

# Diabetes is no (April Fools') joke

Diabetes hasn't always been a problem for Indians. Years ago, when Indians hunted, fished and gathered their food, diabetes was almost unheard of in Indian communities. Diabetes among Indians is due primarily to changes in the lifestyle of Indians, especially in changes in eating patterns and exercise. Today, all we have to do is hop on the car and drive to the grocery store to buy our food. We have eliminated the exercise we got when we hunted, fished and gathered our food. In addition, much of the food we buy is not very nutritious. We laugh and call it "junk food"—those bottles of pop, bags of chips and cookies, frozen TV dinners, packages of candy, boxes of "twinkies," etc. This type of food, together with our inactive lifestyle—watching television during much of our spare time, riding rather than walking, etc.—has resulted in many of us becoming over-fat and diabetic.

Diabetes can be a very serious condition with life-threatening complications. According to Dr. Tom Creelman, of the Warm Springs Indian Health Service, the records of the community show we are aware of 127 people, locally, with Type II diabetes. Unfortunately, this number has been going up steadily since the early 1950s and we have not seen a turnaround yet. Several Native American groups in the Southwest have experienced the same problem with diabetes, but for about one generation longer than at Warm Springs. They are seeing an increasing number of complications and younger people coming down with the disease—something we would like to prevent. In fact, however, we are also beginning to find diabetes among more and more of our younger people.

## What is Diabetes

Diabetes is a condition in which the body doesn't get sugar to the right place. The body needs sugar, but it has to go to the right place or problems will result. Not just sweet, sugary foods, but many other foods we eat are changed into blood sugar by the blood. In blood sugar form, our foods can be used by the body cells for energy. The blood sugar goes into the cells and is burned to give us energy for our daily tasks.

In people without diabetes, this process goes smoothly. In the diabetic, however, the sugar has trouble getting from the blood into the cells where it can be used. The sugar stays in the blood. People who have diabetes are said to have "high blood sugar."

Insulin is the hormone which helps the blood sugar to enter the cell. In the Type II diabetic (Warm Springs has only Type II diabetes at present), there is usually enough insulin being made by the body, but it is having trouble getting enough sugar into the cells because there are not enough "doors" to the cell through which the sugar can pass. These doors are called "receptors" and without enough receptors, not enough sugar can get into the cell. This causes the sugar to back up into the blood causing high blood sugar.

Having too much sugar in the blood over a number of years can result in some very serious health problems. It can cause blindness, it can cause your kidneys to fail, it can cause heart disease and lead to heart attack and stroke, it can interfere with circulation which may prevent sores from healing properly and lead to serious infections sometimes resulting in the amputation of limbs and it can even cause problems with your teeth and gums.

## Who gets Type II Diabetes?

Anyone can develop diabetes, but we know there are certain risks which make the likelihood of developing diabetes greater. These include: being overfat, not getting enough exercise on a daily basis, being over 30 years of age, having other members of your family who are diabetic or, if you are female, having had high blood sugar during pregnancy. If you have any of these, your chances of developing diabetes are increased.

## What are the early symptoms of diabetes

Diabetes is a sneaky condition. Usually we know about diabetes long before it causes some of the more serious problems we have mentioned. The early symptoms can include:

**Fatigue:** When the muscle cells

can't get the sugar they need for energy, the person becomes weak and feels tired much of the time.

**Frequent urination:** The kidneys, whose job it is to clean waste from the blood, can't reprocess all the extra sugar so some of the sugar overflows into the urine. The diabetic needs to urinate more frequently.

**Increased thirst:** Frequent urination requires a lot of water. Therefore, the diabetic feels thirsty much of the time.

**Blurred vision:** This is probably due to the way the lens and fluids in the eye utilize the sugar.

**Sores that don't heal:** The blood vessels may be partially closed and circulation is poor.

**Increased hunger:** Sometimes accompanied by unexplained weight loss.

**Sometimes, there are no signs and symptoms:** You first find out you have diabetes only when your doctor has done a simple blood test checking for high blood sugar.

These early symptoms can be managed fairly well with nutritional changes, exercise and, at times medication. With diabetes, the more serious, long-term problems may take ten to 15 years to show.

