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## The longevity fast that blasts belly fat

It may also slow the ageing process and help your heart. So, asks Jessica Salter, what's the catch?

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It sounds too good to be true. A five-day diet that promises not only a slimmer body, but also the tantalising possibility of a longer lifespan, improved heart health and reduced inflammation.

Dubbed the “fasting mimicking diet” because it delivers all the benefits of fasting, including blasting belly fat and cholesterol, while still allowing you to eat, the five-day diet was created by Prof Valter Longo, a biogerontologist and director of the Longevity Institute at the University of Southern California.

The five-day “fast” has already been shown to slow ageing in animal studies, but now these benefits have been replicated in humans.

Tests of 100 study participants, who followed the regime for three or four months, sticking to the diet for five days per month, then eating normally for the other 25, showed their cells and immune systems were acting in a more youthful way. Further analysis of blood samples revealed that they had reversed their biological age by two and a half years.

When the body goes into fasting mode it supports cellular rejuvenation and longevity. Our bodies are built to fast – “that is literally the reason we carry body fat,” says Dr Jason Fung, a nephrologist, fasting expert and author of *The Obesity Code* – and humans have been practising fasting for millennia, but most of us cannot stick to an extended fast, drinking nothing but water, and still live a normal life.

Which is where the “fasting mimicking diet” comes in: a way of achieving the same results as a full fast but, crucially, with the advantage of eating something. “The fasting mimicking diet (FMD) makes it easier for people to do a longer fast

[five days] as there is some structure and some food,” Dr Fung explains.

Prof Longo’s research led to him discovering how exactly our cells detect food – from there, he created a specific low-calorie meal plan.

The five-day diet ranges from 1,100 calories on day one to 800 calories on days two to five, made up of foods that are plant-based, low sugar, low protein and contain a research-backed composite of nutrients.

This combination tips the body into fasting mode, meaning you’re drawing on fat cells for fuel and using up old dead cells – a process known as autophagy.

### How fasting attacks belly fat

The benefits for our waistline are particularly noticeable. Prof Longo says fasting attacks abdominal fat, without affecting lean muscle (unlike most other diets, which he says “will cause loss of fats, water, sometimes lean muscle and bone density”). “On average the general population lose 5-6lbs of weight, mostly fat, after three cycles of a five-day FMD,” he explains.

His specific diet, called Pro-Lon (short for “pro-longevity”), was awarded the first patent in history for “promoting longevity and healthspan” and has undergone over a decade of studies in both animals and humans, with papers examining FMD’s effects on a range of health topics, from ageing to cancer, published in several scientific journals. One published study found that as well as losing body weight – specifically abdominal fat – those who followed ProLon for five days a month for three months saw reductions in blood pressure and cholesterol and had an increase in stem cell production, as well as reduced levels of insulin-like growth factor (IGF-1), a hormone linked to cancer risk when it is raised.

There are currently several clinical trials underway to look at how it can help cancer patients, something Prof Longo describes as “very promising”.

“I know from having completed or helped complete a number of clinical trials that multiple yearly cycles of FMD can have a range of very beneficial effects on risk factors for ageing and diseases,” says Prof Valter, who has also written a book, *The Longevity Diet*.

As almost two thirds of us in the UK are now either overweight or obese, could this be the answer to the UK’s obesity timebomb? “FMD can be excellent to control weight, especially because it does not require unwanted changes in the everyday diet and it can be done when the person is ready to do it,” he says.

For those who prefer real food, UK-based nutritional therapist Rhian Stephenson, has designed a programme based on FMD principles (plant-based, low calorie), providing recipes you can cook yourself. Her five-day “fast” includes smoothies, quinoa salads and mushroom courgetti-pasta dinners, along with regular yoga sessions. “Because we reduced calories but kept high nutrient density, people reported having far more energy than they expected,” she says.

“It is a short, controlled period of caloric restriction combined with rest and foods that are designed to enhance repair, microbial health and promote healthy blood sugar,” explains Stephenson. “The key difference between the fasting mimicking diet and other calorie-restricted diets is that they are low in protein so that triggers cellular repair.

