

This position statement summarises the key findings and recommendations from the Heart Foundation's Evidence Paper on 'Coconut Products, Medium-chain Triglycerides and Heart Health'.

KEY FINDINGS

The wide range of research often quoted to support use of coconut oil is largely based on animal studies or extrapolated from research on medium chain triglycerides (MCTs). It is erroneous to extrapolate research on MCTs to coconut oil and therefore this research was not considered in this review. Research on MCTs does not apply to coconut oil because:

- The main fatty acid in coconut oil is lauric acid. Commercially produced MCTs comprise predominantly caprylic and capric fatty acids.
- Lauric acid behaves in the body like a long-chain fatty acid, not a medium-chain fatty acid.
- The triglycerides in coconut oil are much larger than those in MCT oils so their effect is quite different.

There is a small body of research available on coconut itself and risk factors for heart disease in humans. Experimental research relates to coconut oil, whereas observational studies relate mainly to coconut flesh or squeezed coconut (cream/milk). There were strong methodological limitations in many of the studies.

When compared to other fat sources, coconut did not raise total cholesterol and LDL cholesterol to the same extent as butter, but increased them to a greater extent than other plant oils. The impact on the ratio of TC:HDL cholesterol was often not investigated. Where it was, intervention studies showed either no statistically significant difference or an adverse effect of coconut. There was generally no statistically significant difference in effect on triglycerides between coconut oil and unsaturated oils.

In relation to other risk factors, there was no evidence that coconut oil contributed to inflammation or oxidative stress in two studies, or to weight gain from addition of 30ml coconut oil in a short, small pilot study.

Population studies suggested that in some traditional Pacific countries, consumption of coconut flesh and squeezed coconut (coconut oil was not traditionally used in food preparation) was high while heart disease rates were low. This is in the context of a basic diet with plenty of vegetables (including starchy vegetables), fruit and seafood and a physically active lifestyle. These findings were not replicated in Sri Lanka, where there was a high intake of coconut along with high rates of heart disease; and the effect was unclear in other studies in Africa, India and Indonesia.

In general, the evidence for the impact of coconut oil on risk factors for cardiovascular disease is poor. The limited evidence is not sufficient to change advice to replace saturated with unsaturated fats, and suggests that in relation to risk factors for heart disease, plant oils higher in unsaturated fatty acids remain preferable.

RECOMMENDATIONS

For people in New Zealand, based on current evidence it is preferable to use unsaturated plant oils rather than coconut oil as the main culinary oil.

A dietary pattern that is based largely on minimally processed foods and includes plenty of vegetables and fruit, some nuts, legumes, wholegrains, seafood and/or lean meats, reduced fat dairy, and healthy oils is recommended for heart health.