

Sleep duration may affect the integrity of sperm DNA

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A new study found a link between sleep duration and a measure of chromosomal health in sperm. The findings are published in the *Journal* of Sleep Research.

In the study of 2020 <u>semen samples</u> provided by 796 male volunteers from colleges in Chongqing (China) from 2013 to 2015, volunteers with more than 9 hours per day of sleep and those with 6.5 hours or less per day sleep had 41% and 30% lower High DNA Stainability—an index that represents the proportion of sperm with abnormal chromatin—than did volunteers with 7 to 7.5 hours per day of sleep. Chromatin is a complex of DNA and proteins that forms chromosomes.

"This is new information after our pervious finding that <u>sleep duration</u> has an inverse U-shaped association with <u>semen</u> volume and total sperm count. In the previous study, we found that these two semen parameters were highest when sleep is 7.0 to 7.5 hours per day, and either longer or shorter sleep was associated with the decrease of the two semen parameters," said Dr. Jia Cao, co-author of the study.

More information: Xiaogang Wang et al. Sleep duration is associated with sperm chromatin integrity among young men in Chongqing, China, *Journal of Sleep Research* (2017). <u>DOI: 10.1111/jsr.12615</u>

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