

TACD

TRANS ATLANTIC DIALOGUE TRANSATLANTIQUE
CONSUMER DIALOGUE DES CONSOMMATEURS

DOC No. FOOD-25-05

DATE ISSUED: MARCH, 2005

Resolution on Trans-Fatty Acids

I. TACD Recommendations

There is now strong evidence that consumption of trans fatty acids increases the risk of cardiovascular disease. Trans fatty acids offer no nutritional benefit and, given the health concerns, there is no reason why food producers should continue to include fats containing trans fatty acids within their products.

TACD therefore:

- urges the European Union and the United States governments to establish specific targets for food producers to eliminate artificially produced trans fatty acids from their products
- urges the European Commission to address the issue of labeling of trans fatty acids as part of its planned review of the nutrition labeling directive.

II. Background

Although some trans fatty acids occur naturally in dairy and meat products from ruminant animals, the United States Food and Drug Administration (“FDA”) concluded in 2003 that about 80 percent of dietary trans fat in the American diet comes from partially hydrogenated vegetable oils. Those vegetable oils are subjected to chemical hydrogenation to increase their melting point, shelf and fry life, and flavor stability. While levels appear to be lower in Europe – the European Food Safety Authority has estimated that around 30 to 80 per cent of total trans fatty acids come from ruminant fat – high levels in certain foods are still cause for concern. Trans fatty acids offer no nutritional benefit, and with strong evidence that they are more harmful than saturated fatty acids, it is essential that the US and EU eliminate artificially produced trans fatty acids from food products.

A. The European Union

1. 2002 - the Health Council of the Netherlands recommended that trans fat should be limited to 1% of calories.

In a report on dietary reference intakes, the Health Council of the Netherlands recommended, among other things, that trans fat should be limited to one percent of calories. That amounts to about two grams per day for a person consuming a 2,000-calorie diet.¹

2. March 2003 - the Danish government announced that, from January 2004, the amount of trans fat from partially hydrogenated oil would be limited to 2% of the total amount of fat or oil in the food.

In 1994 the Danish Nutrition Council (“the Council”) “concluded that trans fatty acids in the diet promote arteriosclerosis at least as much as equivalent amounts of saturated fats and probably more....An agreement was...concluded with the Danish margarine industry to reduce the trans fatty acid content of margarines produced in Denmark.”²

Nine years later, in 2003, the Council concluded that “studies indicate that, gram for gram, the intake of trans fatty acids [from partially hydrogenated fat] as compared with saturated fatty acids is associated with an approximately 10-fold higher risk increment for the development of heart disease.”³

The Council observed in 2003 that “a bag of popcorn, a doughnut and a large portion of French fries can...together contain about 20 grams of industrially produced *trans* fatty acids....If such food is consumed several times a week, the average daily intake of industrially produced trans fatty acids over months or years may be on a scale that increases the risk of heart disease considerably and may cause other health problems.”⁴ Accordingly, the Council recommended “that the use of industrially produced trans fatty acids in foodstuffs be ceased as soon as possible.”⁵

In March 2003 the Danish Veterinary and Food Administration issued a final order that bans – from January 1, 2004 – the sale of a food if it contains trans fatty acids (other than those occurring naturally in animal fat) in excess of two percent of the total oil or fat in the food.⁶ That ban applies to all foods, including those sold by catering establishments, restaurants, and bakeries.⁷ The order also declares that the trans-fat content of a food product claiming to be free of trans fat must be less than one percent of the total fat or oil in the food.⁸

1 Health Council of the Netherlands. Nutrition and health–recommendations of the Health Council of the Netherlands regarding energy, proteins, fats, and carbohydrates. *Ned Tijdschr Geneesk.* 2002;146:2226-9. The one percent figure presumably includes naturally occurring trans fatty acids.

2 The Influence of Trans Fatty Acids on Health, 4th ed. (Danish Nutrition Council 2003) at 9.

3 *Id.* at 9.

4 *Id.* at 42, 43.

5 *Id.* at 10.

6 The text of the final order is at *Id.* at 50.

7 *Id.* at 50.

8 *Id.* at 51.

3. The European Food Safety Authority (EFSA) opinion

In view of the Danish legislation, the EFSA was asked by the European Commission to provide an opinion on the presence of trans fatty acids in food and their effect on human health.