They’ve shown that FMD activates mTOR, a pathway that regulates autophagy, a process of selfcleaning. It’s also designed to keep insulin and blood sugar below a certain baseline, so that the body dips into its fat stores for fuel and switches on the cellular regeneration pathways.”

Eliza Jenkins, 46, a mother of three with a stressful job as a solicitor, tried the “Five-Day Cleanse” online programme (available at [artah.co](http://artah.co)) and says she felt surprisingly good on it. “I had a real surge of energy on day three, and even though it was months ago now, I’ve felt more energetic ever since.”

There were other benefits –

such as half a stone of weight loss. “My skin felt and looked lovely and my digestion has really improved. I felt brilliant.”

The benefits of FMD over intermittent fasting

We’re getting more used to the concept of fasting – specifically intermittent fasting (IF), such as the 5:2 diet, popularised by Dr Michael Mosley, or 16:8, where dieters restrict their eating to within an eight-hour window. In recent years, IF has become the fourth most popular diet plan in the UK, with 134,000 average monthly searches. It’s not just a fad: a systematic review of 40 studies found that intermittent fasting was effective for weight loss, with a typical loss of 7-11lbs over 10 weeks.

But proponents of the fasting mimicking diet say that it can achieve better results than IF alone, particularly for midlife women, who can often lead stressful lives and compound the stress with high-intensity workouts, which raise the body’s cortisol and lead to further inflammation. “Intermittent fasting can be a useful tool to help maintain or lose weight, support digestion and optimise energy when it’s done properly,” Stephenson says. “But from my experience, a large proportion of people who use IF also engage in other intense activities, including things like high-intensity exercise, extreme work stress and dietary stress from socialising or going out – and they rely on IF as a magic bullet.”

Rather than intense exercise, Stephenson suggests walking and light yoga alongside the strict five-day diet. The idea is to support the body in the repair process. “This isn’t just about weight loss and calories in, calories out. You’re looking at cellular repair.”

Prof Longo adds: “We know [from research] that 16 hours or longer of daily fasting, particularly if they involve skipping breakfast, are associated with a shorter, not longer, lifespan and increased cardiovascular disease and other conditions. So, in my opinion people should consider two to four fasting mimicking diet cycles per year and fast for 12 hours per day, not 16.”

ProLon meal kits – which include dried soup blends, nut bars, pouches of olives, kale flax crackers, supplements and herbal teas – are made up of specific calorie counts and contain more than 70 different vitamins, but cost £199 for the five days ([prolon.co.uk](http://prolon.co.uk)).

While it is easy to follow – and the company has plenty of glowing reviews from customers online – the problem with prepared sachets of food is that it’s hard to learn healthy long-term habits. Critics of the plan include Prof

Tim Spector, who says that “FMD is gaining popularity as a temporary diet as opposed to an evidence-based dietary and lifestyle change”.

However, it is perfectly possible to do a DIY five-day fasting mimicking diet without investing in packets of pre-made food. Simply focus on high quality plant-based proteins, mainly from nuts (a maximum of 18-25g per day), healthy fats and vegetables and keep your calories to around 800 a day. “You’ll want to include some high-impact foods, like green tea and turmeric, that are rich in polyphenols,” says Stephenson.

However, it’s not advisable to leap into either five-day diet without a bit of preparation. Not only do you need to clear your social calendar (unless you regularly meet friends for a cup of bone broth), but you need to cut out excess sugar for two weeks beforehand, along with refined carbohydrates and ultra-processed foods, according to Stephenson.

The week before the fast, cut out all sugar, alcohol and red meat.

How often you do fasting mimicking in a year is dependent on the results you want to achieve.

Prof Longo recommends once a month for three months, and then as and when you feel the need. Stephenson says that for “significant weight loss”, she recommends doing her cleanse quarterly, but for maintenance, once or twice a year is enough, not only to potentially give your body some long-lasting health benefits, but also to “help make you more aware of your eating habits”.

‘I had a real surge of energy on day three and I’ve felt more energetic ever since’