To breakfast, or not to breakfast?

BY SANDRA BRASTEIN • APRIL 10, 2018 • PERSPECTIVES

Historically, breakfast has not always been a part of our daily routine; however, dietary recommendations nowadays emphasise waking up to what is often described as “the most important meal of the day”. Despite this, there is rising popularity for a form of intermittent fasting that involves skipping breakfast, with proponents reporting weight loss and improvement in metabolic biomarkers. Does this mean we’ve been wrong about the importance of breakfast all along?

Skipping breakfast may defy the body’s natural rhythms

Breakfast has not always been a universally-consumed meal. The word itself is thought to have first come into use around the 15th century,[1] although at that time breakfast was seen as a luxury for the wealthy, or a necessity for labourers, young children, the sick and the elderly. These days, however, breakfast is part of most people’s regular daily meal pattern and dietary recommendations endorse starting the day with a nutritionally-balanced meal to refuel glycogen stores, kick start metabolism, stabilise blood sugar and provide energy for the day’s activities. Breakfast skippers are also warned that they are more likely to reach for

unhealthier foods or eat larger serves at their next meal and find it harder to lose weight compared with those who regularly eat breakfast.

Circadian systems regulate metabolism of energy and macronutrients in the body, with several rhythms peaking in the morning or around midday, suggesting the morning may be the optimal time for food intake.[2] Studies have found that "evening types" who eat their meals later in the day are less likely to be regular breakfast eaters and tend to lose less weight and lose weight at a slower rate compared to "morning types" who eat a regular breakfast.[3] Breakfast skipping and late-in-the-day eating habits have also been associated with increased consumption of total energy, as well as carbohydrates and fat,[4] as well as negative effects on metabolic biomarkers, such as high fasting blood glucose, post-prandial hyperglycaemia and raised cholesterol and triglyceride levels.[5]

Skipping breakfast may be an alternative to traditional weight-loss methods

Despite the scientific arguments for breakfast, the growing popularity of intermittent fasting is leading to many people choosing to forgo their morning meal. Advocates of fasting report positive results, including increased energy and weight loss, and improvement of some metabolic biomarkers. One form of intermittent fasting, known as Time Restricted Feeding, is an eating pattern that focuses on when to eat rather than what to eat, restricting food and drink intake to a window of around 8 hours or less. Also known as the 16:8 or 8-hour diet, this method normally involves extending the normal overnight fast by skipping breakfast and consuming the first meal of the day around 12pm and the last meal around 8pm. As a weight-loss method, this approach is promoted as having advantages compared with traditional energy restriction diets, as there is less time spent on meal preparation and no kilojoules, macros or points to count.

Although research on fasting is still a relatively new area, studies have indicated positive effects on weight loss, energy metabolism, cholesterol levels, cognitive function, blood pressure and insulin sensitivity.[6][7]

A recent rodent study also found that fasting altered the gut microbiota, resulting in increased production of short-chained fatty acids and inducing "beiging" of white adipose tissue, which may provide a key to treating obesity and metabolic diseases.[8]

Studies specifically researching Time Restricted Feeding have produced lowered inflammation markers in middle-aged men,[9] and positive effects on body weight, fasting blood glucose levels and postprandial variability in type 2 diabetes patients.[10] The 16:8 method has also gained popularity among fitness enthusiasts, possibly due to a study showing that it produced fat loss in male athletes, without loss of muscle mass or maximal strength. The same study did, however, result in a

reduction in levels of testosterone, insulin-like growth factor and leptin in participants following the 16:8 regime.[11]

So … should I eat breakfast, or not?

Reducing energy intake while maintaining a nutritionally adequate diet is known to have positive effects on weight loss, the ageing process and the risk of developing age-related diseases, regardless of the diet or energy restriction approach taken. Studies comparing continuous energy restriction and intermittent fasting have found no significant difference in weight loss or metabolic biomarkers in obese subjects.[12] Similar results have also been found among lean participants when breakfast consumption was compared with breakfast skipping.[13] Researchers do, however, agree that meal timing is important and could influence weight loss even in the absence of energy restriction.[14] But based on the evidence so far, it appears there may not be a universal recommendation for everyone. Time Restricted Feeding may also be unsuitable for certain population groups such as those with hormone disturbances, diabetes, a history of eating disorders, or a medical condition that requires regular energy intake. Ultimately, whether you choose to eat breakfast or not, it is important that the first meal of your day, whenever it may be, is nutritious.

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