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Be in Control - Living with Diabetes

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Food $ense Nutrition Education

Diabetes: Be in Control

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Edited by Dr. Nedra Christensen & Heidi LeBlanc

Living with Diabetes

Finding out you have diabetes can be scary!! Diabetes is a serious disease with many possible complications. However, research has shown that people with diabetes can live long, healthy, and happy lives. The secret is to take care of yourself and be in control. There are three areas of focus that can help you be in control: monitoring, diet, and exercise.

Monitoring your blood sugar can help you understand how different things affect your blood sugar level. Try to monitor your blood sugar at least as much as your doctor has recommended. People with type 2 diabetes should monitor blood sugar at least twice a day at different times throughout the day to assess the effects of their lifestyle on their blood sugar. Monitoring is important not only to help make changes that will give more control over blood sugar, but to also help your doctor adjust medication to fit your needs.

Keeping records (date, time, and blood sugar level) is also a good idea. Records help you and your health care team know what has happened and how that has affected your current health. It will also help them to adjust your medication to work better.

Diet plays a vital part in controlling diabetes. There is no one way to eat with diabetes. How you eat will depend on treatment (insulin therapy or oral medication), exercise, and personal taste. This is the reason it is important to work with a dietitian for specific eating advise.

A general guide to eating is the Food Guide Pyramid. Remember that beans and starchy vegetables (potatoes, peas, corn, squash) are included in the grain group for people with diabetes. For those with type 2 diabetes and those overweight, it is recommended that you lose about 10-20 pounds. Research has shown this can make these people more sensitive to their own insulin.

Exercise lowers blood sugar levels without medication as well as reduces stress, lowers cholesterol and blood pressure, and helps weight loss. It is recommended that you get at least 20-30 minutes of continuous exercise 3 to 5 times a week for the best results. Research now shows that any increase in physical activity will help to improve health. Start out slow and choose activities that you enjoy. This will help you to stick with it.

Day to Day Problems

The key with diabetes is to keep blood sugar within a certain range (80-180). When blood sugar is higher or lower than this range, there can be serious health problems.

High Blood Sugar

Often times, it is hard to tell if your blood sugar is too high by the way your feel. This is the reason that it is important for you to monitor blood sugar levels on a regular basis.

There are many situations that can cause high blood sugar, like sickness, stress, forgetting to take insulin or diabetes pills, not exercising as usual, or eating too much. Symptoms of high blood sugar include hunger, thirst, frequent urination, blurry vision, itchy and dry skin, fruity-smelling breath, and vomiting.

Check blood sugar at any of the above times. If it is high, check urine for ketones. If you have moderate level ketones in your urine, use the correction factor for adjusting insulin if you take insulin. Consult your doctor on how to get your blood sugar back into target range.

Low Blood Sugar

Not everyone has the same symptoms for low blood sugar. Pay attention to how you feel when your blood sugar is low to learn your own symptoms.

Common Symptoms: shakiness, dizziness, nervousness, hunger, cold sweats, tiredness, confusion, anger, light-headedness, numbness, headaches, nightmares, sleeping problems.

Causes: taking too much diabetic medication, forgetting to eat or eating less than was planned for, obtaining more exercise than planned for, or during the night when you don't eat.

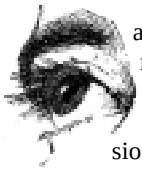
When you think your blood sugar is too low:

1. Test your blood sugar.
2. If it is less than 70, immediately eat or drink something with about 15 grams of carbohydrate (1/2 cup fruit juice or regular soda, 1 cup of milk, 5 Lifesavors). Glucose tablets are also available.
3. If you can't test your glucose and you think that it is low, treat yourself with 15 grams of carbohydrate anyway.
4. Wait 15 minutes and then test your blood sugar again. If it is still low (less than 70), then eat 15 more grams of carbohydrate.
5. Repeat testing and treating until blood sugar returns to normal (higher than 70).

Long Term Problems

Research has shown that having high blood sugar over time can damage your eyes (retinopathy), kidneys (nephropathy), nerves (neuropathy), and heart (heart disease). Once this damage is done, it can not be changed. However, keeping your blood sugar levels under control helps to prevent these complications.

