

STAFF REPORT ACTION REQUIRED

Reducing Artificial Trans Fat in Toronto: Need for Action

Date:	July 6, 2011
To:	Board of Health
From:	Medical Officer of Health
Wards:	All
Reference Number:	

SUMMARY

Canadians need national regulation to fully protect them from artificial trans fat in the food supply and thereby, its contribution to heart disease. This report asks the Board of Health and other public health stakeholders to urge action by Health Canada to develop and implement national regulation that virtually eliminates trans fat from the food supply and implements the recommendations made by the Trans Fat Task Force (TFTF) in 2006. These recommendations were founded on a regulatory approach as the best option to protect consumers and placed artificial trans fat limits of 2% of total fat content for oils and margarines and 5% of total fat content for other food products so as to meet the World Health Organization's recommended daily limits of artificial trans fat intake.

In 2007 the federal government proposed to enact regulation should a two-year voluntary approach not yield significant reductions in artificial trans fats in the Canadian food supply by June 2009. Two years have now passed since the June 2009 deadline for the voluntary compliance and monitoring approach. The final results of the Trans Fat Monitoring Program undertaken between 2006 and 2009 indicate that while some progress has been made, a considerable portion of products available in Canada still contain unacceptable levels, including many foods often consumed by children. Some "trans fat-free" products are more expensive than comparable products containing higher levels of artificial trans fat. This creates disparities in exposure to trans fat and heart disease risk factors which disproportionately affect people living on low income. In 2010, the federal Minister of Health conceded that progress must be improved. It has now been four years since their original commitment to adopt the TFTF recommendations but the government has yet to address the remaining sources of trans fat.

This report also summarizes Toronto Public Health's efforts to monitor progress in artificial trans fat elimination in Toronto institutions and its outreach to the public on this important public health issue. It also provides an update on trans fat reduction efforts in other jurisdictions. Staff will continue to promote trans fat reduction for Torontonians,

and explore partnerships to undertake further trans fat exposure monitoring in Toronto should the federal government not take stronger action.

RECOMMENDATIONS

The Medical Officer of Health recommends that:

- 1. The Board of Health urge the Federal Minister of Health to regulate the amount of artificial trans fat in the Canadian food supply without further delay as recommended in 2006 by the Trans Fat Task Force so as to ensure that sectors that have yet to comply with the voluntary targets and new and imported foods meet the recommended levels:
- 2. The Board of Health request Health Canada to ensure comprehensive, timely monitoring of trans fat in the Canadian food supply, with public reporting of results, so as to better inform the focus of federal regulation and better understand population exposure to artificial trans fat; and
- 3. The Board of Health send a copy of this report to the Ontario Minister of Health Promotion and Sport, the Ontario Minister of Health and Long-Term Care, Public Health Ontario, all boards of health and public health units in Ontario, the Association of Local Public Health Agencies, the Canadian Cardiovascular Society, the Canadian Restaurant and Food Association, the Centre for Science in the Public Interest, the Dietitians of Canada, Heart and Stroke Foundation of Canada, the Ontario Public Health Association, the Ontario Society for Nutrition Professionals in Public Health and the Urban Public Health Network, urging them to also advocate to the federal Minister of Health for national regulation of artificial trans fat in the food supply.

Financial Impact

There are no direct financial implications arising from this report.

DECISION HISTORY

The Medical Officer of Health recommended to the Board of Health at its March 2007 meeting, the Board of Health received a report recommending that the Board urge the federal government to regulate artificial trans fat in the Canadian food supply by implementing the recommendations of the federal Trans Fat Task Force (TFTF) (1). The report identified in detail the public health implications of artificial trans fat and the recommendations of the TFTF that trans fat be limited in the Canadian food supply. The Board of Health adopted the recommendation and also requested the Medical Officer of Health to communicate with all Agencies, Boards, Commissions and Divisions that operate food premises to ensure they voluntarily met the TFTF targets and further requested a report back by September 2007, on a regulatory strategy for the phasing out of trans fat in all Toronto restaurants and other food service establishments, including all

institutional food service facilities funded by the City of Toronto (See: http://www.toronto.ca/legdocs/mmis/2007/hl/bgrd/backgroundfile-2756.pdf.)
Subsequently, at its September 2007 meeting, the Board of Health received a report about the federal government's announcement to adopt a voluntary approach to meeting the recommendations of the TFTF and a summary of the progress in reducing artificial trans

fat in the Toronto food supply (including the progress made in City-operated Agencies, Boards, Commissions and Divisions since the March 2007 report). The option of local regulation was deferred pending the results of Health Canada's approach to monitoring and assessing the food industry's ability to meet the TFTF target limits voluntarily. (See: http://www.toronto.ca/legdocs/mmis/2007/hl/bgrd/backgroundfile-6599.pdf.)

