

You Can Say No To Diabetes

EVEN IF YOU'RE GENETICALLY PREDISPOSED TO THIS DISEASE, THERE ARE THINGS YOU CAN DO TO PREVENT IT FROM DEVELOPING.

When the prophet Hosea declared on God's behalf, "My people are destroyed from lack of knowledge" (Hos. 4:6, NIV), he was indicting the priests for their failure to teach the people the Word of God. However, this principle is applicable to other aspects of our lives as well, including our health.

Ignorance in health matters, combined with the failure to implement knowledge once it is acquired, places many people on a certain path to destruction. Among them are the large and ever-growing number of Americans affected by diabetes.

It seems a "lack of knowledge" regarding diabetes starts with its name. Over the years we've heard terms such as juvenile diabetes, adult-onset diabetes, insulin-dependent diabetes, non-insulin-dependent diabetes, gestational diabetes and even "sugar" diabetes.

If the average person is confused about what to call the disorder, then it should come as no surprise that many are unaware of both the risk factors for diabetes and the symptoms of the disease. Without this knowledge, we cannot be proactive in implementing strategies that will better control or prevent it.

Diabetes is a highly complex disease of metabolism and physiology. Shelves of textbooks and numerous research articles have been written on the subject. However, I'm giving a definition here that is extremely simplistic. My goal is to provide you with a basic level of understanding.

Diabetes is a disorder of glucose metabolism. Glucose is a type of sugar that provides the body with energy necessary for proper function. We get glucose through the foods we eat and

from the liver.

Insulin, a hormone secreted by the pancreas, functions to regulate the level of glucose in our bloodstreams. It's a "traffic controller," so to speak, directing the glucose in the blood to enter various tissues. The pancreas tightly regulates the amount of insulin it produces to make sure an appropriate amount of glucose goes into the tissues while insuring an adequate amount remains in the bloodstream.

Diabetes is divided into two types, type 1 and type 2. Only 5 percent to 10 percent of diabetics have type 1 diabetes, a disorder that results from an inability of the pancreas to produce insulin. It was once referred to as "juvenile" diabetes because it is usually diagnosed in childhood.

The more common form of diabetes (and the focus of this article) is type 2 diabetes. This form of diabetes develops when the body fails to respond properly to the insulin already circulating in the bloodstream, a condition known as insulin resistance. In type 2 diabetes, the pancreas may secrete a normal or even an excessive amount of insulin, but the blood glucose level remains elevated because the tissues don't respond to the hormone present in the blood—hence the term "insulin resistance."

Though the initial problem is one of insulin resistance, over time the pancreas often "burns out" and is no longer able to produce an adequate amount of the hormone. This explains why many type 2 diabetics start out taking pills but later need to be placed on insulin injections.

The diagnosis of type 2 diabetes is made when the glucose in the blood is abnormally elevated. The simplest and most common diagnostic test performed is the fasting plasma glucose test, in which the blood is checked after the patient undergoes an overnight fast or refrains from eating for a minimum of 8 hours. If the glucose level is greater than 126, the patient

is diagnosed with diabetes. If the glucose level is greater than 100 but less than 126, the condition is called pre-diabetes, or "impaired fasting glucose."

THE DIABETES EPIDEMIC Type 2 diabetes affects approximately 6.2 percent of the American population, or about 17 million people. This widespread epidemic is not limited to the United States but is growing in prevalence throughout the world. One reason for the increasing incidence of diabetes is the ever-growing rate of obesity, a major risk factor for the disease.

Unlike type 1 diabetes, type 2 diabetes can go undetected for years, even as long as a decade. It is estimated that close to 6 million people have type 2 diabetes and don't know it. In studies done between 1988 and 1994, 14.5 percent of Americans between the ages of 40 and 74 had either impaired fasting glucose or undiagnosed diabetes. The number is undoubtedly higher now, given the escalating rate of obesity in the last decade.

Of all the chronic medical illnesses, type 2 diabetes carries the greatest burden in terms of complications, disability, premature death and health-care costs. The complications from diabetes include damage to various organs such as the heart, blood vessels, kidneys, eyes and nerves. It increases the risk for coronary heart disease and stroke, and is the number one cause of blindness in adults.

In a time of skyrocketing health-care costs, diabetes carries a hefty share, with a conservative 2002 estimate of \$92 billion dollars spent for direct medical costs and \$132 billion spent in indirect costs.

Both the complications from type 2 diabetes and the expenses related to the disease increase when there is a delay in the diagnosis or less than optimal control of the blood glucose once diagnosed. For this reason, it is vitally important to learn the risk factors for the disease, to get screened for it

if appropriate and to take positive steps in managing the disease once diagnosed.

