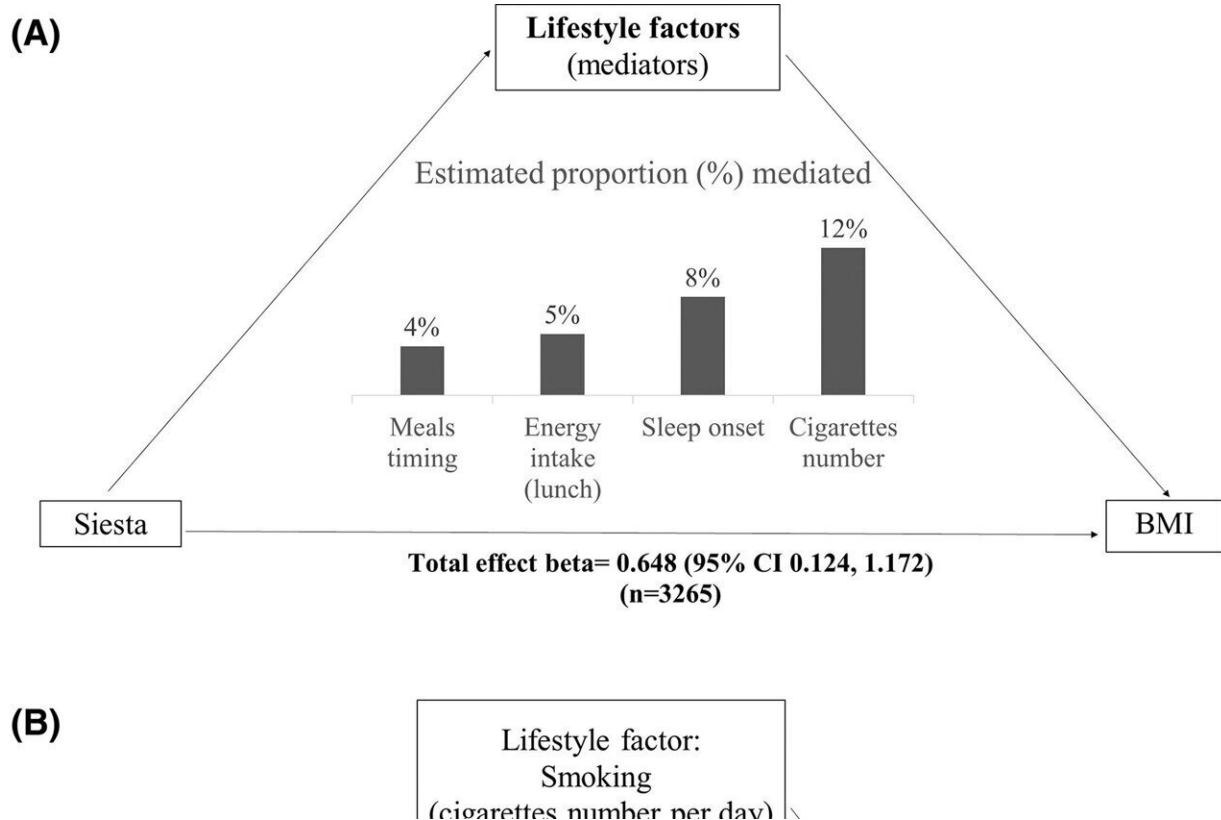


Longer siestas linked to higher risk of obesity, metabolic syndrome and high blood pressure

April 26 2023



(A) Mediated total effect of long siestas vs. no siesta on BMI. (B) Mediated total effect of long siestas vs. no siesta on glucose. (C) Mediated total effect of long siestas vs. no siesta on systolic blood pressure. All models were adjusted for sex, age, center, and year of recruitment. Credit: *Obesity* (2023). DOI: 10.1002/oby.23765

It is a common custom in some countries for individuals to take a siesta or midday nap. Sleeping during the middle of the day has the potential to affect sleep quality, cognitive function, and metabolic processes.