At its January 2009 meeting the Board of Health received a report of the interim results of Health Canada's Trans Fat Monitoring Program. The Board of Health endorsed the recommendation that a survey be conducted to determine the extent to which specific food products containing artificial trans fat were still available on grocery store shelves and in Toronto food service operations. It also endorsed the recommendation that Toronto Public Health continue to monitor artificial trans fat reduction initiatives at the federal level and in other jurisdictions. (See: http://www.toronto.ca/legdocs/2009/agendas/hl.htm),

The Toronto Food Strategy report, "Cultivating Food Connections", endorsed by the Board of Health in June 2010, commented on the need for better regulation of trans fat. Referring to a wide range of food and health issues, the report also asserted that TPH will "continue to monitor and evaluate federal and provincial policies and assess the feasibility of City of Toronto regulation where voluntary measures are inadequate". (See http://www.toronto.ca/legdocs/mmis/2010/hl/bgrd/backgroundfile-30483.pdf).

ISSUE BACKGROUND

What is Trans Fat?

Artificial trans fat is commonly found in margarine; baked goods like cookies, crackers and pastries; and deep-fried foods. Trans fats are a chemical side effect of adding hydrogen molecules to unsaturated vegetable oils to make them more stable and to make liquid oils become solid at room temperature. Partially hydrogenated vegetable oils have been in widespread use in Canada since the 1970s. Food manufacturers have used partially hydrogenated fat because it extends the shelf-life of food, it affects the food's functional properties, such as taste and texture, and is an economical alternative to animal and other vegetable fats. Artificial (also called industrially produced) trans fat is different from the naturally occurring type (called ruminant trans fat) which is found in low levels in meat and dairy foods derived from ruminant animals such as cows, sheep and goats. By comparison, artificial trans fat is found in much larger amounts in the food supply and therefore has been the target ofhealth interventions.

The Health Implications of Trans Fat

There are no known health benefits to artificial trans fat (2). Since 1990 the experimental and observational evidence studying links between artificial trans fat intake and coronary heart disease and other health impacts has grown substantially (3). In May 2009, the World Health Organization (WHO) published its scientific update on the health

consequences of artificial trans fat which was based on a review of evidence generated since 1993 by international scientific experts. The WHO findings served to confirm that artificial trans fats adversely affect cardiovascular risk factors and increase the risk of coronary heart disease events. They increase blood levels of "bad" (low-density lipoprotein or LDL) cholesterol and decrease levels of "good" (high-density lipoprotein or HDL) cholesterol, they promote inflammation and endothelial dysfunction which promote various disease processes and may also adversely affect coagulation, insulin resistance and other metabolic functions (2, 44).

Heart disease is among the leading causes of death and hospitalization in Toronto (5). Research indicates that consuming artificial trans fat confers substantially increased risks of heart disease even at relatively low amounts. For example, a 2 percent increase in energy intake from trans fatty acids was associated with a 23 percent increase in the incidence of CHD in data pooled from four prospective cohort studies (6). WHO experts conclude that the removal of partially hydrogenated vegetable oils would result in important health benefits and deemed the evidence sufficient to recommend that artificial trans fat be significantly reduced or virtually eliminated in the food supply (4).

Federal Government Commitments and Actions

In 2007 the Minister of Health announced that Canada was adopting the recommendations of the Federal TFTF with respect to reducing the amount of artificial trans fat in foods (7). The government allowed the food industry to voluntarily reduce artificial trans fat to achieve the reduction targets of 2% of the total fat content in vegetable oils and margarines and 5% in all other foods within two years. If progress was not made by June 2009, the Minister of Health said regulations would be put in place to ensure trans fat reduction levels were met.

Through its Trans Fat Monitoring Program (TFMP), Health Canada has been analyzing the trans fat content of foods that can be significant sources of trans fat to assess progress in meeting the reduction targets. The analyses of foods were posted approximately every six months on Health Canada's website and the data collection spanned two years, from June 2007 to June 2009 (8). Toronto Public Health has followed the findings of the TFMP and collaborated with Health Canada to ensure that low-cost and ethno-cultural foods were included in the sampling. TPH previously reported that TFMP results released in July 2008 showed some progress was made towards achieving the federal targets. For example, the TFMP data indicate that the trans fat content of French fries available in many fast food restaurants decreased between 2006 and 2008 (9). However, this same dataset also indicated that food products such as soft tub margarine and garlic breads, for example, continued to have trans fat levels above the reduction targets.

COMMENTS

Monitoring Trans Fat in Canadian Food

Results from the fourth and last data set of the TFMP's two-year monitoring period were posted in December 2009. They assessed trans fat content of foods from three sources: i) a label review of products in major grocery stores with a focus on those pre-packaged products not previously tested (including in two areas of Toronto), and laboratory analysis of foods collected from ii) small- and medium-sized family and quick-service

restaurants (in Toronto and Winnipeg), and iii) cafeterias found in institutions (such as high schools, universities or colleges, hospitals and nursing care homes) in five Canadian cities (not including Toronto) (10). The last category of sampling added new information as foods from these settings were not previously assessed by the TFMP.

