

# Crash diets may work against you, and could have permanent consequences

January 3 2024, by Christopher Gaffney

---



Credit: Pixabay/CC0 Public Domain

Those trying to kick-start their weight loss or perhaps wanting to lose a few pounds before a big event or holiday may be tempted to try a crash diet. While it's true that in order to lose weight you need to eat fewer

calories than your body uses each day, in reality crash diets may actually work against you—and may make weight loss more difficult.

Crash diets have been around for years, but have stayed popular more recently thanks to [influencers](#) and social media. Typically, these diets involve drastically reducing [calorie intake](#) to 800–1,200 calories a day for a few weeks at a time. Proponents of these diets claim it can lead to rapid [weight loss](#), which may explain why they have such a significant appeal.

Indeed, research has shown these diets can actually be very effective for certain people.

In a study of 278 adults with obesity, a [12-week crash diet](#) of 810 calories a day led to greater weight loss after 12 months than people who only reduced their calories by portion control. The crash diet group lost an average of nearly 11kg versus only 3kg in the moderate diet group.

Similarly, [one study showed](#) that very low-calorie diets may be beneficial for people with type 2 diabetes. The researchers found that 60% of participants who ate 600 calories a day for eight weeks were able to put their type 2 diabetes into remission. They also lost around 15kg on average.

A follow up at 12 weeks showed participants put around 3kg back on—but, importantly, their [blood sugar levels](#) remained similar.

But while these diets may lead to short-term weight loss success in some people, they can have the long-term consequence of damaging your metabolism. This may explain why around 80% of diets fail—with the person ultimately putting all the [weight they lost back on](#), or even [gaining more weight than they lost](#).

## Crash diets and metabolism

Your metabolism is the sum of all chemical reactions in the body. It's responsible for converting the food we eat into energy, and storing any surplus energy as fat. Your metabolism is affected by many things—including diet, exercise and your hormones. Crash diets affect all these components.

With a crash diet, you consume far less food than normal. This means your body doesn't need to use as much energy (calories) to digest and absorb the foods you've eaten. You also [lose muscle](#). All of these factors [lower metabolic rate](#)—meaning the body will burn fewer calories when not exercising.

In the short-term, crash diets can lead to [feelings of tiredness](#), which makes doing any activity (let alone a workout) challenging. This is because less energy is available—and what is available is prioritized for life-sustaining reactions.

In the long term, crash diets can change the hormone makeup of our bodies. They increase our stress hormones, such as [cortisol](#). And over an extended period of time, typically months, high cortisol levels can cause our body to [store more fat](#).

Crash diets can also reduce levels of the [hormone T3](#), which is produced by the thyroid gland. It's critical in regulating our [basal metabolic rate](#) (the number of calories your body needs in order to sustain itself). Long-term changes in T3 levels can lead to hypothyroidism and [weight gain](#).

Together, all these changes make the body more adept at putting on weight when you begin consuming more calories again. And these changes may exist for months, [if not years](#).

## Gradual dieting

If you're trying to lose weight, the best strategy to use is following a long-term, gradual weight loss diet.

Gradual diets have been shown to be more sustainable and have a less negative impact on your [metabolic rate](#) compared with crash diets. Gradual diets can also help maintain energy levels enough to [exercise](#), which can help you lose weight.

These types of diet also preserve the function of our [mitochondria](#)—the calorie-burning powerhouses in our muscles. This creates a greater capacity for burning calories even after we finish dieting.

The ideal diet is one that reduces body weight by [around 0.5 to 1kg a week](#). The number of calories you'll need to eat per day will depend on your starting weight and how physically active you are.

Eating certain foods can also help maintain your metabolism while dieting.

Fats and carbohydrates use fewer calories to power digestion, compared with protein. Indeed, high-protein diets increase your metabolic rate [11%–14% above normal levels](#), whereas diets high in carbohydrates or fats can only do this by [4%–8%](#). As such, try to ensure around [30% of your day's calories](#) are made up of protein when trying to lose weight.

High-protein diets also help you feel fuller for longer. One study found that when a participant's diet consisted of 30% protein, they consumed [441 calories](#) less over the 12-week study period compared with a 15% protein diet. This ultimately led to 5kg [weight loss](#), of which 3.7kg was fat loss.

While it may be tempting to crash diet if you're trying to lose weight fast, it could have long-term consequences for your metabolism. The best way to lose weight is to slightly reduce the number of calories you need per day, exercise, and eat plenty of protein.

This article is republished from [The Conversation](#) under a Creative Commons license. Read the [original article](#).

Provided by The Conversation

Citation: Crash diets may work against you, and could have permanent consequences (2024, January 3) retrieved 9 May 2024 from <https://medicalxpress.com/news/2024-01-diets-permanent-consequences.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--