The risk for developing diabetes is not the same from one person to the next. Knowledge of the risk factors not only guides us in determining the need for screening but should also serve to motivate us to implement lifestyle changes that will reduce the likelihood of developing the disease, delay its onset or prevent it altogether. The recognized risk factors for type 2 diabetes are:

1. Age over 45 (or younger in the presence of additional risk factors)
2. Overweight or obese (BMI greater than 25)
3. First-degree relative with diabetes
4. Habitual physical inactivity
5. Member of a high-risk ethnic group (e.g., African American, Latino, Native American, Asian-American, Pacific Islander)
6. Previously identified pre-diabetes (impaired fasting glucose)
7. History of gestational diabetes (diabetes during pregnancy) or delivery of a baby weighing more than 9 lbs.
8. Hypertension
9. HDL cholesterol less than 35 mg/dl and/or a triglyceride level over 250 mg/dl
10. Polycystic Ovary Syndrome
11. History of vascular disease.

Most of these risk factors are fairly straightforward, such as age and race. Some, such as the cholesterol level and blood pressure, may require a visit to a health-care provider in order to determine their presence or absence.

Risk factors can be broadly categorized into those that are changeable and those that are unchangeable. Obviously we cannot change our race, our age or our family's genetics.

But we do have the power to control other risks factors such

as our body weight and level of physical activity. Exercise and weight loss not only can benefit those who already have type 2 diabetes but also can prevent the disease from developing in those at risk.

AN OUNCE OF PREVENTION The old saying “An ounce of prevention is worth a pound of cure” is applicable to type 2 diabetes. If you already have this disease, it is crucial for you to change your lifestyle in terms of diet, exercise and weight loss in order to better control it. But if you don’t have it and are at risk, be encouraged by this fact: Long-term studies show that the development of type 2 diabetes can be delayed or even prevented through lifestyle modification.

One major study, the Diabetes Prevention Program, enrolled men and women at risk for type 2 diabetes and divided them into three different groups. The first group received intensive nutrition and exercise counseling. The second and third groups both received standard information on diet and exercise but were also given a pill to take. Group 2 received a medication used to treat diabetes, and group 3 received a placebo, which is a pill that has no measurable effect on the body.

Although one would assume the group receiving the medication for diabetes would end up having the lowest chance for developing the disease, it was actually the first group—the ones who received intensive nutrition and exercise counseling—who fared the best. After a follow-up period of close to three years, they had a 58 percent reduction in the progression to diabetes compared with only a 31 percent reduction in the group given the medication.

What was especially encouraging was the fact that the goals set for the lifestyle modification group were not rigorous. The members of the group were asked to achieve and maintain a 7 percent reduction in their initial body weight and to engage in moderately intense exercise (such as brisk walking) for 150 minutes a week. That would mean a person weighing 200 pounds

at the start of the study was expected to lose only 14 pounds (not 50 or 75) and to walk for 30 minutes 5 days per week. When one considers the seriousness of type 2 diabetes, these modest lifestyle changes are a rather small price to pay to delay or prevent the disease.

Unlike some diseases that strike without rhyme or reason, type 2 diabetes is a disorder that is strongly influenced by our behavior. If you have type 2 diabetes or are at risk for developing this disease, it is important for you to take measures to improve your health and the health of your family.

There are many good resources available to instruct you on diet and nutrition, but there is also much confusion in terms of what types of foods are beneficial and what foods should be avoided. Here are five tips to help you get started on the path toward better health.

Reduce total calories. Diet advice can leave us in a state of confusion, with the average person asking, Which is better, low carbs or low fat? In the midst of this confusion and controversy, it is easy to forget that excess calories cause weight gain, no matter what the type of food. Make sure in your quest for the ideal weight-loss plan that your total calories are reduced by restricting portion sizes, avoiding second servings and eliminating unhealthy high-calorie snacks.

Choose carbohydrates wisely. Select fruits, vegetables, whole grains, beans and lentils packed with vitamins, nutrients and fiber. Limit (or eliminate) highly refined sugars such as those found in pastries and sugary beverages.

Choose fats wisely. Though all fats are high in calories (9 calories per gram compared with 4 calories per gram in carbohydrates and protein), some fats are better than others, and some are even beneficial to our health. Avoid saturated fats and trans fats found in fatty cuts of meat and processed foods. Choose instead monounsaturated and polyunsaturated fats

found in foods such as olive oil, canola oil, fish and nuts.

Reduce consumption of the “whites.” White bread, white pasta, white rice, white sugar and white potatoes should be eaten in moderation. Choose instead whole grain breads and pasta, and brown or wild rice.

Increase physical activity. Make a commitment to exercise at least 30 minutes most days per week, and try to be more active in your day-to-day activities (for example, take the stairs instead of the elevator).

Our bodies are the temples of the Holy Spirit, who has blessed us with wisdom and power. Wisdom enables us to recognize those things we need to change; power gives us what we need to do it. Choose today to walk in wisdom and power, take charge of your lifestyle, and receive the blessing of better health.

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