Report on Quick Service Restaurants plans and progress towards reducing Trans Fatty Acids in the New Zealand food supply

Purpose

To provide a New Zealand position to Food Standards Australia New Zealand (FSANZ) regarding progress of voluntary initiatives by the New Zealand Quick Service Restaurant (QSR) sector to reduce *trans* fatty acids (TFAs) in their food supply chain*.

Background

In May 2007, FSANZ completed a review report of TFAs in the Australia and New Zealand food supply (1).

The report concluded that immediate regulatory intervention was not required and that national non-regulatory approaches to further reduce the levels of TFAs in the Australia and New Zealand food supply would be the most appropriate action for risk management. It was also agreed that a review of the outcomes of non-regulatory measures to reduce TFAs would commence in early 2009.

The New Zealand Food Safety Authority (NZFSA) assisted with the monitoring and review of this risk management approach by facilitating a survey on the progress of non-regulatory measures in the New Zealand QSR sector.

In August 2007 NZFSA hosted a meeting to engage the New Zealand QSR sector. One of the actions of this meeting was to circulate a questionnaire to the QSR sector enabling them to outline their plans to reduce TFAs in the food supply. The initial questionnaire was circulated in September 2007. A follow-up questionnaire was circulated in March 2009. This document summarises the findings of the 2009 follow-up questionnaire and compares findings to the 2007 questionnaire where appropriate.

Method

An email introducing the purpose of the TFA survey and inviting participation was circulated by NZFSA to 28 QSR sector stakeholders in March 2009. This included all stakeholders that completed the 2007 questionnaire and four new QSR sector stakeholders that had been identified by NZFSA.

The follow-up questionnaire was circulated a week later and was also sent to New Zealand participants on the Australia-New Zealand Trans Fat Collaboration. This included the National Heart Foundation of New Zealand and the New Zealand Food and Grocery Council.

* For the purposes of this document the QSR sector includes Quick Service Restaurants, relevant industry association groups, and suppliers of edible fat-containing products such as oils and chips

The follow-up questionnaire was similar to that used by FSANZ in a survey of the Australian QSR sector in 2009 but adapted by NZFSA for use in New Zealand.

An email reminder was sent to all QSR sector stakeholders encouraging completion of the follow-up questionnaire and telephone calls were made to those who had not responded by a pre-determined date. In a small number of cases verbal responses were given to the follow-up questionnaire. These were recorded and are discussed in the report.

Results

Responses

In total 19 QSR sector stakeholders responded to the follow-up questionnaire by the required deadline (Table 1). Seventeen provided written responses and two provided verbal responses. From the 19 respondents, 10 had previously provided responses in 2007. Of the 11 non-respondents, only one of these had previously provided a response to the questionnaire in 2007. The non-respondents consisted of eight QSRs, two oil suppliers and one chip supplier.

Table 1: Response rates to questionnaires and self-reported trans fatty acid plans.

Stakeholder		**2007**			**2009**		
	n	Total responses	TFA** Plan	n	Total responses		TFA Plan
		Baseline			*Follow-up*	*New*	
*QSRs	12	6	5	15	5	2	5
Oil Suppliers	8	4	3	8	4	2	5
Chip Suppliers	4	1	1	4	1	2	2
Other	..	..	..	3	..	3	***n/a
Total	24	11	9	30	10	9	12

Notes:

* QSRs Quick Service Restaurants
** TFA Trans fatty acids
*** n/a Not applicable.

Voluntary Initiatives

Quick Service Restaurants
Of the seven QSR sector stakeholders that responded, five reported having a TFA plan. These were the same five QSRs that reported having a plan in 2007.

In the 2007 questionnaire, one QSR, reported to have implemented a TFAs reduction programme in 2003 which significantly reduced TFAs levels in their products. It reported changing from beef tallow to palm olein (< 1g/100g TFAs) as a par frying medium and a canola/sunflower blend (< 1g/100g TFAs) as a finishing frying medium. It reported no further action in 2009, however it continues to monitor its products.

One QSR reported that it has replaced canola oil with canola oil blends for frying (< 1g/100g TFAs) and continue to ask suppliers to identify TFAs in their products. They also report modifying a number of other products to reduce TFA levels.

One other QSR reported that since 2007 it has removed all partially-hydrogenated vegetable fats and replaced these with palm oil (0.7g/100g TFAs) or palm/soya/butter blends (< 0.5/100g TFAs). This has resulted in its core menu and other products being virtually TFA free and no new products being developed with TFAs present.