According to the data which were collected in late 2008 and early 2009, 27% of the prepackaged foods and 26% of foods from small- and medium-sized family and quick service restaurants/cafeterias selected for review did not meet the trans fat targets adopted in 2007. The results also showed that there are some sectors that face notable challenges in reducing the trans fat content of their products or menu items. For example, some bakery products (donuts, cookies, desserts) remain high in artificial trans fat; 60 % of cookies, 44% of desserts and 37% of bakery products from the restaurant samples were exceeding the limits. From the label review of grocery store products, 53% of coffee whiteners did not meet the trans fat limits. These sectors have found it difficult to maintain the functional properties of their products, such as flakiness in pastry, when reducing trans fat content. However, Health Canada reports that alternatives are now available for all applications (10). Progress in achieving the targets has also been slower in institutional cafeterias than in other areas of the foodservice industry.

The daily average artificial trans fat consumption of Canadians has reportedly gone down from 8.4 grams in the mid-1990s to 3.4 grams in 2008 at the end of the voluntary reduction period (11). This figure is however, still above the WHO target recommended in 2003 to limit population trans fat intake to less than 1% of overall energy intake (11). For a typical 2000 calorie per day adult diet, this would translate to a total of 2 grams or less per day of artificial trans fat. These Health Canada data also indicate that there is considerable variability in the intakes for males and females and across age groups. Those with highest intake (that is, the 95th percentile for all age-sex groups) are consuming approximately 2% of total energy as trans fat (11). Although, the industry has made progress, with 75% of food products tested by Health Canada through the TFMP being "trans fat-free" (meaning they contain less than 0.2 grams of trans fat per serving), 25% of foods were still unacceptably high in trans fat. Not all food products were assessed through the federal monitoring program. Sauces, gravies, semi-prepared baked goods, pre-made pie crusts, and foods from small- and medium-sized food service operators were not included. In addition, most samples of foods were not measured at two or more points in time over the two-year monitoring period. Especially concerning is that levels of trans fats are still very high in foods often consumed by children, including baked goods such as donuts, cookies and crackers. The data from Health Canada indicate that in 2008 the 95th percentile of boys and girls ages 9 to 18 were taking in 7.75 and 6.03 grams per day of trans fat (11). As well, there is some research indicating that products labelled "trans fat-free" can be more expensive than comparable products containing trans fat (12, 13). Price may be a barrier to purchasing the healthier alternatives for people on low incomes which could mean disproportionately higher exposure to artificial trans fat further contributing in turn to health disparities.

Overall, the TFMP results indicate that further reductions are needed to fully meet the public health objectives and reduce the risk of coronary heart disease. Health Canada has stated that it is determining the most effective way to achieve these goals, which includes further analysing the data from the TFMP, assessing the impact on the average trans fat

intake of Canadians and assessing both regulatory and non-regulatory options. Health Canada notes that a regulatory option will have costs and impacts that require better understanding, and that the decision to enact regulation would need to be supported by a cost-benefit analysis to quantify impacts on all stakeholders and sectors. One of the requirements to support the cost-benefit analysis is more current, targeted monitoring data with a focus on areas previously identified as not meeting the trans fat reduction targets to assess whether there has been any progress since the TFMP final testing was conducted.

Limiting artificial trans fat intake by replacing partially hydrogenated vegetable oils with alternative fats and oils clearly reduces the risks of coronary heart disease (14). Because of the significant burden of illness from coronary heart disease this would equate to considerable health benefits and health care cost reduction in the long-term. A 2005 economic study by the Canadian Agricultural Innovation and Research Network estimated that nearly \$7 billion in additional coronary heart disease benefits would come from national regulation of trans fats over and above the impact of mandatory labelling alone (15).

Health Canada continues to encourage Canadians to use the Nutrition Facts table when making food selections so as to minimize intake of trans fats. In 2005 Canada was the first country to put in place regulations for mandatory labelling of all pre-packaged foods with trans fat levels identified in the Nutrition Facts table (16). This legislation is held up by the government as an important plank in its efforts to address trans fat in Canada (17). However, research indicates that while consumers are aware of the need to reduce trans fat and rely on the Nutrition Facts table to determine trans fat content, it is not clear whether they have a good grasp of what is an acceptable level of trans fat and whether this information is used to influence their purchases or choices (18, 19). Research also identifies that men, adults under 40 and members of racialized groups are less likely to make use of nutrition label information (18, 20).

In April 2010 Minister of Health, Leona Aglukkaq indicated that based on the TFMP results, the voluntary approach has seen industry make progress in reducing trans fat from its products while not increasing saturated fats. She signalled however, that the government is continuing to work with industry to ensure further progress in providing healthier choices (21).

