Every day, people are diagnosed with diabetes or what some call “sugar in the blood.” There are approximately 20.8 million American adults and children with diabetes mellitus, and another estimated 41 million with prediabetes. Every 21 seconds someone is diagnosed with diabetes.

**What Is Diabetes?**

Diabetes mellitus is a disease in which the body cannot process food properly. During digestion, your body converts food into a simple sugar, glucose. Glucose is food for the cells, and your body converts it into energy, much the way a car uses gasoline.

The body produces a hormone, insulin, in the pancreas. Insulin stimulates muscle and fat cells to absorb glucose. The liver and cells store the glucose or turn it into energy as needed.

In most people, the body very carefully adjusts the supply of insulin according to the amount of glucose in the blood. In a person with diabetes, the body’s careful balance of glucose and insulin has been lost. The body may have lost the ability to produce enough insulin, or the cells cannot process the insulin properly. The blood glucose level builds up and can damage the body.

**What Is Pre-Diabetes?**

An increasingly common condition in which blood glucose levels are higher than normal but not yet diabetic. Studies have shown that most people with this condition go on to develop Type 2 diabetes within 10 years. Modest changes in diet and physical activity may assist in prolonging or preventing the progression to Type 2 diabetes mellitus.

### There Are Three Types of Diabetes.

- **Type 1 diabetes.** These individuals are typically insulin-dependent.
- **Type 2 diabetes.** These individuals may control their diabetes mellitus with diet, oral medication, and/or insulin.
- **Gestational diabetes** – develops in some women during pregnancy and often results in unusually large babies if not treated. All pregnant women should be tested for diabetes between 24 and 28 weeks of pregnancy so that gestational diabetes, if found, can be treated. Gestational diabetes disappears after the baby is born. However, about half of these women will develop Type 2 diabetes.

The chart below lists the characteristics of the two major types of diabetes.

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>TYPE 1</th>
<th>TYPE 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age when the disease starts</td>
<td>Usually under 30.</td>
<td>Usually over 40.</td>
</tr>
<tr>
<td>Linked to obesity?</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Does body produce insulin?</td>
<td>NO</td>
<td>YES, but not enough or it isn’t functioning properly.</td>
</tr>
<tr>
<td>Are antibodies to insulin-producing cells present?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Does patient respond to oral medication?</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Incidence of diabetes</td>
<td>5%</td>
<td>95%</td>
</tr>
<tr>
<td>Can it be inherited?</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Treatment:</td>
<td>Insulin injections. Balanced food intake. Exercise.</td>
<td>Weight loss. Exercise. In some cases, medication to include pills and possibly insulin injections.</td>
</tr>
</tbody>
</table>

### The Warning Signs

#### Type 1 Diabetes Mellitus:

- frequent urination (or frequent bed wetting in children who have been toilet trained)
- excessive hunger and thirst
- dramatic weight loss
- irritability
- weakness and tiredness
- nausea and vomiting

#### Type 2 Diabetes Mellitus:

- any of the symptoms listed above
- slow healing of cuts (especially in the feet)
- frequent infections (including skin and bladder infections)
- blurred vision or any change in sight
- tingling or numbness in hands or feet
- serious itching with no other apparent cause.

If you experience any of these symptoms, see your doctor as soon as possible and ask to be tested for diabetes.

(continued on reverse side)
A Major Health Problem
Diabetes is the fourth leading cause of death by disease in the United States. The complications may be prevented if the patient takes an active role in his or her care. Among the health problems associated with diabetes are:

- **Blindness.**
  Diabetic eye disease is the number-one cause of new blindness in people between the ages of 25 and 74.

- **Kidney disease.**
  Ten percent of all people with diabetes develop kidney disease.

- **Amputations.**
  According to national data, eight in every 1,000 diabetics in 1990 required a leg or foot amputation.

- **Heart disease and strokes.**
  Diabetics are two to four times more likely to develop heart disease and five times more likely to have a stroke.

- **Birth defects.**
  Diabetes can decrease the chance of having a successful pregnancy and can increase the risk of birth defects.

If you have diabetes, you must realize that prevention of the life-threatening complications begins with you. Consider taking the following actions:

1. Maintain your blood glucose (sugar) at a reduced level as recommended by your doctor.
   **BLOOD SUGAR LEVELS**                **NORMAL LEVELS**
   Before meals 80-120 mg/dl
   Before bed 100-140 mg/dl
   After meals (1-2 hours) 100-160 mg/dl

2. Take special care of your feet and skin.
3. Lose weight if you are overweight.
4. After getting approval from your doctor, exercise a minimum of three days, at least 20 minutes each day.
5. Eat regular balanced meals – never skip a meal!
6. Quit smoking.
7. Have regular check-ups with your doctor.

Watch Out For Episodes of Low Blood Sugar
**Symptoms:**
- feel shaky
- sweaty
- tired
- hungry
- confused
- rapid heartbeat
- headaches

**What to do:**
- eat food with sugar such as candy, juice, regular soda, and follow with 1/2 a sandwich.

Watch Out For Episodes of High Blood Sugar
**Symptoms:**
- blurry vision
- fatigue
- increased hunger
- increased thirst
- numbness or tingling in hands or feet
- increased urination

**What to do:**
- check your blood sugar and if it’s over 240 mg/dl for an extended time, contact your doctor.

**Note:** This educational information is not intended to substitute for expert health and medical advice or treatment. The information is designed to help you make informed choices about your health. Please consult your medical professional for questions or information that is specific to your medical condition.