One QSR reported removal of TFAs from its North American menu and that these changes will be rolled out across New Zealand. However, no further information was provided.

One QSR reported no further changes to its TFA plan since 2007 at which time it had reduced TFAs in its fries to <0.5g/100g, with intentions to reduce TFA levels in other products. They reported that changes to frying oils needed to be carried out in conjunction with equipment changes which is a costly process hence the delay.

Of the two new QSRs to respond in 2009, neither reported having a TFA plan. One of the QSRs is a new business and advise that it is going to establish a “good business model” before developing a plan for TFAs. The other reports the ongoing use of palm olein at < 1g/100g TFAs which results in 0.1g/100g TFAs in its finished product.

Fat and Oil Suppliers
Of the six oil suppliers to respond to the follow-up questionnaire, five reported having TFA plans. All three oil suppliers who reported having plans in 2007 continue to work with the QSRs to reduce TFA in their products and one oil supplier who did not have a plan in 2007 has since implemented one.

One oil supplier reported replacement of heavily hydrogenated oils (canola oil) with alternatives including partially-hydrogenated canola, long life non-hydrogenated canola and other non-hydrogenated cooking oils such as rice bran oil. It reports a decline in the sales of heavily hydrogenated oils and report that as soon as stocks are exhausted it will no longer stock these product lines. It also reported that partially-hydrogenated canola still remains the most popular choice and deemed that the price differential to non-hydrogenated cooking oils is the main barrier to change.

One oil supplier reported in 2007 to have implemented a TFA plan which resulted in 95% of their oils being virtually TFA free at < 1g/100g TFA. It reported no further changes to its plan in 2009.

Another oil supplier reported in 2007 that its main strategy to reduce TFAs in the food supply was by encouraging customers to use rice bran oil. In its 2009 response it commented that while uptake has been reasonably good the recent economic downturn has resulted in a number of customers enquiring about switching back to their original product.

The only oil supplier who did not have a plan in 2007 reported that QSRs would be the drivers of TFA reduction. It has since implemented a plan and reported replacing all partially-hydrogenated oils (16g/100g TFAs) in spreads, margarines and pastry fats with interesterified oils (< 1g/100g TFAs) to maintain the intended consistency of the final product.

Of the two new respondents, one reported having a TFA plan however due to time constraints could provide no further details. The other respondent reported not having a TFA plan but only supplies products that are naturally low in TFAs.

Chip Suppliers
Of the three chip suppliers to respond to the follow-up questionnaire two reported having a TFA plan.

In the 2007 questionnaire one chip supplier reported recent changes to its frying mediums including a change to palm/canola oil blend which resulted in TFA levels < 1g/100g. They report no further changes to their product range in 2009.

One chip supplier reported weekly testing of TFAs in its frying mediums and continual work with its suppliers to further reduce levels. It aims to reduce TFA levels in its frying mediums from 2.0-2.5g/100g to < 1.5g/100g TFAs within the next 12 months.

The one chip supplier that reported not having a plan use palm olein and beef tallow as their main fat sources and will “respond to the market as required”.

Other Initiatives

The Chip Group, which the Heart Foundation is a member of, has set voluntary industry standards for Deep Fried Chips for independent fast food outlets and the foodservice/hospitality sector (e.g. restaurants and cafe’s). For independent fast food outlets, in addition to the industry standards, there is the Heart Foundation recommendation for frying oils (saturated fat ≤ 20g/100g, TFA ≤ 1g/100g and linolenic acid ≤ 3g/100g). For the foodservice/hospitality sector an industry standard for frying medium was set at saturated fat ≤ 28g/100g and TFA ≤ 1g/100g. The Chip Group is also working towards the inclusion of recommendations (which may include oil type) into the operational policies with QSRs. This is being done in conjunction with the Food Industry Group (FIG).

The Food Industry Group has also recently undertaken a TFA survey with its members. Most of the food companies that have responded and who use fat appear to have a TFA policy or are making changes to their product ranges. Examples of the types of changes include changing frying oils to lower saturated/TFA alternatives in cooked grocery products and reformulation of foodservice culinary products such as soups, gravies and mousses to reduce TFA levels.

A number of QSRs reported training and implementing the Heart Foundation's 'Healthy Deep Frying Practices' and one oil supplier reports providing education to its customers on frying techniques to minimise retention of oil.

