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Press Release

Trans fats, but not saturated fats, linked to greater risk of death and heart disease

Higher trans fat intake associated with 20-30% increased risk, say researchers

Saturated fats are not associated with an increased risk of death, heart disease, stroke, or type 2 diabetes, finds a study published in **The BMJ** this week. However, the findings show that trans fats are associated with greater risk of death and coronary heart disease.

The study confirms previous suggestions that industrially produced trans fats might increase the risk of coronary heart disease and calls for a careful review of dietary guidelines for these nutrients.

Guidelines currently recommend that saturated fats are limited to less than 10%, and trans fats to less than 1% of energy to reduce risk of heart disease and stroke.

Saturated fats come mainly from animal products, such as butter, cows' milk, meat, salmon and egg yolks, and some plant products such as chocolate and palm oils.

Trans unsaturated fats (trans fats) are mainly produced industrially from plant oils (a process known as hydrogenation) for use in margarine, snack foods and packaged baked goods.

Contrary to prevailing dietary advice, a recent evidence review found no excess cardiovascular risk associated with intake of saturated fat. In contrast, research suggests that industrial trans fats may increase the risk of coronary heart disease.

To help clarify these controversies, researchers in Canada analysed the results of observational studies assessing the association between saturated and/or trans fats and health outcomes in adults.

Study design and quality were taken into account to minimise bias, and the certainty of associations were assessed using a recognised scoring method.

The team found no clear association between higher intake of saturated fats and all cause mortality, coronary heart disease (CHD), cardiovascular disease (CVD), ischemic stroke or type 2 diabetes, but could not, with confidence, rule out increased risk for CHD death. They did not find evidence that diets higher in saturated fat reduce cardiovascular risk.

However, consumption of industrial trans fats was associated with a 34% increase in all cause mortality, a 28% increased risk of CHD mortality, and a 21% increase in the risk of CHD.

Inconsistencies in the included studies meant that the researchers could not confirm an association between trans fats and type 2 diabetes. And they found no clear association between trans fats and ischemic stroke.

The researchers point out that the certainty of associations between saturated fat and all outcomes was “very low,” which means that further research is very likely to have an important impact on our understanding of the association of saturated fats with disease. The certainty of associations of trans fat with CHD

outcomes was “moderate” and “very low” to “low” for other associations.

They also stress that their results are based on observational studies, so no definitive conclusions can be drawn about cause and effect. However, they say their analysis “confirms the findings of five previous systematic reviews of saturated and trans fats and CHD.”

And they conclude that dietary guidelines for saturated and trans fatty acids “must carefully consider the effect of replacement nutrients.”

[Ends]

Notes to Editors:

Research: Intake of saturated and trans unsaturated fatty acids and risk of all cause mortality, cardiovascular disease, and type 2 diabetes: systematic review and meta-analysis of observational studies

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