## Blood sugar can be controlled

Because some of the early symptoms can be treated well and go away, many people feel the diabetes has gone away and that no further problems will come. This is not so. Diabetes stays with you daily. It does not go away. To avoid the later problems with diabetes, a person with diabetes needs to pay close attention to their lifestyle, especially their nutrition, weight and exercise. They also need to get regular medical checkups including eye and dental exams.

Through lifestyle changes and new oral medications, the cells of people with Type II diabetes can be coaxed into accepting insulin and working normally. You play a key part in controlling blood sugar. Managing and preventing high blood sugar includes finding out about diabetes and having your blood tested periodically to determine your blood sugar level. In Warm Springs, the Wellness Program and I.H.S. hold free blood sugar screenings at various locations on a monthly basis.

If you become diabetic, your



Learning to manage blood sugar level includes regular testing at one of the free blood sugar screening clinics. Spilyay Tymoo photo by Sherwood.

doctor will help you make the diagnosis and plan with you a program of control that will meet your specific needs. A dietitian can help you understand your dietary needs and help you work out a food plan that will help you manage your diabetes. If you have to take medication, your doctor or nurse will instruct you in its management.

Maybe even more important in controlling and stopping diabetes is the encouragement of good, healthy lifestyles early in life, because prevention is much more successful than treatment in diabetes.

Eating properly is an essential part of the treatment and prevention program. Beginning children at an early age to develop proper eating habits and eating nutritionally sound diets may help us to prevent diabetes in the future in Warm Springs. Eating properly is not as hard as it may seem. Most often, eating less fat foods, eating and drinking less sugar foods and eating smaller amounts of food will

result in reaching a proper weight for your body frame and keep your blood sugar at normal levels.

Exercising regularly also helps with weight loss. It decreases the appetite and helps your body burn fat more efficiently. Research has shown that as you lose weight (both through watching your diet and regular exercise), the number of receptors (doors) on target cells increases. It also suggests that the existing receptors work better with regular exercise. With a large number of efficient receptors, the blood sugar can get inside the cells more quickly following a meal. This results in lower blood sugar levels.

Regular exercise may also help reduce the genetic tendency to develop diabetes. If Type II diabetes runs in your family, do not wait until you get the disease. Start now to eat a proper, well-balanced and nutritious diet. Get fit and stay as active as possible. Walk instead of

ride whenever you can. Enroll in an exercise program. Take advantage of the exercise equipment and programs available through the Wellness Program, the Community Center and the Extension Service. Work in your yard, go camping, go fishing, go for a hike with your family. Do something that keeps you active for the rest of your life.

Through an understanding of diabetes and its treatment, meal planning, regular exercise and in some cases, medication, you can control diabetes if you have it and possibly avoid or delay getting diabetes if you don't. Know the signs and symptoms, know what risks you might have and have your blood sugar tested on a regular basis. Be informed. Ask for diabetes information from the IHS clinic or the Wellness Program. Take charge of your own health—don't wait for it to take charge of you.

## Early signs and signals of high blood sugar

- \*\*Fatigue—Feels tired much of the time
- \*\*Increased thirst
- \*\*Frequent urination
- \*\*Experiences blurred vision
- \*\*Have sores that don't heal
- \*\*Have sore gums
- \*\*Increased hunger
- \*\*Losing weight

If you are experiencing any of these symptoms, you may have diabetes. Check with your doctor.

## Are you at risk for getting high blood sugar

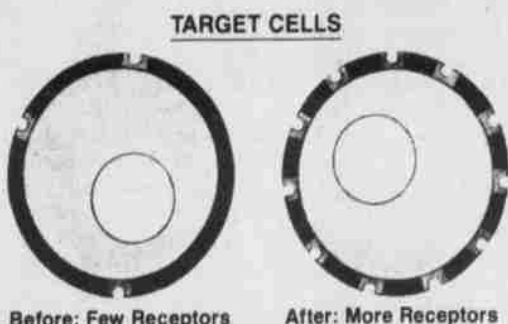
- Are you heavy? \_\_\_\_\_
- Are you inactive? \_\_\_\_\_
- Are you over 30? \_\_\_\_\_
- Do you have family members with high blood sugar? \_\_\_\_\_
- Did you have high blood sugar during pregnancy? \_\_\_\_\_

If you answered "Yes" to any of these, you may be more likely to get diabetes. Have your blood sugar checked.

