



Control your diabetes *For Life*

THE WILDCAT WAY TO WELLNESS

Do you have diabetes? Does someone in your family or a friend have diabetes? If you answered yes to either of these questions, this publication can help you learn how to best control this disease. It is intended for people who are diagnosed with diabetes as adults, but it may also help families of children with diabetes. The good news, which you should share with your family and friends, is that you can control diabetes—for life.

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Increasing numbers of Kentuckians report they have been told by a doctor that they have diabetes. A random telephone survey shows that from 1995 to 1999 the number of Kentuckians who had been told they have diabetes nearly doubled. (Figure 1.)

About half of Kentucky's adults are overweight and are not physically active, and the state has more older people than ever before. Being overweight, inactive, and older all increase risk for diabetes.

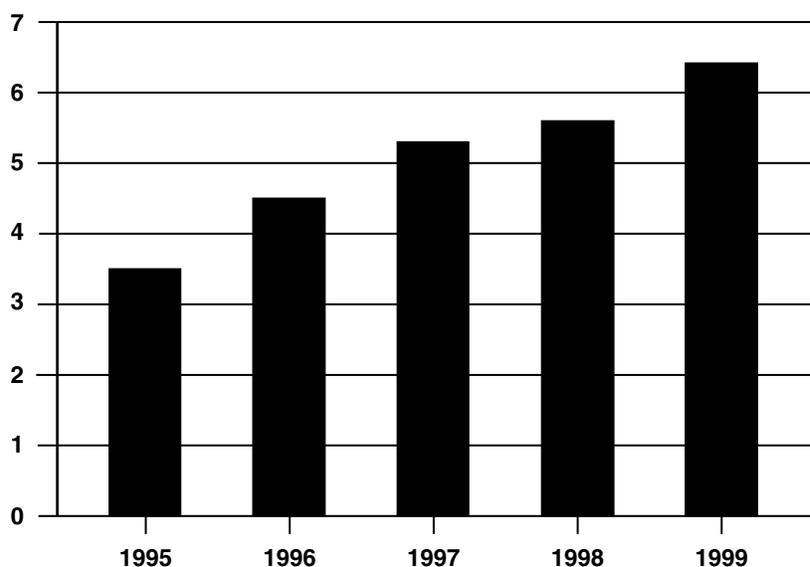


Figure 1. Percentage of Kentucky adults in a survey who answered yes when asked if a doctor had ever told them they have diabetes.

Importance of Good Control

If you have diabetes, keeping glucose, fats, and insulin under control can help you stay in top condition and may prevent future problems with your eyes, heart, kidneys, nerves, and feet. Here's why glucose, fats, and insulin should be controlled:

Glucose—When food is digested, it is supposed to enter the blood as glucose (sugar) to be used for energy. To carry on the processes of life, glucose should be quickly cleared from the blood for use by the body's cells. When someone is diagnosed with diabetes, it is because that person's body is not able to properly control the glucose in the bloodstream. If glucose levels in the blood are too high for long periods of time, damage can occur to the blood vessels.

Fats—People with diabetes, for reasons that are not clear, often have higher levels of fats such as cholesterol in their blood, which can damage or block blood vessels. As a result, people with diabetes experience heart disease at a rate three to four times higher than that of people who do not have diabetes. So, it is important to keep fats in the diet under control.

Insulin—People diagnosed with diabetes as adults often produce too much insulin, a hormone which helps the body use glucose. Even though the insulin level may be high, the insulin in people with diabetes does not work well to control the level of blood glucose. Scientists have found that a high level of insulin may actually damage blood vessels.

The damage to blood vessels caused by high levels of glucose, fats, and insulin in the blood can

prevent blood from reaching different parts of the body and delivering important substances, such as oxygen, to the organs and tissues that need them.

Principles for Controlling Diabetes

People with diabetes should talk with their health care providers about what care options are best. They need to discuss why some options may be better choices for them than others. To encourage people with diabetes to talk about care options, some principles about quality diabetes care have been developed by the National Diabetes Education Program to guide people with diabetes toward long, healthy lives. The next section of this publication is based on these principles for quality diabetes care.

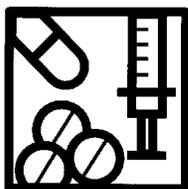
1. Find out what type of diabetes you have.

If you have diabetes, ask your doctor whether you have Type 1 or Type 2.

- Type 1 diabetes: This type of diabetes used to be called *juvenile* diabetes. People who have this type of diabetes need to take insulin every day.
- Type 2 diabetes: This type of diabetes used to be called *adult onset* diabetes. This type of diabetes can often be controlled with diet and regular physical activity. Some people with Type 2 diabetes may also need to take pills or insulin.

