FOOD STANDARDS Australia New Zealand
Te Mana Kounga Kai – Ahitereiria me Aotearoa

Supporting document 2

Survey of selected quick service restaurants, edible oil suppliers, packaged food manufacturers and supermarkets on initiatives to reduce trans fatty acids in the Australian and New Zealand food supply

Executive summary

The purpose of this survey was to investigate past and current activities, and future plans of sectors in the food industry to reduce trans fatty acids (TFAs) in the Australian and New Zealand food supply.

A selection of Australian and New Zealand quick service restaurants (QSRs), edible oil and spread manufacturers/suppliers, packaged food manufacturers (frozen goods and snack products) and supermarket chains were surveyed. These businesses were specifically targeted to participate in the survey given existing knowledge about the key sources of manufactured TFAs in the Australian and New Zealand food supply.

The survey included questions on activities to reduce the trans fatty acid (TFA) content of foods, whether TFA levels had been reduced as much as practicable and whether companies provide information to consumers or customers about the TFA content of products. The survey was conducted via email between July and September 2013.

Responses were received from 22 of the 52 companies selected to participate (five QSR, five edible oil manufacturers/suppliers, three frozen goods manufacturers, seven snack product manufacturers and two supermarket chains). Six of the respondents provided a combined response for both the Australia and New Zealand arms of the company.

Overall, the findings indicate that the majority of the surveyed companies are actively maintaining a low TFA content of their products and that in some cases, there is ongoing work to make further reductions in TFA levels. It was noted that companies producing fats and oils in Australia and New Zealand are competing with hydrogenated oils imported from Asia and that many companies in Australia and New Zealand are sourcing oils and fats offshore. The TFA content of such imported products is unclear. Should a further study be undertaken in the future, this could be investigated. It is not possible to extrapolate the findings of the study to the food industry because of the small number of respondents and the convenience sampling approach.

Table of Contents

1 Purpose

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2 Background

2.1 Labelling Review

In 2009, the then Australian and New Zealand Ministerial Council for Food Regulation (now known as the COAG Legislative and Governance Forum on Food Regulation (Forum)) agreed to a comprehensive independent review of food labelling law and policy. An expert panel, chaired by Dr Neal Blewett, AC, undertook the review and the panel's final report, *Labelling Logic: Review of Food Labelling Law and Policy (2011)* (Labelling Logic) was publicly released in January 2011.

One of the independent panel's recommendations concerns TFAs, Recommendation 13, which states that:

> *Mandatory declaration of all trans fatty acids above an agreed threshold be introduced in the Nutrition Information Panel if manufactured trans fatty acids have not been phased out of the food supply by January 2013.*

In responding to this recommendation, the Forum asked FSANZ to undertake a technical evaluation and provide advice on the proposed change to trans fatty acid (TFA) declaration requirements. This survey is one of three projects undertaken to support the development of the technical evaluation and advice.

2.2 Previous surveys on the use of trans fatty acids in the Quick Service Restaurant Sector in Australia and New Zealand

The Australia New Zealand Collaboration on Trans Fats (Collaboration) was established in October 2006 to support and broaden existing initiatives to manage TFAs. The Collaboration included representatives from government, public health and industry bodies. In March 2007, representatives of the Quick Service Restaurant (QSR) sector in Australia, the Collaboration and the Australian Government established a Roundtable on Trans Fats in the QSR Industry. The aim of the Roundtable was to minimise the presence of TFAs in quick service meals, while not adversely affecting saturated fatty acid content. In August 2007, a similar QSR Roundtable was established in New Zealand by the then New Zealand Food Safety Authority (NZFSA)[1].

In 2007 members of both the Australian and New Zealand Roundtables were invited to participate in separate surveys on plans and strategies to reduce TFAs in their products. Follow-up surveys were undertaken in 2009. The majority of respondents in the 2007 and 2009 surveys were from the QSR sector.

Findings from the Australian 2009 survey, based on responses from 14 companies, indicated that the respondents in the QSR sector had been proactive in reducing the levels

[1] NZFSA merged with other government departments in 2012 and is now part of the New Zealand Ministry for Primary Industries.

of TFAs in their products[2]. It appeared that there had been some dramatic reductions of 50-90% in levels of TFAs in certain ingredients and products. Strategies used by the respondents in the QSR sector to reduce TFA levels in foods included eliminating or limiting the use of hydrogenated fats or oils in food production processes, substituting high TFA oils with new blends containing very low levels of TFAs, using oven-baking rather than deep-frying techniques and increasing education and awareness about TFA reduction. The higher cost of low TFA oils was identified as an impediment by some respondents to the attainment of low TFA products.

