

Daily Exercise Offsets 'Obesity Gene' in Teens

BY MARY ANN MOON

Physical activity appears to cancel out the effects of the "obesity gene" in adolescents, as it has been shown to do in adults.

"To our knowledge, our study is the first to report an interaction between the FTO [fat mass- and obesity-associated] rs9939609 polymorphism and physical activity level on adiposity indices using

objectively assessed physical activity in adolescents," said Jonatan R. Ruiz, Ph.D., of the Karolinska Institute, Huddinge, Sweden, and his associates.

The investigators genotyped and assessed body mass index, waist circumference, and body fat percentage in 752 adolescents in the Healthy Lifestyle in Europe by Nutrition in Adolescence Cross-Sectional Study. They also assessed subjects' physical activity level using an ac-

celerometer attached to the lower back.

As expected, the FTO gene variant known as rs9939609 was significantly associated with higher BMI, greater waist circumference, and higher percentage of body fat. But there was no such association in the subgroup of carriers who engaged in at least 60 minutes per day of moderate to vigorous physical activity, Dr. Ruiz and his colleagues said (*Arch. Pediatr. Adolesc. Med.* 2010;164:328-33).

The findings "have important public health implications and indicate that meeting the physical activity recommendations [of the Department of Health and Human Services] may offset the genetic predisposition to obesity associated with the FTO polymorphism in adolescents," the researchers said.

The study was funded by several European government organizations. No financial conflicts were reported. ■

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Pediatric Patients: Safety and effectiveness of ONGLYZA in pediatric patients have not been established.

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Reference: 1. Fingertip Formulary[®] data as of October 25, 2009. Data on File, October 2009.

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