TRANS FAT ACTION IN VARIOUS JURISDICTIONS

International

International approaches to removing artificial trans fat from the food supply have been varied and reflect local conditions and circumstances (16). In contrast to Canada, where the focus has been on mandatory labelling and voluntary reformulations of products, Denmark was the first country worldwide to regulate artificial trans fat in the food supply beginning in 2004 after voluntary efforts achieved incomplete results. Danish action went farther than in other countries because of a focus on reducing artificial trans fat intake for subgroups with high intakes, rather than a focus on average population intake alone as was the case in Canada. Danish researchers studied the change over time in Denmark in exposure to artificial trans fat from eating a high-trans-fat selection of foods

(defined as a large serving of French fries and chicken nuggets, a 100 g bag of microwave popcorn and a 100 g serving of biscuits or wafers). In 2001 such foods would provide 30 grams of trans fat altogether, but by 2005, after federal regulation, this amount was less than 1 gram (22). This was achieved without apparent effects on the availability, price or quality of foods in Denmark. The regulatory action in Denmark has had spill over benefits in the rest of Scandinavia as many food companies have provided the same low trans fat foods in other countries they serve like Sweden, Finland and Norway (16). Switzerland also regulated trans fat in 2008 (23). Iceland and Sweden have also recently begun the process for national regulation of trans fat in the food supply (24, 25).

Canada

In Canadian provinces and cities, action on trans fat has been limited largely to education and voluntary approaches, but some noteworthy policy and regulatory changes have been undertaken since the 2006 report of the TFTF.

British Columbia has taken the lead at the provincial level with legislation under the Public Health Act implemented in September 2009 to require all foodservice establishments to meet the TFTF recommendations and to keep information (such as ingredient lists, Nutrition Facts tables, or product specification sheets) on site for regular inspection by local Environmental Health Officers (26). Support is provided to foodservice operators through a provincial trans fat website (www.restricttransfat.ca) and a toll-free phone line. EHOs received training and toolkits. Educational materials for the foodservice industry were also translated into Chinese, Punjabi, Korean, Farsi, and Vietnamese and a pilot project used "community detailers" to reach out to about 400 foodservice establishments representing these language groups to increase their awareness and compliance with the regulation (27). The BC Trans Fat Initiative was planned and implemented as a partnership between the Ministry of Health and the Heart and Stroke Foundation of BC and Yukon in consultation with the food industry (28, 29).

The BC Trans Fat Initiative had a six month lead time before the regulation was enforced to allow the foodservice industry adequate time to prepare and regional health authorities time to educate and disseminate information. Score Cards summarizing compliance data reported to the Ministry of Health have been released at regular intervals. These Score Cards have shown that the Trans Fat Regulation has resulted in high levels of compliance and the levels continue to improve. Data released in May 2011 show that in the first 18 months of enforcement, 31,629 foodservice establishments were inspected with 82% of operators complying with having on site documentation for all foods offered, 91% had margarines and oils that were within acceptable limits, and 87% met the reduction target for all other foods served (30). Large restaurant chains underwent a process of voluntary auditing wherein the companies sent in their information for analysis by Ministry staff. There was 100% compliance for the documentation requirements and the margarine trans fat limit, while 82% of chains met the limit for all other foods. The BC Trans Fat Regulation has been successfully implemented and supported.

In Ontario, the provincial government has not taken similar action on trans fat with food service establishments, however, as described in the January 2009 report to the Board of Health, the *Healthy Food for Healthy Schools Act*, 2008 came into effect on September 1, 2008. This legislation requires Ontario publicly-funded schools to ensure that all food

offered for sale meets the Trans Fat Standards (O.Reg.200/08) which mirror the trans fat limits recommended by the TFTF. This legislation only applies however, to foods usually *sold* at school, and not to food sold on "special event days".

United States

Stronger action has been taken on artificial trans fat on the part of some cities and states in the United States. New York City, which in 2007 was the first North American city to phase out artificial trans fat in restaurants and other food service establishments, after voluntary efforts were seen as inadequate. New York continues to have very high compliance rates with its regulation according to a March 2009 report (31). Detailed trans fat information was provided to all 32,000 foodservice establishments in New York. The restaurant industry was given two years to phase out the trans fat in their operations such that by full implementation (July 1, 2008), no food with 0.5 grams or more of trans fat per serving (the U.S. definition for "trans fat-free") could be stored, used, or served by food service establishments (32). A 99% compliance rate was achieved just 11 months after the first year deadline in 2008. Boston, Philadelphia, Montgomery County (Maryland), Brookline (Massachusetts) and King County (Washington) have also phased out trans fat with similar legislation.

