

Study to support the impact assessment of the initiative to limit industrial trans fats in the EU

Executive summary

Written by Andrew Jarvis, Matt Rayment, Julien Etienne, Eliana Biundo, Jonathan Pearson-Stuttard, Jonathan Lonsdale, Kate McEntaggart, Alice Bennett, Gabor Endrodi, Dace Akule, Elbereth Puts, Lena Ruthner, Agnieszka Paczynska, Thomas Di Pietro, Astrid Stampe Lovelady, Johanna Dorenburg and Robin Pistorius.





EUROPEAN COMMISSION

Directorate-General for Health and Food Safety Directorate E — Food and feed safety, innovation Unit E1 — Food information and composition, food waste Contact: Stephanie Bodenbach E-mail: Stephanie.Bodenbach@ec.europa.eu European Commission B-1049 Brussels

Study to support the impact assessment of the initiative to limit industrial trans fats in the EU

Executive summary

EUROPEAN COMMISSION

EUROPE DIRECT is a service to help you find answers to your questions about the European Union

Freephone number (*): 00 800 6 7 8 9 10 11

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you)

LEGAL NOTICE

This document has been prepared for the European Commission however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

More information on the European Union is available on the Internet (http://www.europa.eu).

Luxembourg: Publications Office of the European Union, 2014

Print	ISBN [number]	ISSN [number]	doi: <mark>[number]</mark>	[Catalogue number]
PDF	ISBN [number]	ISSN [number]	doi: [number]	[Catalogue number]
EPUB	ISBN [number]	ISSN [number]	doi: [number]	[Catalogue number]

© European Union, 2014

Reproduction is authorised provided the source is acknowledged.

Printed in [Country]

PRINTED ON ELEMENTAL CHLORINE-FREE BLEACHED PAPER (ECF)

PRINTED ON TOTALLY CHLORINE-FREE BLEACHED PAPER (TCF)

PRINTED ON RECYCLED PAPER

PRINTED ON PROCESS CHLORINE-FREE RECYCLED PAPER (PCF)

EXECUTIVE SUMMARY

The problem

Industrial trans fatty acids (iTFA) are industrially produced unsaturated fatty acids that, despite important reduction over the last decades, are still found in a number of food products in the EU. In particular, the presence of iTFAs in foods differs between national markets and/or segments of the single market. iTFAs contribute to ill health, notably to the incidence of coronary heart disease (CHD) which is a leading cause of mortality in the EU. Higher levels of iTFA intake have been observed in lower income groups – population segments that also experience higher rates of coronary heart disease. As such, iTFAs contribute to health inequalities within the EU.

The case for EU action

Five Member States (MS) have legislated to tackle the iTFA problem, and some parts of the food chain have adopted voluntary measures to reduce the iTFA content of certain food products. The lack of a coordinated, consistent approach means that there is variation across the EU in the obligations placed on food business operators with regard to the iTFA content of products placed on the market, and variation in the level of protection provided to consumers against the harmful effects of iTFAs.

There has been a steady decline in iTFA intake, as assessed at EU level, as a result of legislative and voluntary action. Continuation of this trend would see iTFA levels decline even in the absence of EU action. Yet iTFA levels remain comparatively high in the products of some sectors and in some EU countries. There is some evidence of food businesses in some MS and sectors bringing new products with high iTFA content to the market in recent years. The research also suggests that current industry initiatives will not generate substantial additional benefits beyond those which they have already delivered.

In the absence of EU action, each Member State that has not already legislated might independently adopt measures or decide not to act. Evidence on the likely scale of Member State and industry action in the absence of new EU policies is mixed but, overall, the expected negative health impacts of this baseline scenario are higher than would be seen if there was concerted action to drive down iTFA intake by reducing levels in food across the EU.

In this context, the European Commission is examining options to limit the use of iTFAs in food products in the EU, and thus to reduce iTFA intake of the EU population.

EU policy objectives

The general objectives of EU action on iTFAs are:

- To ensure a high level of health protection for EU consumers;
- To contribute to reducing health inequalities, one of the objectives of Europe 2020;
- To contribute to the effective functioning of the Internal Market for foods that could contain iTFAs.

The specific objectives of EU action on iTFAs are:

- To reduce intake of industrial trans fats in the entire EU for all population groups;
- To ensure that the same conditions apply in the EU to the manufacturing and placing on the market of foods that could contain iTFAs;
- To ensure legal certainty for food business operators as regards the rules applicable to the manufacturing and placing on the market of foods that could contain iTFAs.

The policy options

In this study the impact of the following five policy options were assessed: an EU-level voluntary agreement to limit the iTFA content of food products sold to consumers to 2% of fat (option 1a); EU-level legislation limiting the iTFA content of such products sold to consumers to 2% of fat (option 1b); legislation requiring the addition of information on trans fatty acids content to the nutrition declaration on all pre-packed food products

(option 2); an EU-level voluntary agreement to ban partially hydrogenated oils (PHOs) in the EU (option 3a); and EU legislation banning PHOs (option 3b). The impact of combining the labelling obligation (option 2) with the other options was also assessed.

