



Fast forward

Nutritionist **Kim Pearson** explores the trend of fasting

New research into fasting is turning traditional nutrition advice on its head. Recommendations to always have breakfast, eat little and often and never go hungry are being strongly challenged by leading experts in diet and health.

We're now learning that going for extended periods of time without food can provide a wide range of benefits, including promoting health and longevity by reducing numerous disease risk factors and promoting cellular regeneration. When carried out in the right way, fasting will not automatically result in a reduced metabolic rate or rebound weight gain as once believed.

In this article we will discuss some of the different approaches to fasting.

TIME RESTRICTED EATING

Time restricted eating involves restricting food intake to a limited period of time during the day, typically eight hours. For example eat between 11am and 7pm, then between 7pm

and 11am, consume only water. Some individuals choose to skip either breakfast or dinner, eating just two substantial meals per day. Others consume three meals per day within a shorter timeframe than usual. This style of fasting is designed to be practiced daily, on an on-going basis.

Research has demonstrated time restricted eating to be clinically relevant for preventing and treating obesity and metabolic disorders, including type 2 diabetes. In one study overweight individuals with >14 hour eating duration who ate for only 10–11 hours daily for 16 weeks reduced body weight and reported being energetic with improved sleep.

Time restricted eating doesn't require calorie restriction and it particularly suits individuals who don't have a natural desire to eat breakfast. Those who are used to eating breakfast may experience hunger initially, if they choose to delay eating in the morning, and it can take some adapting to for those who graze throughout the day. Timeframes can be adapted to suit the individual.

INTERMITTENT FASTING

Intermittent fasting involves alternating 24 hour periods of fasting with periods of eating normally. Fast days typically involve either consuming water only, or significant calorie restriction. Studies have found that intermittent fasting is as effective as continuous calorie restriction for improving weight loss, insulin sensitivity and other health biomarkers.

There are two primary methods of intermittent fasting. One method involves fasting completely, consuming nothing except water for 24-hours, on one or two non-consecutive days a week. The most common method is the 5:2 diet approach. This involves consuming only 500 calories for women, or 600 calories for men calories per day, on two non-consecutive days per week. There is no restriction on food intake for the remaining days of the week.

If adopting the 5:2 diet, the person fasting needs to understand the calorific values of the foods they are consuming, which often positively influences food choices on non-fasting days. Individuals can choose which days to fast in order to work around their lifestyle.

When restricting food intake, you're also limiting the opportunity to consume essential nutrients such as vitamins, minerals, antioxidants, essential fats and fibre. It's important to ensure that the general diet is as nutrient dense as possible. Supplementation may also be considered.

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PERIODIC FASTING

Periodic fasting involves consuming nothing but water for a period of several days. Leading experts in the field believe that, in order to experience the full range of health benefits, prolonged fasts should be carried out for more than three to four days.

Prolonged fasting has been shown to induce autophagy, a process that helps to maintain healthy cellular function. During autophagy cells repair, regenerate and rid themselves of debris. Prolonged fasts also promote stem cell generation. Water only fasts induce ketosis, a state where the body switches over from using glucose (from carbohydrates) as a primary energy source, to burning stored body fat. This can be a very effective way to reduce excess fat and reduce risk factors associated with being overweight.

There are potential contraindications with medical conditions such as diabetes and heart conditions. Fasting for long periods of time carries the risk of low blood sugar and fainting. It's not uncommon for individuals to experience side effects such as headaches.

Extended water only fasts should be carried out under expert supervision, as they can cause harm if done incorrectly. Ideally blood tests should be run in order to rule out any underlying health issues. If fasting for longer the five days this should then be supervised by an experienced professional. Plan on drinking two to three litres of water

every day whilst you're fasting, but space this out over the day. Avoid strenuous exercise.

FASTING MIMICKING DIETS

A concept developed by Professor Valter Longo and researchers at the University of Southern California who have carried out extensive research into periodic fasting. Fasting mimicking diets (FMDs) provide the benefits of water only fasting but with a specially designed, plant based diet plan that does not trigger nutrient sensing pathways.

FMDs are the result of two decades of research and millions of dollars of Federal funding. In studies, FMDs reduced risk factors for ageing and diseases including diabetes, cardiovascular disease and cancer. Benefits include reduced visceral fat and levels of systemic inflammation, stem cell generation and autophagy.

Fasting mimicking diets provide the health and cellular regeneration benefits of periodic fasting but without having to give up food altogether.

For many individuals, a programme which allows food can seem less daunting compared with consuming water alone for several days. Compared with periodic water only fasting there is reduced risk of certain contraindications. The provision of specifically designed plant based meals means that the body still receives essential nutrients whilst remaining in a fasted state.

As with water only fasting, it's important to make sure that the individual has no medical contraindications. FMDs cannot be done by individuals who are allergic to the ingredients in the programme which include nuts and soya.

For healthy individuals it is recommended that three FMD cycles are completed over three months initially, with 25 days off in-between cycles. After the initial three cycles, it is recommended that three cycles are completed per year on an on-going basis. ProLon is the world's first fasting mimicking diet. The five day diet plan comes simply packaged, including plant-based energy bars, soups and a variety of snacks, drinks and supplements. These are all carefully chosen to be convenient and have minimal disruption on daily life.

CLINICAL CONSIDERATIONS

Fasting is not right for everyone. Prior to recommending fasting to clients and patients, take a full medical history to rule out contraindications including active infections, diseases, use of certain medications, history of syncope (fainting) and pregnancy. Fasting is not recommend for anyone with an eating disorder.

In summary, fasting can promote health and longevity via a number of scientifically proven mechanisms. Fasting provides cells the opportunity to rest, regenerate, clear out waste and move from storing fat to burning it. It is important to ensure that fasting strategies are tailored to the individual's needs based on their state of health, medical history, lifestyle and their desired outcomes. **AM**



Kim Pearson qualified as a nutritionist in 2008. Her areas of speciality are weight loss, skin health and healthy ageing. She writes articles and provides professional comments for a range of magazines and newspapers and has appeared on national radio and television. Pearson speaks regularly at conferences and is a key opinion leader for leading nutrition companies. She is a full member of the Complimentary and Natural Healthcare Council, British Association of Applied Nutrition and Nutritional Therapy and the Guild of Health Writers.