California was the first state to regulate trans fat in a two-year phased-in approach beginning January 2010 (33). As of January 2011, the state implemented phase II of its regulation which bans all food containing more than 0.5 grams of artificial trans fat per serving in food service establishments. California has not yet released any data on compliance. Michigan, Oregon and Vermont have focussed on regulating restaurants such that they publicly disclose information on trans fat content of foods (34). Indiana, New Jersey and North Carolina have enacted legislation setting nutrition standards that limit trans fat in food served in schools (34). Although a number of other states have proposed action of different forms on trans fat, none have enacted legislation similar to that in California (34).

At the US federal level, New York Senator Kirsten Gillibrand, a member of the Senate's Agriculture Committee and vocal nutrition advocate, is authoring legislation that would ban trans fat in foods served in public schools (35). In her proposed legislation, any US schools that receive federal reimbursement for meals would be required to remove food containing trans fat from the school. Schools would be given a five-year window to implement the changes.

FURTHER ACTION IS NEEDED ON TRANS FAT IN CANADA

It has been over four years since the TFTF's final report recommended regulation to eliminate trans fat from the Canadian food supply. It has been more than two years since the deadline for voluntary compliance in June 2009. Despite the progress noted from the TFMP in trans fat reductions in many foods available in major grocery stores and major chain restaurants, the food industry as a whole has yet to fully meet the recommended targets. Experts and advocates and even some of the affected industries feel that further significant reductions are unlikely without federal regulation. There has not yet been any clear indication from the Minister of Health about trans fat regulations despite conceding in April 2010 that voluntary efforts were incomplete and that both regulatory and non-

regulatory options were still under consideration (21). In February 2011, Health Canada reported to the Urban Public Health Network that a decision on regulations would be made pending completion of their analysis of the TFMP (36).

The federal government's delay in acting on the original recommendations of the TFTF and its delay in implementing regulation after voluntary measures did not meet proposed trans fat targets continues to put a portion of Canadians at risk of consuming artificial trans fat at unhealthy levels . In September 2007, the Board of Health urged the federal government to immediately regulate artificial trans fat if at the end of the two year voluntary period, 100% of products from food categories targeted by the TFTF had not met the recommended limits. Toronto Public Health therefore reiterates its recommendation that the federal government announce its intention to honour a commitment to public health nutrition and regulate artificial trans fat in the food supply.

While advocates note that action by municipalities and provinces is preferable to inaction, local and provincial governments have limitations in their ability to effectively reduce people's exposure to trans fat in the food supply. These orders of government can only partially address the problem by regulating restaurants and other food service establishments in their use of products containing artificial trans fat (37). Many Canadians eat meals in restaurants and at take-away places on a regular basis, but a sizeable portion (between 38 to 52%) also report that they eat meals prepared at home every day (19). As a result, local regulation aimed at restaurants and food service establishments is limited in the extent to which it can virtually eliminate trans fat intake for all Canadians. Federal regulation would be more comprehensive in that it would address trans fat in the entire food supply, it would apply also to new or imported foods, as well as foods in the retail and restaurant sectors, thereby levelling the playing field for all parts of the industry. Federal initiatives would also allow for greater consistency in approach nationally and would, therefore be the most effective way to reduce artificial trans fat for all Canadians.

SUPPORT FOR FEDERAL REGULATION OF ARTIFICIAL TRANS FAT

Position of Food Industry Associations

Representatives of the Baking Association of Canada, Food and Consumer Products of Canada (representing the packaged foods sector), and the Canadian Restaurant and Foodservice Association (CRFA) were active members of the federal Trans Fat Task Force and are all committed to reducing trans fat to improve the health of Canadians although they have different opinions on the preferred approach.

Members of the Baking Association have been reformulating their product recipes away from partially hydrogenated vegetable oils to achieve similar taste and texture with alternate oils over the past two years in response to the demand for low or no trans fat products from bakery suppliers. This demand for change has been more difficult for smaller, less well resourced companies. Recognizing the challenges specific to this industry, the TFTF recommended a two-year phase-in period be allowed for certain applications, such as baking (1). The Baking Association is not opposed to regulation, but requires this extended phase-in period to find healthier alternatives that meet consumers' expectations for taste, texture and quality (38).

The Food and Consumer Products of Canada Association (FCPC) supports a voluntary approach to trans fat reduction as it has experienced similar challenges to the baking industry (39). FCPC is confident that the packaged food industry is making ongoing progress and notes that the last set of monitoring data collected by Health Canada is not current as it was collected in late 2008 and early 2009.

The Canadian Restaurant and Foodservice Association (CRFA) is advocating for federal regulation of trans fat in the food supply rather than legislation of the foodservice sector alone as is the case with local or provincial initiatives. CRFA asserts that regulating trans fat in the foodservice sector puts an unnecessary burden on compliance and record-keeping since documentation would have to be on site for every food product used in food preparation. It would also lead to an unlevel playing field between restaurants and the retail sector (40).

