

Study IDs two novel loci linked to insulin sensitivity

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(HealthDay)—Two novel loci have been identified that are associated



with insulin sensitivity, according to a study published online July 14 in *Diabetes*.

Geoffrey A. Walford, M.D., from Massachusetts General Hospital in Boston, and colleagues performed a genome-wide association study of the modified Stumvoll Insulin Sensitivity Index (ISI) within the Meta-Analyses of Glucose and Insulin-related traits Consortium. Discovery was performed in 16,753 individuals, and the authors attempted replication in 13,354 independent individuals for the 23 most significant novel loci. The correlation with ISI was assessed in different models.

The researchers found that in a model analyzing the combined influence of genotype effect adjusted for body mass index (BMI) and the interaction effect between the genotype and BMI, three variants reached genome-wide significance: rs13422522 (NYAP2), rs12454712 (BCL2), and rs10506418 (FAM19A2). Conditioning on the known IRS1 insulin sensitivity locus eliminated the association at NYAP2; the associations at BCL2 and FAM19A2 were independent of known cardiometabolic loci.

"In conclusion, we identified two novel loci and replicated known variants associated with insulin sensitivity," the authors write. "Further studies are needed to clarify the causal variant and function at the *BCL2* and *FAM19A2* loci."

Several authors disclosed financial ties to the pharmaceutical industry.

More information: <u>Full Text (subscription or payment may be required)</u>

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