The following terms are no longer used to describe diabetes:

- "A touch of diabetes."
- "Borderline diabetes."
- "Sugar that's a little high."



You need to learn about your choices for eating, physical activity, and medications.

2. Get regular health care.

To help you control your diabetes, you have the right to the best health care available. You should:

- See a doctor, diabetes educator, nurse, and dietitian regularly.
- Talk with members of your health care team about how often you should meet with them.
- For each health care visit, make a list of what you want to talk about.
- Seek support from your family, friends, and coworkers.
- Ask your insurance provider about its standards for quality care for diabetes.
- Ask your doctor or someone else on the clinic staff to help you find resources if you have trouble paying for food, medicine, or medical supplies.

3. Learn how to control your diabetes.

If you have diabetes, you have the right to accurate and up-to-date information from health care providers. No single approach is right for everyone. You need to learn about your choices for eating, physical activity, and medications. You will probably need to try a few different approaches before you find what works best for you. As time passes, you will probably need to fine-tune your self-care routine in order to keep your diabetes under control throughout your life. Your health care provider can give you advice and guidance, but you must learn how to best care for yourself. Principles four through seven will help you learn how.

4. Treat high levels of blood glucose.

The number one goal of diabetes care is to control high levels of blood glucose. You can control your blood glucose level by:

- Testing it regularly.
- Eating a healthy diet.
- Taking part in regular physical activity.
- Taking medication.

Most people with diabetes should have the following goals for their blood glucose level:

- Before meals: 80 to 120 milligrams per deciliter (1/10 liter).
- At bedtime: 100 to 140 milligrams per deciliter. Goals for blood glucose control should be individualized. Work with your health care team to set blood glucose goals that are right for you.

Talk to your doctor and health care staff about controlling high blood glucose. Become involved in creating a treatment plan that is right for you.

5. Monitor your level of blood glucose.

Regularly testing your own blood glucose is one way you can take control of your diabetes. Talk with your health care provider about:

- What type of test to use.
- How to do the test in the right way.
- How often to test and write down the results.
- How often to talk with your health care team about the results.
- How to obtain the supplies you need to do the tests. (Medicare can help pay for supplies.)

A hemoglobin A1C test is another way to test your blood glucose level. This is the best test to help you find out how well your blood glucose level has been controlled over the past three months. People with diabetes should ask to have this test done at least twice a year. A hemoglobin A1C of seven percent or less indicates excellent control. A level of eight percent is a sign of good control. If your hemoglobin A1C is more than eight percent, you should



Regularly testing your own level of blood glucose is one way you can take control of your diabetes.

take action to achieve better control through changes in your diet, activity, or medication. Work with your health care team to establish hemoglobin A1C goals that are right for you.

6. Take steps to prevent diabetes from affecting your health in other ways.

People with diabetes need to control their level of blood glucose to prevent problems such as eye disease, kidney disease, nerve damage, heart disease, and stroke. If you have diabetes, do the following regularly to reduce the risk of these problems:

- Have your blood pressure checked.
- Have your blood fats, such as cholesterol, tested.
- With the help of your health care team, make sure your kidneys are working properly.
- Have your feet and eyes examined.

7. Obtain care for any long-term problems you have.

If you do have any of the problems described in principle six, you should regularly see your health care provider for treatment of those problems as well as for treatment of your diabetes.

It is important for people with diabetes to discuss these seven principles with their health care providers.

By working closely with a health care team and following these seven principles for quality diabetes care, people can prevent problems or find them early, when they can best be treated and managed.

The Wildcat Way to Wellness is a program designed to help Kentuckians take a personal approach to better health. This publication is one part of this wellness program.

Current wisdom about good health acknowledges that you need to make informed choices that are right for you in order to successfully improve your well-being. By considering your eating, activity, and attitude habits, you can identify new behaviors to improve your well-being.

CATSkills for Better Diabetes Control

Eating a healthy diet, being active, and taking time to be well will help you to control diabetes if you have it and may even decrease your chances of developing Type 2 diabetes. To take steps toward better health, practice these CATSkills:

- Cooking and Eating, Your Way.
- Activity for Your Health.
- Time to Be Well.

Cooking and Eating, Your Way

Everyone agrees that if a person with diabetes can control the disease by eating a healthy diet and exercising regularly, that approach is best. The science about what people with diabetes should eat has expanded in the last century, and more dietary choices than ever are now available to control blood glucose levels. Educators can now advise people with diabetes on ways to enjoy good food and stay in control.

If you have diabetes, you should work with a Registered Dietitian (R.D.) or Certified Diabetes Educator (C.D.E.) to develop an eating plan that is right for you. No one diet is right for all people with diabetes, and a registered dietitian or certified diabetes educator can help you plan an approach that will allow you to control your blood glucose level and live to the fullest.



