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The Effect of 10,000 Steps per Day on Glucose Tolerance and Insulin Response in Overweight Women

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CATEGORY Established Investigator Grant

ABSTRACT

Type II diabetes is a disease in which the body does not effectively control the glucose (i.e., sugar) levels in the blood. It affects millions of Americans each year, and many serious complications may result. The development of this disease is typically slow, and people often do not know they have the disease until it becomes quite serious. Physical inactivity is one of the risk factors for developing this disease.

Researchers at the University of Tennessee in Knoxville were interested in learning how daily walking would impact disease progression in women at risk for developing Type II diabetes. Women who were not yet diabetic but showed signs of developing the disease were recruited for the study. The women were placed on a walking program, and pedometers were used to monitor the amount the women walked. They were encouraged to walk 10,000 steps each day; this was an increase of about two miles per day farther than the women usually walked.

In only eight weeks, the women had significant improvement. Their response to a sugar stimulus was significantly reduced, meaning that their bodies were processing the sugars they ingested much better than usual. Furthermore, the women experienced a large drop in their blood pressures. In conclusion, inactive women who are at risk for developing Type II diabetes may experience significant improvement in their physical health by beginning a walking program.

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