve your foot.

## **DIABETIC DERMATOMES**

There are a number of skin rashes, blemishes, or sores that can occur in diabetes and they are collectively known as [diabetic dermatomes](#).

Those with diabetes are at an increased risk for bacterial skin infection of all kinds. This type of infection is even more serious in those with poor control of their diabetes (such as in those not following a proper diabetic diet).

Infection with the bacteria commonly known as staph or its treatment resistant and life-threatening mutations collectively known as the Superbug MRSA are especially dangerous. Staph & MRSA causes open sores, styes, boils, folliculitis, and even deep infection (cellulitis). MRSA kills more people in the USA each year than HIV/Aids.

There is an increased risk for fungal infections that may affect the nails, body folds, genital regions, and feet.

The darkening and thickening of body folds due to insulin resistance, called acanthosis nigricans, may be early symptoms of diabetes.

Diabetic dermopathy is damage to small blood vessels of the skin that can cause brown spots on the legs.

Granuloma annulare are circular or arc-shaped red lesions due to changes in the collagen of the skin.

## **MENTAL FUNCTION & DEMENTIA**

There is a link between [cognitive deficit](#) (Alzheimer's disease) and diabetes. Compared to those without diabetes, those with the disease have a 1.2 to 1.5-fold greater rate of decline in cognitive function.

Studies indicate that patients with Type 2 diabetes face a higher than average risk of developing dementia caused either by Alzheimer's disease or problems in blood vessels in the brain. Problems in attention and memory can occur even in people under age 55 who have had diabetes for a number of years.

## **DEPRESSION**

Diabetes doubles the risk for depression. Depression, in turn, may increase the risk for hyperglycemia and complications of diabetes.

## RESPIRATORY INFECTIONS

People with diabetes face a higher risk for influenza and its complications, including pneumonia, possibly because the disorder neutralizes the effects of protective proteins on the surface of the lungs.

## OTHER COMPLICATIONS

**Diabetes increases the risk for other conditions, including:**

- Hearing loss
- Periodontal disease
- Carpal tunnel syndrome
- Nonalcoholic fatty liver disease, also called nonalcoholic steatohepatitis (NASH), a particular danger for people who are obese
- Colorectal cancer
- Uterine cancer

## SPECIFIC COMPLICATIONS IN WOMEN

**Medications:** Certain types of medications can affect blood glucose levels. For example, birth control pills can raise blood glucose levels. Long-term use (more than 2 years) of birth control pills may increase the risk of health complications. Thiazolidinediones (a class of diabetes medications) can prompt renewed ovulation in premenstrual women who are not ovulating, and can weaken the effect of birth control pills.

**Sexual Health:** Diabetes may cause decreased vaginal lubrication, which can lead to pain or discomfort during intercourse.

**Urinary Tract Infections:** Women with diabetes face a significantly higher risk for recurrent urinary tract infections, which are likely to be more complicated and difficult to treat than in the general population.

**Diabetes and Pregnancy:** Both temporary diabetes that occurs during pregnancy (gestational diabetes) and pregnancy in a patient with existing diabetes can increase the risk for birth defects. Studies indicate that high blood sugar levels can affect the developing fetus during the critical first 6 weeks of organ development. Therefore, it is important that women with pre-existing diabetes (both Type 1 and Type 2) who are planning on becoming pregnant, strive to maintain good glucose control for 3 to 6 months before pregnancy. It is also important for women to closely monitor blood sugar levels during pregnancy. For women with Type 2 diabetes who take insulin, pregnancy can affect their insulin dosing needs. Insulin dosing may also need to be adjusted during and following delivery.

**Diabetes and Menopause:** The changes in estrogen and other hormonal levels that occur during perimenopause can cause major fluctuations in blood glucose levels. Women with diabetes also face an increased risk of premature menopause, which can lead to higher risk of heart disease.

## **SPECIFIC COMPLICATIONS IN MEN**

**Reduced strength and loss of muscle mass:** Unexplained loss of muscle mass may be a sign of high sugar levels and diabetes. If blood sugar levels remain at high levels for relatively long periods during the day, the body will start to break down fat and muscle for energy. The [resulting weight loss](#) is usually most noticeable in people with type 1 diabetes. However, it can also affect people with type 2 diabetes that has gone undiagnosed for a long period of time.

