Trans Fats

Trans fats have received much interest in recent years. While it is clear that we all need to include some fat in our diets to remain healthy, not all fats are equal in terms of their effects on our health. Some are more beneficial and others may be unhealthy if you eat too much of them. This Food Fact Sheet looks at trans fats, comparing them to other types of fats, describing which foods they are in and giving you tips on how to avoid them.

What are trans fats?

Trans fats, or to give them their full name, trans fatty acids (TFA), are fats present in small amounts in a wide range of foods. Health concerns about these fats has recently led to many manufacturers reducing the amounts of trans fats in foods. For example, until the 1980s margarines contained 10-20% trans fats. However, since then, production methods for margarines and spreads have altered due to concerns between trans fats and risk of coronary heart disease. This has led to the reformulation of many margarines and spreads to make them much lower and virtually free of trans fats.

Artificial trans fats (sometimes called industrially produced trans fats) are produced when vegetable oils are hydrogenated: a chemical process that hardens vegetable oils and turns them into solid or semi-solid fats. These hardened fats, usually called hydrogenated vegetable oil or fat, are widely used as an ingredient in frying and baking. Partial hydrogenation is sometimes used in the food manufacturing industry to improve the shelf life and culinary properties of foods.

Which foods contain trans fats?

Naturally-occurring trans fats are found in small amounts in dairy products, for example cheese and cream, and also beef, lamb and mutton, and products made from these foods. All trans fats may be potentially unhealthy, no matter what their origin, but if they are present or consumed at low levels, they are unlikely to have a significantly harmful effect.

Trans fats may also be produced when ordinary vegetable oils are heated to fry foods at very high temperatures and this is one reason why takeaway foods can sometimes be high in trans fats. Foods that are produced from or use hardened vegetable oils as an ingredient typically contain some trans fats (for example, biscuits, pies, cakes and fried foods). Fat spreads and margarines that have hydrogenated vegetable oil as an ingredient will usually contain some trans fats, although reformulation has led to significant reductions in recent years.

How do I know if a food is high in trans fats?

There are currently no legal requirements for food manufacturers to label trans fats, and nutrient claims regarding trans fatty acids are not permitted, so companies can no longer make claims about trans fats. This means you need to check ingredients lists for hydrogenated fats or hydrogenated vegetable oils. A fully hydrogenated fat does not contain trans fat, only partially hydrogenated fats contain trans fats. If a food product contains partially hydrogenated fats or oils, it will almost certainly contain trans fats too, and the higher up the list the fat or oil appears, the more trans fats the product is likely to contain. Many manufacturers now avoid using hydrogenated fats or have reduced the amount of trans fats in their products to very low levels.
Should I worry about trans fats?

Trans fats, like most saturated fats, raise blood cholesterol levels, particularly levels of ‘bad’ LDL cholesterol. Trans fats can also reduce the ‘good’ HDL cholesterol, as well as increase levels of another form of blood fat called triglycerides. All of these effects of trans fats can raise your risk of coronary heart disease (CHD). Gram for gram, trans fats appear to increase risk of CHD more than saturated fats, and so are potentially worse for our health.

Are we eating too much?

Results from the first three years of the National Diet and Nutrition Survey (NDNS) rolling programme (2008/09 -2010/11) suggest that children and adults aged 19-64 years are eating 0.7% of food energy (calories) as trans fats and older adults aged 65 years and over have intakes of 0.8% of food energy. Men and young children were found to have the highest intakes. The UK Scientific Advisory Committee on Nutrition recommends that average intakes of trans fatty acids should not exceed 2% of food energy, so on average, the UK is well-within recommended maximum levels. But that doesn’t mean we should be complacent about trans fats in foods, especially foods that may not have ingredients lists or labels, like takeaway items and fast food.

Summary

The good news is that in the UK intakes of trans fats are on average lower than guidelines. Results from the Department of Health Summary Report on trans fats (2013) show that levels of trans fat have reduced considerably compared with previous analyses of similar foods carried out over the last 20-30 years. However as part of a healthy diet, you should aim to keep both the amount of saturated and trans fats to a minimum. In general trans fats are found in cakes, biscuits, hard margarines, takeaways, pastry, pies and fried foods, all of which are the types of foods to limit when choosing a healthy, balanced diet.

Further information:

Food Fact Sheets on other topics including Healthy Eating and Heart Health are available at: www.bda.uk.com/foodfacts