When considering intake⁹, the EFSA looked to the TRANSFAIR study of around 1300 foods from 14 European countries between 1995-6. It concluded that the content of bakery products could vary considerably depending upon the type of fat used. The TRANSFAIR study indicated that this could vary from below 1 per cent to up to 30 per cent of total fatty acids. Some breakfast cereals with added fat, French fries, powdered soups, sweets and snack products were also found to have high levels. Average daily intakes ranged from between 1.2 to 6.7g/day for men and 1.7 to 4.1g/ day for women. Intake was lowest in the Mediterranean countries, Finland and Germany. There were moderate intakes in Belgium, the Netherlands, Norway and the UK and the highest intake was found in Iceland.

The EFSA reinforced the evidence for adverse health effects from trans fatty acids:

- evidence from many controlled human intervention studies indicates that consumption of diets containing trans fatty acids, like diets containing mixtures of saturated fatty acids, consistently results in increased serum LDL cholesterol (ie the 'bad' cholesterol). The effect seems to be proportional to the amounts of trans fatty acids consumed, but it is not possible to say whether this differs from the effect that saturated fatty acids have.
- Evidence from controlled human intervention studies also indicates that consumption of diets containing trans fatty acids also results in decreased serum HDL cholesterol (ie. the 'good' cholesterol)
- Evidence from controlled human intervention studies also indicates that, relative to diets containing other fatty acids, consumption of diets containing trans fatty acids results in increased concentrations of fasting triacylglycerol (TAG) which is positively associated with the risk of cardiovascular disease in epidemiological studies.
- Prospective epidemiological studies consistently support the findings for an association between higher intakes of trans fatty acids and increased risk of coronary heart disease (CHD)
- In the prospective cohort studies that compared the effects of trans fatty acids and saturated fatty acids, the effects of trans fatty acids were stronger than those of a mixture of saturated fatty acids.

4. Labelling

The provision of nutrition labelling is voluntary within the European Union. When it is provided, it has to follow a prescribed format which does not

⁹ Opinion of the Scientific Panel on Dietetic Products, Nutrition and Allergies on a request from the Commission related to the presence of trans fatty acids in foods and the effect on human health of the consumption of trans fatty acids, adopted on 8 July 2004, The EFSA Journal (2004) 81, 1-49.

include trans fatty acids, unless the manufacturer voluntarily decides to provide this information for consumers. Few products do provide information on trans fatty acids, and they are not usually included in any form within the nutrition information panel. The only way that consumers can currently gain an indication of whether or not a product contain trans fatty acids, is to look for 'hydrogenated' or 'partially hydrogenated' fat or oil in the ingredients list. The European Commission is due to publish proposals for a review of the nutrition labeling directive, which provides an opportunity to address this.

5. Studies by European consumer organisations

The evidence for health effects raises the question of why food manufacturers are continuing to use artificially produced trans fatty acids in their products.

A recent study by Which?, the UK's consumer association, found high levels of trans fatty acids in a range of commonly consumed food products available in the UK¹⁰. The results are shown in the table below and show that some consumers could easily be consuming high levels of trans fatty acids on a regular basis.

| Food | Trans fat (g per portion) |
|---|---------------------------|
| KFC Colonel's regular crispy strips and fries | 4.4 |
| McDonalds McNuggets and regular fries | 3.0 |
| Saxby's fresh ready rolled short pastry | 2.5 |
| Tesco 'free from' toffee fudge shortbread | 2.5 |
| Burger King whopper and regular fries | 2.3 |
| Sainsbury's puff pastry minced beef and onion pie | 1.8 |
| Lidl Le Chef cheese, onion and chives quiche | 1.3 |
| Cadbury's Boost bar | 1.2 |
| Aunt Bessie's homestyle crispy roast potatoes | 1 |
| Asda sausage roll | 1 |
| Mr Kipling mini classics Victoria sponge cake | 0.8 |
| McVities Milky Way cake bars | 0.7 |
| Asda milk chocolate flavour caramel shortcakes | 0.65 |
| Dairylea lunchables hotdogs (without drink) | 0.6 |
| Linda McCartney deep country pies | 0.5 |
| Fish and chips | 0.4 |
| Tesco peach melba Danish pastry | 0.3 |
| Morrisons pork pie | 0.3 |
| McVities Penguin biscuit | 0.2 |
| Sainsbury's treacle tarts | 0.2 |