Position of Non-Governmental Organizations

The Heart and Stroke Foundation's (HSF) position on trans fat reduction is that Canada urgently needs national trans fat regulations to protect all Canadians and especially children. The HSF states that thousands of cardiac deaths could be averted in Canada annually if all artificial trans fats were replaced with a healthier alternative (41).

Similarly, the Centre for Science in the Public Interest (CSPI) continues to urge the federal government to promulgate regulations restricting the use of trans-fat-laden partially hydrogenated oils in Canada (42).

The Ontario Society of Nutrition Professionals in Public Health wrote the Health Minister in February 2010, urging her to regulate the use of trans fat in the food supply as the monitoring reports showed that the voluntary approach to reduction was not working (43). Dietitians of Canada also notes that while the TFMP showed reductions to trans fat being made by industry, further progress was needed (44). The Ontario Public Health Association (OPHA) (45) and the Association of Local Public Health Agencies (alPHa) (46) have also both advocated for federal regulation of trans fat in the food supply in light of the limitations of the voluntary approach.

TORONTO PUBLIC HEALTH'S ACTIONS TO ADDRESS ARTIFICIAL TRANS FAT

In May 2010, as requested by the Board of Health, Toronto Public Health carried out an informal spot check to determine the extent to which Torontonians were still exposed to artificial trans fat after the two-year federal voluntary approach was completed. Similar to the findings from the federal TFMP, the spot check revealed some progress in the foods sampled in large-chain and ethnic grocery stores, private child care centres, workplace cafeterias and restaurants. High levels of trans fat however, were still found in some commonly eaten and used products such as baked goods and margarines. Key products to continue monitoring in Toronto include frozen pizza, cake mixes and frostings, ready-to-bake dough, margarine, various bakery products and oils for deep frying. (See Attachment A for further details of the spot check results.)

Since 2007, Toronto Public Health has taken steps to educate clients, community partners and the public on trans fat reduction through various means. The trans fat issue fits with multiple themes of the Toronto Food Strategy, such as supporting food literacy (educating consumers on the health risks of trans fats and how to avoid them), access to healthier food for all (trans fat-free products tend to be more expensive), integrating food into the green economy (the drive to trans fat-free alternatives brings opportunities for healthier, more sustainable food innovation), and urging governments to establish health-focused food policies (implementing the TFTF recommendations).

A number of TPH programs and education sessions specifically include trans fat when discussing Canada's Food Guide, when advising on reading labels or when assessing diets with clients. These programs include Colour It Up!, Healthiest Babies Possible, Peer Nutrition Program and Diabetes Prevention Healthy Eating Program, among others.

The Trans Fat Fact sheet developed with the Heart and Stroke Foundation is available in 7 languages (English, French, Spanish, Tamil, Urdu, Chinese-Simplified, and Chinese-Traditional) and trans fat information is also incorporated into the Cooking up Some Fun guide which is distributed to parents/caregivers of young children.

Toronto Public Health registered dietitians continue to monitor Toronto Student Nutrition Programs (SNPs) for foods containing artificial trans fat through onsite visits. This monitoring shows that SNPs have continued to improve in meeting the trans fat recommendations over the past three years - from 70% in 2008, 79% in 2009 to 94% in 2010. This success may reflect 2008 revisions to the Nutrition Standard for SNPs (banning *all* artificial trans fat). TPH registered dietitians continue to educate program coordinators about trans fat, during yearly SNP Nutrition Site Visits and through SNP 'Food Safety and Nutrition' workshops.

Toronto Public Health dietitians assessing foods offered in school cafeterias for the Eat Smart! Award of Excellence record any items found to be in excess of the TFTF recommendations. Over the past three school years, only one to two schools each year have had foods that contain significant amounts of trans fat.

Toronto Public Health has worked to bring greater awareness to the issue among local food service establishments and with the public. Further progress on reducing trans fat exposure to residents of Toronto rests with the federal government. Should the government not enact regulation, Toronto Public Health will explore funding opportunities, and academic and community partnerships, to undertake further ongoing monitoring of artificial trans fat in foods sold in Toronto grocery stores, restaurants, and other food service establishments, in order to monitor local population exposure to trans fat.

CONCLUSION

Federal monitoring of artificial trans fat in the Canadian food supply indicates that the voluntary approach to trans fat reduction has not gone far enough to reduce exposure for all Canadians. There are still a number of commonly eaten food items containing artificial trans fat above recommended levels. Local and provincial initiatives, are limited in their ability to virtually eliminate artificial trans fat from the diet of Canadians. Toronto Public Health therefore reiterates its request that the federal government enact legislation to restrict artificial trans fat in the food supply with a focus on those sectors that have yet to comply with the voluntary approach. This would serve to level the playing field and better protect everyone from exposure to these harmful fats. Such a comprehensive national regulatory approach would bring considerable gains by contributing to the reduction of a significant portion of the burden of illness from heart disease in Canada. Toronto Public Health encourages other public health stakeholders to advocate to the federal Minister of Health to make immediately good on the government's commitment to achieve these important public health nutrition goals through regulation. Toronto Public Health will continue to take steps to increase awareness among clients and if necessary, monitor population exposure to trans fat.

