The Pre-Diabetic and Diabetic Type Diet

Allowable Foods Reference
# Contents

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<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is Blood Sugar and Why is it Important?</td>
<td>1</td>
</tr>
<tr>
<td>What is Blood Sugar?</td>
<td>1</td>
</tr>
<tr>
<td>What is Prediabetes?</td>
<td>1</td>
</tr>
<tr>
<td>What is Diabetes?</td>
<td>2</td>
</tr>
<tr>
<td>What is Hemoglobin A1c?</td>
<td>3</td>
</tr>
<tr>
<td>What A Borderline High Hemoglobin A1c Indicates</td>
<td>3</td>
</tr>
<tr>
<td>Questions and Answers About Prediabetes and Diabetes</td>
<td>4</td>
</tr>
<tr>
<td>Your Dietary Recommendations—Pre-Diabetes and Diabetes</td>
<td>6</td>
</tr>
<tr>
<td>Category 1 Diet - Hgb A1C &gt;8 or Urinary Glucose &gt; 500mg/dl</td>
<td>7</td>
</tr>
<tr>
<td>Category 2 Diet - Hgb A1C = 6-8 or Urinary Glucose 100-250mg/dl</td>
<td>8</td>
</tr>
<tr>
<td>Category 3 Diet - Hgb A1C &lt;6 or Urinary Glucose &lt;50mg/dl</td>
<td>9</td>
</tr>
<tr>
<td>Diabetic Sample Menu</td>
<td>11</td>
</tr>
<tr>
<td>Treating Blood Sugar Problems</td>
<td>15</td>
</tr>
<tr>
<td>Nutritional Products Used To Control Blood Glucose</td>
<td>15</td>
</tr>
<tr>
<td>Test Your Understanding</td>
<td>20</td>
</tr>
<tr>
<td>Purpose of this Quiz</td>
<td>20</td>
</tr>
<tr>
<td>Additional Information and Links</td>
<td>22</td>
</tr>
<tr>
<td>Diseases of the Digestive System</td>
<td>22</td>
</tr>
<tr>
<td>Images of Advanced Diabetes</td>
<td>23</td>
</tr>
<tr>
<td>Other Types of Diabetes</td>
<td>23</td>
</tr>
<tr>
<td>Links to Articles Regarding Blood Sugar</td>
<td>26</td>
</tr>
</tbody>
</table>
What is Blood Sugar and Why is it Important?

What is Blood Sugar?
A blood glucose test measures the amount of a type of sugar, called glucose, in your blood. Glucose comes from carbohydrates in foods. It is the main source of energy used by the body. Insulin is a hormone that helps your body's cells use the glucose. Insulin is produced in the pancreas and released into the blood when the amount of glucose in the blood rises.

Normally, your blood glucose levels increase slightly after you eat. This increase causes your pancreas to release insulin so that your blood glucose levels do not get too high. **Blood glucose levels that remain high over time can damage your eyes, kidneys, nerves, and blood vessels.**

Several different types of blood glucose tests are used.

- **Fasting blood sugar (FBS)** measures blood glucose after you have not eaten for at least 8 hours. It is often the first test done to check for prediabetes and diabetes.
- **2-hour postprandial blood sugar** measures blood glucose exactly 2 hours after you start eating a meal.
- **Random blood sugar (RBS)** measures blood glucose regardless of when you last ate. Several random measurements may be taken throughout the day. Random testing is useful because glucose levels in healthy people do not vary widely throughout the day. Blood glucose levels that vary widely may mean a problem. This test is also called a casual blood glucose test.
- **Oral glucose tolerance test** is used to diagnose prediabetes and diabetes. An oral glucose tolerance test is a series of blood glucose measurements taken after you drink a sweet liquid that contains glucose. This test is commonly used to diagnose diabetes that occurs during pregnancy (gestational diabetes).

What is Prediabetes?
**Prediabetes** is a term used when a person's blood sugar (glucose) level is above normal but below a level that indicates diabetes. Prediabetes has no symptoms. It can be diagnosed with a blood glucose test as well as a Hemoglobin A1c test (discussed below).

Prediabetes is becoming more common in the United States. The U.S. Department of Health and Human Services estimates that at least 57 million U.S. adults ages 20 or older had prediabetes in 2007. Those with prediabetes are likely to develop type 2 diabetes within 10 years, unless they take steps to prevent or delay diabetes.

The good news is that people with prediabetes can do a lot to prevent or delay diabetes. Studies have clearly shown that people can lower their risk of developing diabetes by losing 5 to 7 percent of their body weight through diet and increased physical activity. A major study of more than 3,000 people with IGT found that diet and exercise resulting in a 5 to 7 percent weight loss—about 10 to 14 pounds in a person who weighs 200 pounds—lowered the incidence of type 2 diabetes.

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1 carbohydrates - carbohydrates are essential nutrients and are excellent source of energy (measured as calories) for the body and is the preferred fuel for the brain and nervous system. All forms of carbohydrate increase a person's blood sugar level, depending on the amount of carbohydrate in the food. Carbohydrate comes in two forms: starch and sugar. Starch (complex carbohydrate) is found in foods such as breads, cereals, grains, pasta, rice, flour, legumes, and vegetables. Sugar (simple carbohydrate) is found in foods such as fruits, juices, milk, honey, desserts, and candy.

2 insulin - Insulin is a hormone produced in the pancreas that allows sugar (glucose) to enter body cells, where it is used for energy. It also helps the body store extra sugar in muscle, fat, and liver cells where it can be released and used for energy when needed. Diabetes develops if the body does not produce enough insulin or does not use insulin properly.

3 hormone - a hormone, such as insulin or estrogen, is a substance released by an organ or tissue that controls the activity of organs or cells in another part of the body. The organs or glands that release hormones are part of the endocrine system.

4 pancreas - the pancreas is an organ in the upper abdomen, behind the stomach and close to the spine, that produces substances (digestive enzymes) needed to break down and use food. The pancreas also produces insulin, the hormone that regulates sugar (glucose) in the blood.
by nearly 60 percent. Study participants lost weight by cutting fat and calories in their diet and by exercising—most chose walking—at least 30 minutes a day, 5 days a week.

