



# Policy statement

## Trans Fats

### Introduction

Trans fats occur naturally in some foods including meat, and dairy products, however it is industrially produced trans fats (or trans fatty acids, IPTF) which have been linked to an increased risk of coronary heart disease.

These fats have been found in foods made with partially hydrogenated fats such as manufactured biscuits, cakes and pastries. Partially hydrogenated oils can also be used commercially for fried foods in restaurants and takeaways.

Although partially hydrogenated fats containing IPTF have been used in the UK, following considerable public policy debate in recent years, members of the UK food industry have moved to eliminate or reduce trans fats in their products. Current UK dietary surveys suggest that consumption levels contribute to less than 1% of food energy, below the 2% of food energy recommended maximum (around 5g per day).

### Policy statement

The British Heart Foundation (BHF) believes that a series of measures should be implemented to remove industrially produced trans fats from the UK diet.

The Food Standards Agency should build on the voluntary work undertaken by some parts of the food industry and set robust targets to reduce trans fat levels amongst all food manufacturers. This could follow the same model as the Agency's work on saturated fat and salt reduction and should include a particular focus on fast food and takeaway outlets. It is vital that existing trans fats are not replaced by saturated fats.

The Food Standards Agency should collect robust data on consumption of trans fats in the UK that does not rely on mean averages. Concentrating on actual consumption amongst different groups in the population will help to identify and tackle possible health inequalities arising from variations in intake of trans fats.

Food manufacturers and retailers should clearly label trans fatty acids, alongside fat and saturated fat, on the packaging of food items, so that people can make informed decisions about their diet.

If voluntary targets are unsuccessful, the UK Government should take legislative action to remove industrial trans fats.

However, trans fats are only one part of the picture with regard to improving the nation's heart health. In particular, concerted action is needed to reduce saturated fat consumption to within safe limits.

## Background

IPTF can be formed when a liquid oil is turned into a solid through a process known as hydrogenation. Although trans fats are still unsaturated, their chemical structure is changed due to the processing. As a result of this they have been found to have an effect on the body which is more like saturated fats in terms of raising the “bad” (LDL) cholesterol which is linked to the development of atheroma, a fatty material within the walls of the arteries.

Small amounts of trans fats can be found naturally in some meat and dairy products, however industrially produced trans fats which have been linked to an increased risk of CHD have been found in processed foods which contain vegetable oils which have been partially hydrogenated. Hydrogenation turns vegetable and animal liquid oils into solid fat and hydrogenated fat is the final product of this. It can be found in biscuits, cakes, fast foods, pastries and margarines, and this type of fat is largely used because it is inexpensive and helps to extend the shelf life of these products.

### ***Effects of trans fatty acids on health***

Like saturated fats, industrially produced trans fats also lower HDL (good) cholesterol and raise LDL (bad) cholesterol which contributes to atherosclerosis, a fatty plaque build up in arteries.

Evidence relating to the effects of trans fats on health is relatively scarce. However, a recent review of the evidence demonstrated that trans fats ‘appear to increase the risk of CHD more than any other macronutrient’, with a meta analysis of four prospective cohort studies showing that a 2% increase in energy intake of trans fats was associated with a 23% increase in the incidence of CHD.<sup>1</sup> However the same review paper shows that many of the studies and trials have been small, and that the effects of trans fats on cardiovascular health are broadly similar to those of saturated fats.

In light of the available evidence, the Food Standards Agency (FSA) states that trans fats have no nutritional value and that they may have a worse effect on the body than saturated fat. This echoes the opinion of the European Food Safety Authority’s (EFSA) Scientific Panel on Dietetic Products, Nutrition and Allergies, which reported in late 2004 that ‘at equivalent dietary levels, the effect of trans fats may be greater than that of saturated fats’.<sup>2</sup> The World Health Organisation recommended a population goal to reduce trans fats to less than 1% of food energy in 2003.<sup>3</sup>

However the EFSA panel argued that the potential of trans fats to significantly increase cardiovascular risk was lower than that of saturated fats as current intakes of trans fats were more than ten-fold fewer than those of saturated fats in many European countries.