However, the relationship between siestas and [metabolic health](#) is not well understood. A new study led by investigators from Brigham and Women's Hospital, a founding member of the Mass General Brigham healthcare system, assessed more than 3,000 adults from a Mediterranean population, examining the relationship of siestas and siesta duration with obesity and [metabolic syndrome](#).

The researchers found that those who took siestas of 30 minutes or longer (long siestas) were more likely to have a higher body mass index, higher blood pressure, and a cluster of other conditions associated with heart disease and diabetes (metabolic syndrome) compared to those without siestas.

However, for those who had short siestas, also known as "power naps," this increased risk for obesity and metabolic alterations was not present. In contrast, short siesta-takers were less likely to have elevated systolic blood pressure than those who took no siestas. The team's results are published in *Obesity*.

"Not all siestas are the same. The length of time, position of sleep, and other specific factors can affect the health outcomes of a nap," said senior author Marta Garaulet, Ph.D., a visiting professor in the Division of Sleep and Circadian Disorders at Brigham and Women's Hospital.

"A previous study that we conducted in a large study population in the UK had found that siestas were associated with an increased risk of obesity. We wanted to determine whether this would hold true in a country where siestas are more culturally embedded, in this case Spain, as well as how the length of time for siestas is related to metabolic

health."

Obesity is a growing health concern affecting over one billion people around the world. Fat accumulation in the body is connected to how food is digested during [metabolic processes](#). Understanding how [lifestyle choices](#), such as taking siestas, affect these metabolic mechanisms could help researchers learn how habits influence health.

The researchers examined data from 3,275 adults in a Mediterranean population, specifically people from the Spanish region of Murcia. Baseline metabolic characteristics were measured for the participants at the University of Murcia and a survey on siestas collected additional details regarding their naps and other lifestyle factors. This resulted in the categories of no siestas, shorter than 30 minutes, and longer than 30 minutes.

The research team found that long siesta-takers had a higher body mass index and were more likely to have metabolic syndrome (MetS) than those who did not take siestas. Additionally, compared with the no-siesta group, the long siesta group had higher values of waist circumference, fasting glucose levels, systolic blood pressure (SBP), and diastolic blood pressure.

The researchers found that long siestas were associated with later nightly sleep timing and food timing, with increased energy intake at lunch and cigarette smoking, and with the location of siestas (a bed vs. a sofa), which may explain the higher risks associated with longer duration siestas.

While this is an [observational study](#) and it is possible that some factors may be a consequence of obesity and not siestas per se, a previous study of the data collected in the UK Biobank pointed to a causal relationship between napping and obesity, particularly with abdominal obesity, the

most detrimental form. In the current study, the authors found a variety of statistically significant lifestyle factors mediating the association between siestas and health measures.

The results of the study call for future research to investigate whether a short siesta is advantageous over a long one, particularly for individuals with habits such as having delayed meals and sleep schedules, or for those who smoke.

"This study shows the importance of considering siesta length and raises the question whether short naps may offer unique benefits. Many institutions are realizing the benefits of short naps, mostly for work productivity, but also increasingly for general health. If future studies further substantiate the advantages of shorter siestas, I think that that could be the driving force behind the uncovering of optimal nap durations, and a cultural shift in the recognition of the long-term health effects and productivity increases that can amount from this lifestyle behavior," said co-author Frank Scheer, Ph.D., a senior neuroscientist and professor in the Medical Chronobiology Program in the Brigham's Division of Sleep and Circadian Disorders.

More information: Barbara Vizmanos et al, Lifestyle mediators of associations among siestas, obesity, and metabolic health, *Obesity* (2023). [DOI: 10.1002/oby.23765](https://doi.org/10.1002/oby.23765)

Provided by Brigham and Women's Hospital

Citation: Longer siestas linked to higher risk of obesity, metabolic syndrome and high blood pressure (2023, April 26) retrieved 6 May 2024 from <https://medicalxpress.com/news/2023-04-longer-siestas-linked-higher-obesity.html>

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.