Studies by the Swedish Consumer Coalition, Sveriges Konsumenter i Samverkan, found that trans fatty acids were found in a number of food products, where their existence amongst ingredients was noted but the quantity was not. In Sweden, trans fatty acids were found in the following international brands: Biska (Danish cakes), Campbell Soups, Marabou,

¹⁰ The State of our Food, Which?, October 2004

McVities, Nestlé, Old El Paso, Unilever (including Knorr, Maizena, Becel). The results can be found in Swedish here:

http://www.konsumentssamverkan.se/11verk/kampanj/livsmedel/hardatfett/hardat_lista.htm and http://www.konsumentssamverkan.se/11verk/kampanj/livsmedel/hardatfett/hardat2_lista.htm.

B. The United States

In October 1993 the Center for Science in the Public Interest (CSPI) asked the FDA to require disclosure of the amount of trans fat in packaged foods and to stop misleading health claims. This followed studies done in the early 1990s which showed that consumption of trans fatty acids increased the risk of coronary heart disease. In February 1994 CSPI petitioned the FDA to require label disclosure of the amount of trans fatty acids and to prevent misleading label claims.

In November 1999 the FDA, in response to CSPI's petition, proposed amending its labeling regulations for packaged foods (1) to require that, for those foods containing at least 0.5 grams of trans fat per serving, the amount of trans fat in the food be included in the amount and percentage Daily Value declared for saturated fatty acids; and (2) to limit health claims on foods containing significant amounts of trans fat.¹¹

In 1999, the FDA observed that "reports from the Federal Government and the NAS (National Academy of Sciences) in the late 1980's concluded that trans fatty acids did not appear to have deleterious health effects."¹² However, after reviewing more recent studies, the FDA concluded "that under conditions of use in the United States, consumption of trans fatty acids contributes to increased serum LDL-C (low-density lipoprotein cholesterol) levels, which increases the risk of CHD (coronary heart disease)...Moreover, the similar impact on LDL-C evidenced for trans fatty acids, as is known for saturated fatty acids, warrants serious attention from a public health perspective."¹³

In July 2002 the Institute of Medicine ("IOM") of the National Academies, at the request of the FDA, reviewed the scientific evidence on trans fat and concluded that "There is a positive linear trend between trans fatty acid intake and total and LDL cholesterol concentration, and therefore increased risk of CHD, thus suggesting a UL (Tolerable Upper Intake Level) of zero."¹⁴ The IOM concluded that trans fat is at least as harmful to health as saturated fat¹⁵

¹¹ 64 Fed. Reg. 62746-62825 (November 17, 1999).

¹² 64 Fed. Reg. at 62753.

¹³ 64 Fed. Reg. at 62754.

¹⁴ Food and Nutrition Board of the Institute of Medicine, Letter Report on the Dietary Reference Intakes for Trans Fatty Acids (July 10, 2002) at 34.

¹⁵ The IOM said "The preponderance of the data suggest that [partially] hydrogenated fat/trans fatty acids, relative to saturated fatty acids, result in lower HDL cholesterol concentrations." Id. at 13.

and recommended that “trans fatty acid consumption be as low as possible while consuming a nutritionally adequate diet.”¹⁶

After reviewing the public comments on its 1999 proposed trans labeling rule, the FDA concluded in July 2003 that its final trans-fat labeling rule for packaged foods would save between 240 to 480 deaths a year¹⁷ (as compared to its earlier estimate of saving 2,500 to 5,600 lives a year, which was based on different assumptions). Extrapolating from those findings, if the average daily consumption of trans fatty acids from partially hydrogenated oils were eliminated (and replaced by a mixture of saturated, monounsaturated, and polyunsaturated fatty acids), CSPI estimated in May 2004 that the annual number of fatal coronary heart disease cases would fall by 11,739 to 23,074, depending on whether trans fat’s effects on only LDL-C or both LDL-C and HDL-C were considered. Thus, after taking into account the 240 to 480 deaths a year that will not occur because of trans-fat labeling, one gets an additional annual reduction of 11,499 to 22,594 deaths from coronary heart disease by eliminating from the diet trans fat from partially hydrogenated oils.

