

Working Night Shift Increases Risk for Type II Diabetes

A study published in February of 2018 performed by the UK Biobank, revealed a link between night-shift work and the risk for type II diabetes development. The UK Biobank is a health organization which aims to improve the tools for prevention, diagnosis and treatment of a wide range of serious and life-threatening illnesses. This agency collected extensive work history data on greater than 270,000 men and women between 2006 and 2010. Overall the investigators included 224,928 day-workers, 40,485 shift-workers (outside 9 a.m. to 5 p.m. hours), and 6,801 night-workers in this study. Once the investigators collected all data points they accounted for many variables including but not limited to, family history, age, sex, ethnicity, alcohol consumption, physical activity, and other medical conditions to prevent these variations from skewing the data.

Overall the investigators found 6,770 cases of type 2 diabetes. This information lead to several major findings relating to the shift an individual works and the risk for developing type II diabetes. Individuals who rotated shift work were 15% more likely to have type 2 diabetes than day workers. In addition, the frequency of nights shifts worked per month in their rotation, increased the risk of diabetes. Those who worked an average of eight night shifts or more a month had a 36% higher chance of developing type 2 diabetes. Those who worked rotating shifts with most of those shifts being night shift had a 44% higher likelihood of developing diabetes.

Interestingly, those who worked night shift consistently for less than 10-years did not have an increased risk of developing type II diabetes compared to those who worked day shift. However, those who worked night shift for greater than 10-years had a significantly higher risk of developing type 2 diabetes than those who never worked night shifts. Physical activity also played a role in the likelihood of developing type II diabetes in this study. Individuals with a higher level of physical activity only experienced a higher risk of diabetes when they worked rotating shifts that usually include night shifts. However, those with low physical activity had a higher risk for diabetes development when working both shift work and night shift. Lastly, working night or shift work did not affect an individual's genetic predisposition for developing diabetes.

References:

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