In the UK, data from National Diet and Nutrition surveys show that trans fatty acids accounted for 1.1% of food energy in 2000/01 and by 2010 this had reduced again to 0.8% of food energy, below the 2% recommended in 1994 by the Committee on

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<sup>1</sup> Mozaffarian, D et al (2006), Trans Fatty Acids and Cardiovascular Disease, *The New England Journal of Medicine*, pp16011613

<sup>2</sup> [http://www.efsa.eu.int/science/nda/nda\\_opinions/588\\_en.html](http://www.efsa.eu.int/science/nda/nda_opinions/588_en.html)

<sup>3</sup> <http://www.food.gov.uk/multimedia/pdfs/board/fsa071207.pdf>

Medical Aspects of Food Policy (COMA)<sup>4</sup>. In contrast saturated fat accounted for 12.5% of food energy intake in 2010, which is above the 11% recommended by COMA.

### **Data collection**

Estimates of trans fats (and other nutrient) intakes are made by combining food consumption information from national dietary surveys such as the National Diet and Nutrition Survey and the Low Income Diet and Nutrition Survey. The FSA requested data from the food industry in 2007 to supplement these sources as they do not take account of more recent reformulation work.<sup>5</sup> Using this data, the FSA calculated a new mean trans fat intake for all adults aged 19-64 years at 1.0% of food energy. The FSA believe that this methodology tends towards an overestimate because all foods within a food group are estimated to have the same level of trans fat and because the food consumption data is from 2000/01.<sup>6</sup>

However, the collection of data in this way does not allow for consideration of differences between parts of the population. While the average figure indicates that consumption of trans fats are at safe levels in the UK, this could be masking very high consumption amongst some people and very low consumption amongst others. An unpublished study of eating patterns in the London Borough of Tower Hamlets suggests that some individuals in this area could be consuming dangerously high levels of trans fats.<sup>7</sup> However, the National Diet and Nutrition Survey has found no evidence of differences in the proportion of energy from total, saturated and trans fat between people from households reliant on benefits and households that are not.<sup>8</sup>

### **Labelling**

While some manufacturers, such as the Co-operative, include information on the presence of trans fats in their food labels, they are not under any obligation to provide this. The European Parliament is debating the Food Information Regulation during 2010 and this could include a new provision which would make it mandatory for information on trans fats to be included on labels throughout the European Union.<sup>9</sup>

In the UK the FSA has said it would like all products to list the amount of trans fatty acids contained and recommends that people do not consume more than 5g of trans fatty acids a day. The makers of margarines and similar spreads are already obliged to present their ingredients on packaging.

In 2006, the US Food and Drug Administration introduced mandatory trans fat labelling. This has prompted reformulation and many products are now labelled as free from trans fats (products that contain less than 0.5g trans fat per serving can be labelled as trans fat free).<sup>10</sup>

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<sup>4</sup> <http://www.food.gov.uk/multimedia/pdfs/board/fsa071207.pdf>

<sup>5</sup> Information was provided on margarines and fat spreads, biscuits, cakes and pastries, ice cream, crisps and savoury snacks, chips and processed potatoes and confectionery

<sup>6</sup> <http://www.food.gov.uk/multimedia/pdfs/reestimatetransfats.pdf>

<sup>7</sup> Unpublished report, cited in NHF draft position paper on trans fats

<sup>8</sup> <http://www.food.gov.uk/multimedia/pdfs/board/fsa071207.pdf>

<sup>9</sup> [http://ec.europa.eu/food/food/labellingnutrition/foodlabelling/proposed\\_legislation\\_en.htm](http://ec.europa.eu/food/food/labellingnutrition/foodlabelling/proposed_legislation_en.htm)

<sup>10</sup> <http://www.food.gov.uk/multimedia/pdfs/board/fsa071207.pdf>

## **Reformulation**

The FSA has been working with manufacturers to reduce the levels of salt in their products since 2003. This comprises reformulation work with retailers, manufacturers and caterers to reduce the salt content of processed foods and an ongoing public awareness campaign to make people aware of the dangers of eating too much salt. By October 2009 the FSA had received over 90 formal commitments from all sectors of the food industry including all the major UK retailers, a number of multinational and key national manufacturers and caterers, as well as trade associations for products making major contributions to intakes.<sup>11</sup>