In 2003 the FDA also calculated the dollar value of the health benefits from requiring disclosure of the amount of trans fat on packaged foods, looking at both the dollar value of the extension of longevity and the savings in medical costs associated with reductions in nonfatal cases of coronary heart disease. Using a discount rate of 3 percent and depending on which assumptions are used, the FDA estimated the cumulative total of the benefits of its labeling rule over 20 years at \$13.1 billion - \$26.8 billion (compared to cumulative costs over 20 years of \$139 million - \$275 million), depending on assumptions concerning blood lipids. In May 2004, CSPI estimated that the benefits of a ban on partially hydrogenated oils appear to be about 47 times the benefits of the FDA’s trans-labeling rule. Thus, a simple extrapolation indicates that the discounted cumulative dollar value (over 20 years) of the benefits of such a ban would be \$616 billion to \$1.260 trillion.

In December 2003 the IOM – in a report to the United Department of Health and Human Services, the United States Department of Agriculture, and Health Canada – noted its 2002 conclusion that trans fatty acids (TFA) are “not required in the diet” (though the IOM cautioned that eliminating all trans fat, including that from ruminant sources, might introduce undesirable effects, such as inadequate intake of protein and micronutrients).¹⁸ The IOM went on to conclude in 2003 that “diets can be planned that provide less than 1 percent of calories from TFA, provided that the only sources of TFA are naturally occurring (i.e., in meat and dairy products).”¹⁹

16 Id. at 34.

17 68 Fed. Reg. at 41488. This final rule only requires disclosure of the amount of trans fat. In July 2003 the FDA announced that it was scrapping the rest of its 1999 proposed rule and published an advanced notice of proposed rulemaking on how to put this disclosure in context and on new nutrient-content claims. 68 Fed. Reg. 41507 (July 11, 2003).

18 Dietary Reference Intakes: Guiding Principles for Nutrition Labeling and Fortification (Food and Nutrition Board of the Institute of Medicine, December 2003) at 5-13

19 Id. at 5-14.

In April 2004 the Nutrition Subcommittee of the FDA's Food Advisory Committee, in response to a question posed by the FDA, unanimously concluded that trans fat is "more adverse" than saturated fatty acid with respect to coronary heart disease.

In May 2004 CSPI petitioned the FDA to revoke the legal authority for both packaged food companies and restaurants to use partially hydrogenated vegetable oils. The petition and a letter from 28 physicians and scientists in support of the petition are available at www.cspinet.org/new/200405181.html.

In July 2004 CSPI petitioned the FDA to require restaurants to indicate that the food they serve contains trans fat from partially hydrogenated vegetable oils. The petition is available at www.cspinet.org/new/200407221.html.

C. The World Health Organization

In May 2004 the World Health Assembly of the World Health Organization ("WHO") endorsed the recommendation that "populations and individuals should...limit energy intake from total fats and shift fat consumption away from saturated fats to unsaturated fats and towards the elimination of trans-fatty acids."²⁰

II. Conclusion

There is now strong evidence that consumption of trans fatty acids increases cardiovascular disease risk. Trans fatty acids offer no nutritional benefit and given the health concerns, there is no reason why food producers should continue to include fats containing trans fatty acids within their products. Some manufacturers have already eliminated trans fatty acids from their products, demonstrating that it is possible to switch to alternatives.

TACD commends the Danish government for limiting the amount of trans fat from partially hydrogenated oil to two percent of the total fat or oil in both restaurant foods and packaged foods, and recognizes the WHO's recommendation to eliminate the consumption of trans fat.

TACD urges that both the European Union and the United States governments establish specific targets for food producers to eliminate artificially produced trans fatty acids from their products.

TACD also urges the European Commission to address the issue of labeling of trans fatty acids as part of its planned review of the nutrition labeling directive. Nutrition labeling should be mandatory and the trans fatty acid content should be shown in a user-friendly way for consumers – either with saturated fatty acids or separately on the label.

²⁰ Global strategy on diet, physical activity and health (57th World Health Assembly, May 22, 2004, WHA57.17) at 8.