

# Diet for prevention of cardiovascular disease

Guidelines from the European Society of Cardiology recommend the following dietary characteristics for the prevention of cardiovascular disease:<sup>1</sup>

- Saturated fatty acids to account for <10% of total energy intake, through replacement by polyunsaturated fatty acids.
- Trans-unsaturated fatty acids: as little as possible, preferably no intake from processed food, and <1% of total energy intake from natural origin.
- <5g of salt per day.
- 30-45g of fibre per day, from wholegrain products, fruits and vegetables.
- 200g of fruit per day (2-3 servings).
- 200g of vegetables per day (2-3 servings).
- Fish at least twice a week, one of which should be oily fish.
- Consumption of alcoholic beverages should be limited to two glasses per day (20g/day of alcohol) for men and one glass per day (10g/day of alcohol) for women.
- Energy intake should be limited to the amount of energy needed to maintain (or obtain) a healthy weight, i.e. a BMI <25kg/m<sup>2</sup>.
- In general, when following the rules for a healthy diet, no dietary supplements are needed.

These recommendations are based on the best and latest available scientific evidence. Apart from looking at specific *nutrients*, research into dietary *patterns* support the so-called “Mediterranean diet” which provides a high intake of fruits, vegetables, legumes, wholegrain products, fish and unsaturated fatty acids typified by olive oil. This eating pattern includes moderate alcohol consumption, typically wine with meals. The consumption of red meat, dairy products and other saturated fatty acids is low. A number of studies and a meta-analysis support this eating pattern; the meta-analysis showed 10% reduction in CVD and 8% reduction in all-cause mortality.<sup>2</sup>

The “Banting diet” in contrast recommends a marked reduction in carbohydrate intake, and replacement with a high saturated fat intake as the prime source of energy. This dietary pattern requires a high intake of dairy products, red meat and eggs. Its rationale is based on a world-wide epidemic of obesity and type 2 diabetes, which is multi-factorial in its development, but to an extent is due to widespread consumption of sugar-sweetened beverages<sup>3</sup>. This eating pattern is reputed to result in significant short-term weight loss, and feelings of satiety and well-being. It is hypothesized that the diet improves insulin sensitivity, and lessens the burden of diabetes, thereby reducing the risk of cardiovascular disease.

There are two problems with the Banting diet: Firstly it is an untested hypothesis, and secondly it comes at considerable cost as it is accompanied by a deterioration in adherents’ lipid profiles, which is certain to *increase* the likelihood of cardiovascular disease.

The SA Heart Association cannot condone the Banting diet until conclusive proof of the longterm beneficial effects of increasing dietary saturated fat have been demonstrated.

References:

1. European guidelines on cardiovascular disease prevention in clinical practice (version 2012). Eur Heart J 2012; 33: 1635-1701.
2. Sofi F et al. Am J Clin Nutr 2010; 92: 1189-96.
3. Malik VS et al. Circulation 2010; 121: 1356-64.