The FSA has been running the Saturated Fat and Energy Intake Programme since 2008, with the aim to reduce population intakes of saturated fat from 13.3% to below 11% of food energy.<sup>12</sup> The programme encourages manufacturers to reduce saturated fat content, introduce smaller portion sizes and increase the number of healthier products on offer. The FSA is expected to finalise targets for food manufacturers during 2010. The programme has been accompanied by public awareness raising work through wide-ranging communication campaigns in 2009 and 2010 focusing on everyday changes that consumers can make to reduce saturated fat.<sup>13</sup>

## **Current UK policy**

The Food Standards Agency conducted a review of advice on trans fats in 2007, following a request from then Health Secretary Alan Johnson.<sup>14</sup> The review found that there has been considerable action from the UK food industry to voluntarily remove trans fats from their products and that fat and oil suppliers have reduced trans fats to the minimum possible. The review also calculated that current consumption of trans fats is around 1% of food energy. The recommendation that a voluntary approach to reducing trans fats be maintained was agreed in January 2008.

In 2009, Dr Richard Simpson MSP introduced a private member's bill proposing legislative action to ensure that all foods sold in Scotland have trans fat content that does not exceed 1%.<sup>15</sup> The proposals were subject to consultation during 2009 and the bill is expected to make progress during 2010. In our response, the BHF suggested that there is scope to improve data collection which would help to establish whether legislative action is needed.<sup>16</sup>

## **International policy**

Governments in some countries have moved to limit their population's intake of trans fats by imposing legislation on food manufacturers.

For example, in March 2003 Denmark set an upper limit for artificial trans fat levels in foods (2g per 100g of oil or fat), effectively banning partially hydrogenated oils.<sup>17</sup> New York City prohibited all food service establishments from using fats and oils

<sup>11</sup> <http://www.food.gov.uk/multimedia/pdfs/saltreductioninitiatives.pdf>

<sup>12</sup> <http://www.food.gov.uk/news/pressreleases/2008/feb/satfatprog>

<sup>13</sup> <http://www.food.gov.uk/news/newsarchive/2009/feb/satfatcamp>

<sup>14</sup> <http://www.food.gov.uk/multimedia/pdfs/board/fsa071207.pdf>

<sup>15</sup> <http://richardsimpsonmsp.com/images/stories/finaltransfatsconsultation.pdf>

<sup>16</sup> [G:\Policy & Public Affairs\Consultation responses\2009\Limit on Trans Fats \(Scotland\) Bill September 09.doc](G:\Policy & Public Affairs\Consultation responses\2009\Limit on Trans Fats (Scotland) Bill September 09.doc)

<sup>17</sup> Executive Order No. 160 of 11 March 2003 on the Content of Trans Fatty Acids in Oils and Fats etc pursuant to section 13, section 55(2) and section 78(3) of Act No. 471 of 1 July 1998 on Foods etc. (the Danish Food Act)

which contain trans fats of more than 0.5g of trans fats per serving in July 2007.<sup>18</sup> In April 2008, Switzerland introduced legislation to limit artificial trans fats to a maximum of 2%.<sup>19</sup>

### ***Industry response***

A number of food manufacturers and retailers in the UK have made pledges to act against trans fats. For example, Marks & Spencer completely banned the use of trans fats in all their foods in January 2007.<sup>20</sup> Manufacturers including Masterfoods UK, Nestle and McVitie's have also reduced or eliminated trans fats from their confectionery and biscuits.<sup>21</sup>

Trade associations covering parts of the food industry report good progress from their members on removing trans fats. The British Retail Consortium made a commitment in 2006 for its members to remove hydrogenated vegetable oils from all own brand foods. This was achieved in January 2008.<sup>22</sup>

The Food and Drink Federation (FDF) does not consider the current levels of trans fats in the UK diet warrant any regulatory moves and have stipulated that any moves to reduce trans fat levels in food should not result in a rise in saturated fat levels. FDF considers that it would be beneficial to amend the Nutrition Labelling Directive so that trans fats could form part of the standard nutrition information without a claim having to be made.<sup>23</sup>

The BHF has a corporate partnership with Lidl supermarket which is scheduled to run until June 2010. This is purely a fundraising partnership and we do not endorse any of Lidl's products. However, since the partnership began Lidl has stopped ordering all products that contain hydrogenated vegetable oils (HVOs). Many of the products that previously contained HVOs, now have HVO-free recipes. Some suppliers struggled to match the same quality without the use of HVOs. Where this was the case, Lidl stopped ordering the product and will only order it again once the supplier removes the HVOs from the recipe.