*The Wildcat Way
to Wellness.*

Weight Loss

People with diabetes are often told that they need to lose weight in order to get their diabetes under control, and losing 10 pounds can certainly help people who are overweight improve their blood pressure and their glucose and cholesterol levels. However, you may not want to make the changes in lifestyle needed to reach the ideal weight for your height. Decide what you want to do and set reasonable goals. The most important part of working toward a healthy weight is to become more active. Do not let a struggle to lose weight keep you from getting the care you need, because it is important for you to see your health care team regularly. If you decide that weight loss is not right for you at this time, encourage others to accept your decision.

What You Eat

People who eat the healthiest diets are those who regularly shop for groceries, prepare their own food, and don't eat out often. If you want to change the way you eat, you should first look at what you are eating right now. Chances are, you choose foods that are tasty, convenient, affordable, and somewhat healthy.

Cooking and preparing food for yourself and your family in the 21st century does not require that you spend hours in the kitchen. Convenience foods such as pasta and pasta sauces, rice, canned beans, salsa, and frozen vegetables can help you keep your pantry ready for meals in minutes. Choose breads and cereals that contain at least 3 grams of fiber per serving. Keep low-fat, high-flavor dairy foods in your refrigerator. Use small amounts of lean meats in stir-fry dishes. Eat plenty of

colorful fruits and vegetables to pack your diet with good nutrition.

The reasons we choose the foods we eat are varied and complex, and changing eating habits is not easy to do. That is why it is important to work with a Registered Dietitian to develop an eating plan that is right for you. People who have diabetes should decide what dietary changes they are able to make and take steps toward their goals.

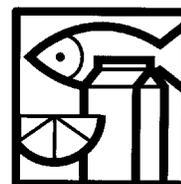
The Best Foods

The foods that are best for people with diabetes are the same foods that are best for everyone. In fact, there is a food guide pyramid for people with diabetes. The primary difference between the USDA Food Guide Pyramid and the pyramid for people with diabetes is that in the diabetes pyramid, starchy vegetables are counted as part of the food group at the base of the pyramid. Whether you have diabetes or not, the goals for good nutrition are to eat sensible portions of food and to:

- Include whole-grain, high-fiber breads and cereals.
- Eat at least five servings of fruits and vegetables each day.
- Eat two to three servings of dairy foods every day.
- Choose lean protein foods.
- Limit intake of fats and sugars.

In the past, people with diabetes were often given only one way to plan meals—the exchange diet. This diet is based on lists of similar foods that can be “exchanged” for one another in a meal-and-snack pattern for each day. For people who generally like to eat the same things each day, the exchange diet may be a good choice.

Some people found this approach to be too rigid and wanted



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more flexibility in their daily food choices. Many people now like to count carbohydrates to keep blood glucose under control, following a meal plan that allows them to eat a certain amount of carbohydrates throughout the day. People who are counting carbohydrates should still choose healthy foods most of the time to get the nutrition they need.

People with diabetes have the same nutrient needs as people who do not have diabetes. New studies show the importance of eating a diet rich in plant foods, colorful fruits and vegetables, and dairy foods.

New scientific studies have shown that it is the total amount of carbohydrates eaten and not the food source that is important to good control. In 1994, the American Diabetes Association changed the dietary recommendations for people with diabetes, recognizing that sugars do not raise blood glucose levels more rapidly than other carbohydrate-containing foods.

Now that people with diabetes have more freedom to count carbohydrates, many options for healthy meals are available.

Activity for Your Health

Being more active may be the single most important thing you can do to improve your health. Everyone should engage in at least 30 minutes of moderate activity five days a week. In the United States, most of us are now less physically active than our ancestors, and lack of physical activity is one of the reasons why more of us are overweight and have diabetes. In fact, people who participate in activities like

walking are less likely to develop Type 2 diabetes than inactive people.

Not only can regular activity help people with diabetes feel better and achieve a healthy weight, it offers other benefits, including:

- Increasing your insulin's ability to control glucose.
- Improving your blood pressure.
- Lowering your cholesterol level.

Activities that can become a part of your daily life are the easiest way to begin increasing your activity level. Look for everyday ways to be more active:

- Park your car farther from the door and walk a longer distance to work.
- Take the steps instead of the elevator.
- Walk to the mailbox.
- Clean out a closet.
- Go outside and play with your kids.
- Do some gardening.
- Let the dog take you for a walk.
- Run the vacuum.
- Go dancing.
- Get out and enjoy nature.
- Take activity breaks while you are watching television or working on the computer.

If you work everyday activity into your life, you may feel so good that your next step will be to start hiking or riding a bike.