- Prediabetes may be called impaired glucose tolerance or impaired fasting glucose, depending on the test used to diagnose it.
- People who are overweight or physically inactive are at risk for prediabetes. Other things that increase risk include:
  - Family history of diabetes.
  - High cholesterol.
  - African-American, Asian-American, Hispanic, Native American, or Pacific Islander ethnicity.
  - History of gestational diabetes. This is a type of diabetes that develops during pregnancy. Delivering a baby that weighed more than 9 pounds is also a risk.
  - Polycystic Ovary Syndrome (PCOS), a hormone imbalance that interferes with normal ovulation.
  - Metabolic syndrome, a cluster of conditions related to the body’s metabolism. These conditions include excess body fat (particularly abdominal obesity); elevated triglycerides, blood pressure, and blood sugar; and low HDL cholesterol (the “good” cholesterol).
  - Some people with prediabetes go on to develop type 2 diabetes later in life. And recent studies show that prediabetes increases the risk of heart disease. People with prediabetes may be able to prevent type 2 diabetes by losing weight, eating a healthy diet, and exercising regularly.

**What is Diabetes?**

Almost everyone knows someone who has diabetes. An estimated 23.6 million people in the United States—7.8 percent of the population—have diabetes, a serious, lifelong condition. Of those, 17.9 million have been diagnosed, and 5.7 million have not yet been diagnosed. In 2007, about 1.6 million people ages 20 or older were diagnosed with diabetes.

**Type 1 Diabetes**

Type 1 diabetes, previously called juvenile diabetes, is usually first diagnosed in children, teenagers, or young adults. People with type 1 diabetes make no insulin and must take insulin every day. (Insulin helps the body use glucose from food for energy).

**Type 2 Diabetes**

The most common form of diabetes is type 2 diabetes. About 90 to 95 percent of people with diabetes have type 2. This form of diabetes is most often associated with older age, obesity, family history of diabetes, previous history of gestational diabetes, physical inactivity, and certain ethnicities. About 80 percent of people with type 2 diabetes are overweight or obese.

Type 2 diabetes is increasingly being diagnosed in children and adolescents, especially among African American, Mexican American, and Pacific Islander youth.

When type 2 diabetes is diagnosed, the pancreas is usually producing enough insulin, but for unknown reasons the body cannot use the insulin effectively, a condition called insulin resistance. After several years, insulin production decreases. The result is the same as for type 1 diabetes—glucose builds up in the blood and the body cannot make efficient use of its main source of fuel.

The symptoms of type 2 diabetes develop gradually. Symptoms may include fatigue, frequent urination, increased thirst and hunger, weight loss, blurred vision, and slow healing of wounds or sores. Some people have no symptoms.
What is Hemoglobin A1c?

Hemoglobin A1c is also known as Hemoglobin A1c, Fast Hemoglobins, GHB, HBal, Hemoglobin Ala, Alb, Alc, and Glycosylated Hemoglobin.

Glycated hemoglobins extend through the life of the red blood cell (90-120 days), and give an accurate picture of what your blood sugar is over an extended period of time. Glycated hemoglobin values are used to assess long-term glucose control in diabetics, especially patients with insulin dependant diabetes whose urinary and fasting blood glucose levels vary significantly. In addition, measuring the HgbA1c is a convenient way for your doctor to get more information about your glucose control even if you have a pre-diabetic condition. Your progress can be accurately tracked with this lab test.

What a Borderline High Hemoglobin A1c Indicates

If your hemoglobin A1c is even borderline high, it’s important that you address blood sugar issues before they escalate even higher. Extremely high hemoglobin A1c levels mean you have full-blown diabetes.
Questions and Answers About Prediabetes and Diabetes

**Q:** If I’ve been diagnosed as prediabetic will I become a full-blown diabetic?

**A:** This is largely up to you and what steps you take with your diet and lifestyle. The information in this manual is optimized to prevent you from developing full-blown diabetes. We have successfully treated many people with prediabetes and they have arrested their condition fully. In almost every case, each person took effective steps concerning their diet and exercise regimens to get these results.

**Q:** What can I do to control or prevent diabetes?

**A:** Managing diabetes requires effort every day to eat healthy foods, be physically active, take diabetes medicine as prescribed, and test blood glucose levels. You can take steps to prevent or slow down other health problems diabetes can cause over the years by keeping your blood glucose, blood pressure, and cholesterol under control. If you have diabetes, work with your health care provider to create a plan for managing your health. You can do a lot to lower your chances of getting diabetes. Some tips are:

- Be physically active on a regular basis
- Eat less fat and fewer calories
- Lose weight if you need to

**Q:** What are the long term effects of diabetes if it isn’t treated?

**A:** The long term effects of diabetes are severe and can cause severe disability:

- Heart disease and stroke
- Eye problems that can lead to trouble seeing or going blind
- Nerve damage that can cause your hands and feet to feel numb. Some people may even lose a foot or a leg
- Kidney problems that can cause your kidneys to stop working; this is called kidney failure; people who develop kidney failure can develop additional complications such as high blood pressure. Diabetes and high blood pressure are the most common causes of kidney disease.

**Q:** If I’m a diabetic will I need to take medication for the remainder of my life?

**A:** That depends on several factors: 1) How long you’ve been a diabetic, 2) What you’ve done in terms of your lifestyle to control the condition, 3) If you have other medical conditions such as hypothyroidism and digestive problems. One thing is for certain: you should NEVER take yourself off diabetic medications without the consent of your doctor.

**Q:** I’ve been on medication for diabetes and my blood sugar is still out of control. What’s going on?

**A:** First, you need to take a good hard look at your diet. Just because you take medication for diabetes is not a reason you can ignore your diet. Diabetic medications don’t address the underlying causes of diabetes and without making lifestyle changes, you will develop serious problems.

If you’re following the dietary recommendations in this manual and you are exercising regularly, there can be other factors that have been missed. These include:
• the wrong medication
• side effects of other medications, and
• other medical conditions that have not been diagnosed properly.

**Q:** Why hasn't my doctor taken the time to explain my condition in detail?

**A:** There are a couple reasons:

• First, your doctor may have no interest in explaining diet and nutrition. Most medical doctors have NO training in nutrition. They use drugs in an almost exclusive manner for their treatment.

• Secondly, the majority of medical doctors don't interpret lab tests by correlating all of the individual values. If a lab value is medically “normal” they dismiss you as being “OK” or state, “we'll have to watch this and see if it gets worse. I don't know about you, but if I had a fire burning ever so slightly, I'd want to find out why and fix it before it became a full blazing fire.

**Q:** The American Diabetes Association (ADA) recommends that carbohydrates should be from 45 to 65 percent of our diet. How can this be true?

**A:** They don't have the facts straight and their reasoning for such a statement is illogical:

• First, we know that pre-diabetes as well as diabetes have problems metabolizing carbohydrates. Therefore it stands to reason that their diet would be different from the average person. That's simple reasoning and needs no science.

• As an example let's say your car can't burn gasoline correctly because it's messed up. Would you put more gasoline through the pipe to correct the problem? No, of course not and your engine would flood. It would just add to the problem!

