

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

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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

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