Be sure to check with your doctor before making any big changes in your routine. You may need to adjust your diet or medication when you are active. Your health care team may recommend that you regularly check your blood glucose level before you start an activity session. If your blood glucose is too high (more than 300 milligrams per deciliter), you should not exercise. Your blood sugar could also drop to a low level while you are



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active, and you will need to know how to treat it if that happens. You should keep your feet in good shape and wear comfortable socks and shoes when you walk, even if walking is not your chosen physical activity.

These tips can help you make activity part of your diabetes care routine. Activity should be an important part of controlling your diabetes for life. Talk to your health care team, family, friends, and coworkers about ways to be more active. Everyone can benefit. Try to learn to enjoy moving. Becoming more active can help you feel better and have a more positive outlook on life.

Time to Be Well

Taking care of yourself when you have diabetes can be a challenge. It may sound like a lot to keep track of your blood glucose level, work in daily activity, eat the right foods, and regularly see your health care team, but it doesn't have to be overwhelming. Part of taking time to be well is realizing that how you feel is affected by what you think.

Researchers agree that you can positively change your sense of well-being by:

- Engaging in regular physical activity.
- Thinking positive thoughts.
- Managing your emotions.
- Coping effectively with stress.

You can choose how you react to a given situation because you control your thoughts. Positive thought and action make it easier to take control of diabetes for life.

It is important to make decisions about which thoughts or behaviors you would like to change. Then, consider whether you are willing to make those changes. For example, if you want

to lose weight, you will need to change the way you eat and how much activity you engage in. Try to select changes that you are comfortable making and go slowly. If you are not willing to change your eating or activity patterns, try to accept yourself at your current weight. No good will come from continually telling yourself you need to lose weight. If you are able to focus on a goal of better health rather than weight loss, you may succeed.

Sometimes we worry without purpose. Some amount of worry encourages us to do what we need to do, but worrying without either resolution or action is seldom productive.

If you can curb your nonproductive worrying, you will improve your mood, increase your energy, and give yourself a greater sense of well-being. One way to check your thought patterns is to keep a log of "automatic" thoughts. Many people are harsh self-critics. Especially with yourself, try to forgive and forget. If you respond to an event with automatic self-criticism, write it down. This practice will help you see if you have a negative thought pattern. By learning to rethink your thought response to different types of events, you can reshape your attitude. A positive outlook and the belief that you are making progress help you move down the road to wellness.

For More Information

If you have diabetes, one of the most important things you can do is to find caring health care professionals you can talk with about controlling the disease. Some people may also benefit from meeting regularly with a support



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group or coalition to talk with other people who have the same concerns. The following people and groups can help:

- **Certified Diabetes Educator (C.D.E.)**—To find a C.D.E. in Kentucky, contact the Kentucky Diabetes Control Program at (502) 564-7996. You can also call the American Association of Diabetes Educators at (800) 832-6874.
- **Certified Health Education Specialist (C.H.E.S.)**—To locate this professional, contact your local health department.
- **County Extension Agent for Family and Consumer Sciences**—a professional who can help people with diabetes learn skills to plan and prepare foods that fit into their meal plans and can provide other consumer education resources. Contact your local Cooperative Extension Service office.
- **Diabetes Coalition**—a local group of health care providers and people with diabetes working together to improve diabetes care and awareness in Kentucky. To find a coalition near you, contact the Kentucky Diabetes Control Program at (502) 564-7996.
- **Diabetes Support Group**—a local group of people with diabetes that meets regularly to learn about diabetes and talk with about having diabetes.
- **Endocrinologist**—a medical doctor (M.D.) who specializes in the treatment of diabetes.
- **Medical Doctor (M.D.)**—a physician who may also be part of your health care team. Medical doctors work in clinics, hospitals, and health departments throughout Kentucky.

- **Ophthalmologist**—a medical doctor who can treat diseases of the eye.
- **Optometrist**—a professional trained to examine your eyes and help you keep your vision at its best.
- **Physical Therapist (P.T.)**—a health care professional who can help people with diabetes develop an activity routine.
- **Podiatrist**—a medical professional who can help people with diabetes care for and protect their feet.
- **Registered Nurse (R.N.)**—a health care professional who may also be part of your diabetes care team. These professionals work in clinics, hospitals, and health departments throughout Kentucky. Some may also be Certified Diabetes Educators specializing in diabetes education.
- **Registered Dietitian (R.D.)**—a professional who works in clinics, hospitals, and health departments throughout Kentucky. Some may also be Certified Diabetes Educators specializing in diabetes education. To find an R.D. near you, contact the Kentucky Dietetic Association at (502) 223-5322.

More information is also available at:

- The National Diabetes Education Program, National Institutes of Health, Bethesda, Maryland, <<http://ndep.nih.gov>>.
- The Kentucky Diabetes Control Program, (502) 564-7996.

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When you are finished with this publication, please pass it along to a friend who would like to hear the good news about how to control diabetes for life.



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