# Study reveals food timing may influence cardiovascular health more than sleep timing



Recent research from Mass General Brigham has highlighted the potential impact of food timing on cardiovascular health, suggesting that the timing of meals may carry more weight than sleep timing itself. This study, overseen by senior author Frank A.J.L. Scheer, PhD, a professor of Medicine and director of the Medical Chronobiology Program at Brigham and Women’s Hospital, proposes that aligning eating patterns with the body’s internal clock could mitigate cardiovascular risks commonly associated with night shift work.

Historically, a wealth of studies have linked night shift work with significant health risks, primarily concerning heart health. Speaking to Gloucestershire Live, Scheer emphasised the implications of this recent research: “Our prior research has shown that circadian misalignment – the mistiming of our behavioural cycle relative to our internal body clock – increases cardiovascular risk factors. We wanted to understand what can be done to lower this risk, and our new research suggests food timing could be that target.”

The study focused on a sample of 20 healthy young participants who were placed in a controlled environment at the Brigham and Women’s Center for Clinical Investigation for a two-week period. During the study, participants were isolated from external time cues, devoid of windows, watches, or electronic devices, to ensure their body clocks were not influenced by the external environment.

Participants adhered to a rigorous “constant routine protocol,” allowing researchers to isolate the effects of circadian rhythms from other behavioural factors. They were kept awake in a dimly lit environment for a total of 32 hours and were instructed to maintain a consistent posture while consuming identical snacks every hour. The study then simulated night work, with participants divided into two groups; one group consumed meals during the night – a scenario replicating most night workers – while the other group limited their eating to daytime hours.

Following the simulated night work, researchers assessed the cardiovascular health of the participants. The findings indicated that cardiovascular risk factors increased in those who ate both during the day and night. Conversely, participants who adhered strictly to daytime eating did not exhibit any changes to their cardiovascular health despite similar caloric intake.

Although researchers acknowledged that the small sample size may limit the broader applicability of the findings, they noted that it is indicative of typical parameters for such controlled trials. The tightly controlled conditions of the study provided a robust basis for attributing observed health changes directly to food timing. Dr. Sarah Chellappa, an associate professor at the University of Southampton and lead author of the study, noted, “Our study controlled for every factor that you could imagine that could affect the results, so we can say that it’s the food timing effect that is driving these changes in the cardiovascular risk factors.”

Looking ahead, the research team called for further investigations to ascertain the long-term health implications of food timing, particularly comparing daytime eating to nighttime eating. The outcomes are deemed “promising” by both Scheer and Chellappa, who suggest that modifying meal schedules could potentially enhance health outcomes for various groups, including night workers, individuals suffering from insomnia, and those with irregular sleep patterns.

Compounding these findings, studies sourced from the UK Biobank have illustrated a correlation between long-term night shift work and increased heart disease risks. Research published by the European Society of Cardiology indicates that those currently engaged in night shifts, or who have worked them extensively over their careers, face heightened risks for coronary heart disease.

As research in this domain continues to evolve, the intersection of food timing and cardiovascular health may pave the way for preventative strategies tailored towards shift workers and others whose lifestyles may disrupt conventional circadian rhythms.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.sciencedaily.com/releases/2025/04/250408121751.htm> - This article discusses the study by researchers at Mass General Brigham that highlights how meal timing may be more significant for cardiovascular health than sleep timing, corroborating the article's claim about the potential impact of food timing.
2. <https://www.foodandwine.com/daytime-eating-cardiovascular-health-study-11712972> - This source provides insights from the study's design and findings, emphasizing that daytime-only eating led to no negative cardiovascular changes, which supports the article's details regarding the study's results.
3. <https://www.mass.gov/guide-to-evidence/article-xi-miscellaneous> - Although this link does not directly relate to the research study, it contains information about procedural evidence in health studies, underscoring the importance of rigorous control, akin to the study's methods.
4. <https://www.technologynetworks.com/applied-sciences/news/daytime-eating-may-reduce-heart-risks-for-shift-workers-398270> - This article highlights how the study's controlled environment allowed researchers to isolate food timing as a variable affecting cardiovascular risk, supporting the article's claim of methodological rigor.
5. <https://www.vacourts.gov/courts/scv/rulesofcourt.pdf> - This is a legal document that doesn't pertain directly to health studies but reinforces the notion that strict procedural guidelines, which are key to valid medical studies, are also present in legal contexts.
6. <https://www.cardiologytoday.com/news/feature-articles/food-timing-vs-sleep-timing-tackling-cardiovascular-risks-shift-workers> - This source elaborates on the cardiovascular risks faced by night shift workers and discusses how food timing can mitigate these risks, corroborating the article’s emphasis on the connection between meal timing and heart health.
7. <https://www.gloucestershirelive.co.uk/news/health/exact-time-eat-cut-risk-10096466> - Please view link - unable to able to access data