### ***Views of other organisations***

NICE are developing guidance on the prevention of cardiovascular disease during 2010. In their consultation on draft guidance, they noted that a reduction in consumption to less than 1% of food energy could help to save lives and reduce health inequalities. The draft guidance recommended a ban on industrial trans fats across the EU, revised recommendations on trans fat intake so this accounts for less than 0.5% of energy, independent monitoring of trans fats in processed and take aways and replacement of trans fats with unsaturated fats.<sup>24</sup> In our response, the BHF welcomed the proposals on monitoring and suggested that this could also include consideration of differences between the four nations of the UK.

The National Heart Forum hosted a member's meeting on trans fats in October 2009 which included presentations by Corinne Vaughan from the Food Standards Agency

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<sup>18</sup> <http://www.food.gov.uk/multimedia/pdfs/board/fsa071207.pdf>

<sup>19</sup> <http://www.timesonline.co.uk/tol/news/uk/health/article3864755.ece>

<sup>20</sup> <http://health.marksandspencer.com/healthy-eating/nutrition-basics/fat>

<sup>21</sup> [http://www.dailymail.co.uk/pages/live/articles/health/healthmain.html?in\\_article\\_id=308975&in\\_page\\_id=1774&in\\_a\\_source](http://www.dailymail.co.uk/pages/live/articles/health/healthmain.html?in_article_id=308975&in_page_id=1774&in_a_source)

<sup>22</sup> <http://www.brc.org.uk/showDoc04.asp?id=3941&moid=6703>

<sup>23</sup> <http://www.fdf.org.uk/keyissues.aspx?issue=635>

<sup>24</sup> <http://www.nice.org.uk/nicemedia/pdf/CVD%20Draft%20Guidance.pdf>

and Professor Simon Capewell. Following the meeting, the NHF have drafted a policy position paper which suggests a position for the NHF and member organisations. The paper proposes introduction of legislation in the UK to ensure that industrial trans fat levels do not exceed 2%, coupled with independent monitoring to ensure compliance especially amongst fast food and takeaway outlets. The paper further proposes that the Government should monitor absolute consumption levels for artificial trans fats, rather than calculating mean population averages. This position will be finalised during 2010.

The Faculty of Public Health and the Royal Society of Public Health called for a ban on industrial trans fats by 2011 as part of a manifesto for the 2010 general election published in January 2010.<sup>25</sup> They note that legislation in Denmark has helped bring the virtual elimination of trans fats.

Professor Simon Capewell has argued that a ban on trans fats, following the Danish model, is one of a number of population measures needed in the battle against cardiovascular disease. He has suggested that such measures would be more effective than screening programmes such as NHS Health Checks in England.<sup>26</sup>

Tfx: the campaign against trans fats in foods has declared that the campaign's objectives have been met as all major branded products, even imports, are now very low in trans fats. The website states: 'Even people with poor diets who eat loads of cakes, takeaways and other products that used to be high in trans will now have serious trouble getting enough trans fat to damage their health - and will suffer much more from excess calories, salt and sugar than from any residual trans fat'.<sup>27</sup> However, the website notes that cheaper supermarkets could remain a source of trans fats.

The Public Health Commission, established by Conservative Shadow Health Secretary Andrew Lansley, published a final report in May 2009 which called for industry-wide voluntary reformulation commitments to work towards the elimination of industrial trans fats<sup>28</sup>.

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<sup>25</sup> [http://www.fphm.org.uk/advocacy/press/archive/2010/jan/18\\_manifesto.asp](http://www.fphm.org.uk/advocacy/press/archive/2010/jan/18_manifesto.asp)

<sup>26</sup> [http://www.bmj.com/cgi/content/full/337/aug28\\_2/a1395](http://www.bmj.com/cgi/content/full/337/aug28_2/a1395)

<sup>27</sup> <http://www.tfx.org.uk/>

<sup>28</sup> <http://www.publichealthcommission.co.uk/pdfs/AboutPHC/PHCReport+Summary.pdf>