DIABETES GUIDE

INTRODUCTION
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"An integral role of the doctor caregiver is one of educator....teaching patients and family members about their bodies, health, and illness as well as complications, prognosis, and potential side effects of therapies is a characteristic of being a doctor... without question MedicineNet.com allows patients and families to acquire higher levels of knowledge about these health concerns, each at their own pace...this affords patient understanding, comfort about decision-making processes, and satisfaction about self-empowerment related to their own, friends' and family members' health."

William Shiel Jr., M.D., F.A.C.P.
Chief Medical Editor, MedicineNet.com

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Diabetes Facts

- Diabetes is a chronic condition associated with abnormally high levels of sugar (glucose) in the blood.
- Insulin produced by the pancreas lowers blood glucose.
- Absence or insufficient production of insulin causes diabetes.
- The two types of diabetes are referred to as type 1 and type 2. Former names for these conditions were insulin-dependent and non-insulin-dependent diabetes, or juvenile onset and adult onset diabetes.
- Symptoms of diabetes include increased urine output, thirst, hunger, and fatigue.
- Diabetes is diagnosed by blood sugar (glucose) testing.
- The major complications of diabetes are both acute and chronic.
  - **Acute complications**: dangerously elevated blood sugar (hyperglycemia), abnormally low blood sugar (hypoglycemia) due to diabetes medications may occur
  - **Chronic complications**: disease of the blood vessels (both small and large) which can damage the feet, eyes, kidneys, nerves, and heart may occur
- Diabetes treatment depends on the type and severity of the diabetes. Type 1 diabetes is treated with insulin, exercise, and a diabetic diet. Type 2 diabetes is first treated with weight reduction, a diabetic diet, and exercise. When these measures fail to control the elevated blood sugars, oral medications are used. If oral medications are still insufficient, insulin medications and other injectable medications are considered.

Read full article:

**What Are the Different Types of Diabetes?**

There are two major types of diabetes, called type 1 and type 2. Type 1 diabetes was also formerly called insulin dependent diabetes mellitus (IDDM), or juvenile onset diabetes mellitus. In type 1 diabetes, the pancreas undergoes an autoimmune attack by the body itself, and is rendered incapable of making insulin. Abnormal antibodies have been found in the majority of patients with type 1 diabetes. Antibodies are proteins in the blood that are part of the body’s immune system. The patient with type 1 diabetes must rely on insulin medication for survival.

**Type 1 Diabetes**

In autoimmune diseases, such as type 1 diabetes, the immune system mistakenly manufactures antibodies and inflammatory cells that are directed against and cause damage to patients’ own body tissues. [Read more](http://www.medicinenet.com/diabetes_mellitus/article.htm)
Type 2 Diabetes

Type 2 diabetes was also previously referred to as non-insulin dependent diabetes mellitus (NIDDM), or adult onset diabetes mellitus (AODM). In type 2 diabetes, patients can still produce insulin, but do so relatively inadequately for their body's needs, particularly in the face of insulin resistance as discussed above. Read more

What Are Diabetes Symptoms?

- The early symptoms of untreated diabetes are related to elevated blood sugar levels, and loss of glucose in the urine. High amounts of glucose in the urine can cause increased urine output and lead to dehydration. Dehydration causes increased thirst and water consumption.
- The inability of insulin to perform normally has effects on protein, fat and carbohydrate metabolism. Insulin is an anabolic hormone, that is, one that encourages storage of fat and protein.
- A relative or absolute insulin deficiency eventually leads to weight loss despite an increase in appetite.
- Some untreated diabetes patients also complain of fatigue, nausea and vomiting.
- Patients with diabetes are prone to developing infections of the bladder, skin, and vaginal areas.
- Fluctuations in blood glucose levels can lead to blurred vision. Extremely elevated glucose levels can lead to lethargy and coma.

How Is Diabetes Diagnosed

The fasting blood glucose (sugar) test is the preferred way to diagnose diabetes. It is easy to perform and convenient. After the person has fasted overnight (at least 8 hours), a single sample of blood is drawn and sent to the laboratory for analysis. This can also be done accurately in a doctor's office using a glucose meter.

- Normal fasting plasma glucose levels are less than 100 milligrams per deciliter (mg/dl).
- Fasting plasma glucose levels of more than 126 mg/dl on two or more tests on different days indicate diabetes.
- A random blood glucose test can also be used to diagnose diabetes. A blood glucose level of 200 mg/dl or higher indicates diabetes.

When fasting blood glucose stays above 100mg/dl, but in the range of 100-126mg/dl, this is known as impaired fasting glucose (IFG). While patients with IFG do not have the diagnosis of diabetes, this condition carries with it its own risks and concerns, and is addressed elsewhere.

Read full article:
http://www.medicinenet.com/diabetes_mellitus/article.htm
**Diabetes Quiz**

**Q: What is diabetes?**

A: A metabolic disease characterized by high blood sugar.

Diabetes mellitus (commonly referred to as "diabetes," "sugar diabetes," or "type 2 diabetes") is a group of metabolic diseases characterized by high blood sugar (glucose) levels that result from defects in insulin secretion, or action, or both.

**Q: Diabetes can be cured with diet, exercise, and medication. True or False?**

A: False.

Diabetes is a chronic medical condition, meaning that although it can be controlled, it cannot be cured, and lasts a lifetime.

**Q: What are symptoms of diabetes?**

A: Medically recognized symptoms of diabetes include increased or excessive thirst, increased hunger, dry mouth, frequent urination, unexplained weight loss, fatigue, blurred or decreased vision, and headaches.

Other symptoms of type 2 diabetes may include slow-healing sores or cuts, itching skin, vaginal infections, weight gain, numbness or tingling of the hands and feet, and impotence.