Nineteen companies responded to the 2009 New Zealand survey[3]. Findings indicated that respondents in the QSR sector had made positive changes and were continuing to work towards reducing TFA levels in their food supply chain. Since the initial survey conducted in 2007, a number of QSR respondents reported major changes to their frying mediums and fats used in bakery products, resulting in products with lower levels of TFAs. The higher cost of low TFA oils was mentioned by companies in New Zealand as it was in Australia noting that, in times of economic downtown, voluntary initiatives such as TFA plans may not be prioritised.

3 Methods

3.1 Participant selection

The sampling frame was Australian and New Zealand quick service restaurants (QSR), edible oil and spread manufacturers/suppliers, packaged food manufacturers (frozen goods and snack products) and supermarket chains. These groups of businesses were specifically targeted given existing knowledge about the key sources of manufactured TFAs in the Australian and New Zealand food supply. Compared with the earlier surveys, more companies that produced packaged foods for the retail sector were included given the focus of Labelling Review recommendation 13 on mandatory labelling.

A convenience[4] sample of companies, based on the sampling frame, was developed using a variety of methods. The QSRs selected were predominantly those that had participated in either the 2007 and/or 2009 surveys. Australian and New Zealand edible oil manufacturers and suppliers were identified by an expert with knowledge of the industry. An internet search identified other relevant companies. Similarly, manufacturers of frozen goods (e.g. frozen chips and crumbed fish/chicken products) and snack food products (e.g. biscuits, crisps) were identified from FSANZ knowledge of the food industry sector. The main supermarket chains in each country were also selected, for the specific purpose of seeking information on their in-store bakery products.

3.2 The survey

The survey was primarily based on the survey templates used in 2007 and 2009. A copy of the survey is provided at Attachment 1.

[2] Report can be found at http://www.foodstandards.gov.au/publications/Pages/transfattyacidsrepor4560.aspx

[3] Report can be found at http://www.foodstandards.gov.au/publications/Pages/transfattyacidsrepor4560.aspx

[4] A convenience sample is when elements (people, businesses) are selected from a population on the basis that these particular people/businesses are easy to survey. This sampling technique does not use a random process for selection into the sample, so the results from this type of sample are unlikely to be representative of the population and therefore contain bias. Other terms for convenience sample are grab sampling and accidental sampling.

The survey comprised seven questions:

- Questions 1 to 4 related to the company's stage of action to reduce TFAs in their products – either a current plan/program in place (Q1 and 2); previous action had lowered TFA levels in products as much as practicable (Q3); or future company plans to develop a plan/program (Q4).
- Question 5 sought information from companies on current levels of TFAs in individual food products and in the types of oils and fats they use in the manufacture of their products. This information was sought to help inform the sampling plan for the Implementation Subcommittee for Food Regulation (ISFR) coordinated analytical survey and is not included in this report.
- Question 6 asked companies whether they provide information to consumers or customers about the TFA content of products (for example on product labels, at point of sale, in website material or a certificate of analysis for customers).
- Question 7 was open-ended, to enable companies to provide any other comments.

3.3 Implementation of the survey

FSANZ phoned each of the selected food companies to establish the appropriate contact person in the company and to request their participation in the survey. An overview of the survey and background information about FSANZ's work on TFAs was also provided. If the food company representative agreed to participate, then an electronic self-complete survey with a cover letter was emailed to them. Companies were asked to return completed surveys by email by a specified date (within two to three weeks of receiving the request). Two email reminders were sent to those companies that did not respond within the specified timeframe to encourage completion of the survey, thereby extending the survey due dates for those companies.

The survey was conducted between July and September 2013.

4 Results

4.1 Response

Fifty-two companies across Australia and New Zealand were selected to participate. Of these, a relevant company contact was established in 40 companies and 36 of the representatives agreed to participate in the survey (13 QSRs, eight edible oil and spread manufacturers/suppliers, four frozen goods manufacturers, eight biscuit snack product manufacturers and three supermarkets). Resource constraints and competing priorities were given as reasons by the four companies that did not agree to participate.

Twenty-two of the 36 surveys distributed by email were returned (five QSR, five edible oil manufacturers/suppliers, three frozen goods manufacturers, seven snack product manufacturers and two supermarkets). This represents an overall response rate of 42%. Six of the respondents provided a combined response for both the Australia and New Zealand arms of the company.

4.2 Quick Service Restaurants

All five responses from the QSR sector were from multinational companies. Of the five responses, three respondents said they had lowered TFAs in their products as much as practicable; one respondent had made major changes before 2006, another had removed nearly all manufactured TFAs in 2009 and had since introduced a policy of no manufactured TFAs in ingredients and the third respondent had changed the frying oil in 2010 and made further changes in 2012. Of the other two QSRs, one said they do not use TFAs and the other said they had started reducing TFAs in 2011 and that they anticipated TFAs would be as low as possible by June 2014.