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SIGNATURE

Dr. David McKeown Medical Officer of Health

ATTACHMENT

Attachment A - Toronto Public Health Grocery and Foodservice Trans Fat Spot Check $-\,2010$

REFERENCES

- 1. TRANSforming the Food Supply. Report of the Trans Fat Task Force Submitted to the Minister of Health June 2006. Available at: http://www.hc-sc.gc.ca/fn-an/nutrition/gras-trans-fats/tf-ge/tf-gt_rep-rap-eng.php
- 2. Mozaffarian D. Aro A, Willett WC. 2009. Health effects of trans-fatty acids: experimental and observational evidence. European Journal of Clinical Nutrition 63, S5–S21 http://www.nature.com/ejcn/journal/v63/n2s/full/1602973a.html
- 3. Nishida C, Uauy R. 2009. WHO Scientific Update on health consequences of trans fatty acids: introduction European Journal of Clinical Nutrition 63, S1–S4. http://www.nature.com/ejcn/journal/v63/n2s/full/ejcn200913a.html
- 4. Uauy R, Aro A, Clarke R, Ghafoorunissa, et al., 2009. WHO Scientific Update on trans fatty acids: summary and conclusions. European Journal of Clinical Nutrition 63, S68–S75. http://www.nature.com/ejcn/journal/v63/n2s/full/ejcn200915a.html
- 5. Toronto Public Health: Toronto's Health Status 2010, December 2010. Available at: http://www.toronto.ca/health/hsi/pdf/pht_10.pdf
- Mozaffarian D, Katan MB, Ascherio A, Stampfer MJ, Willett WC. Trans fatty acids and cardiovascular disease. N Engl J Med. 2006;354(15):1601-13. Toronto Public Health. The Reduction of Trans Fat in the Toronto Food Supply - Update. Report to Board of Health September 4, 2007. http://www.toronto.ca/legdocs/mmis/2007/hl/bgrd/backgroundfile-6599.pdf
- 7. Health Canada. Trans Fat Monitoring Program web page. Last modified 2009-12-16. Available at: www.hc-sc.gc.ca/fn-an/nutrition/gras-trans-fats/tfa-age_tc-tm-eng.php
- 8. Health Canada. Trans Fat Monitoring Program. Second Set of Trans Fat Monitoring data. July 2008. Bureau of Nutritional Sciences, Food Directorate, Health Products and Food Branch, Health Canada. http://www.hc-sc.gc.ca/fn-an/nutrition/gras-trans-fats/tfa-age2-eng.php
- 9. Health Canada. Trans Fat Monitoring Program. Fourth Set of Trans Fat Monitoring data. Bureau of Nutritional Sciences, Food Directorate, Health Products and Food Branch, Health Canada. 2009-12-21. http://www.hc-sc.gc.ca/fn-an/nutrition/gras-trans-fats/tfa-age_four-data_quatr-donn-eng.php
- 10. Ratnayake WM, L'Abbe MR, Farnworth S, Dumais L, et al. Trans fatty acids: current contents in Canadian foods and estimated intake levels for the Canadian population. J AOAC Int. 2009 92(5):1258-76.
- 11. Ricciuto L, Lin K, Tarasuk V. 2009. A comparison of the fat composition and prices of margarines between 2002 and 2006, when new Canadian labelling regulations came into effect. Public Health Nutr. 12:1270-5.
- 12. Albers MJ, Harnack LJ, Steffen LM, Jacobs DR. 2008. 2006 marketplace survey of trans-fatty acid content of margarines and butters, cookies and snack cakes, and savory snacks. J Am Diet Assoc. 108:367-70.
- 13. Mozaffarian D, Clarke R. 2009. Quantitative effects on cardiovascular risk factors and coronary heart disease risk of replacing partially hydrogenated vegetable oils with