• Dr. Richard K. Bernstein, perhaps the country's most famous endocrinologist, as well as the late Dr. Robert Atkins have stated that “You can quite easily survive on a diet in which you would eat no carbohydrate.” And, people who have done just that have better health overall.

**Q:** What is the glycemic index and how can it help me in managing my blood sugar?

**A:** The glycemic index, glycaemic index, or GI is a measure of the effects of carbohydrates in food on blood sugar levels. It estimates how much each gram of available carbohydrate (total carbohydrate minus fiber) in a food raises a person's blood glucose level following consumption of the food, relative to consumption of glucose. Glucose has a glycemic index of 100, by definition, and other foods have a lower glycemic index.

Glycemic index is defined for each type of food, independent of the amount of food consumed. Glycemic load accounts for the amount of food consumed and is calculated in terms of glycemic index. Foods with carbohydrates that break down quickly during digestion and release glucose rapidly into the bloodstream tend to have a high GI; foods with carbohydrates that break down more slowly, releasing glucose more gradually into the bloodstream, tend to have a low GI.

To get detailed information on the glycemic index, purchase our popular ebook “The Glycemic Index - A Comprehensive List of 1879 Foods Plus Recipes”, Click here:

Your Dietary Recommendations—Pre-Diabetes and Diabetes

**The Rules**

1) Initially, you will be on a protein/veggie diet. **Avoid all breads, crackers, pasta, rice, and/or other grains even if they are whole grain**, until the doctor’s approval.

2) **When possible, use organic produce and meats.** Most of the time, we can control our exposure to the pesticides on produce and the hormones in meats. It is better for your health if you can eliminate your exposure to these chemicals.

3) For you, some foods (even foods listed as desirable) may cause your glucose to rise that possibly would not affect someone else. This is why you need to **check your glucose regularly** and make note of the foods you have eaten if your glucose is registering too high. You should go to a drug store and get a glucometer. This is an at-home blood sugar monitoring device that measures your blood sugar. The glucometer tells you whether your blood sugar is too low, too high or in a good range for you. Keeping a record of your results gives your doctor an accurate picture of how your treatment is working. It’s small and easy to take with you. You can test virtually anywhere, anytime.

4) **Eat smaller portions up to six times per day** to control your blood sugar. To begin, you can try using a smaller, saucer-sized plate to learn how to reduce your portion sizes.

5) **Eat your meals at the same times each day** to make your blood sugar recording more accurate and easier to trend. Eating small, well-balanced meals throughout the day is the best plan for preventing elevated blood sugars.

**Most Desirable Protein Sources**

Regardless of what category you are in below, **all patients should consume the following foods containing protein:**

<table>
<thead>
<tr>
<th>MOST DESIRABLE PROTEIN SOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almond Butter</td>
</tr>
<tr>
<td>Beef</td>
</tr>
<tr>
<td>Cashew Butter</td>
</tr>
<tr>
<td>Salmon (fresh)</td>
</tr>
<tr>
<td>Chicken</td>
</tr>
<tr>
<td>Eggs</td>
</tr>
<tr>
<td>Nuts (all)</td>
</tr>
<tr>
<td>Mackerel (fresh)</td>
</tr>
<tr>
<td>Peanut Butter (without sugar)</td>
</tr>
<tr>
<td>Turkey</td>
</tr>
<tr>
<td>Seeds (all)</td>
</tr>
<tr>
<td>Tuna (fresh)</td>
</tr>
</tbody>
</table>

The remainder of your dietary recommendations are based on your Hemoglobin A1c lab test results. Your on-line doctor will tell you if you should follow the Category 1, 2 or 3 food lists. As your laboratory values improve, you will be allowed to eat foods that stress your body’s ability to handle higher glucose containing foods.

**My Food List**

From your doctor: I should follow

- Category 1 Food List
- Category 2 Food List
- Category 3 Food List
CATEGORY 1 DIET - HGB A1C > 8 OR URINARY GLUCOSE > 500MG/DL

Vegetables: Fresh or Frozen

- Note: All vegetables should be eaten raw or lightly blanched or steamed (cook until color is vibrant). If you have digestive problems, it is advised that you always blanch or steam your vegetables before eating.

<table>
<thead>
<tr>
<th>CATEGORY 1 VEGETABLES (WITH LOWEST CARBOHYDRATE CONTENT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asparagus [1]</td>
</tr>
<tr>
<td>Avocado</td>
</tr>
<tr>
<td>Bean sprouts</td>
</tr>
<tr>
<td>Beans, string</td>
</tr>
<tr>
<td>Beet greens</td>
</tr>
<tr>
<td>Broccoli</td>
</tr>
<tr>
<td>Brussel Sprouts</td>
</tr>
<tr>
<td>Cabbage [1]</td>
</tr>
<tr>
<td>Kohlrabi</td>
</tr>
<tr>
<td>Radishes</td>
</tr>
</tbody>
</table>

[1] Have these only once or twice per week if you have been directed to do so as a result of a low thyroid.

Fruits: Fresh or Frozen

CATEGORY 1 FRUIT (WITH LOWEST CARBOHYDRATE CONTENT)

Choose one per day. One cup equals one serving

<table>
<thead>
<tr>
<th>CATEGORY 1 FRUIT (WITH LOWEST CARBOHYDRATE CONTENT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cataloupe</td>
</tr>
</tbody>
</table>
**CATEGORY 2 DIET - HGB A1C = 6-8 OR URINARY GLUCOSE 100-250MG/DL**

**Vegetables: Fresh or Frozen**

These vegetable are from the Category 1 list with a few additions:

- Note: All vegetables should be eaten raw or lightly blanched or steamed (cook until color is vibrant). If you have digestive problems, it is advised that you always blanch or steam your vegetables before eating.

<table>
<thead>
<tr>
<th>CATEGORY 1 VEGETABLES (WITH LOWEST CARBOHYDRATE CONTENT)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Asparagus [2]</td>
<td>Celery</td>
</tr>
<tr>
<td>Avocado</td>
<td>Chard, swiss</td>
</tr>
<tr>
<td>Bean sprouts</td>
<td>Collards</td>
</tr>
<tr>
<td>Beans, string</td>
<td>Cucumber</td>
</tr>
<tr>
<td>Beet greens</td>
<td>Dandelion Greens</td>
</tr>
<tr>
<td>Broccoli</td>
<td>Eggplant</td>
</tr>
<tr>
<td>Brussel Sprouts</td>
<td>Endive</td>
</tr>
<tr>
<td>Kohlrabi</td>
<td>Pumpkin</td>
</tr>
<tr>
<td>Radishes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATEGORY 2 VEGETABLES (HIGHER CARBOHYDRATE CONTENT) EAT TWICE WEEKLY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Artichokes</td>
<td>Beans, dried</td>
</tr>
<tr>
<td>Corn</td>
<td>Beans, kidney</td>
</tr>
<tr>
<td>Potato, sweet</td>
<td>Beans, Lima</td>
</tr>
</tbody>
</table>

[2] Have these only once or twice per week if you have been directed to do so as a result of a low thyroid.

