A recent study comparing the health benefits and drawbacks of morning and evening eaters begins with the premise that one type is in sync with nature's rhythm, while the other is not.

While that rhythm, the circadian clock, is an accepted scientific phenomenon its existence shouldn't necessarily mean that evening eaters – in this case "night owls," if you will – are more prone to be unhealthy eaters. And while that's the central finding of the research, the conclusion isn't terribly satisfying or convincing given the study's many limitations that cast doubt on the results.

First, here's what these Finnish researchers concluded from their study [2], titled "Chronotype differences in timing of energy and macronutrient intakes: A population-based study in adults," published in the journal *Obesity*.

"In the morning, evening types had lower energy and macronutrient intakes (except for sucrose of which they had a higher intake) than morning types ... while in the evening, evening types had higher intakes of energy, sucrose, fat, and saturated fatty acids than morning types. On the weekend," the authors wrote, adding that they controlled for a range of factors, which included smoking, gender, age, body-mass index and hours slept, "differences in evening intakes of energy, sucrose, and fat intake were more pronounced, and evening types had more eating occasions and more irregular meal times than morning types."

In short, the authors concluded, night owls made worse food choices, were less prone to stick to a
meal schedule, and as a result were at higher risk of being overweight and obese.

The Finnish research began with a random sample of 10,000 subjects, aged 25 to 74, from a 2007 study "monitoring cardiovascular risk factors in Finland." The cohort was eventually narrowed down to 1,854 participants.

However, a primary drawback of the study was that is was based on questionnaire data, which can be less than reliable. Among the study's limitations listed by the authors were these:

- "Dietary intakes and the assessment of chronotype were based only on self-reported data. Thus, possible memory and reporting biases may affect the data to some extent."

- "Though we successfully combined the results from two dietary intake methods to assess intake timings for weekdays and weekends, we cannot completely rule out the possibility of methodical differences affecting the results."

- "Present findings may have been affected to some extent by the fact that especially women and people with obesity often tend to misreport their food intake, and also by the fact that health-conscious people are more likely to participate in health surveys."

To a neutral observer it would seem that these biases, and as well as potential shading of the truth in reporting food consumption, would make the study's results somewhat suspect.

Then, we have to consider "irregular meal times" and "fat," two factors presented as shortcomings for night owls.

First, there is nothing magical or special about eating at the same time, and the absence of
keeping a meal schedule doesn’t necessarily contribute to unhealthy eating. In fact, it could be just the opposite, reflecting the recommended concept of eating only when one’s hungry – which would be a benefit, not a drawback.

And as for fat, this is regularly demonized for no good reason. Consuming some in moderation – eggs, occasionally, for instance – is perfectly fine.

"Some of the most negative and unfounded criticisms of food single out animal fats and, by inference, all products that contain them," as the American Council has previously stated. "Such criticisms typically make vague reference to heart disease, cancer, or both, and they are often repeated by nutritionists and health care specialists writing for syndicated columns that are read by thousands of people. Such communications are a disservice to readers."

This health information is as valuable today as it was in 2002, when the above passage [3] was written by an ACSH advisor.

All in all, if an individual's health is more prone to be compromised by staying up and eating late on a regular basis, it would seem that there's need for more convincing evidence.