DIABETES, YOU CAN TAKE CONTROL RAKSHA JOSHI, MD

Diabetes, sometimes called the 'sugar illness,' is a condition in which the body's glucose levels are above normal. This is the simplest way to define 'diabetes'. Let us look at the very basic reason why a person becomes 'diabetic'.

The body converts food to glucose, a type of simple sugar, which the cells use for energy to stay alive and to perform all the functions that every cell of the body must perform. In order for the body's cells to be able to utilize the glucose, the hormone Insulin is essential. Insulin is produced by the pancreas. It is impossible for cells to utilize glucose in the absence or even relative lack of insulin. People with diabetes have problems converting food (glucose) to energy in their cells because they lack insulin, the hormone essential for this conversion. Brain cells are unique in that they can use **only** glucose for their energy needs and cannot use any other form of energy source, which other cells of the body can use. In people with diabetes, the pancreas does not make enough insulin or the body's cells cannot use the insulin properly. In either case, the cells are unable to convert glucose to energy, so the glucose simply accumulates in the body and we call this condition 'diabetes'.

The most common type of diabetes, Type 2, occurs in adults, but also can occur in children. In Type 2 diabetics, the pancreas does produce insulin but it is not enough for the body's needs. For some time, the pancreas meets the body's demand by producing more and more insulin. Ultimately, however, the pancreas reaches the point where it can't keep up. With Type 1 diabetes, the pancreas is completely unable to produce insulin or produces inadequately small amounts.

Diabetes often lacks specific symptoms unless blood glucose is very high. The most common symptoms are increased thirst and urination and unexplained weight loss. Other symptoms include fatigue, difficulties with vision, increased hunger or small injuries that won't heal.

Several risk factors increase a person's risk for developing diabetes. They include:

- Being over age 45
- Being overweight or obese
- Having direct family members, such as a parent or sibling, with diabetes
- Being of Hispanic/Latino, African American, American Indian or Asian American descent
- Pregnancy which places increased demands for insulin to the body
- Giving birth to a baby weighing more than nine pounds
- Getting little or no exercise

Because obesity is so common among Americans, the risk of diabetes has also increased. The easiest way for people to find out if they have diabetes is to get a blood test, ordered by their physician during their annual preventive health exam. Anyone over age 45, especially people with any of the above risk factors, is encouraged to have an annual diabetes test.

People can decrease their risk of developing diabetes by maintaining a healthy body weight, exercising regularly and following a low-fat, low-calorie diet. If already diagnosed, diabetics can help keep blood glucose under control by losing weight and exercising regularly. In

addition, their doctor might prescribe medications or even insulin to maintain control of the diabetes.

Uncontrolled diabetes can lead to complications such as blindness, kidney and heart disease, nerve problems, infections and possibly limb amputation over time.

People at risk for diabetes can take control of their health by maintaining normal weight and a regular exercise program, and asking their doctor to test them for diabetes.

As with all chronic diseases, the patient must become the 'expert' on the illness because he or she must take primary responsibility for the day-to-day control of the illness. It is imperative for the person who has diabetes to know as much as possible about the causes of uncontrolled or difficult to control blood glucose, the symptoms of high or low blood sugar and also how to test the blood glucose daily (home glucose monitoring) and what to do if the sugar is too high or too low.

Diabetics are also at increased risk for heart attacks from coronary artery disease (blockage of the blood vessels of the heart) and they should take good care to maintain their blood pressure within normal levels. Diabetics must take special care of their nails and feet so as not to develop infections in these areas, because unattended minor injuries can progress to major infections and the infection can even progress to infection of the bone of the foot/leg, leading to the need for amputation.

All diabetics must work very closely with their doctors to maintain a tight glucose control, your physician can advise you, but cannot work miracles if you do not do your part.

You <u>can</u> gain the power to control your diabetes and let your diabetes <u>not</u> control you. This power will come from obtaining knowledge about diabetes. Your physician, nutritionist, podiatrist (foot specialist) and your family will be your help and support, but ultimately you alone have the power to win over your diabetes. So,

- learn as much as you can about your condition
- ask questions when you visit your physician
- keep a daily written diary of your blood sugars before and after food
- exercise regularly
- keep your weight within normal limits
- above all, know that you are the one person who can control your diabetes, feel powerful

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