

Family history of diabetes increases the risk of prediabetes by 26 percent, with effect most evident in non-obese

August 21 2013

A study involving more than 8,000 participants has shown that people with a family history of diabetes see their risk of prediabetes increase by 26%. The research is published in *Diabetologia*, the journal of the European Association for the Study of Diabetes, and is by Dr Andreas Fritsche and colleagues from the German Center for Diabetes Research.

Prediabetes is a condition most often described as the 'state between [normal blood sugar](#) control and full diabetes', and indeed prediabetes progresses to full blown diabetes in up to 20% of individuals affected per year.

Prediabetes can take two forms: impaired fasting glycaemia (IFG), whereby levels of glucose in the fast state are higher than normal but not high enough to be classed as diabetes; and also impaired glucose tolerance (IGT), where [blood sugar levels](#) are abnormal due to increased [insulin resistance](#). While it is known that a family history of [type 2 diabetes](#) increases the risk of full blown diabetes, research has not yet explored whether such a family history increases the risk of prediabetes in either form.

In this study Fritsche and colleagues analysed 8,106 non-diabetic individuals of European origin collected from the study centres of the German Center for Diabetes Research.* Of these, 5,482 had normal [glucose tolerance](#), and 2,624 had IFG and/or IGT n=2,624. They

analysed whether having at least one first degree relative with diabetes is associated with prediabetes.

A family history of diabetes was found to increase the crude, unadjusted risk for prediabetes (IFG and/or IGT) by 40%. This increased risk fell to 26% when the analysis took account of age, sex, and BMI of participants.

When different types of prediabetes were considered, family history increased the risk of isolated IFG by 37%, of isolated IGT by 25%, and the two combined by 64%. However overall, when adjusted for BMI, the association between family history and prediabetes was seen only in non-obese individuals (BMI

Citation: Family history of diabetes increases the risk of prediabetes by 26 percent, with effect most evident in non-obese (2013, August 21) retrieved 2 May 2024 from <https://medicalxpress.com/news/2013-08-family-history-diabetes-prediabetes-percent.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.