In summary, the responses from the five QSRs, three of which covered businesses in both Australia and New Zealand, indicated that TFAs would be as low as possible by mid-2014.

4.3 Biscuit and snack product manufacturers

Of the seven biscuit/snack product manufacturers, five said they did not have an on-going plan in place to reduce TFAs in their products because they had lowered the TFA content as much as practicable. One respondent noted that they had a TFA reduction plan and that, following a review of the TFA content of all their products in 2010, all their products would comply with their policy (less than 3%TFAs of total fat) by the end of 2013. Although the seventh respondent did not indicate whether the company had a TFA reduction in plan or not, TFAs had been reduced by replacing hydrogenated vegetable oils with rice bran oil and palm oil based products with very low levels of TFAs.

Four respondents noted that significant TFA reduction had been undertaken some time ago, for example seven years ago around 2006/7. Respondents noted that some of their products did contain a low level of TFAs from animal sources.

Two of the respondents provided a combined response for both the Australia and New Zealand arms of the company.

4.4 Edible oil and spread manufacturers/suppliers

Of the five responses from the edible oil manufacturers/suppliers, three companies stated that they do not use partially hydrogenated oils. It was noted that Australian oil refineries do not hydrogenate oils but that Australian companies are competing against imported fats/oils. One of these three companies noted that while some of their products contain naturally occurring TFAs they offer lower TFA alternatives to customers, for example, by using palm oil instead of tallow.

Another company indicated that nearly all their retail products, foodservice oils and confectionary fats are virtually TFA free (less than 1% TFA on product basis) and have been for over 10 years. While it was noted that some food service spreads have 3–4 g TFAs/100 g and that a small number of vegetable based bakery margarines have between 1 and 2 g TFAs/100 g, work is continuing to reduce the levels of TFAs in such products. Several foodservice/bakery fats and margarines that contain beef tallow have around 3–4 g TFAs/100g.

The fifth company stated that all retail products, infant formula blends, foodservice oils and nearly all confectionary fats are virtually TFA free (less than 1 g TFAs/100 g food). While many vegetable based bakery fats/margarines are also virtually TFA free, some have TFA levels up to about 4% TFAs, with a few products containing 8%TFAs. Work completed early 2014 reduced the TFA content of a fat used for popcorn to less than 1% TFAs (personal communication, April 2014). Work is continuing to reduce the TFA content in bakery fats and margarines. It was noted that some specialty fats are made to specifications required by customers.

One of the seven biscuit/snack product manufacturers that also produces retail and foodservice edible oil spreads and oils indicated they had reduced TFAs a few years ago particularly in retail pastry and other bakery fats and that they considered they had lowered TFAs as much as possible. In addition the company noted that for their small number of products that may have detectable levels of TFAs, the functionality of the fat in the product, coupled with limited customer demand for a TFA variant and low volume of sales further consideration of TFA levels was not warranted.

4.5 Frozen goods manufacturers

Of the three frozen goods manufacturers, one was in the process of developing a plan for TFA reduction, and another said that as they source ingredients with minimal TFA content there was no need for a plan. The third respondent noted they did not have a plan for TFA reduction but had nonetheless reduced manufactured TFAs as much as practicable. This company also noted that some products did contain TFAs from animal fats and that occasionally some products were imported that contained TFAs. One of the respondents provided a combined response for both the Australia and New Zealand arms of the company.

4.6 Supermarket chains

One supermarket chain noted that, while they did not have a plan in place to reduce TFAs in in-store bakery products, they did evaluate both saturated fat and TFA content on a case-by-case basis and consider reformulation if levels were high. The other supermarket chain indicated they had implemented a policy in 2012 whereby hydrogenated or partially hydrogenated oils were not used in private label products.

4.7 Provision of information to consumers and customers

Of the 22 respondents, 13 indicated they provide information on TFA content of their products in at least one of the following ways:

- website (for retail and foodservice customers)
- in-store brochure
- nutrition information panel (voluntarily, voluntarily when product contains more than 1% total fat, when product carries the Heart Foundation Tick Program or nutrition content claims about fat)
- product specification
- customer request (retail or foodservice)

Six respondents said they did not provide any information on TFA content to consumers or customers, while three respondents did not answer the question on provision of information.

5 Discussion

The majority of companies that participated in this survey (16 out of 22) considered they had reduced the TFA content of their products as much as possible or that their products already contained low levels of TFAs. In many cases, TFAs had been reduced in their products a number of years ago. Of the remaining six respondents:

- two indicated that there was ongoing work to reduce TFAs in both retail and foodservice vegetable based bakery fats and margarines
- two indicated that TFA levels in their products would be as low as possible by the end of 2013/mid-2014
- one respondent said they had not considered TFA content of their products but were in the process of developing a plan and would be measuring TFA levels in the near future
- one respondent (supermarket) considered TFA content of private label products on a case by case basis.

