

References:

1. American Diabetes Association. Type 2 diabetes. www.diabetes.org/type-2-diabetes.jsp. Accessed September 6, 2008.
2. Mayo Clinic. Insulin and weight gain: Keep the pounds off. <http://www.mayoclinic.com/health/insulin-and-weight-gain/DA00139>. Accessed October 27, 2008.
3. American Diabetes Association. Standards of medical care in diabetes. *Diabetes Care*. 2008;31:(Suppl1):S12-54.
4. American Diabetes Association. A1C test. <http://www.diabetes.org/type-2-diabetes/a1c-test.jsp>. Accessed September 6, 2008.
5. National Institutes of Health. News in Health: Preventing type 2 diabetes. November 2005. <http://newsinhealth.nih.gov/pdf/NIHNIH%20November05.pdf>. Accessed September 6, 2008.
6. American Diabetes Association. The dangerous toll of diabetes. www.diabetes.org/diabetes-statistics/dangerous-toll.jsp. Accessed September 6, 2008.
7. American Heart Association. What is diabetes mellitus? <http://www.american-heart.org/presenter.jhtml?identifier=4546>. Accessed October 3, 2008.
8. NIDDK, NIH. Hypoglycemia. <http://diabetes.niddk.nih.gov/dm/pubs/hypoglycemia/>. Accessed September 6, 2008.
9. McCarren M. Insulin and type 2 diabetes: fears, myths, and truths. *American Diabetes Association* 2004:#4867-01.
10. Pancreas. Dorland's Medical Dictionary for Healthcare Consumers. http://www.mercksource.com/pp/us/cns/cns_hl_dorlands_split.jsp?pg=/ppdocs/us/common/dorlands/dorland/six/000077678.htm. Accessed October 21, 2008.

This information is not intended as a substitute for professional medical care. Only your doctor can diagnose and treat a medical problem.

sanofi aventis

© 2008 sanofi-aventis U.S. LLC All rights reserved
US.NMH.08.11.017 Printed in the USA



Myths and Truths about Diabetes

Diabetes

Myths and Truths About Diabetes

Learning the Truth about Type 2 Diabetes and Insulin

It's not always easy to separate myths from facts. Especially when it comes to your health. But knowing the truth about diabetes and insulin can help you lead a longer and healthier life.¹ This brochure gives you the facts you need to take control of your diabetes and improve your health.

Myths about Type 2 Diabetes and Insulin

People talk about diabetes and insulin. Sometimes, they give you scary and wrong information. That's why you might have doubts about insulin. Or fears. Here's the good news: Learning the truth about type 2 diabetes and insulin can help you feel better.

Myth 1: Insulin will make me gain a lot of weight.

Fact: Some people do put on a few pounds when they start taking insulin because it causes the body to store calories from food. Following a meal and exercise plan should help keep you from gaining a lot of weight.²

Myth 2: Taking insulin means I've failed with pills or my diabetes is getting worse.

Fact: You haven't failed. Diabetes may change over time.³ Or your body may not be responding to pills. Many people who start on pills may need insulin later to control their blood sugar. Other times, doctors prescribe insulin early since it can help at any stage of the disease. Everyone's body is different. Your doctor can tell you what will work best for you.

Myth 3: Insulin is prescribed when other treatments don't work.

Fact: Each person is different. There are different treatments to match the needs of individuals. If your body is not producing enough insulin, your doctor might prescribe it for you. Only your doctor can tell if and when insulin is the right treatment for your body.

Myth 4: Injecting insulin is painful and will interfere with my schedule.

Fact: The insulin needle is tiny and thin. New injection pens make it even easier. Many patients taking insulin say it has become a part of their daily routine, like brushing their teeth.

Myth 5: Insulin is dangerous and addictive.

Fact: Insulin is not addictive or dangerous like narcotics. It replaces a chemical your body once made naturally. Plus, it's necessary for your survival.¹ However, like any medicine, insulin can have side effects. You can reduce risks and problems simply by taking insulin as your doctor instructs.

Getting The Big Picture

Talk to your doctor about whether insulin is right for you. Remember, insulin is only a part of treating diabetes. Following a meal plan, staying active, regularly checking your blood sugar levels, and taking all diabetes medications as prescribed are also important steps.



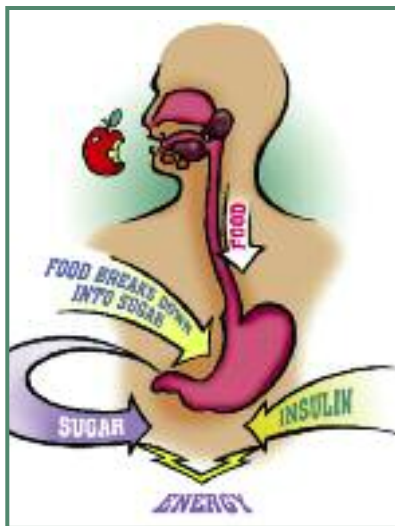
Knowing Your Diabetes Terms

Quick Definitions		
Term	What it Means	How it Affects You
A1C (also called HbA1C)	A test your doctor gives. Shows the sugar level in your blood over the last 2-3 months. ⁴	Try for a level of less than 7% to lower your chance of problems caused by diabetes. ³
Diabetes	A disease that occurs when the body cannot use your blood sugar as it should. ⁵ It is a chronic illness that requires medical care and self-management. ⁶	If not controlled, diabetes can lead to serious health problems. ⁵ You can take steps to control the disease and lower its risks. ⁶
Glucose	A type of sugar found in your blood that is the body's main source of energy. ¹	Treating diabetes is based on balancing insulin and blood glucose levels.
Insulin	A hormone that helps your body use blood sugar for energy. ⁵	Without insulin, glucose cannot go to your cells. ⁶ Fortunately, you can add insulin if your body does not make or use it.
Type 2 Diabetes	The most common form of diabetes. Formerly called "adult onset diabetes," but you can get it at any age. ⁵	Being overweight or inactive increases your chances of getting diabetes. ⁵