Retinopathy – The retina is the lining at the back of the eye that senses light. It acts like film in a camera helping you to see. In the mild form of retinopathy, high blood sugar levels damage blood vessels in the eye causing them to leak blood and fluid into the eye. This can cause impaired vision in the form of blind spots or blurred vision. In the more severe form of retinopathy, new blood vessels form and grow out of control. They can bleed and stop light from reaching the retina or cause scarring which pulls the retina away from the rest of the eye, impairing vision and ultimately causing blindness.



The onset of symptoms is usually gradual and can go unnoticed without a medical eye exam. It is recommended that people with diabetes get an eye exam once a year. Symptoms include blurry vision, double vision, seeing spots or floaters, pain in one or both eyes, pressure build up in one or both eyes, loss of peripheral vision, or trouble reading.

Diabetic retinopathy is permanent, but prevention is possible. The key is to keep blood sugar levels within or close to normal ranges.

Nephropathy – Your kidneys filter your blood to remove waste products and get rid of them in urine. High blood sugar damages the kidneys. When the damage is severe, the kidneys are unable to filter the blood properly, and body protein is lost while waste products remain and build up in the blood.

There are no symptoms of kidney disease until the kidney becomes severely damaged.

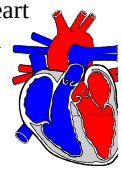
It is possible to prevent diabetic nephropathy. The first step is to keep blood sugar levels within or close to normal ranges. Next, control blood pressure, and strive to keep it within normal ranges.

Neuropathy – High blood sugar levels damage the nerves in your body. It usually begins in your feet and can move up your legs and to the rest of your body.

Symptoms include prickling, tingling, burning, or jabbing feelings; loss of feeling; weakness; fainting; vomiting; bladder infections; diarrhea; and sexual problems.

As with other complications due to diabetes, neuropahty means permanent damage. There are several lifestyle habits that can help you to prevent neuropathy: 1) keep blood sugar levels within or close to normal ranges, 2) do not smoke, 3) avoid or limit alcoholic beverages, 4) eat a healthy diet, and 5) exercise regularly.

Heart and Blood Vessel Damage – People with diabetes are at greater risk of developing heart disease and having a stroke, heart attack, and blood clots (especially in the legs). High blood sugar levels damage blood vessels. This is the starting point for hardening of the arteries. Also, with diabetes your blood chemistry can change causing cholesterol and triglyceride levels to increase. These changes contribute to the development of heart disease.



Symptoms of heart and blood vessel damage include infections, itchy skin, shiny legs that lose their hair, pain in calf muscles with exercise, high cholesterol, high triglycerides, and high blood pressure.

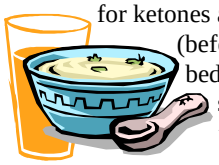
Prevention is the best and perhaps only cure. Here are some tips: 1) keep blood sugar levels within or close to normal ranges, 2) do not smoke, 3) eat a healthy diet, 4) control blood pressure, 5) strive to keep total cholesterol below 200, 6) exercise regularly, and 7) lose weight if you need to.

Sickness

When you are sick, it is easy to forget about your diabetes and worry only about your sickness. It is important for you to still take care of your diabetes. Here are some tips:

1. Take the usual dose of insulin and medication at the regular times. Your blood sugar may still be high even if you did not eat anything. Hormones that your body produces during sickness can cause your blood sugar levels to be elevated.

2. Check blood sugar levels and test urine for ketones at least four times a day (before each meal and at bedtime). If your blood sugar level is higher than 240 with medium to large amounts of ketones in your urine, this is a sign that you need more insulin. (Talk to your doctor about specific doses you should take.)



3. Try to eat as normally as possible. If your blood sugar is in the normal range, and if you can not handle regular foods, try liquid or soft carbohydrate-containing foods (fruit juices, regular soft drinks, soup, Jello, ice cream). Strive to get at least 50 grams of carbohydrate every 3 to 4 hours.

4. Drink large glasses of liquid every hour. If nausea and vomiting occur, try small sips (1-2 Tbsp) every 15 to 20 minutes. If vomiting continues, contact your doctor.

5. Notify your health care team if your sickness lasts longer than one day.

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Sources: 1) American Diabetes Association at www.diabetes.org; 2) Duyff R. *The American Dietetic Association's Complete Food & Nutrition Guide*. Chronimed Publishing: Minneapolis, MN: 1996