



Researchers from NUS have established that the elevated levels of low-density lipoprotein cholesterol from eating palm oil translate into a 6 per cent higher risk of coronary heart disease. The study was published last May in *The Journal Of Nutrition* by the American Society for Nutrition. PHOTO: AGENCE FRANCE-PRESSE

The oily truth

Eating palm oil leads to higher levels of 'bad' cholesterol but it may not be the worst cooking oil, say experts

Poon Chian Hui

Not all types of cooking oil are equal, and a recent study has singled out the ubiquitous palm oil for raising one's risk of coronary heart disease.

Researchers from the National University of Singapore (NUS) established that eating palm oil led to higher levels of "bad" cholesterol in the body. This was compared with other types of vegetable oil that contain lower levels of saturated fat.

The elevated levels of low-density lipoprotein (LDL) cholesterol from eating palm oil translated into a 6 per cent higher risk of coronary heart disease incidence and death, they concluded.

These findings were drawn from analysing 30 past studies on this topic. The study was published last May in *The Journal Of Nutrition* by the American Society for Nutrition.

It has long been known that palm oil has plenty of harmful saturated fat – about 50 per cent, much high-

er than other commonly used cooking oils – which can clog up the arteries.

However, some researchers have cast aspersions on the detrimental effects of palm oil.

In addition, not all clinical trials on humans have shown a link between palm oil consumption and LDL cholesterol levels, said Associate Professor Rob van Dam of the Saw Swee Hock School of Public Health, the principal investigator of the latest study.

These slivers of doubt prompted his team to carry out a comprehensive review of relevant clinical trials.

Establishing a more definitive conclusion is important, given that palm oil is widely used in Asia. It is also a highly popular cooking oil in Singapore, and generally used by food outlets and hawkers.

One reason is that palm oil is the cheapest cooking oil. A two-litre bottle costs \$6 to \$8 at retail shops.

"Many people use 'blended oil' or 'vegetable oil' for home cooking. These are high in palm oil content," said Prof van Dam.

"Although small amounts of palm oil are unlikely to have a large effect on LDL cholesterol and one's risk of heart disease, many of us are eating large amounts of palm oil on a daily basis," he added.

Coronary heart disease is the No. 3 killer in Singapore, accounting for 16 per cent of deaths in 2014, according to figures from the Ministry of Health.

A poor ratio of saturated to unsaturated fat consumed raises a person's risk of developing such cardiovascular diseases.

The health dangers of cooking oil products that are high in saturated fat are recognised by the Health Promotion Board (HPB), which started offering subsidies to get food joints to use healthier oil.

Under the Healthier Ingredient Scheme, which was launched in January last year, oil suppliers receive subsidies for selling healthier oil products to restaurants, hawkers and food outlets.

The goal is to improve dietary fat through reducing the intake of saturated fat by partially replacing it with cardio-protective unsaturated fat, said an HPB spokesman.

The subsidy is applicable for oils with a saturated fat level of 35 per cent or lower.

In addition, the Healthier Choice Symbol helps consumers identify healthier cooking oil products.

One in two cooking oil products sold in supermarkets is now labelled as healthier, said the HPB spokesman.

"We are encouraged to see a strong growth in demand for healthier cooking oil in the supermarkets."

The HPB does not specify the types or blends of oil that may be endorsed, as long as they meet the board's nutrition criteria, such as the proportion of saturated fat and trans fat.

While palm oil has one of the highest proportions of saturated fat among vegetable oils at 49 per cent, it may not be the worst cooking oil around.

The NUS study's meta-analysis found that palm oil increased high-density lipoprotein or "good" cholesterol levels when pitted against cooking oils that are high in trans fat, said Prof van Dam.

Trans fat is a type of fat formed by an industrial process, called partial hydrogenation, to make liquid vegetable oils more solid. In our bodies, it increases bad cholesterol while decreasing good cholesterol.

"Therefore, the use of palm oil may be preferable to replace trans fat in food items that require one of these fats to maintain their sensory characteristics – for example, the texture of doughnuts or the crispiness of cookies," he said.

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Comparing cooking oils

While cooking oil products are almost completely made up of fat, the proportion of harmful saturated fat to unsaturated fat, which is healthier, can be very different.

Type of oil	Saturated fat (%)	Unsaturated fat (%)
Palm oil	49	51
Rice bran oil	20	80
Peanut oil	17	83
Soya bean oil	16	84
Olive oil	14	86
Sunflower oil	10	90
Canola oil	7	93

Source: UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE ST GRAPHICS

Know the different guises of palm oil and opt for healthier alternatives

OILS LABELLED 'VEGETABLE OIL' OR 'BLENDED OIL'

These products tend to have palm oil as their main ingredient.

Check the ingredient list – if palm oil is listed first, it means that it is the most abundant oil in the product.

Do not be fooled into thinking that a particular cooking oil is healthier based just on packaging claims like "no cholesterol".

Plant-based oils never contain cholesterol in the first place, only animal-based oils do.

Instead, check the nutritional information panel for saturated fat content, which is a more important determinant of blood cholesterol levels.

DISHES SERVED AT HAWKER CENTRES AND FOOD COURTS

Most food stalls tend to use blended oils that are high in palm oil content. It may be useful to ask your favourite hawker to make the switch to a healthier oil.

One example is the palm-canola mix that the Health Promotion Board is now encouraging food sellers to use as it is lower in saturated fat.

PROCESSED OR PACKAGED FOOD

Cookies, potato chips, chocolate, peanut butter and instant coffee – all these popular food products may be made with palm oil.

If you eat such processed food products regularly, consider looking for alternatives that use another

type of oil. For instance, some brands of potato chips are cooked with sunflower oil.

Of course, it is best to limit the consumption of salty snacks, candy and pastry items. Try having some fruit and nuts for a snack instead.

OTHER TIPS

- Palm oil may be listed under different names in the ingredient list, such as palm olein or, simply, vegetable fat. In such cases, compare products by looking at the saturated fat content stated in the nutritional information panel. Pick the one that has less saturated fat and more unsaturated fat.
- Cooking oil products may be

described on the label as cold-pressed, refined, unrefined, light or pure. But all these terms are not directly relevant to the saturated or unsaturated fat content in the oil. For example, cold-pressed extra virgin olive oil means it is mechanically extracted without using heat or chemicals. Compared with "light" olive oil, more flavour and phytochemicals are preserved.

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• Source: Associate Professor Rob van Dam, Saw Swee Hock School of Public Health, National University of Singapore