Understanding Insulin and Diabetes

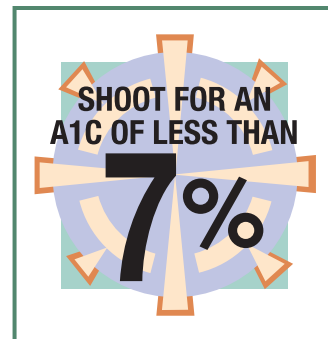
When you have diabetes, you have too much sugar (glucose) in your bloodstream. Here's what happens:

1. When you eat **food** your body changes it into **sugar** in your bloodstream. That happens with most foods, not just sweets.¹
2. Your body also makes **insulin**. **Insulin** helps move the **sugar** from your blood into your body's cells for **energy**.¹
3. If your body cannot produce enough insulin or cannot properly use the insulin it has, the sugar (glucose) cannot move from your bloodstream to your cells.⁷
4. Your cells don't get the sugar they need for energy. And the glucose builds up in your blood to levels that are too high for your body, putting you at higher risk for diabetes and complications.⁷



Knowing Your A1C Number

Your doctor does a type of blood test—the A1C test—to tell how well the sugar (glucose) in your blood has been controlled. This shows how well your treatment has been working.⁴ The guidelines for good blood sugar control is for less than 7%.³ Talk to your doctor about the right goal for you. If your blood sugar is not controlled, you may be at risk for developing serious complications later. The good news is that your doctor can recommend a treatment plan of diet and exercise, and can add medicine (including insulin) if you need it.



There are many different kinds of insulin. Some kinds, such as “long-acting,” give you a slow, steady release of insulin. Other kinds are taken at meals and can be “rapid acting,” regular/intermediate-acting,” or “short-acting,” depending on your needs. Insulin may be used alone or in combination with other insulin or oral medications.

Getting Control

Your doctor will check your A1C levels on a regular basis. But, you also need to check your blood sugar levels each day. This is an important part of controlling your blood sugar level. To do this, you use a special meter (a blood glucose meter) that measures your blood sugar at home, instantly. Keeping track of your levels can help you and your health care team set goals, or targets, for your blood sugar.



One of the best ways to do this is with a daily diary:

1. Check your blood sugar levels and record them.
2. Include the foods you ate, exercise you did, and medicines you took.



Over time, you will see what makes your levels go up or down. And, remember, always work together with your healthcare provider to find the right medicine and dose for you.

Managing Diabetes: The Highs and Lows

Managing diabetes is a balancing act.

- ▶ **Too High:** If blood sugar is too high (hyperglycemia), you may feel tired or moody, and have complications in the future. Over time, it can damage your eyes, kidneys, nerves, heart, and more.
- ▶ **Too Low:** If your blood sugar is too low (hypoglycemia), it can be scary. Check your blood sugar if you suddenly have any of these⁸:
 - Extreme hunger
 - Nervousness and shakiness
 - Perspiration
 - Dizziness or light-headedness
 - Sleepiness
 - Confusion
 - Difficulty speaking
 - Feeling anxious or weak
 - Low blood sugar can occur without symptoms, so check your levels regularly!

That's why it's so important to educate yourself—and those who care for you—about low blood sugar and what to do if it happens to you. It can happen because of⁸:

- ▶ Missed, small, or delayed meals
- ▶ Too much insulin or diabetes medication
- ▶ Increased activity/exercise
- ▶ Excessive alcohol

If your blood sugar is too low, here are some tips to raise it quickly⁸:

- ▶ Drink half a can of regular, not diet, soda
- ▶ Eat or drink high-sugar foods (5-6 pieces of hard candy, 1 tablespoon honey, 1 cup milk, OR ½ cup orange juice)
- ▶ Eat 2-3 glucose tablets (depending on brand; available at pharmacies)

Recommended Guidelines

Controlling your A1C levels over time reduces the risk of complications later. The American Diabetes Association suggests these guidelines for adults with diabetes³:

- ▶ **A1C: Less than 7%**
- ▶ **Plasma Blood Glucose before meals: 70-130mg/dL**

Talk to your doctor about your appropriate target levels and possible problems, and ask any questions.

Please see Important Safety Information for Insulin on next page.

Facing the Facts

You may have heard many things about diabetes and insulin. In fact,

“You may not want to take insulin shots. You may keep putting the decision off. But no matter how well you eat and exercise, your pancreas [an important organ that helps you digest food and control sugar in the blood] can wear out, and you need insulin to live.”^{9,10}

Insulin can bring your blood sugar closer to normal. This may help you feel better. By learning the facts about diabetes and insulin, you can work with your doctor to help manage your diabetes.

Important Safety Information for Insulin

Possible side effects may include blood sugar levels that are too low, injection site reactions, and allergic reactions, including itching and rash. Tell your doctor about all other medicines and supplements you are taking because they can change the way insulin works. Daily glucose monitoring is recommended for all patients with diabetes.