Diabetes risk from sitting around

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A new study has found that women who stay seated for long periods of time every day are more prone to developing type 2 diabetes, but that a similar link wasn't found in men.

Researchers from the University of Leicester Departments of Health Sciences and Cardiovascular Sciences revealed that women who are sedentary for most of the day were at a greater risk from exhibiting the early metabolic defects that act as a precursor to developing type 2 diabetes than people who tend to sit less.

The team assessed over 500 men and women of the age of 40 or more about the amount of time spent sitting over the course of a week, helped out by tests on the level of specific chemicals in their bloodstream that are linked to diabetes and metabolic dysfunction. It was found that the women who spent the longest time sitting had higher levels of insulin, as well as higher amounts of C-reactive protein and chemicals released by fatty tissue in the abdomen, leptin, and interleukin6, and which indicate problematic inflammation.

The study, published in the American Journal of Preventive Medicine, revealed that the link between sitting time and diabetes risk was much stronger in women than men, but could not pinpoint why there was a gender difference, although it was suggested that women might snack more often than men during sedentary behaviour, or because men tend to take part in more robust activity when they do get up and about.

Dr Thomas Yates who led the study said: "This study provides important

new evidence that higher levels of sitting time have a deleterious impact on insulin resistance and chronic low-grade inflammation in women but not men and that this effect is seen regardless of how much exercise is undertaken. This suggests that women who meet the national recommendations of 30 minutes of exercise a day may still be compromising their health if they are seated for the rest of the day.

'It therefore suggests that enabling women to spend less time sitting may be an important factor in preventing chronic disease.' The paper calls for further experimental research investigating the effect of reduced sitting time on human volunteers

Dr Yates added: "If these results are replicated, they have implications for lifestyle recommendations, public health policy, and health behaviour change interventions, as they suggest that enabling women to spend less time sitting is an important factor in preventing chronic disease."

Provided by University of Leicester