

Children who sleep an hour less at higher risk of type 2 diabetes, says study

August 15 2017



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A study has found that children who slept on average one hour less a night had higher risk factors for type 2 diabetes, including higher levels of blood glucose and insulin resistance.

The NHS Choices recommended sleep duration for a 10 year old is 10 hours and so a child getting just one hour less has a higher risk, say

researchers.

Professor Christopher G Owen, who led the research at St George's, University of London, said: "These findings suggest increasing sleep duration could offer a simple approach to reducing levels of body fat and type 2 diabetes risk from early life.

"Potential benefits associated with increased sleep in childhood may have implications for health in adulthood."

The study, "Sleep Duration and the Risk of Type 2 Diabetes," also confirmed prior research that has shown an association between shorter sleep duration and [higher levels](#) of body fat.

Researchers analysed the body measurements, blood sample results and questionnaire data from 4,525 children of multi-ethnic descent, aged 9 to 10 years, in England.

Children who slept longer had lower body weight and lower levels of fat mass. Sleep duration was also inversely related to insulin, insulin resistance and [blood glucose](#).

The study, in the September 2017 issue of the *Pediatrics* academic journal, did not find an association between sleep duration and [cardiovascular risk factors](#), including blood lipids and blood pressure.

The authors conclude that increasing the mean weekday [sleep duration](#) (10.5 hours) by half an hour could be associated with a 0.1 kg/m² lower body mass index and a 0.5 percent reduction in [insulin resistance](#).

Reducing these levels may have longer-term implications for reduced type 2 diabetes in later life, the study states.

More information: Alicja R. Rudnicka et al. Sleep Duration and Risk of Type 2 Diabetes, *Pediatrics* (2017). [DOI: 10.1542/peds.2017-0338](https://doi.org/10.1542/peds.2017-0338)

Provided by St. George's University of London

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