**Fruits: Fresh or Frozen**

You may choose from the category 1 list, in addition to the Category 2 fruits. As your glucose becomes more regulated, more choices may be made from this list when the doctor has given permission based upon test results.

<table>
<thead>
<tr>
<th>CATEGORY 1 FRUIT (WITH LOWEST CARBOHYDRATE CONTENT)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cataloupe</td>
<td>Rhubarb</td>
</tr>
<tr>
<td>Strawberry</td>
<td>Watercress</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATEGORY 2 FRUITS (HIGHER CARBOHYDRATE CONTENT)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>Apricots</td>
</tr>
<tr>
<td>Cranberries</td>
<td>Currants</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>Guava</td>
</tr>
<tr>
<td>Limes</td>
<td>Oranges</td>
</tr>
<tr>
<td>Betty Lou Smackers</td>
<td>Gooseberries</td>
</tr>
<tr>
<td>Blackberries</td>
<td>Grapes</td>
</tr>
<tr>
<td>Gooseberries</td>
<td>Melons</td>
</tr>
<tr>
<td>Blackberries</td>
<td>Papayas</td>
</tr>
<tr>
<td>Grapes</td>
<td>Peaches</td>
</tr>
</tbody>
</table>
Vegetables: Fresh or Frozen

You may choose from the Category 1 and 2 lists.

- Note: All vegetables should be eaten raw or lightly blanched or steamed (cook until color is vibrant). If you have digestive problems, it is advised that you always blanch or steam your vegetables before eating.

<table>
<thead>
<tr>
<th>CATEGORY 1 VEGETABLES (WITH LOWEST CARBOHYDRATE CONTENT)</th>
<th>CATEGORY 2 VEGETABLES (HIGHER CARBOHYDRATE CONTENT) EAT TWICE WEEKLY</th>
</tr>
</thead>
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<tr>
<td>Avocado</td>
<td>Chard, swiss</td>
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<tr>
<td>Bean sprouts</td>
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<tr>
<td>Beans, string</td>
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<tr>
<td>Beet greens</td>
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<td>Pumpkin</td>
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<tr>
<td>Radishes</td>
<td></td>
</tr>
</tbody>
</table>

[3] Have these only once or twice per week if you have been directed to do so as a result of a low thyroid.

Fruits: Fresh or Frozen

* You may choose from the Category 1 and 2 lists:

<table>
<thead>
<tr>
<th>CATEGORY 1 FRUIT (WITH LOWEST CARBOHYDRATE CONTENT)</th>
<th>CATEGORY 2 FRUITS (HIGHER CARBOHYDRATE CONTENT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cataloupe</td>
<td>Rhubarb</td>
</tr>
<tr>
<td>Apple</td>
<td>Apricots</td>
</tr>
<tr>
<td>Cranberries</td>
<td>Currants</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>Guava</td>
</tr>
<tr>
<td>Limes</td>
<td>Oranges</td>
</tr>
<tr>
<td>Plums</td>
<td>Raspberries</td>
</tr>
</tbody>
</table>
Category 3 Fruits: (with highest carbohydrate content)

*Use these only when your glucose had normalized and the doctor has given permission to choose from this list based upon test results:

<table>
<thead>
<tr>
<th>CATEGORY 3 FRUITS (WITH HIGHEST CARBOHYDRATE CONTENT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bannanas</td>
</tr>
<tr>
<td>Kumquats</td>
</tr>
<tr>
<td>Pears</td>
</tr>
</tbody>
</table>
DIABETIC SAMPLE MENU

We purposefully did not put serving sizes on this list. Don’t worry about fat grams or calories. Just eat the right KINDS of foods. Eat until you are content but not “over-stuffed”.

Fruits listed for Category 1 Diabetics are very seasonal. In the winter months, you may have to stick with frozen cantaloupe and strawberries. Try to do organic!

During Snack time…you do not have to eat a lot, just a few bites to keep your glucose levels optimal and take stress off of your body. Remember to keep yourself to one serving of fruit per day. Refer to the section “Your Dietary Recommendations—Pre-Diabetes and Diabetes” for help regarding the type of fruits and vegetables to choose. This will change as your body gets healthier and can keep your glucose levels regulated. At that time, you will be instructed to move to a different category which will allow you to incorporate a better variety of fruits and vegetables.
**SAMPLE DIET FOR PRE-DIABETES AND DIABETES**

**DAY 1**

**Breakfast**
- Omelet with mushrooms, green peppers, onions, & tomatoes; Vitamins, Clean Water

**10:00 am Snack**
- Nut Butter and celery sticks

**Lunch**
- Boiled eggs; Turkey Bacon; side salad
- Cup of cantaloupe; Vitamins; Clean Water.

**2:00 pm Snack**
- Hand full of raw carrots

**4:00 pm Snack**
- Hand full of raw nuts and seeds

**Dinner**
- Broiled Salmon (see recipe);
- Sautéed Asparagus w/ steamed carrots
- Lettuce Salad (Choice of lettuce, bean sprouts, pine nuts, tomato w/ Annie’s Goddess Dressing)
- Vitamins; Clean Water

**8:00 pm Snack**
- Hummus and carrot sticks

**DAY 2**

**Breakfast**
- Eggs; Chicken Sausage (see ‘Brands We Use’)
- Vitamins; Clean Water

**10:00 am Snack**
- Hand full of broccoli w/ dressing

**Lunch**
- Baked or grilled Chicken; Imagine Foods Tomato Soup; Hand full of raw veggies;
- Cup of Strawberries; Vitamins; Clean Water

**2:00 pm Snack**
- Hand Full of Seeds and Nuts

**DAY 3**

**Breakfast**
- Omelet w/ broccoli, tomatoes, green pepper & onions Vitamins; Clean Water

**10:00 am Snack**
- Instant Cup of Soup (see Brands We Use)

**Lunch**
- Big salad from grocery store salad bar (make sure you get enough protein by adding seeds and nuts, eggs or some other form of protein).
- Top with Annie’s Natural’s Goddess Dressing;
- Hummus and carrot sticks;
- Vitamins; Clean Water

