

No sign ethnic group genes cause diabetes

April 17 2007

U.S. and Australian scientists have dispelled a 40-year-old "thrifty genotype theory" that certain minority groups are genetically prone to diabetes.

University of California-Irvine anthropologist Michael Montoya, University of Washington geneticist Stephanie Fullerton, and Yin Paradies, an epidemiologist at Australia's Menzies School of Health Research, analyzed existing genetic studies published across a variety of disciplines.

The team found no evidence to support the popular "thrifty genotype theory," which suggests cycles of feast and famine early in human history created a gene that helps the body use scarce nutrients -- a gene that leads to obesity and diabetes in comfortable, sedentary modern lifestyles.

"Our study challenges the presumption that Native American, Mexican American, African American, Australian Aborigine, or other indigenous groups are genetically prone to diabetes because the evidence demonstrates that higher rates of diabetes across population groups can be explained by non-genetic factors alone," said Montoya.

He noted the research helps explain why more than 250 genes have been studied as possible causes of type-2 diabetes, but those genes explain less than 1 percent of diabetes prevalence worldwide.

The findings are published in the spring issue of the journal *Perspectives*

in Biology and Medicine.

Copyright 2007 by United Press International

Citation: No sign ethnic group genes cause diabetes (2007, April 17) retrieved 1 May 2024 from <https://medicalxpress.com/news/2007-04-ethnic-group-genes-diabetes.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.