

1 hour daily exercise fights 'fatso' gene in teens

April 5 2010, By CARLA K. JOHNSON , AP Medical Writer

(AP) -- One hour of moderate to vigorous exercise a day can help teens beat the effects of a common obesity-related gene with the nickname "fatso," according to a new European study.

The message for adolescents is to get moving, said lead author Jonatan Ruiz of the Karolinska Institute in Sweden.

"Be active in your way," Ruiz said. "Activities such as playing sports are just fine and enough."

The study, released Monday, appears in the April edition of [Archives of Pediatrics and Adolescent Medicine](#).

The research supports U.S. guidelines that tell children and teenagers to get an hour or more of physical activity daily, most of it [aerobic activity](#) such as running, jumping rope, swimming, dancing and bicycling.

Scientists are finding evidence that both lifestyle and [genes](#) cause obesity and they're just learning how much diet and exercise can offset the inherited risk.

One gene involved with obesity, the FTO gene, packs on the pounds when it shows up in a variant form. Adults who carry two copies of the gene variant - about 1 in 6 people - weigh on average 7 pounds more than people who don't.

In the new study, 752 teenagers, who had their blood tested for the gene variant, wore monitoring devices for a week during waking hours to measure their [physical activity](#).

Exercising an hour or more daily made a big difference for the teens who were genetically predisposed to obesity. Their waist measurements, [body mass index](#) scores and body fat were the same, on average, as the other teenagers with regular genes.

But the teens with the [gene variant](#) had more body fat, bigger waists and higher BMI if they got less than an hour of exercise daily. The results were similar for boys and girls.

The teens lived in Greece, Germany, Belgium, France, Hungary, Italy, Sweden, Austria and Spain. The study was funded by the Spanish and Swedish governments and the European Union.

The new study found that most of the teenagers had at least one copy of the variant gene. Only 37 percent had regular genes. The rest had either one of two copies of the pesky fatso gene.

An earlier study in Amish adults in Lancaster County, Pa., found they needed three to four hours of moderate activity daily to beat the gene. The adults in that study did things like brisk walking, housecleaning and gardening.

The teens in the new study may have exercised more vigorously than the Amish adults, Ruiz said. The new analysis was designed to see whether the current U.S. guidelines - which specify a moderate to vigorous level of exercise for an hour a day - made a difference for kids.

The lead author of the Amish study, Evadnie Rampersaud of the University of Miami, said the new findings are "very interesting"

because they suggest one hour daily spent exercising can be enough for teenagers at risk.

University of Miami researchers now are studying adults in an employee wellness program to see what it takes for them to overcome the fatso gene, Rampersaud said.

"The message is clear: genes are not destiny," said Dr. Alan Shuldiner of the University of Maryland, a co-author of the Amish study. "Those with obesity susceptibility genes should be especially motivated to engage in a physically active lifestyle."

More information: Archives: <http://www.archpediatrics.com>

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