

Low-Carb Diets

Are they safe and do they work?



In a bid to lose weight many people are trying out low carbohydrate diets. There is a range of low-carb diets on the market. Three of the more popular include: -

Atkins diet – you can eat as much meat and fat as you like, but your carbohydrate intake is limited.

Zone diet – this is more moderate and it doesn't recommend high-fat foods. You have to carefully balance food intake with 40 percent of your kilojoules coming from carbohydrate, 30 percent from fat and 30 percent from protein.

South Beach – this does not limit your carbohydrate intake but divides carbohydrates into "good" and "bad".

Do you lose weight?

Atkins diet – there is likely to be greater weight loss at six months compared with the conventional low fat diet. However, after one year, Atkins dieters have a greater weight regain.

Zone diet – the Zone diet produces weight loss without the adverse effects of the Atkins diet. The high protein content has health implications for people with diabetes or kidney disease.

South Beach – after initially restricting carbohydrates this diet generally follows the conventional low-fat diet. Weight loss is likely because you are eating fewer kilojoules.

Problems with low-carb diets

- Very difficult to stick to the plan, particularly the more restrictive diets such as Dr Atkins. This leads to weight regain in the long-term.
- Constipation because your body is missing out on high-fibre foods. Again, this seems to be more of a problem with the more restrictive diets.
- The Atkins diet results in ketosis. This is when your body begins to burn fat because it doesn't have enough glucose. Ketones result in nausea, headaches and bad breath! Appetite, often reduced with ketosis, is likely to return when you return to a normal diet.
- Little is known about the long-term health effects of these diets. Too much saturated fat increases risk of heart disease, while too little fruit and vegetables increases the risk of heart disease and some cancers.
- High protein diets are not recommended for people with diabetes and signs of kidney disease.

This information is not intended to replace the advice of your doctor or individual consultation with a Registered Dietitian. This information may only be used in its entirety.

Code: NUT0074

Date: October 2005, authorised by the Nutrition and Physical Activity Team, Community and Public Health

Canterbury

District Health Board

Te Pōari Hauora o Waitānā

What about no carbs after 5pm?

Those encouraging this approach believe that if you eat carbohydrate at night it will be converted to fat tissue as you sleep. At the same time it appears to be fine to eat foods high in protein and fat after sunset. There is no evidence to support this illogical theory.

It's illogical because weight gain occurs when energy intake exceeds energy expenditure. The carbohydrate portion of an evening meal is unlikely to be responsible for excess energy – carbohydrate has a lower energy density compared with protein and fat. It is also the preferred source of fuel for the body and is the **least** likely to end up as stored fat.

As part of the “carb curfew after 5pm”, another belief is that our bodies work on a 24-hour clock. Following this theory any excess energy at the end of the day is converted to fat tissue during the night when our metabolic rate is lower. The reality is that energy intake and energy expenditure is not balanced on a daily or even weekly basis, but over a period of time.

Cutting out sugary foods like cakes, biscuits and softdrinks makes sense since they are very energy-dense. However, research shows that wholegrain carbohydrate foods are linked with better long-term weight control. A moderate amount of rice or wholegrain bread, for example, cannot only be accommodated, but it is actually helpful. Anyone with diabetes taking insulin or other blood glucose medications should definitely not practice the carb curfew as their blood sugar level could drop too low.

Best Approach

- Eat a variety of healthy foods from the four food groups. Include plenty of fruit, vegetables and wholegrain breads and cereals. Have moderate amounts of lean meat, chicken, seafood, eggs, cooked dried beans, peas and lentils and low-fat milk and milk products.
- Prepare foods or choose pre-prepared foods, drinks and snacks
 - With minimal added fat, especially saturated fat
 - That are low in salt: if you use salt, choose iodised salt
 - With little added sugar; limit your intake of high-sugar foods
- Drink plenty of fluids each day, especially water.
- Keep active. Regular activity is the key to a healthy weight. Physical activity should be part of your everyday life. Put together at least 30 minutes of moderate-intensity physical activity on most, if not all days of the week.

For more information take a look at the following pamphlets available from your local Public Health Service:-

Healthy Weight for Adults – code 1324

Eating for Healthy Adult New Zealanders – code1518

This factsheet is based on an article from Consumer magazine, *Low-carb diets*, 5 February 2005.

This information is not intended to replace the advice of your doctor or individual consultation with a Registered Dietitian. This information may only be used in its entirety.

Code: NUT0074

Date: October 2005, authorised by the Nutrition and Physical Activity Team, Community and Public Health

Canterbury

District Health Board

Te Pori Hauora o Waitaha