

POPULAR FAD DIETS

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For full article references please email info@ networkhealth group.co.uk Today's high prevalence of obesity, combined with less than satisfactory results using traditional weight-control methods, has helped to foster the popularity of fad diets.¹ The purpose of this article is to look a little closer at three of these diets, to enable a better understanding of them, so that we can offer our patients more informed advice should they wish to commence one.

As dietitians, we are often asked for our opinion on or advice around commencing a popular or fad diet, and sometimes we find that a patient has already commenced one. With an increased access to and use of the internet and social media, new diets are reaching our patients every day, making it hard to keep up-to-date with all of them.

The British Dietetic Association (BDA)^{2,3} and NHS Choices⁴ have created useful lists of the most current popular and fad diets, outlining the claims behind and the pros and cons of each. Many of these diets are endorsed by or associated with celebrities and include the Paleolithic diet, the Bulletproof diet, the Super Elixir diet, the No Sugar diet, the 5:2 diet, the Dukan diet and the South Beach diet. Here, I will be taking a closer look at three of these diets.

THE PALEO DIET

One of the most controversial diets in recent times is the Palaeolithic diet, also known as the Stone Age diet, the Caveman diet, or simply the Paleo diet.⁵ The Paleo diet is a regime based on the supposed eating habits of our hunter-gatherer ancestors during the Paleolithic era, before the development of agriculture around 10,000 years ago.⁴ It is described as the diet that humans are genetically adapted to, containing only foods that can be hunted or fished

for (i.e. meat and seafood) and gathered (i.e. eggs, nuts, seeds, fruit, vegetables, herbs and spices).^{4,6} This means that cereal grains, dairy products, refined sugar, legumes, potatoes, processed foods, alcohol and salt are excluded.^{2,4}

Advocates of the Paleo diet claim that as a long-term healthy eating plan this diet can achieve weight-loss, improve lipid profiles⁵ and reduce the risk of diabetes, heart disease, cancer,⁴ metabolic syndrome, acne vulgaris and myopia.⁷

The diet has some positive aspects, such as encouraging an increase in the consumption of fruits and vegetables and a reduction in the consumption of processed foods.⁴ It is simple, flexible and doesn't involve calorie counting. The Paleo diet has, however, been shown to be 9.3% more expensive than a diet of similar nutritional value.6 which may limit the diet's use to those on a higher income. The BDA2 deems the diet to be unbalanced, time-consuming and socially-isolating, and one which could comprise a healthy relationship with food. It also warns that excluding dairy completely from the diet, without careful verv substitution, could compromise bone health due to a lack of calcium. Indeed, a number of studies have shown that calcium intake is below the recommended amounts in those following the Paleo diet.6,7,8

Most studies on the Paleo diet are small, short, heterogeneous in design and underpowered⁵ and more longterm research is needed to show conclusively whether or not it is as effective as some people claim. There are no accurate records of the diet of our Stone Age ancestors, so the Paleo diet is largely based on an educated guess, with its health claims lacking in scientific evidence.⁴ Doing a quick internet search will reveal a lot of conflicting advice around the Paleo diet, with some websites supporting the diet9,10 and others criticising it.11,12 Taking all of this into consideration, it is little wonder our patients can become misled and confused by this diet.

People on the Paleo diet should be referred to an accredited dietitian for individualised advice and to discuss potential nutritional inadequacies such as calcium.⁵ Encouraging an increase in activity levels that mimic our Paleolithic ancestors, rather than trying to copy their supposed diet, has also been recommended.^{4,13}

THE DUKAN DIET

The Dukan diet is a weight loss plan devised by French Doctor, Pierre Dukan. It claims to achieve a weight loss of up to 2lb per week and to promote long-term weight management.⁴

It is a low-carbohydrate, high-protein diet and consists of four phases. The attack phase involves adhering to a strict lean protein diet for five days, with the aim of achieving rapid weight loss. Carbohydrate (including fruit and vegetable sources) is off limits, with the exception of a small amount of oat bran. The cruise, consolidation and stabilisation phases of the plan involve the progressive reintroduction of some fruit, vegetables and carbohydrate, and eventually all foods.¹⁴ There is no limit to how much can be eaten during the plan's four phases, provided that there is strict adherence to the rules of the plan. There is no time limit on the final phase, which involves having a 'protein-only day' once per week and taking regular exercise.4

Studies have demonstrated that the diet results in a reduced energy intake, which is responsible for the lowering of body mass.¹⁵ The rapid weight loss and prescriptive nature of the



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diet are likely to be key motivators for people who wish to follow the Dukan diet.

A number of side effects of following the Dukan diet have been reported and include bad breath, a dry mouth, tiredness, dizziness, insomnia and nausea from cutting out carbohydrate, as well as constipation from a lack of wholegrains, fruit and vegetables in the early stages.⁴ More worryingly, studies have warned that nephrolithiasis is a potential side effect and so, persons with a known history of this disease should not follow this diet.^{14,16} Concerns have also been raised about the potential progression of chronic kidney disease and the increase in cardiovascular risk when following the diet.¹⁴ One study doubted the efficacy of the Dukan diet in glucose tolerance control and weight loss,16 whilst another study revealed a lower intake of calcium, iron, potassium, vitamin C and folate, but excessive amounts of protein, phosphorus, sodium, vitamin A and vitamin D.15

In terms of safety, there is little long-term information on the health effects of high-protein diets¹⁶ such as the Dukan diet. An internet search on the Dukan diet will reveal both success stories of people who have followed it^{17,18} and warnings against following it.^{19,20} Again, given the lack of robust evidence and the myriad of confusing messages around the diet, it is easy to understand why patients are unsure of whether or not it is an appropriate weight-loss option for them.

THE NO SUGAR DIET

The No Sugar diet involves exclusion of all types of sugar from the diet. The BDA³ acknowledges that cutting down on free sugars, adding less sugar to food and consuming fewer products already containing added sugar, in addition to being label aware, are positive elements of this diet. It does warn, however, that some versions of the No Sugar diet promote cutting out all sugar from the diet, which is not only almost impossible, but would mean eliminating foods like vegetables, fruit, dairy products and nuts, leading to a less than healthy diet.

Fruit juice receives bad press mainly due to its high sugar content,²¹ but consumption of 100% orange juice has been positively associated with nutrient adequacy and diet quality, with no increased risk of overweight/obesity in children²² or adults.²³ There is also convincing evidence from epidemiological and clinical studies that pure fruit juices reduce the risk of CVD,²¹ which demonstrates that excluding a whole food group such as fruit from the diet because of its sugar content can actually remove elements of the diet that are beneficial to health. The BDA³ advocates a whole diet approach, rather than a focus on a single food or nutrient.

As with the Paleo and Dukan diets, there is a large volume of conflicting advice on the internet and social media around the No Sugar diet.^{24,25,26} The health benefits of reducing sugar intake have been well documented over the years, but even the Action on Sugar campaign²⁷ is aiming for targets to reduce the amount of sugar added to food and not the complete exclusion of sugar from the diet.

CONCLUSION

Given the lack of robust evidence for or against popular or fad diets and the large amount of conflicting advice on the internet and social media, it is easy to understand how patients may become misled and confused. As dietitians, rather than dismiss outright a patient's desire to commence one of these diets, it may be better to discuss the lack of clinical evidence to support the diet and highlight the potential adverse effects on health that following the diet may have. If they still wish to follow the diet, then suggesting an adapted version of the diet (i.e. that doesn't ban any food groups), or offering advice on how to improve the nutritional adequacy of the diet, may help to reduce some of the adverse side effects and potential risks of nutrient deficiencies that are associated with these diets.