Can’t sleep? Chronic insomnia could be due to genetics

Researchers have identified specific genes that may trigger the development of sleep problems, and have also demonstrated a genetic link between insomnia and psychiatric disorders such as depression, or physical conditions such as type 2 diabetes.

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[Researcher Murray] Stein’s research team conducted genome-wide association studies (GWAS). DNA samples obtained from more than 33,000 soldiers participating in the Army Study To Assess Risk and Resilience in Servicemembers (STARRS) were analyzed.
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Overall, the study confirms that insomnia has a partially heritable basis. The researchers also found a strong genetic link between insomnia and type 2 diabetes. Among participants of European descent, there was additionally a genetic tie between sleeplessness and major depression.

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Insomnia was linked to the occurrence of specific variants on chromosome 7. In people of European descent, there were also differences on chromosome 9. The variant on chromosome 7, for instance, is close to AUTS2, a gene that has been linked to alcohol consumption, as well as others that relate to brain development and sleep-related electric signaling.

“Several of these variants rest comfortably among locations and pathways already known to be related to sleep and circadian rhythms,” Stein elaborates. “Such insomnia associated loci may contribute to the genetic risk underlying a range of health conditions including psychiatric disorders and metabolic disease.”

Editor’s note: Read full study (behind paywall)

Read full, original post: Can’t sleep? Could be down to genetics