Discussion

Of the 30 QSR sector stakeholders to be sent follow-up questionnaires 19 responded. Six of the seven QSRs to respond were multinational companies with multiple stores across New Zealand. Of those QSRs who did not respond two were multinational companies, two were Australian franchises, and four were New Zealand franchises.

Of the five QSRs that reported having plans, these were at different stages of development or implementation. Some had been implemented from 2003 resulting in much lower TFA levels in their products while others were still in the planning stages, providing no targets or timelines in their follow-up responses. Since the initial questionnaire was circulated in 2007, a number of QSRs reported significant changes to their frying mediums and fats used in bakery products, resulting in lower TFA products.

As oil and chip suppliers work across many QSRs they have the potential to make a large impact on both TFA and saturated fats levels in the foods QSRs serve to their customers. Of those oil suppliers that responded, all are currently modifying their product ranges to reduce TFA levels. One oil supplier commented that it is QSRs themselves that drive TFA reduction and because of this they have made a number of changes to their product lines to meet their customers' needs; this again suggests that QSRs are taking an active responsibility to reduce TFA in their products. Two of the chip suppliers also reported taking actions to reduce TFAs in their products. The only chip supplier who reported not having a plan stated it would "react to the marketplace as required" highlighting the importance of QSRs continuing to drive their initiatives.

In the current economic climate, cost-savings measures are inevitable and as one oil supplier commented a number of the lower TFA products are more expensive than other oil types. They reported that while there has been good uptake of lower TFA products over the past two years a number of QSRs are enquiring about switching back to their original products. Another oil supplier reported that they are developing lower priced non-hydrogenated oils and this should result in further changes. One QSR also reported on the cost of changing its frying mediums; change of oil needs to be accompanied by change of equipment, which is a costly process and has resulted in delayed implementation of its plan.

A number of QSR sector stakeholders commented that TFAs should not be addressed in isolation from total fat and saturated fat. While a number of the TFA initiatives that have been implemented have resulted in high saturated fat products being used, TFAs are considered more harmful than saturated fats so the self-reported perception is that progress is still positive. The promotion of rice bran oil and other unsaturated vegetable oils was also reported however these are not the most ideal frying oils due to the changes that take place under high temperatures (2).

National collaborations such as The Chip Group and FIG have played an important role in education of QSR sector stakeholders and continue to implement additional initiatives that will further influence the TFA content and overall nutritional content of the food supply. These educational initiatives not only encourage alternatives to frying and healthy frying practices but also aim to educate QSR sector stakeholders on the most appropriate oil choices for improved nutritional profile of their products. These initiatives should continue to be supported.

In reporting on the progress of non-regulatory initiatives a number of limitations with the survey need to be acknowledged. NZFSA was not able to gather enough information from this follow-up questionnaire to provide a complete picture of action or inaction within the QSR sector, as only 19 of 30 stakeholders responded. Response bias is a common issue with questionnaires and NZFSA cannot exclude the possibility that only those QSR sector stakeholders that have TFA plans in place responded to the follow-up questionnaire. However, efforts were made by NZFSA to mitigate this bias by contacting those stakeholders that had not responded to the follow-up questionnaire by the required deadline. This elicited additional written and verbal responses which were included in the final results. It should also be noted that all information is self-reported and therefore subject to those limitations associated with this. While there was scope to add quantitative data in the follow-up questionnaire, this was not readily provided.

Summary

This report indicates that the QSRs and their stakeholders (relevant industry association groups, and suppliers of edible fat-containing products such as oils and chips) have made positive changes and continue to work towards reducing TFA levels in their food supply chain. Some are clearly more advanced in doing this than others. The follow-up questionnaire has highlighted that during times of economic downturn New Zealand may see voluntary initiatives, such as TFA plans, not being prioritised. For this reason the QSR sector may need to be supported and encouraged to continue implementing and monitoring TFAs plans; this can be achieved by collaborative support and by QSRs working together to ensure demand and therefore prices are kept down on healthier product lines. This survey has also raised the issue of looking at nutrients in isolation; the positive health outcomes associated with reduction in TFAs could be further enhanced by addressing these in conjunction with the most appropriate oil choices.

References

(1) Food Standards Australia New Zealand. Review Report. Trans Fatty Acids in the New Zealand and Australian Food Supply. 2007.

(2) Mackay S. Techniques and Types of Fat used in Deep-fat Frying: A Policy Statement and Background Paper. 2000.