## Are you a high risk?

- Take this test to find out. Points are listed for "yes" answers.
- (1) I have been experiencing the following symptoms on a regular basis:
    - \*Excessive thirst (20 points)
    - \*Frequent urination (20 points)
    - \*Extreme Fatigue (10 points)
    - \*Unexplained weight loss (20 points)
    - \*Occasional blurry vision (20 points)
  - (2) I am more than 40 years old. (10 points)
  - (3) I am 20 percent overweight or more. (20 points)
  - (4) I am a woman who has had more than one baby weighing more than nine pounds at birth. (20 points)
  - (5) I am of Native American descent. (10 points)
  - (6) I am of Hispanic or black descent. (10 points)
  - (7) I have a parent with diabetes. (10 points)
  - (8) I have an identical twin with diabetes (30 points)
  - (9) I have a brother or sister with diabetes (20 points)
- Those scoring 30 to 50 points can hear a recorded message about diabetes by calling 1-900-650-TEST. Those scoring 50 or above may call 1-900-650-RISK. The lines are open Tuesday only. There is a \$1 charge per call, with a portion benefiting diabetes research and education.

## You can increase target cells



**Insulin receptors** on target cells actually increase in number as you slim down. With more receptors to bind insulin, glucose has a better chance of getting inside the cells. So, by losing excess weight and eating the right foods, you help to correct the two basic problems of type II diabetes: hyperglycemia and a low number of insulin receptors.

Insulin receptors work better with

regular exercise. Research has shown that existing receptors work better, perhaps by binding insulin more tightly. More important, the number of receptors on target cells increases in people who are fit. Glucose can get inside the cell more quickly following a meal thereby reducing blood sugar levels.

**Hyperglycemia** becomes a problem when it is not controlled. But, through diet and exercise, you can keep blood glucose low and reduce the chances of developing complications.

Hyperglycemia can be controlled by regulating blood glucose levels through both exercise and well-planned meals. Think of exercise as a self-prescription. Test your blood or urine sugar levels to see when they are highest. Then talk to your doctor or diabetes educator about using exercise to control your hyperglycemia. After you've begun an exercise program, check daily glucose records to see how you're doing.

**Follow the dietary program** that your doctor, dietitian, or nurse has developed. You will soon see how easy it is to control your diabetes by eating right and checking your progress with regular glucose testing.

## Diabetic Breakfast Club meets monthly

On the fourth Thursday of every month, a free diabetic breakfast is held in the basement conference room at the Warm Springs Indian Health Service Clinic. It begins at 8:00 a.m. and ends approximately 9:30 a.m.

During this time, participants are treated to a breakfast specifically

designed for the diabetic. It is always very delicious. An educational session follows the eating of breakfast. This session deals with many questions and concerns people have about diabetes. It is very informative. This breakfast club is a time for learning and sharing information and for getting tougher

and talking with our friends. There is no blood work done and no exercise class.

If you are interested in learning about diabetes, plan to attend our next session which will be held on April 28th. For more information, contact the IHS clinic or Eva at the Tribal Wellness Office (ext. 205).



Blood sugar control includes learning about proper diet and nutrition. Educational sessions are held monthly at the Diabetic Breakfast Club meetings. Spilyay Tymoo photo by Sherwood.

## Free Blood Sugar Screening Clinic

April 13	10:00 a.m. to Noon	Community Center
April 20	10:00 a.m. to Noon	Kah-Nee-Ta, K.W.S.I and K.W.S.O.
May 11	10:00 a.m. to Noon	Fire Management
May 18	10:00 a.m. to Noon	Fire Management
June 8	10:00 a.m. to Noon	Warm Springs Mill
June 15	10:00 a.m. to Noon	Warm Springs Mill
July 13	10:00 a.m. to Noon	Tribal Warehouse
July 20	10:00 a.m. to 11:00 a.m.	Day Care Center
July 20	11:00 a.m. to Noon	Presbyterian Church

Fourth Thursday of Every Month 10:00 a.m. to Noon Tribal Administration Building