**2:00 pm Snack**
- Hand full of seeds and nuts

**4:00 pm Snack**
- Hand Full of Seeds and Nuts

**Dinner**
- Turkey Burgers (see recipe) w/ sliced tomato
- Raw carrots, broccoli, and celery w/ dressing dip of your choice; Cantaloupe & Strawberry fruit cup
- Clean Water; Vitamins

**8:00 pm Snack**
- Hummus and Veggie Sticks
SAMPLE DIET FOR PRE-DIABETES AND DIABETES

DAY 4

Breakfast

• Same as Day 2; Vitamins; Clean Water

10:00 am Snack

• Hand full of seeds and nuts

Lunch

• Leftover soup from Day 2;
• Hummus and lightly steamed broccoli;
• Vitamins; Clean Water

2:00 pm Snack

• Avocado and strawberries (combine 1 avocado, 1 cup of strawberries and stevia in a food processor or mini chopper and make a “pudding”. I use about 1 teaspoon of stevia. You may want to add a little more but be careful as stevia has a strong taste if you add too much.)

4:00 pm Snack

Celery Sticks and Nut Butter

Dinner

• Grilled Tuna (grill approx. five minutes on each side or until fish starts to flake);
• Asparagus sautéed Bragg’s Liquid Aminos (Spray with Bragg’s Liquid Aminos and sauté for approx. 10–15mins).
• Raw Carrots; Clean Water; Vitamins

8:00 pm Snack

• A few spoonfuls of nut butter

DAY 5

Breakfast

• Turkey Egg Casserole; Vitamins; Clean Water
• 10:00 am Snack
• Hummus and crackers

Lunch

• Chicken Salad (see recipe) made with leftover chicken from a previous meal; raw veggies and hummus;
• Cantaloupe; Vitamins; Clean Water

DAY 6

Breakfast

• Same as Day 3
• Vitamins; Clean Water

10:00 am Snack

• Hand full of seeds and nuts

Lunch

• Veggie burger patty or grilled portabella mushroom (try topping with the hummus and sliced tomato);
• Hand full of nuts and seeds; “Imagine Foods” Tomato Soup; Raw veggies and dip; Vitamins; Clean Water

2:00 pm Snack

• Celery and peanut butter

4:00 pm Snack

• Hand full of baby carrots and dressing

Dinner

• Chicken Broccoli Stir-Fry
• Small side salad (greens; bean sprouts; broccoli; pistachios); Watermelon; Clean Water; Vitamins

8:00 pm Snack

• Leftover stir-fry
SAMPLE DIET FOR PRE-DIABETES AND DIABETES

DAY 7

Breakfast

• Scrambled Eggs; Chicken Sausage;
• Serving of cantaloupe and strawberries; Vitamins;
  Clean Water

10:00 am Snack

• Betty Lou Smacker

Lunch

• Garbage Soup
  • Take all of your leftover vegetables and meat
    (make sure you add some protein) and add 2
    cartons of chicken broth, 3 – 4 cups of tomato
    base (this can be a jar spaghetti sauce or stewed
    tomatoes or tomatoes put in a blender and pureed
    (my choice), 1–2 tbs. Spike all purpose seasoning,
    1tbs. cumin, ½ tsp. thyme, 1 bay leaf, ½ tsp. garlic
    powder, 3 tbs. onion flakes. Throw it in the crock
    pot. Cook on low all day or on high for 3 – 4
    hours or put it in a stew pot and cook for at least
    30 minutes.
  • Watermelon
  • Hummus and veggie sticks
  • Vitamins; Clean Water

2:00 pm Snack

• Leftover soup

4:00 pm Snack

• Hummus and veggie sticks

Dinner

• Grilled Chicken and/or Steak
  • Large Salad (boiled egg, seeds and nuts, broccoli, red
    pepper, avocado, tomatoes, mushrooms)
  • Fruit; Vitamins; Clean Water

8:00 pm Snack

• Few bites of leftover meat
TREATING BLOOD SUGAR PROBLEMS

It can’t be stressed enough that you change your diet to blood sugar problems. Your doctor can provide supplements that will help with blood sugar regulation, but your commitment in changing your diet is a better long-term solution.

NUTRITIONAL PRODUCTS USED TO CONTROL BLOOD GLUCOSE

BIOTICS RESEARCH PRODUCTS

• ADHS
ADHS is an adrenal gland support supplement consisting of a complex formula of herbal adaptogens (adaptogens are herbs that relieve stress), vitamins and minerals to help the body deal with the stresses we encounter in every day life; things such as pollutants, job stress, lack of sleep, travel, and other outside forces that the body must deal with and overcome.

Indications: fatigue, insomnia, anxiety, depression, weakness, water retention, low blood pressure, allergies and hypersensitivities, hyperinsulinemia.

Should be taken with breakfast and lunch. Do not take this product after 12:00 pm, as it may interfere with sleep patterns.

• Amino Acid Quick Sorb
Amino Acid Quick Sorb is a liquid containing nine free form L-amino acids that provide a stabilizing effect on blood glucose levels. It is used in situations where there is a need to rapidly increase blood glucose levels, such as endurance sports and reactive hypoglycemia.

Many of our patients who need the product keep it in their car for use when they are driving long distances. When they become fatigued or start to suffer with other symptoms of hypoglycemia, ten or fifteen drops under their tongue will usually relieve the symptoms until they are able to stop and eat. We also have several world class athletes, such as tennis players, who take this product between games or during events to keep their blood sugar and energy levels up.

Thus, Amino Acid Quick Sorb helps increase your level of concentration and can revive you fairly rapidly. I believe it is a product that any patient with reactive hypoglycemia should keep with them at all times.

• Amino Sport
Amino Sport is a formulation designed to create an anabolic state. It is useful for bodybuilding and rehabilitation; I know several body builders who use it and they think it’s a wonderful product. Also, a great many doctors involved with rehabilitation use it with a great success.

Amino Sport can also be used as a broad-spectrum amino acid formula used to provide general amino acid support. Amino Sport should be taken before meals.

This product should not be used while on tri-cyclic drugs, or monoamine oxidase inhibitors (MAOI’s) such as Marplan, Nardal, or Parnate, or SSRI’s such as Prozac, Paxil, Zoloft, or Effexor.

• Bio-3B-G
Bio-3B-G is a specially formulated multiple B vitamin with a balance that is high in thiamine/B1, particularly helpful with anxiety, congestive heart failure, and low blood pressure.
Especially when blood sugar problems are present, consider Bio-Glycozyme Forte. It has a larger amount of natural B1 and contains Manganese, which is needed for the utilization of Thiamin/B1 and works well with the B complex to promote a feeling of well-being.