One respondent noted that companies are competing with hydrogenated oils imported from

Asia and many companies in Australia and New Zealand are sourcing oils and fats offshore which may or may not contain TFAs.

There are a number of limitations with this survey. Given the convenience sampling approach and the small number of respondents, it is uncertain whether the findings are representative of the food sectors sampled. Findings may also have been affected by response bias due to the low response rate. The results were not reported separately for the two countries because of the small sample size and because a number of respondents gave collective information for both New Zealand and Australian arms of the company.

Due to the inclusion of companies from food sectors not covered in the previous surveys and the study limitations noted above, it is not appropriate to compare the findings from this survey with those from the 2007 and 2009 surveys.

6 Conclusions

Overall, the findings indicate that the majority of the surveyed companies are actively maintaining a low TFA content of their products and that in some cases, there is ongoing work to make further reductions in TFA levels. It was noted that companies producing fats and oils in Australia and New Zealand are competing with hydrogenated oils imported from Asia and that many companies in Australia and New Zealand are sourcing oils and fats offshore. The TFA content of such imported products is unclear. Should a further study be undertaken in the future, this could be investigated. It is not possible to extrapolate the findings of the study to the food industry because of the small number of respondents and the convenience sampling approach.

Attachment 1 – 2013 survey questions

Survey of current activities and future plans to reduce trans fatty acids in food products

Company	
Contact person and position in company	
Contact details	
Date	
Is any information to be treated as Confidential Commercial Information*? **s4 Food Standards Australia New Zealand Act 1991*	☐ Yes – *please identify and provide this information separately* ☐ No
Description of company, including food products it manufactures or supplies	
FSANZ conducted similar surveys in 2007 and 2009 – did your company respond to either of these surveys?	*Please select either:* ☐2007 ☐ 2009 ☐ 2007 and 2009 ☐ Neither ☐ Not sure
Question 1: Do you currently have a plan or programme in place to reduce trans fatty acids in your food products? ☐ Yes – *please go to Question 2* ☐ No – *please go to Question 3*	
Question 2: (a) Please outline your plan/programme (or attach a copy), including the date it was implemented. (b) What progress has been made to date? Please describe and quantify in the attached table. (c) If you responded in 2007 and/or 2009, please specifically highlight progress made since then to reduce trans fatty acids. If no further progress has been made, what have been the barriers for your company to doing so?	

(d) What overall outcomes do you expect to achieve from your plan/programme? Please describe below and quantify in the attached table.

When completed, please go to Question 5

Question 3:

(a) Has your company already lowered trans fatty acid levels in products as much as practicable?

☐ Yes

☐ No – *please go to Question 4*

(b) If yes, please outline the plan/programme used (or attach a copy) and outcomes achieved. *Then go to Question 5.*

Question 4:

(a) Do you intend to develop a plan or programme to reduce trans fatty acids in your food products?

☐ Yes

☐ No

(b) If yes, when do you expect to develop and implement the plan/programme?

(c) If no, why do you not intend to develop a plan/programme?

When complete, please go to Question 5

Question 5:

Do you know the levels of trans fatty acids in your products? If you are willing to share this information with us (it can be kept confidential if requested), we are particularly interested in:

(a) The current levels of trans fatty acids in individual food products:

Food product	Oil or fat used	Total level of TFAs	Levels of individual TFAs (e.g. mono- and poly-TFAs)	Method of analysis used to determine TFA level

(b) The types of oils and fats used in the manufacture of your products, and the levels of trans fatty acids in these oils and fats:

Description of oil/fat used in products	Total level of TFAs	Levels of individual TFAs (e.g. mono- and poly-TFAs)	Method of analysis used to determine TFA level

Please go to Question 6

Question 6:

Do you provide information to consumers or clients about the trans fatty acid content of your products (for example, on product labels, at point of sale, in website material or a certificate of analysis)?

☐ Yes – *please describe below*

☐ No

Please go to Question 7

Question 7:

Do you have any further comments you wish to provide?

Activities to reduce trans fatty acids in food products – outcomes to date and further anticipated outcomes

Product/food category/ingredient	**Current TFA content or level**	**Description of activity**	**Outcomes to date (including date achieved)**	**Expected overall outcomes**	**Timeframe**
Example 1: Hydrogenated vegetable fat for frying	20% TFA	Replace with rice bran oil in all QSR	2% TFA in frying oil used since 2011; a decrease of 18% TFAs	Will remove X kg or tonnes TFAs from food supply	Implemented in all outlets by end of 2013
Example 2: Bakery shortenings used	7% TFA	Replace all shortenings used in biscuit cream fillings	None to date	Will reduce TFAs across biscuit lines by X tonnes per year when fully implemented	New shortenings to be progressively introduced from October 2013, complete implementation by December 2014