

Text by Dr Chie Zhi Ying

With the global prevalence of obesity rising rapidly in both developed and developing countries, obesity has become a pandemic. We are familiar with the complications of obesity, like our "three highs" (type 2 diabetes, hypertension and hyperlipidaemia), as well as cardiovascular disease, nonalcoholic fatty liver disease, cholelithiasis, osteoarthritis, sleep apnoea and even colorectal cancer.

The meat of the matter

Extreme diets have gained popularity in recent years as they frequently promise rapid weight loss, but they remain controversial in terms of the health benefits they bring and the sustainability of the diet. It is no wonder that as consumers, we are constantly bombarded with media messages promoting such diets.

In my practice, I have come across patients who shared with me their attempts at adopting extreme diets to achieve rapid weight loss and thereby optimise the control of their chronic conditions, such as diabetes. But what

exactly are in these extreme diets and what are the possible side effects of taking them? This article is not meant to be an academic discussion on extreme diets but to share some anecdotes based on my patients' experiences.

Juice-only diet

The first extreme diet is the "juice-only" diet which involves consuming only fresh fruit and vegetable juices. It purportedly helps to detoxify and cleanse the body, and the diet regime typically lasts from three days to a week. You can make your own juices or buy commercially prepared juices (aka cold-pressed juices). Whether one chooses to take some solid foods with the juices or not, it is usually very restrictive in terms of caloric intake. This diet lacks the usual nutrition from carbohydrates, fibres, fats, protein and minerals like iron and calcium which are essential for our bodily function, and such deficits can lead to blood glucose spikes. While one could possibly reduce his/her weight rapidly with this diet since caloric intake is strictly restricted, I have heard from one of my diabetic patients that he constantly felt hungry and giddy, and his

blood glucose level was fluctuating so wildly that he had to stop and return to his normal diet. To him, it was simply not sustainable, especially since he also did not have the energy to exercise because of the caloric restriction.

Ketogenic diet

The ketogenic or "keto" diet is another popular diet that is a low-carbohydrate, fat-rich eating plan. The diet consists of exceptionally high fat content, typically 70% to 80%, though with only a moderate intake of protein. The typical food consumed in this diet can be high in saturated fat (eg, fatty cuts of meat, processed meats, lard and butter) and can also be sources of unsaturated fats (eg, nuts, seeds, avocados, plant oils and oily fish). Again, similar to the juice diet, the resultant carbohydrate restriction that might last for days to weeks can cause hunger, fatigue, low mood, irritability, constipation, headaches and brain fog. In addition, there is a potential risk of one's body going into ketoacidosis, which is fatal if left untreated. Following a very high-fat diet can be challenging to maintain, and my patient who was on

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the ketogenic diet would usually take some carbohydrates on and off to satisfy the cravings.

Paleo diet

The next diet is the paleo diet which involves following the so-called huntergatherer-style diets of our ancestors during the Paleolithic period. It includes taking fruits, vegetables, lean meats, fish, eggs, nuts and seeds. Foods excluded from the diet are beans, legumes, starchy carbohydrates, starchy vegetables and dairy products. In more extreme cases, paleo diet supporters may also opt for a totally raw diet. Similar to the above two diets, patients can develop symptoms from carbohydrate restriction, such as giddiness, fatigue, headache, weakness and irritability.

Fast 800 diet

Lastly, there is the Fast 800 diet which restricts the eater to an 800-calorie daily eating plan. This includes taking a relatively low-carbohydrate Mediterranean-style diet with lean protein sources and vegetables, or taking milkshakes that are high in protein, fibre and healthy fats as meal replacements. The eater is supposed to follow it for at least two weeks and no more than 12 weeks. This is similar to the very lowcalorie diet used in many weight loss programmes. Again, the side effects are like those of the above diets and from what my patients have shared, they end up feeling weak, giddy and listless, and suffer from constipation.

One size does not fit all

In the latest health trend, intermittent fasting has quickly gained traction and several of my patients have already tried it. There are various ways to use intermittent fasting for weight loss. For example, one might try eating only during an eight-hour period each day and fast for the remainder of the day. One could also choose to eat only one meal a day for two days a week. Whichever combination one chooses, one should tweak it until one is able to adjust to the new way of eating. From the experience of my patients, most were indeed able to lose weight and achieve better glycaemic control. They shared with me that they would sometimes have "cheat days" where they reward themselves by indulging in small snacks so that they could sustain this diet.

As you can tell from the above extreme diets, there are definitely health concerns regarding the lack of nutrition, the side effects of calorie restrictions, as well as the difficulty of sustaining such diets and promoting long-term weight loss.

Adopting an extreme diet may help you achieve rapid weight loss, but as soon as you return to a slightly more normal diet, your weight may rebound equally fast. The age-old formula of eating well with a reduced calorie count (following the recommendations of the My Healthy Plate from the Health Promotion Board) and leaving enough energy for one to exercise would seem to be a more gradual and safer way of achieving long-term weight loss.

As the old Chinese saying goes, 民以食为天 (Chinese for "food is the first necessity of the people"). Whether you are a foodie who lives to eat or you simply eat to live, food is as much a necessity for survival as it is an indulgence. Without eating sufficiently to stave off hunger and enjoy tasty foods, one misses the opportunities to indulge in the basic pleasures of life and get a timely morale boost. Not having a sufficient calorie intake would also mean that one will not have enough energy to participate in exercises, so while you might able to lose weight in a short amount of time, you might not look fitter without workouts. Ultimately, there is no one-size-fits-all formula and one has to exercise discretion and wisdom to find the best solution to maintain a healthy weight. •

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