NutriPax, along with a personalized and specific nutritional program, has been shown to be of tremendous value in overcoming depression, anxiety and insomnia.

Coffee, alcohol, tobacco, sugar, raw oysters, estrogen replacement therapy, and birth control pills interfere with B vitamins and may cause a greater need for them.

**Bio-Glycozyme Forte**

Bio-Glycozyme Forte is the best broad-spectrum glycemic product available in the marketplace. There’s nothing that even comes close to it.

Bio-Glycozyme Forte is used in reactive hypoglycemia; for B complex insufficiency in situations where we need the accessory nutrients to go along with the B vitamins; for patients who can fall asleep but can’t stay asleep; and again for reactive hypoglycemia. Also, for patients who fall asleep or want to crash up to two hours after they’ve eaten, (but not immediately after they have eaten), Bio-Glycozyme Forte will usually work because this is a strong sign of reactive hypoglycemia. Patients who want to fall asleep immediately after eating have carbohydrate sensitivity.

This product works in reactive hypoglycemia, adrenal fatigue, general fatigue, stress, highly refined diets and carbohydrate sensitivity.

If your blood pressure is very low also, you may need to add a small amount of Cytozyme-AD (neonatal adrenal tissue). This nutrient is also in Bio-Glycozyme Forte, but in some cases, the amount may not be sufficient.

Together with a reasonable diet, Bio-Glycozyme Forte will generally bring the reactive hypoglycemic person around very quickly and you will see significant changes in very short order.

**IMPORTANT NOTE ON TAKING THIS PRODUCT:** Take 2-3 tablets, 3 times a day at 10:00 a.m., 3:00 p.m. and 2 hours after supper when the blood sugar is dropping and at the point you may be entering into a crash-and-burn syndrome. If you are able to fall asleep but can not stay asleep, add 3 tablets just before bedtime. Coffee, alcohol, tobacco, sugar, raw oysters, estrogen replacement therapy, and birth control pills interfere with B vitamins and may cause a greater need for them.

**BioMega-3**

Amino Each capsule of Biomega-3 contains 1000 mg of natural marine lipid concentrate providing a natural source of EPA and DHA. Biomega-3 should be considered with any systemic inflammatory problem such as rheumatoid arthritis, etc. and in any case where blood viscosity is increased (increased fibrinogen).

With all of the controversy over toxins in fish oil you should know that Biomega-3 is assayed for pesticides (aldrin, dieldrin, chlordane, DDT, BHC, hexachlorobenzene, etc.), PCBs, and heavy metals. The level of toxins must be below the detection limit of the equipment used for assaying or Biotics Research simply will not use the oil.

**Cytozyme-PAN**

Cytozyme-PAN supplies organ specific support as Neonatal Pancreas Concentrate (bovine), combined with SOD and catalase, important antioxidant enzymes. This neonatal glandular is useful in the treatment of pancreas-related dysfunction, in enzyme production, and in sugar regulation. Pancreatic exhaustion ultimately leads to diabetes. A decrease in pancreatic hormones has been successfully modulated and reversed with proper diet, supplements, and glandular support. This product is pivotal for recovering pancreatic function.

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1 Reactive hypoglycemia - low blood sugar that occurs after a meal — usually one to three hours after eating.
Treating Blood Sugar Problems

- **Cytozyme-H (Heart Tissue)**
  Cytozyme-H is a source of neonatal bovine heart and is used with cardiac stress, fatigue, lack of muscle tone or integrity, to increase muscle demand for glucose and some cases of fibromyalgia. In some cases of fibromyalgia up to 20 tablets a day may be required to resolve tissue inflammation and tenderness and the use of magnesium, thiamine, lithium, CoQ-10, and up to 20 Cytozyme-H per day if necessary, as this helps striated muscle.

  With high blood pressure we also consider using Bio-GGG-B, and with low blood pressure, Bio-3B-G and Cytozyme-AD. With cardiovascular dysfunction, we also consider adding Bio-Cardiozyme.

- **GlucoBalance**
  GlucoBalance is an excellent formula for insulin dependent diabetics, non-insulin dependent diabetics, patients with increased triglycerides, increased LDL cholesterol and decreased HDL cholesterol, and always with hyperinsulinism (Syndrome-X/Metabolic Syndrome).

  Like any other formula designed to support a glycemic problem, GlucoBalance, will work best if combined with the correct diet, exercise and other required nutrients.

  Dr. David Brownstein has stated “I haven’t found any one supplement that will increase HDL cholesterol faster than GlucoBalance. It has been a silver bullet for this application.” Of course the other means for increasing HDL cholesterol are by increasing exercise and losing weight; one generally goes with the other.

  Beyond weight loss, dietary controls to reduce carbohydrate and exercise, I have not found a better way to increase HDL cholesterol than GlucoBalance even in cases where the decreased HDL is a genetic problem. David Brownstein, M.D. conducted a clinical study using GlucoBalance for increased triglycerides and the average reduction of triglyceride levels for study participants was 26.4 percent! One of the patients went from 600 to less than 300 in just 30 days.

  Consequently, there was a corresponding improvement in the total cholesterol to HDL ratio, from 5:1 initially before supplementation, to 4:1 post supplementation at the end of the trial. In fact, the trend for the entire study group was lower cholesterol, lower LDL, lower triglycerides and higher HDL. **Note: If you are taking insulin, insure that you take your blood sugar levels frequently as Glucobalance will often have a dramatic effect on insulin needs. Your insulin dose may have to be modified accordingly.**

- **Inositol**
  Each tablet contains 650 mg of inositol derived from rice. Use with elevated or reduced blood sugar, elevated blood fats, diabetes, skin lesions, slow growth, hair loss that is not genetically pre-determined, pesticide poisoning, lymph edema and in some cases of constipation. Inositol is helpful with gallbladder problems in lower doses as part of a protocol. In high doses inositol can disrupt biliary function. If light colored stools develop, discontinue immediately and take Beta Plus.

**Professional Complimentary Health Formulas Products**

- **GlucoEase - PCHF**
  GlucoEase contains herbs that assist in stabilizing blood sugar levels. Each capsule contains: gymnema (gymnema sylvestre) 350 mg, goat’s rue (galega officinalis) 200 mg, fenugreek (trigonella foenum-graecum) 150 mg, devil’s club (oplopanax horridus) 150 mg, chromium (polynicotinate) 50 mcg, vanadium (sulfate) 25 mcg.

