

Ministry of Food, Agriculture and Fisheries

Trans Fat – a case for legislation?

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*Reformulating Food to Optimize the
Consumer's Shelf-Life*
Championing Public Health Nutrition,
Ottawa, October 22-23, 2008

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Overview of presentation

1. The Danish ban on trans fat.
2. Scientific background.
3. Results of the ban.
4. Labeling or legislation?
5. Is voluntary reductions in industry an alternative to legislation?
6. Conclusions.

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The Danish ban on trans fat (1)

The history of the Danish order on trans fat:

- Notified to the EC in May 2002.
- Notified to WTO in June 2002.
- Entered into force in June 2003.
- **Applied from in January 2004.**
- Initial steps of EU infringement procedure 2005-2006.
- EU infringement procedure halted in March 2007.
- European Parliament has in October 2008 urged the EU Commission to draft a proposal on EU legislation on TFA.

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The Danish ban on trans fat (2)

The Danish order on trans fat in oils and fats:

- Trans fatty acids maximum level: 2 % of fat content.
- Focus on oils and fats – limit at the source.
- Only industrially processed trans fatty acids.

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Scientific background (1)

Recommendations from scientific bodies:

- WHO 2004: "... Towards the elimination of TFA".
- Institute of Medicine 2002 (US): "Keep intake as low as possible while consuming a nutritionally adequate diet".
- AFSSA 2005: "Intake >2 E% increases risk of CVD." Maximum of 1 %.

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Scientific background (2)

Well-established link between trans fatty acids and cardiovascular disease:

- Increase of 5 g TFA/Day = 25 % increased risk of cardiovascular disease.
- Intake of 20 g TFA/Day = 2,5 times higher risk of cardiovascular disease.
- Risk related to TFA 4-5 times higher than risk related to saturated fats.
- US estimate (1997): 30-40% of deaths related to cardiovascular disease due to TFA (>30.000 deaths a year); average TFA-intake 5 g/day.

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Scientific background (3)

The problem to be addressed is industrial trans fat:

IP-TFA	Natural TFA
<ul style="list-style-type: none"> Added in the production process – comparable to additives or contaminants. Level potentially high – no safe upper level. No benefits. Reduction technologically possible. Distinction by analysis possible. 	<ul style="list-style-type: none"> Naturally occurring TFA integral part of product. Level of naturally occurring trans fatty acids low. No evidence of health risk related to naturally occurring trans fatty acids. Beneficial nutrients in animal products.

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Scientific background (4)

Key premises behind the Danish ban on trans fat:

- Well-established link between trans fat and cardiovascular disease.
- No safe upper level.
- High risk product groups
- No benefits.
- Reduction technologically possible.
- Separation by analysis possible.

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Results of the ban (1)

Surveys on target products 2002-03 and 2004-05:

- Significant decrease in products >2 % TFA
- Low level of transgression (2-6 %)
- Substitution: both monounsaturated and saturated fats.
- New methods of production developed – solid and semi-solid 'specialty fats'
- No increase in prices and same product availability.

A new survey has been conducted in 2006-7. Results will be published in an article by Bysted A., Mikkelsen A.Æ. & Leth T., which focuses on the substitution of trans fatty acids in foods in Denmark.

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Results of the ban (2)

High trans fat menu (Stender et al 2006, NE Journal of Medicine)

Country	2001 (g per serving)	2006 (g per serving)
Denmark (DK)	~30	< 1
Sweden (SE)	~10	~10
UK	~22	~22
Germany (DE)	~25	~25
USA (US)	~38	~38
Hungary (HU)	~42	~42

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Results of the ban (3)

Case: Fat content in foods at McDonalds in Denmark

Pre-regulation	Post regulation
<ul style="list-style-type: none"> 55 % Monounsaturated 8 % Polyunsaturated 20 % Saturated 8 % Transfats. 	<ul style="list-style-type: none"> 70 % Monounsaturated 15 % Polyunsaturated 15 % Saturated NO Transfats !

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Results of the ban (4)

The health impact?

- It has been estimated that the Danish ban will save the life of 4-500 citizens each year out of a population of around 5 million.
- Difficult to 'isolate' TFA-impact in health studies.
- Studies conducted by Danish Obesity Research Center – for further information see: www.DanORC.dk.

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Labeling or regulation (1)

“Mandatory labelling of foods with their IP-TFA content in a clear form undoubtedly results in a reduction in the mean daily intake of TFA due to the pressure it imposes on the producer. Labelling nevertheless still allows for a high intake of these fatty acids, as demonstrated by our purchase of a high trans fat menu with 37g of IP-TFA in Canada in November 2005. Canada has had a mandatory labelling of trans fatty acids on packaged food since January 2003.”
(Stender S, Dyerberg J. & Astrup A. in NHDmag.com, Sept. 2007)



Labeling or regulation (2)

Regulation

- Protection of citizens.
- Simple and efficient way of reducing intake and to eliminate risk.
- Enforceable, controllable and technologically feasible.

Labeling

- Empowering citizens –leaving vulnerable groups at risk.
- Reduces intake –doesn't eliminate risk.
- Unpacked food products.
- Massive public information required.



Legislation or voluntary reductions in industry

- Agreement with industry on voluntary reductions can potentially achieve the same purpose as legislation.
- There must although, as seen in Canada, be a clear will to legislate, if set objectives aren't met.
- Still leaves the question open, on how to handle those producers/importers, who aren't willing to contribute to a common effort in the food industry.



Conclusions

- Legislation is an adequate response to the health risks associated with trans fat.
- Voluntary reductions in industry is a possible alternative.
- Labeling is not an adequate response.