

## Type 2 diabetes in women less than 45 triples risk of early menopause

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[Type 2 diabetes](#) - the most common type of [diabetes](#) - triples the risk of an early [menopause](#) in women younger than 45 years of age, according to new research published in the peer-reviewed journal *Climacteric*.

Diabetes is a huge and increasing international problem. The International Diabetes Federation estimates that 366m people had diabetes in 2011 - more than the entire population of the USA. This figure is predicted to rise to 552m by 2030. 90% of those with diabetes have type 2 [diabetes](#).

A group led by Dr Álvaro Monterrosa-Castro, of the University of Cartagena, Colombia asked 6079 women aged between 40 and 59 years from 11 Latin American countries a series of questions related to menopause, [depression](#), and diabetes. They then associated their responses with a series of variables such as weight, blood pressure, HRT use. Using a statistical programme developed by the Centre for Disease Control in the USA, they were able to pull out a series of correlations - some expected, but some more surprising. The main finding was:

- Menopause itself does not increase the risk of diabetes. But in contrast, women under 45 who have type 2 diabetes have almost three times (Odds Ratio, 2.76) the risk of an early menopause; the average age of menopause in women with diabetes was 48.5 years, as opposed to 50.1 years in non-diabetic women (there were no other significant differences between the groups). This means that 29.5% of diabetic women aged 40 to 44 had experienced the [menopause](#).

Other findings of the research are:

- Living at an altitude of more than 2500m is associated with a lower [diabetes](#) risk (26% )
- Women with a BMI of  $\geq 30$  were 57% more likely to have diabetes
- [High blood pressure](#) significantly increased the risk of Diabetes (87%)

In contrast to previous studies, this work found that [Hormone](#) Replacement Therapy (HRT) increased the risk of diabetes by 14%. Dr Monterrosa-Castro commented "This result is different to the majority of previous work which has shown that HRT reduces the risk for diabetes. However, it is possible that the differences may be explained by genetic differences or by the fact that nowadays women tend to use lower doses of [estrogen](#) than when most of the previous studies were carried out".

The study also found a mixed result for the association of alcohol with type 2 [diabetes](#), with those women taking lower or moderate doses of alcohol having a reduced risk, whereas high alcohol intake was associated with a higher diabetes risk.

Source: University of Cartagena