

HEALTHY LIVING

Exorcising Diabetes

With right attitude, activities, patient beats the disease

BY VIKKI CONWELL

Cox News Service

A diagnosis of diabetes initially frightened Katrina Johnson, but the fear soon incited her to launch a new life.

After 30 years of leading a sedentary lifestyle and eating chocolate, fast food, oversized portions and lots of pasta, the 5-foot-tall woman weighed about 216 pounds when a physical exam revealed that obesity was not her only health concern.

Johnson suffered from diabetes, a condition that often leads to kidney disease, heart disease and stroke. Additional consequences can include amputation and blindness. Diabetes, the focus of an awareness campaign this month, has grown at epidemic proportions, with more than 24 million Americans affected, yet an estimated one-fourth of them are unaware of their condition.

Once she became aware, Johnson got educated about the disease and sprang into action to manage her glucose and her health. She and her husband, Greg (not a diabetic), changed their eating habits and started exercising at the gym. She lost more than 50 pounds; he trimmed down by more than 90.

The diagnosis "was quite a blessing because we were able to take hold of it and not let it continue," said Johnson, 33, a Canton, Ga., resident who was diagnosed in 2006. "We rebirthed ourselves," she said.

Diabetics such as Johnson who combine aerobic and resistance/strength training demonstrate greater improvements in glucose control, physical performance and body fat composition, according to a new study by the American Physical Therapy Association.

Regular exercise has long been prescribed as part of a diabetic treatment program as studies show physical activity improves heart health, weight control and sugar levels. This is one of the first studies to explore the relationship between a particular type of exercise and diabetes.



BRANT SANDERLIN / COX NEWS SERVICE

Katrina Johnson lifts weights on a machine as part of an exercise regimen she began after being told she had diabetes.

This is not a new concept, but it underscores the importance of a balanced and comprehensive approach to diet and exercise for diabetics, said Wylene Watts, a physical therapist and executive director of rehabilitation services at Wellstar Health Systems.

Many diabetics lack the energy to exercise, but a regular exercise regimen not only increases their energy level but also improves their mobility,

she said.

"Our approach is to not only manage illness but wellness," said Watts. "A combination of approaches gives them the best outcome."

During exercise, muscles burn sugar for energy, thus lowering blood sugar levels. A more strenuous workout produces longer-lasting results. In Type 2 diabetics, exercise can reduce the amount of insulin needed to transport

sugar into the cells, reducing dependence on glucose-lowering medication.

Resistance exercise in particular — such as lowering a dumbbell in a bicep curl — strengthens muscles, and that can further improve the way insulin works in the body.

When muscles are more fit, they take in sugar more easily, said Scott Isaacs, an endocrinologist and clinical instructor of medicine at Emory University School of Medicine. In addition to a healthy diet and aerobic exercise, Isaacs prescribes at least 20 minutes of strength training two to three times a week for his diabetic patients. People with more fit muscles can also handle more sugar than those whose muscles are out of shape, he said.

"Most patients understand the importance of physical activity, but still don't do it," said Isaacs, citing additional benefits of better sleep. "We say that knowing doesn't equal doing," he said.

Johnson is one of Isaac's patients who followed doctor's orders.

When diagnosed, her blood glucose teetered around 110-120 while she took diabetes medication.

She implemented a low-calorie diet with protein shakes and an exercise regimen that burned 2,000-2,500 calories a week with 30 minutes of strength/resistance training twice a week. Her blood sugar now reads in the 80s, and she has been taken off all medication.

According to her doctor, Johnson is "essentially, no longer a diabetic."

"It's absolutely amazing what a bit of weight loss and eating healthy can do," said Johnson, who plans to lose another 30 pounds. ■

EXERCISE AND DIABETES

When you're ready to exercise, start slowly. Work your way up to 30 minutes of moderate-intensity exercise most days of the week. While you're working out, remember to take good care of yourself.

- **Monitor your blood sugar:** Check your blood sugar before, during and after exercise — especially if you take insulin or medications that can cause low blood sugar. Carry glucose tablets or hard candy in case your blood sugar drops too low or you feel shaky, nervous or confused.

- **Pay attention to your feet:** Wear smooth-fitting socks and comfortable athletic shoes. Examine your feet before and after exercise for cuts or blisters.

- **Drink up:** Drink plenty of fluids while you exercise, especially when it's hot. Dehydration can increase your blood sugar. If you exercise for more than an hour, drink carbohydrate-containing beverages rather than plain water.

- **Identify yourself:** Wear a diabetes identification bracelet or shoe tag while exercising.

- **Know when to stop:** If you experience any warning signs — severe shortness of breath, dizziness, faintness, nausea, chest pain, heart palpitations, or pain in an arm or in your jaw — stop exercising. If you don't feel better within 15 minutes, seek immediate medical help.

Source: Mayo Clinic

ABOUT DIABETES

Diabetes is considered the biggest public health crisis of the 21st century, and it continues to grow to epidemic proportions. Nearly 24 million children and adults in the United States have diabetes.

- **The death rate** for diabetes has continued to grow since 1987, while the death rates due to heart disease, stroke and cancer have declined.

- **Proper diabetes control** can help reduce the risks for health complications. Data from the Centers for Disease Control and Prevention (CDC) indicate the following risks from diabetes:

- **Heart disease and stroke:** Adults with diabetes have heart disease death rates about two to four times higher

than adults without diabetes.

- **Blindness:** Diabetes leads to 12,000 to 24,000 new cases of blindness each year, making it the leading cause of new cases of blindness in adults.

- **Kidney disease:** Diabetes is the leading cause of kidney failure.

- **Amputations:** More than 60 percent of non-traumatic lower-limb amputations occur in people with diabetes.

ABCs OF DIABETES

Remembering the "ABCs of diabetes" can help prevent or delay the onset of diabetes complications, the American Diabetes Association says:

- **Average Glucose:** Test at home daily and have blood sugar levels tested every three months to get an average reading over time. Keep level measured in so-called A1C test less than 7 percent.

- **Blood Pressure:** Maintain a blood pressure reading lower than 130/80.

- **Cholesterol:** LDL (bad) cholesterol reading should be below 100; HDL (healthy) cholesterol should be above 40 for men and 50 for women; triglycerides should be below 150. ■