**Erectile dysfunction:** Erectile dysfunction is defined as the inability to either achieve or maintain an erection sufficiently well to satisfy sexual activity. Erectile dysfunction may be an indicator of undiagnosed diabetes. Erectile difficulties can be caused by high blood sugar levels over a long period of time causing difficulties either with blood supply to the penis or

from damage to nerves in the penis.

**Recurrent genital thrush:** Genital thrush is a [yeast infection](#) that can occur if blood sugar levels are high, causing sugar to be passed out via the urine. Symptoms of genital thrush include:

- Redness on or around the head of the penis
- Swelling on or around the head of the penis
- Itching on or around the head of the penis
- Unpleasant odor
- A white curd-like appearance on the skin
- Soreness during sex

# CHOOSE THE RIGHT DOCTOR

**(Find an Integrative Holistic Medicine / Naturopathic Doctor)**

These types of Alternative Medicine doctors offer the best treatments that multiple disciplines of traditional medicine have to offer. They also offer the often superior natural treatments that Mother Nature, alternative medicine, and scientific research has to offer. These doctors go above and beyond the often ignored Hippocratic oath to “do no harm”. They find the underlying cause of a health problem and help you fix that rather than merely prescribing drugs to treat the symptoms of your ailment. These doctors are rare gems, difficult to find, and often shunned by medical peers for their successes when traditional medical practices fail the patient. Seek such a superior doctor out in your vicinity via the Internet and mostly rely on patient recommendations rather than peer recommendations.

*Author of this book, Christopher David Allen, whole-heartedly recommends his personal physician and good friend ... Dr. Andreas Grossgold of Clearwater, Florida.*

**[CLICK HERE to visit the Dr. Andreas Grossgold Website](#)**

*Dr. Grossgold suggested this book and was to be the co-author. Unfortunately, he was unable to participate due to conflict of interest and contractual obligations with several institutional associations. He has great expertise in Diabetes management. Dr. Grossgold was given an advance copy of this book and his review was short and succinct ...*

By Dr. Andreas Grossgold ... **“Overall I read it and I can tell you that it is very concise and easy to understand for patients. A great tool for diabetics and patients that are dealing with elevated sugars”.**

*Thanks so much Dr. Grossgold for the heartfelt review!*

**Here are a couple of websites to help you begin your search for a “Superior Doctor” in your area:**

**<http://www.wellness.com/find/integrative%20doctor>**



<http://www.wellness.com/find/naturopathic%20doctor>

# ABOUT THE AUTHOR

***Christopher David Allen*** is an International Best Selling Author many times #1 Best Selling Author on Amazon. He has been a nutritional researcher and holistic health advocate for more than 40 years. He continues his research and writing with a special emphasis to prevent all disease (a lack of ease).

He is a prolific author who writes mainly in the Optimum Health, Fitness, and Wellness genres. He has published over 30 books. His purpose as an author is to enlighten and help people through his books. To benefit as many people as he can, he keeps the price on his books low.

# AUTHOR AFTERTHOUGHTS



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***Thanks for your Reviews!***

***To your Optimum Health and Wellness!***

***Christopher David Allen***



***Of Lynne Marie who  
became an Angel at age  
38 on September 19, 1986***

***Christopher David who  
was never born because  
of Lynne's passing***

*The five-year battle against cancer that took her life was a primary reason I began to more seriously study health, nutrition, and wellness. Lynne was my wife, Eternity Mate (a higher level to which mere Soulmates might aspire), enchantress, kindred spirit, lover, best friend, teacher, confidant, partner, guardian angel, and more. She was everyone's best friend and loved by all who had the privilege to know her. I loved her so deeply and I am a much better person for having known her. I was privileged to be her husband and to have known the joy of her loving ways. I would have died that Lynne could have lived.*

*Because of Lynne, I have continued to research, learn, and share about optimum health and fitness. In her memory, I seek to help others avoid disease as well as the suffering to those who love and care for those afflicted. In her name, I share the specific things we can do to have good health and wellness. In the name of the son we never had (Christopher David) because of Lynne's cancer, I expose the things that cause us harm and we should avoid. I've taken his name as my pen name in his honor.*

***Good Health, Prosperity,  
Fulfillment, Freedom, Peace,***

***Bliss, and Love to all  
of my cherished readers!***

***Christopher David Allen***

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