

## Could ultra-processed foods be associated with your insomnia?

May 30 2024



Credit: Unsplash/CC0 Public Domain



Ultra-processed foods (UPF) may be associated with insomnia experienced by an estimated one-third of adults. An <u>analysis</u> of dietary and sleep patterns reported in the *Journal of the Academy of Nutrition and Dietetics*, shows a statistically significant association between consumption of UPF and chronic insomnia independent of sociodemographic, lifestyle, diet quality, and mental health status characteristics.

Lead investigator Marie-Pierre St-Onge, Ph.D., Division of General Medicine and Center of Excellence for Sleep & Circadian Research, Department of Medicine, Columbia University, explains, "At a time when more and more foods are highly processed and sleep disturbances are rampant, it is important to evaluate whether diet could contribute to adverse or good-quality sleep."

While past studies have examined nutrients or <u>dietary supplements</u> in relation to sleep (for example, protein, magnesium), this study is novel because it evaluates a dietary pattern beyond nutrients and specific foods and shows that the degree to which foods are processed may have some relevance for <u>sleep health</u>.

Dr. St-Onge adds, "Our research team had previously reported associations of healthy dietary patterns, like the Mediterranean diet, with a reduced risk of insomnia and poor sleep quality (both cross-sectionally and longitudinally), and high-carbohydrate diets with an elevated risk of insomnia. The consumption of UPF is on the rise worldwide, and it has been linked to numerous health conditions such as diabetes, obesity, and cancer."

To examine dietary intakes for their association with sleep, this large epidemiological study used NutriNet-Santé data from more than 39,000



French adults. This large cohort study was ideally suited to address this question, given its inclusion of sleep variables and multiple days of detailed diet information.

Data were collected every six months between 2013 and 2015 from adults who completed multiple 24-hour dietary records and provided information on insomnia symptoms. The definition of insomnia was based on the criteria provided by the DSM-5 and the ICSD-3.

Participants reported consuming approximately 16% of energy from UPF and close to 20% reported chronic insomnia. Individuals who reported chronic insomnia consumed a higher percentage of their energy intake from UPF. The association of higher UPF intake and insomnia was evident in both males and females, but the risk was slightly higher in males than females.

First author Pauline Duquenne, MSc, Sorbonne Paris Nord University and Paris Cité University, INSERM, INRAE, CNAM, Nutritional Epidemiology Research Team (EREN), Center for Research in Epidemiology and Statistics (CRESS), cautions, "It is important to note that our analyses were cross-sectional and observational in nature, and we did not evaluate longitudinal association. While data do not establish causality, our study is the first of its kind and contributes to the existing body of knowledge on UPF."

Other study limitations included reliance on self-reported data and possible misclassification of some food items. Caution is advised when generalizing the findings because the NutriNet-Santé includes a higher proportion of females and individuals of high socioeconomic status compared with the general French population, although UPF intake was similar to a nationally representative sample.

The investigators recommend that future studies should test causality and



evaluate the associations over time. However, they advise that individuals with sleep difficulties may consider examining their diet to determine whether UPF could be contributing to their sleep issues.

**More information:** Pauline Duquenne et al, The association between ultra-processed food consumption and chronic insomnia in the NutriNet-Santé Study, *Journal of the Academy of Nutrition and Dietetics* (2024). DOI: 10.1016/j.jand.2024.02.015

## Provided by Elsevier

Citation: Could ultra-processed foods be associated with your insomnia? (2024, May 30) retrieved 20 June 2024 from <a href="https://medicalxpress.com/news/2024-05-ultra-foods-insomnia.html">https://medicalxpress.com/news/2024-05-ultra-foods-insomnia.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.