





## Why is this an issue?

Some might argue that butter is a healthier and more 'natural' choice than margarine and other table spreads. However, butter is higher in saturated fats than other spreads. Evidence suggests that reducing intake of saturated fats, and replacing it with healthier unsaturated fats, reduces risk of cardiovascular disease. Butter is one of the biggest sources of saturated fat in the New Zealand diet.

# What are the main types of fats found in food?

Fatty foods contain a mixture of fats (see Table 1). Animal fats such as butter contain mostly saturated fats. Unsaturated fats (polyunsaturated fats and monounsaturated fats) are found mostly in plant foods as well as oily fish. Figure 1 shows the types of fats in a variety of fats and oils.

# **Table 1: Types of fats**

Saturated fatty acids (SFA)	SFA are found in animal foods such as butter, cream, meat, milk and cheese, and in some tropical plant oils, especially palm oil and coconut oil. The Ministry of Health Eating and Activity Guidelines recommend limiting consumption of SFA to reduce the risk of heart disease.
Trans fatty acids	Trans fatty acids are formed mainly during food processing and can be found in some margarines, biscuits and baked goods. They also occur naturally in butter, meat and milk at low levels. The Ministry of Health Eating and Activity Guidelines recommend limiting consumption of trans fats to reduce the risk of heart disease. In general, table spreads in New Zealand contain low amounts (less than 1%) of trans fats.
Monounsaturated fatty acids (MUFA)	Olive, canola, rice bran and peanut oils are rich in MUFA. Avocados and avocado oil are also good sources of MUFA.
Polyunsaturated fatty acids (PUFA)	PUFA are found in seed oils such as sunflower and corn oil. The very long chain omega-3 PUFA are mainly present in oily fish. The current body of evidence supports replacing saturated fats with polyunsaturated fats to reduce the risk of heart disease and stroke.

### In a nutshell

- There is evidence that it is better for our cardiovascular health to replace foods high in saturated fats with foods containing unsaturated fats, particularly polyunsaturated fats. Butter and many processed foods are high in saturated fats.
- Choose foods like avocado, hummus, nut and seed butters in place of butter.
- Limit bakery products and baked goods that are made using butter, such as pies, pastries, cakes and biscuits. Commercially produced bakery items may contain saturated and trans fats.
- Rather than focusing on specific foods or nutrients, focus on the bigger picture, which is your overall dietary pattern. A diet based on whole, less processed foods like whole grains, legumes and lots of vegetables and fruit is recommended by the Ministry of Health.

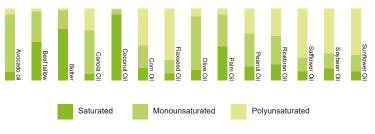
## What's in butter and margarine?

Butter is a dairy product made by churning fresh pasteurised milk until it thickens and separates the butter fat from the milk. Butter consists of milk fat, very small amounts of milk proteins, water and usually salt. In accordance with the Australia New Zealand Food Standards Code, butter must contain at least 80% fat.

Margarines and other table spreads made from plant oils tend to be lower in saturated fats and contain more monounsaturated and polyunsaturated fats.

Some table spreads may have plant sterols added, which can help to reduce the absorption of LDL-cholesterol (the 'bad' cholesterol) from the gut and can help to lower blood cholesterol levels. It is important to note though that to reduce cholesterol you need to consume 2-3g per day of plant sterols. You can check the labels of plant sterol fortified foods to find out how much of a food to eat to achieve the recommended intake. What matters most though is the overall quality of the diet, with a focus on plenty of fruits and vegetables and wholegrain foods.

# Figure 1: Fat type: Percentage of fats and oils



Graph courtesy of the Heart Foundation and reprinted with permission<sup>3</sup>.

# What does the evidence say?

There is convincing evidence that replacing saturated fats with polyunsaturated fats improves cholesterol and reduces our risk of heart disease. The link between a higher intake of saturated and trans fats, high blood cholesterol and heart disease is well-established. The Ministry of Health Eating and Activity Guidelines recommend limiting saturated and trans fats intake to no more than 10% of total energy.

### What should we eat?

Where possible, we should replace foods containing saturated fats such as butter and processed foods, with foods containing unsaturated fats. For example, replacing butter with margarine or other table spreads, avocado, hummus, nut or seed butters.

Other sources of the healthier unsaturated fats include nuts, seeds, oily fish, avocado and plant oils, such as olive, avocado, canola oil or rice bran oil.

## Practical dietary advice

Rather than focusing on specific foods (such as butter), it's important for us to focus on the bigger picture, which is our overall dietary pattern and the proportion of healthy fats we're eating. A heart-healthy eating pattern is based largely on minimally-processed foods with plenty of vegetables and fruit. It includes whole grains, legumes, nuts, seeds, and other sources of healthy fats such as oily fish. It may also contain some lean meat, poultry and low fat dairy such as milk and yoghurt.

#### References

- Abdelhamid AS, Martin N, Bridges C, et al. (2018). Polyunsaturated fatty acids for the primary and secondary prevention of cardiovascular disease. Cochrane Database of Systematic Reviews, Issue 11. https://www.cochranelibrary.com/cdsr/ doi/10.1002/14651858.CD012345.pub3/full. (Accessed May 2020).
- Australia New Zealand Food Standards Code Standard 2.5.5 Butter (2016). https://www.legislation.gov.au/Details/F2015L00423. (Accessed May 2020).
- Heart Foundation (2018). Eating for a Healthy Heart. https://www.heartfoundation.org. nz/shop/heart-healthcare/eating-for-a-healthy-heart-v2.pdf. (Accessed May 2020).
- Kris-Etherton PM, Petersen K, Van Horn L (2018). Convincing evidence supports reducing saturated fat to decrease cardiovascular disease risk. BMJ Nutrition, Prevention & Health. https://nutrition.bmj.com/content/1/1/23. (Accessed may 2020).
- Scientific Advisory Committee on Nutrition (2019). Saturated fats and health. https:// www.gov.uk/government/publications/saturated-fats-and-health-sacn-report. (Accessed May 2020).
- Mensink, RP (2016). Effects of saturated fatty acids on serum lipids and lipoproteins: a systematic review and regression analysis. Geneva: World Health Organization.
- Ministry of Health (2015). Eating and Activity Guidelines for New Zealand Adults. Wellington: Ministry of Health.
- Ministry for Primary Industries (2016). https://www.mpi.govt.nz/food-safety/food-safety-for-consumers/whats-in-our-food-2/nutrients/trans-fatty-acids/. (Accessed May 2020).
- NHMRC (2006). Nutrient Reference Values for Australia and New Zealand Including Recommended Dietary Intakes. Canberra: NHMRC, Wellington: Ministry of Health.