Take the Diabetes Quiz:

What Is Type 2 Diabetes?

Type 2 diabetes strikes people of all ages, and early symptoms are subtle. In fact, about one out of three people with type 2 diabetes don’t know they have it. This chronic condition thwarts the body’s ability to use the carbohydrates in food for energy. The result is elevated blood sugar. Over time, this excess sugar raises the risk for heart disease, loss of vision, nerve and organ damage, and other serious conditions.

View Slideshow:
http://www.medicinenet.com/type_2_diabetes_pictures_slideshow/article.htm

Related Slideshows

**Type 1 Diabetes**

In people with type 1 diabetes, the pancreas cannot make insulin. Without it, sugar builds up in the blood and can reach dangerous levels. Watch this slideshow to learn warning signs, causes, treatments and health tips for this potentially life-threatening condition.

http://www.medicinenet.com/type_1_diabetes_pictures_slideshow/article.htm

**Diabetes Management in 10 Minutes or Less**

From tips on controlling blood sugar to diet and exercise, watch this slideshow on 10 simple ways to better manage your diabetes and cut the risk of complications, most of which can be done in minutes.

http://www.medicinenet.com/diabetes_management_10_minutes_pictures_slideshow/article.htm

**20 Reasons for Blood Sugar Swings**

Innocent foods, spices, yard work, and even your boss can make blood sugar levels jump or dip. Watch this slideshow to get helpful tips to balancing blood sugar levels caused by caffeine, sleep, alcohol, stress and more.

http://www.medicinenet.com/reasons_for_blood_sugar_swings_pictures_slideshow/article.htm
Patient Comments: Diabetes – Symptoms at Onset of Disease

Question: The symptoms of diabetes can vary greatly from patient to patient. What were your symptoms at the onset of your disease?

Comment from: Barb March58, 45-54 Female (Patient) Published: October 13

My blood glucose lab readings for 49 years were always between 99 and 104. I had the last test done 5 days before entering the hospital for a "spider bite" which turned out to be MRSA. My glucose levels were 500-600. I had no symptoms and since I'd never been hospitalized, it actually felt like a "spa" to me - no cooking, no phones, etc. I was loving this. Well, I wound up having severe surgery removing a rather large mass from my upper thigh. I was put on Glucophage the minute the sugar levels were notices elevated. My docs (from one of the world's most famous hospital) actually believe that the MRSA brought on the diabetes and in 3-4 months it will slowly dissipate. I've always eaten a very healthy, balanced diet. But the numbers jump from 103 to 500 every single day - no matter what I eat, when I take the meds, when I exercise, etc. BUT IT STILL HAVE NO SYMPTOMS! However, just because I can't "feel" it, I take this very seriously. Good luck to all.

Related Reading: glucose | MRSA | diabetes

Comment from: SSpumpkin, 65-74 Female (Patient) Published: September 25

After reviewing a letter written by my doctor, where I read he had prescribed Celebrex for me due to pain of Arthritis which had really messed up my neck, back and knees, I found that one of the side effects of Celebrex is Diabetes. I have Type 2, now, and have been being treated for it for over three years. I am keeping it under control, but it's not easy and I have a tendency to mess up when I cannot afford my medications. I am retired, living on a fixed income and money is hard to come by. As noted in the Celebrex info, this can also work into hypoglycemia. Just loads of fun here, huh?

Related Reading: Arthritis | hypoglycemia

Comment from: 35-44 Female (Patient) Published: August 04

I was 8 yrs old. Had typical symptoms of thirst, lethargy, urinary frequency, weighed just 40 lb for 18 months, growing but getting thinner? TV hurt my eyes, no saliva and horrible taste in mouth, would sleep 24/7 if allowed to. The doctor kept insisting I was fine and did not examine me. A friend suggested it might be diabetes, but the doctor didn't want to test urine. He finally agreed to give me the test, but still insisting it would be negative. Wrong! I was referred to hospital for routine appointment in 2 weeks. Fortunately the school nurse said don't wait, go there now. Hospital doctors said I was 2 days from a coma.

Related Reading: sleep | coma

View all Comments:
http://www.medicinenet.com/diabetes_mellitus/discussion-17.htm
Suggested Reading on Diabetes (type 1 and Type 2) on MedicineNet

Suggested Reading on Diabetes (Type 1 and Type 2) by Our Doctors

- **Kidney Stones**
  - One in every 20 people develop a kidney stone at some point in their life. A kidney stone is a hard mineral and crystalline material formed within the

- **Sty (Stye)**
  - A sty (sometimes spelled stye) is a tender, painful red bump located at the base of an eyelash or on, inside, or under the eyelid, which is the result

- **Cellulitis**
  - Cellulitis is an acute spreading bacterial infection below the surface of the skin characterized by redness, warmth, inflammation, and pain. The most common

- **Medications**
  - 51 articles

- **Procedures & Tests**
  - 10 articles

- **Pictures, Images & Quizzes**
  - 18 articles

- **Doctor’s & Expert’s Views**
  - 69 articles

- **Health News**
  - 689 articles

- **Health Features**
  - 67 articles

More on MedicineNet:

- [http://www.medicinenet.com/diabetes/focus.htm](http://www.medicinenet.com/diabetes/focus.htm)
Suggested Reading on Diabetes Across the WebMD Network

**WebMD**

Diabetes Health Center on WebMD.com
http://diabetes.webmd.com/

**MedicineNet.com**
We Bring Doctors' Knowledge to You

Diabetes Health Center on Medicinenet.com
http://www.medicinenet.com/diabetes/focus.htm

**eMedicineHealth.com**
experts for everyday emergencies

Diabetes on eMedicineHealth.com

**RxList**
The Internet Drug Index

Oral Diabetes Prescription Medications