Dear Alice,

My friends and I disagree—can you settle the dispute? I feel a calorie is a calorie no matter what time of day that you eat it. They say that if you eat all of your calories early in the day, that it is less fattening, because you will be moving around burning off those calories. I say that if you eat 1800 calories a day, it doesn't matter if you eat them in five meals or ten meals, it is still 1800 calories. I believe that the idea of not eating anything after 7 p.m. helps you to lose weight because you cut out the high calorie, high fat foods that are often eaten late in the evening. They say that by not eating after 7 p.m., you lose weight because you're not moving to burn off those calories. Please settle the dispute. Thanks.

Answer

Dear Reader,

You and your friends have picked up on a popular debate. One aspect of weight management that's vital to understand is that people gain and lose weight over periods of time—weeks, months, years—not hour by hour. This happens as more calories are consumed than are used. Another critical fact of metabolism is that your body never stops working. Even when you're sleeping, hearts are beating, blood is circulating, lungs are breathing, and brains are working. This all takes energy—which means calories are being burned. Whether eating at night causes weight gain is not a clear-cut answer. Depending on what you're consuming and your physical activity levels, eating at night can either aid or hinder any potential weight loss goals.

While it may not matter when you eat, you may be able to use those late night meals and snacks to your advantage. There's no magic time after which the body stores fat. For instance, if you eat the same exact meal at six p.m. or at eight p.m., they both have the same number of calories. What really matters is the total amount of food and drink you have over the course of a day, a week, a month, or longer, and how much energy you expend during that timeframe. Any excess caloric intake during this time will be stored as fat. However, what you eat late at night may actually help your body become stronger, and facilitate weight loss—but only if done in a strategic manner. If you're physically active in the evening, eating carbohydrates (carbs) within 45 minutes of working out and eating protein before bedtime may actually improve muscle strength and assist post-workout recovery. Additionally, eating foods such as carbs and those with low glycemic indices may help to reduce your appetite the following day. Foods low in glycemic index help regulate blood sugar which can help you
feel more alert and energetic versus lethargic the next day. If you or your friends are intentionally eating more nutritious foods late at night, you can improve your weight loss and increase your muscle strength. For certain populations, late-night eating may provide additional benefits. For example, it may be essential for people with type 1 diabetes to regulate their blood sugar levels. For elderly people, it may be beneficial in strengthening potentially deteriorating muscles.

That said, it’s still possible that eating late at night can lead to weight gain but not because of the behavior itself. Instead, there are several reasons eating late at night contribute to weight gain:

- **Large portion sizes**: Waiting a long time for meals could lead to eating larger portion sizes. This is particularly true if you skip breakfast or eat too quickly; both are associated with obesity.
- **Eating quickly**: The faster you eat, the less time your brain has to register you’re full, which increases your likelihood of overeating.
- **Quality of food**: After a long day of work or school, grabbing a few slices of pizza or a fast burger may seem easier than preparing steamed vegetables or broiled fish. As such, people who routinely eat food with high-fat foods late at night may see an increase in their body mass index (BMI).
- "**Mindless snacking**": Eating while studying, going out, or watching TV (often nighttime activities) may lead to excess calories from fatty or sugary, on-the-go options.
- **Sleep deprivation**: People often consume more calories than necessary to supplement energy lost as a result of lack of sleep, increasing their susceptibility to weight gain. This is particularly of concern when combined with later bedtimes. As it gets later and your body asks for more energy, you’re more likely to reach for those fatty and carb-heavy foods, increasing the likelihood of having a higher BMI.

For some people, limiting late-night meals and snacks helps with weight management because it helps to control overall calorie intake. If you’re concerned about gaining weight from eating at night, there are some strategies you can use to help keep energy levels consistent for both work and play. Some people find that setting a time after which they can’t eat helps minimize or eliminate the possibility of munching on a considerable amount of high calorie foods. Another strategy some use is to eat four or five smaller meals and snacks spread evenly throughout the day so they don't become overly hungry at any point (especially late at night). What’s more, eating small, frequent meals can help to regulate blood sugar levels and maintain an active metabolism. Planning nutritious snacks at a certain time each night to may help reduce your dinner size and keep cravings for less healthy options at bay. Incorporating some of these strategies may help manage your weight and how much you eat at night.

At the end of the day, late night eating itself doesn’t contribute to significant weight gain. The quality and quantity of the foods consumed, paired with your daily routine, seem to be more reliable indicators of whether late night eating may have positive or negative impacts on health.

Bon appétit!

Alice!