  When Gymnema is taken before eating, gymnemic acid blocks the taste of sugar, thereby reducing the desire to eat it. The molecules of the gymnemic acid fill the receptor sites for one to two hours, thus preventing the taste buds from being activated by the sugar molecules in food. It also helps to stabilize blood sugar levels and enhances insulin production.
Goat’s rue contains Galegine (an anti-diabetic chemical). It is a wild legume and was used during the Middle Ages to treat plague. It is originally from Europe by way of Asia, but can now be found in most temperate regions around the world that have damp, sandy soil.

Fenugreek is a uterine stimulant and also lowers blood sugar. It is good for adult onset diabetes and insulin resistant forms of diabetes. It helps in menstrual regulation following childbirth.

Devil’s club is good for adult onset diabetes and insulin resistant forms of diabetes.

Chromium Polynicotinate consists of pure niacin-bound chromium, identified by United States Government researchers as the active component of true GTF (Glucose Tolerance Factor). Glucose Tolerance Factor is the factor responsible for binding insulin to cell membrane receptor sites. Chromium Polynicotinate is more effective than other types of chromium, because it binds to niacin also known as Vitamin B-3. This provides a biologically active form of chromium, and makes it easier for the body to absorb.

- Gymnema Complex - PCHF
  
  Gymnema Complex assists in lowering and stabilizing blood sugar. Each tsp contains: fenugreek (trigonella foenum-graecum) 1:1 45%, gymnema (gymnema sylvestre) 1:1 22%, goat’s rue (galega officinalis) 1:2 33%, deionized Water and usp grain alcohol (25% by volume)
  
  Fenugreek is a uterine stimulant and also lowers blood sugar. It is good for adult onset diabetes and insulin resistant forms of diabetes. It helps in menstrual regulation following childbirth.

  Gymnema Sylvestre has been used in India for over 2,000 years. It supports the metabolism of carbohydrates and sugars and reduces your taste for sweets.

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- Metab (Metabolism) - PCHF
  
  Metab provides Homeopathic support to help balance energy and the endocrine systems including amino acid, electrolyte, and intermediary metabolism

  Inside each cell, chemicals must be converted from one substance to another. In addition, these chemicals must be able to get into the cell before they can be converted. Once entering the cell, these chemicals can be converted into energy. Metab enhances oxygen uptake and allows this chemical conversion to take place

- Sugar Free - PCHF
  
  Sugar free is used to assist in the stabilization of blood sugar levels and to reduce diabetic-related sugar cravings. Each capsule contains: Bitter Melon 175 mg, Gymnema (gymnema sylvestre) 175 mg, Fenugreek 175 mg, B6 (pyridoxal-5'-phosphate) 5 mg, Magnesium citrate 50 mg, Chromium polynicotinate 150 mcg, Zinc (as monomethionine 5 mg, Vanadium 100 mcg.

  Bitter Melon’s main capacity consists in lowering sugar levels in blood. For this reason it can be applied in diabetes, serving a good alternative for chemical drugs. It is additionally being tested as a potential remedy for HIV-virus.

  Gymnema Sylvestre has been used in India for over 2,000 years. It supports the metabolism of carbohydrates and sugars and reduces your taste for sweets.

  Fenugreek is a uterine stimulant and also lowers blood sugar. It is good for adult onset diabetes and insulin resistant forms of diabetes. It helps in menstrual regulation following childbirth.
Chromium Polynicotinate consists of pure niacin-bound chromium, identified by United States Government researchers as the active component of true GTF (Glucose Tolerance Factor). Glucose Tolerance Factor is the factor responsible for binding insulin to cell membrane receptor sites. Chromium Polynicotinate is more effective than other types of chromium, because it binds to niacin also known as Vitamin B-3. This provides a biologically active form of chromium, and makes it easier for the body to absorb.
TEST YOUR UNDERSTANDING

Purpose of this Quiz

• they can causatively deal with their physical condition, and
• as a result they follow their treatment recommendations

After you’ve read this document, you should be able to answer the following questions. Your on-line doctor will be reviewing this questionnaire with you. If you are unable to answer the question, refer to the referenced section so you can answer the question. All of the answers to these questions can be found in this document. There are no “trick questions”.

1) What is blood sugar? See “What is Blood Sugar?” on page 1

2) What is insulin and what purpose does it serve? See “What is Blood Sugar?” on page 1

3) What is Prediabetes? See “What is Prediabetes?” on page 1

4) What is diabetes and why is it serious? See “What is Diabetes?” on page 2

5) What is Hemoglobin A1c and how is it helpful if you have elevated blood glucose? See “What is Hemoglobin A1c?” on page 3 and See “What A Borderline High Hemoglobin A1c Indicates” on page 3

6) What are the long term effects of diabetes if it isn’t treated? See “Q: What are the long term effects of diabetes if it isn’t treated?” on page 4

7) If a person has been on medication for diabetes and their blood sugar is still out of control, what are the possible causes? See “Q: I’ve been on medication for diabetes and my blood sugar is still out of control. What’s going on?” on page 4
8) What 5 rules should you follow as regards your diet? *See “The Rules” on page 6*

1) ___________________________________________________________

2) ___________________________________________________________

3) ___________________________________________________________

4) ___________________________________________________________

5) ___________________________________________________________

9) Identify which Food List you are to follow. Your on-line doctor will tell you which Category you are to follow. I am to follow the

- Category 1 Food List [*see page 7*]
- Category 2 Food List [*see page 8*]
- Category 3 Food List [*see page 9*]
If you don't have an on-line doctor you can receive your first call for FREE.
Go to the following link to take a free test and schedule your consultation.

http://www.becomehealthynow.com/freetests/

Diseases of the Digestive System
Images of Advanced Diabetes

Diabetes, in its advanced stages can create some rather awful effects:

Figure 1 — Ulcer from advanced diabetes
Figure 2 — Gangrene resulting from Diabetic Peripheral Neuropathy
Figure 3 — Diabetic neuropathy (the eye)

Other Types of Diabetes

A number of other types of diabetes exist. A person may exhibit characteristics of more than one type. For example, in latent autoimmune diabetes in adults (LADA), also called type 1.5 diabetes or double diabetes, people show signs of both type 1 and type 2 diabetes.