The PHO ban legislative is assumed to include provision for authorised derogations for certain food additives that are used in small quantities, such as in chocolate coatings.

Study methodology

Through a detailed review of the literature and collection of primary data, this study has developed an evidence basis that has been used in the assessment of the social, economic and environmental impacts of a set of alternative EU policy options that could be adopted to tackle this issue. The assessment has used quantitative models for the assessment of health impacts and economic impacts. The impacts on health inequalities and environmental impacts were assessed qualitatively. The appraisal was informed by research on the evidence and experience from countries that have already acted on iTFAs, including interviews with competent authorities and food business representatives. Selected representatives of the food industry and NGOs working on consumer and health issues were also invited to comment on draft assumptions and results.

The assessment methodology was explicitly designed to accommodate known uncertainty about the future trend in iTFA intake in the absence of EU action (the baseline scenario). The policy options were tested against three variants of the baseline that represent the spectrum of expected possible trajectories – iTFA intake remaining constant at current levels, a linear decline in iTFA intake to zero over 15 years and an accelerated linear decline to zero over 10 years.

Findings

The legislative policy options (1b and 3b) perform better than the alternatives in relation to:

- Health benefits (measured in disability-adjusted life year or "DALY")
- Reduction in health inequalities
- Improvements in the functioning of the internal market
- Efficiency
- Proportionality

Table E.1 - Effectiveness of all options and combinations of options under variant B2 of the baseline scenario (in which iTFAs decline to zero over 15 years)

	Option 1a	Option 1b	Option2	Option3 a	Option3 b	Options 1a/3a + 2	Options 1b/3b + 2
DALYs saved	0.7m	6m	1m	0.7m	6m	1.3m	6m
Health inequalities reduction	(+)	++	(+)	(+)	++	+	++
Internal market	(+)/(-)	++	0	(+)/(-)	+(+)	(+)/(-)	++

Note: scale of - - to + + indicates a range of strongly negative (- -) to strongly positive (+ +) impacts, with '0' being neutral.

The savings in health-related costs to society are very much greater than the incremental costs for all options except the labelling. The benefit:cost ratio is largest for options 1b and 3b.

Table E.2 - Monetised costs (administrative and compliance costs) and benefits (health-related savings) for the 5 options under variant B2 of the baseline scenario (NPV, EUR)

Administrative compliance costs (€)	and 50m	297m	9826m	59m	346m
Health-related savings (€	E) 11,078m	94,008m	15,353m	11,078m	94,008m
Ratio of monetised ber to costs	nefits 222	317	1.6	189	272

Furthermore, legislation imposing a maximum limit to iTFA content of products sold direct to consumers (option 1b) performs better in terms of efficiency and coherence than a legal ban on PHOs (option 3b) in that:

- Equivalent social benefits are delivered at a lower cost to the industry;
- Its approach is consistent with the measures already adopted by a number of Member States (and actions planned in others);
- Compared to option 3b, option 1b avoids the need to agree a PHO definition and establish the capacity across the EU to test oils for compliance with it (both for enforcement purposes and for assurance within the supply chain).

A combination of either of the two options 1b and 3b with mandatory labelling of TFA levels on pre-packed products (option 2) would raise overall costs significantly. Such a combination is unlikely to deliver added social benefits.

The expected benefits of the voluntary options (1a or 3a), while positive, are smaller and much less certain, generating smaller overall costs, and providing much smaller expected benefits than options 1a or 3a. The members of the food business organisations that are likely to participate in EU voluntary agreements have already reformulated their products to reduce iTFA levels or have eliminated iTFAs from their products completely. Research suggests that the businesses responsible for much of the residual iTFA in the food chain are unlikely to participate in an EU agreement, either directly or through representative organisations. The voluntary options do not provide the assured protection that is delivered by the legislative alternatives.

Summary

The results of the assessment suggest that legislative action at EU level to reduce iTFAs in food would generate positive impacts on health that are substantial as compared to the costs. These measures would substantially remove iTFA-related health inequalities, provide assured protection to consumers across the EU, and address the internal market integrity issues caused by unilateral Member State action. They would also help to ensure a consistent standard of food quality across the EU. The results are robust across all foreseen variants of the baseline scenario. The options that perform best in the appraisal are a legal limit of 2% on iTFA content on food products sold directly to consumers and a legal ban on PHOs. A legal limit of 2% on iTFA content performs marginally better than a legal ban on PHOs in terms of efficiency and of coherence with existing Member State legislation.

HOW TO OBTAIN EU PUBLICATIONS

Free publications:

- one copy: via EU Bookshop (http://bookshop.europa.eu);
- more than one copy or posters/maps: from the European Union's representations (http://ec.europa.eu/represent_en.htm); from the delegations in non-EU countries (http://eeas.europa.eu/delegations/index_en.htm); by contacting the Europe Direct service (http://europa.eu/europedirect/index_en.htm) or calling 00 800 6 7 8 9 10 11 (freephone number from anywhere in the EU) (*).

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

Priced publications:

• via EU Bookshop (http://bookshop.europa.eu).



doi: [number] ISBN [number]