Other types of diabetes include those caused by

- genetic defects of the beta cell—the part of the pancreas that makes insulin—such as maturity-onset diabetes of the young (MODY) or neonatal diabetes mellitus (NDM)
- genetic defects in insulin action, resulting in the body’s inability to control blood glucose levels, as seen in leprechaunism and the Rabson-Mendenhall syndrome
- diseases of the pancreas or conditions that damage the pancreas, such as pancreatitis and cystic fibrosis
- excess amounts of certain hormones resulting from some medical conditions—such as cortisol in Cushing’s syndrome—that work against the action of insulin
- medications that reduce insulin action, such as glucocorticoids, or chemicals that destroy beta cells
- infections, such as congenital rubella and cytomegalovirus
- rare immune-mediated disorders, such as stiff-man syndrome, an autoimmune disease of the central nervous system
- genetic syndromes associated with diabetes, such as Down syndrome and Prader-Willi syndrome

Latent Autoimmune Diabetes in Adults (LADA)

People who have LADA show signs of both type 1 and type 2 diabetes. Diagnosis usually occurs after age 30. Researchers estimate that as many as 10 percent of people diagnosed with type 2 diabetes have LADA. Some experts believe that LADA is a slowly developing kind of type 1 diabetes because patients have antibodies against the insulin-producing beta
Most people with LADA still produce their own insulin when first diagnosed, like those with type 2 diabetes. In the early stages of the disease, people with LADA do not require insulin injections. Instead, they control their blood glucose levels with meal planning, physical activity, and oral diabetes medications. However, several years after diagnosis, people with LADA must take insulin to control blood glucose levels. As LADA progresses, the beta cells of the pancreas may no longer make insulin because the body’s immune system has attacked and destroyed them, as in type 1 diabetes.

**Diabetes Caused by Genetic Defects of the Beta Cell**

Genetic defects of the beta cell cause several forms of diabetes. For example, monogenic forms of diabetes result from mutations, or changes, in a single gene. In most cases of monogenic diabetes, the gene mutation is inherited. In the remaining cases, the gene mutation develops spontaneously. Most mutations in monogenic diabetes reduce the body’s ability to produce insulin. Genetic testing can diagnose most forms of monogenic diabetes.

NDM and MODY are the two main forms of monogenic diabetes. NDM is a form of diabetes that occurs in the first 6 months of life. Infants with NDM do not produce enough insulin, leading to an increase in blood glucose. NDM can be mistaken for the much more common type 1 diabetes, but type 1 diabetes usually occurs after the first 6 months of life. More information about the two types of NDM, permanent neonatal diabetes and transient neonatal diabetes mellitus, is provided in the fact sheet Monogenic Forms of Diabetes, available online from the NDIC at www.diabetes.niddk.nih.gov/dm/pubs/mody. For printed copies of the fact sheet, call the NDIC at 1–800–860–8747.

MODY usually first occurs during adolescence or early adulthood. However, MODY sometimes remains undiagnosed until later in life. A number of different gene mutations have been shown to cause MODY, all of which limit the pancreas’ ability to produce insulin. This process leads to the high blood glucose levels characteristic of diabetes. More information about specific types of MODY is provided in the fact sheet Monogenic Forms of Diabetes.

**Diabetes Caused by Genetic Defects in Insulin Action**

A number of types of diabetes result from genetic defects in insulin action. Changes to the insulin receptor may cause mild hyperglycemia—high blood glucose—or severe diabetes. Symptoms may include acanthosis nigricans, a skin condition characterized by darkened skin patches, and, in women, enlarged and cystic ovaries plus virilization and the development of masculine characteristics such as excess facial hair. Two syndromes in children, leprechaunism and the Rabson–Mendenhall syndrome, cause extreme insulin resistance.

**Diabetes Caused by Diseases of the Pancreas**

Injuries to the pancreas from trauma or disease can cause diabetes. This category includes pancreatitis, infection, and cancer of the pancreas. Cystic fibrosis and hemochromatosis can also damage the pancreas enough to cause diabetes.

**Diabetes Caused by Endocrinopathies**

Excess amounts of certain hormones that work against the action of insulin can cause diabetes. These hormones and their related conditions include growth hormone in acromegaly, cortisol in Cushing’s syndrome, glucagon in glucagonoma, and epinephrine in pheochromocytoma.

**Diabetes Caused by Medications or Chemicals**

A number of medications and chemicals can interfere with insulin secretion, leading to diabetes in people with insulin resistance. These medications and chemicals include pentamidine, nicotinic acid, glucocorticoids, thyroid hormone, phenytoin (Dilantin), and Vacor, a rat poison.

**Diabetes Caused by Infections**

Several infections are associated with the occurrence of diabetes, including congenital rubella, coxsackievirus B, cytomeg-
lovirus, adenovirus, and mumps.

**Rare Immune-Mediated Types of Diabetes**

Some immune-mediated disorders are associated with diabetes. About one-third of people with stiff-man syndrome develop diabetes. In other autoimmune diseases, such as systemic lupus erythematosus, patients may have anti-insulin receptor antibodies that cause diabetes by interfering with the binding of insulin to body tissues.

**Other Genetic Syndromes Sometimes Associated with Diabetes**

Many genetic syndromes are associated with diabetes. These conditions include Down syndrome, Klinefelter's syndrome, Huntington's chorea, porphyria, Prader-Willi syndrome, and diabetes insipidus.
**Additional Information**

**Links to Articles Regarding Blood Sugar**

If you have this document open in Adobe Acrobat, click on the title of the article to view the article.

*Artificial Sweeteners Once Again Linked to Weight Gain*


Foods and beverages that contain no-calorie artificial sweeteners may be ruining your ability to control your food intake and body weight, according to new research by psychologists at Purdue University’s Behavior Research Center.

*What is HbA1c?*


HbA1c stands for “hemoglobin A1c”. This test is a simple lab test that shows the average amount of sugar in your blood over the last two to three months. It’s the best way to find out if your blood sugar is under control.

*How to Get More Vegetables Into Your Life*


Americans are falling short of eating the number of vegetables recommended by the USDA. It may take a little creativity and planning on your part to help the nation continue to climb out of this vegetable slump, but you can do it. Make a note of the ideas you’d like to try.

*146 Reasons Why Sugar Is Ruining Your Health*


If you are eating a lot of refined sugar, perhaps this lengthy list of why you should not will convince you to change. Very easy to read.

*Fructose is No Answer For a Sweetener*


The consumption of fructose (corn syrup) has risen considerably in the general population within recent years. In 1980 the average person ate 39 pounds of fructose and 84 pounds of sucrose. In 1994 the average person ate 66 pounds of sucrose and 83 pounds of fructose. This 149 pounds is approximately 19% of the average person’s diet.

*The Glycemic Index*


The glycemic index of food is a ranking of foods based on their immediate effect on blood glucose (blood sugar) levels.

*What is Refined Sugar?*


Sugar refining is the process of extracting out the sugar (sucrose) from the plant materials and then removing other unwanted materials from the extracted raw sugar.

*White Flour Is Like Sugar*


As far as your body is concerned, eating white flour is almost the same as eating sugar.