- other fats and oils. European Journal of Clinical Nutrition 63, S22–S33. http://www.nature.com/ejcn/journal/v63/n2s/full/1602976a.html
- 14. Gray R, Malla S. 2007. Reducing Trans Fats Consumption in Canada: Voluntary/Mandatory Labeling System or Trans Fats Ban? Canadian Agricultural Innovation Research Network Policy Brief. Number 10, October 2007. http://www.aginnovation.usask.ca/final%20policy%20briefs/GrayMalla_TransFat10.pdf
- 15. L'Abbe MR, Stender S, Skeaff C M, Ghafoorunissa, Tavella M. 2009. Approaches to removing trans fats from the food supply in industrialized and developing countries European Journal of Clinical Nutrition (2009) 63, S50–S67 http://www.nature.com/ejcn/journal/v63/n2s/full/ejcn200914a.html
- 16. Government of Canada. 2010. 40th Parliament, 3rd Session Standing Committee on Health. Study: Health Canada's Trans Fat Monitoring Program. Evidence Contents. Thursday, May 6, 2010. See: http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=4505680&Language=E&Mode=1&Parl=40&Ses=3
- 17. Ellis S, Glanville NT. 2010. Trans fat information on food labels: consumer use and interpretation. Can J Diet Pract Res. 71:6-10.
- 18. Canadian Council of Food and Nutrition. Tracking Nutrition Trends VII. August 2008. http://www.ccfn.ca/membership/membersonly/content/Tracking%20Nutrition%20Trends/TNT_VII_FINAL_REPORT_full_report_Sept.pdf
- 19. Jasti S, Kovacs S. 2010. Use of trans fat information on food labels and its determinants in a multiethnic college student population. J Nutr Educ Behav. 42:307-14.
- 20. Government of Canada. 2010. 40th Parliament, 3rd Session Edited Hansard •No. 027 Contents Friday, April 16, 2010. http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=4436122&Language=E&Mode=1&Parl=40&Ses=3
- 21. Stender S, Dyerberg J, Astrup A. 2006 Consumer protection through a legislative ban on industrially produced trans fatty acids in foods in Denmark. Scand J Food Nutr 50: 155-160. http://www.foodandnutritionresearch.net/index.php/fnr/article/viewFile/1596/1464
- 22. Perez-Ferrer C, Lock K, Rivera JA. 2010. Learning from international policies on trans fatty acids to reduce cardiovascular disease in low- and middle-income countries, using Mexico as a case study. Health Policy Plan 25 (1): 39-49.
- 23. Norden, the Nordic Council. "New Icelandic rules for trans fats." Nov 11, 2010. http://www.norden.org/en/news-and-events/news/new-icelandic-rules-for-trans-fats
- 24. "Sweden's parliament passes trans fat ban." The Local. Published March 17, 2011. http://www.thelocal.se/32634/20110317
- 25. Province of British Columbia. Order of the Lieutenant Governor in Council. Order in Council No. 127 Approved and ordered February 27, 2009. http://www.health.gov.bc.ca/healthyeating/pdf/Order in council trans fat 20090302 http://www.health.gov.bc.ca/healthyeating/pdf/Order in council trans fat 20090302

- 26. Ministry of Health. Province of British Columbia. Trans Fat Help. Educational Materials. undated web page. http://www.restricttransfat.ca/educational_materials.html
- 27. Province of British Columbia and Heart & Stroke Foundation of BC & Yukon. 2010. Measuring UP: an Evaluation of the BC trans fat initiative June 2010. http://www.restricttransfat.ca/media/upload/file/Trans%20Fat%20Evaluation-June%202010%20Final.pdf
- 28. McBride M. Trans Fat Restrictions: Development of Supporting Regulations.

 Summary of Comments from All Sources November 21, 2008 to December 10, 2008.

 Available at:

 http://www.health.gov.bc.ca/healthyeating/pdf/TF_Consultation_Session_Summary_-All_2008_FINAL.pdf
- Province of British Columbia. 2011. B.C. Trans fat Initiative Score Card Update May 2011. http://www.restricttransfat.ca/media/upload/file/trans-fat-initiative-score-card-may-2011.pdf
- 30. New York City Department of Health and Mental Hygiene. 2009. Take Care New York: a Policy for a Healthier New York City. Fourth Year Progress Report. March 2009. www.nyc.gov/html/doh/downloads/pdf/tcny/tcny-4yr-ar.pdf
- 31. New York City Department of Health and Mental Hygiene and Take Care New York. 2007. The Regulation to Phase Out Artificial Trans Fat In New York City Food Service Establishments (Section 81.08 of the New York City Health Code). How to Comply: What Restaurants, Caterers, Mobile Food- Vending Units and Others Need to Know. http://www.nyc.gov/html/doh/downloads/pdf/cardio/cardio-transfat-bro.pdf
- 32. County of Sacramento, Environmental Management Department. Compliance Assistance Bulletin. Trans fat ban Assembly Bill (AB) 97 California Health and Safety Code Section 114377.

 http://www.emd.saccounty.net/Documents/Info/CABS/Trans%20Fat%20Bulletin%2012-16-09.pdf
- 33. National Conference of State Legislatures. Trans Fat and Menu Labeling Legislation. Updated April 2011. http://www.ncsl.org/default.aspx?tabid=14362
- 34. Kirsten Gillibrand, United States Senator for New York. Web page. http://gillibrand.senate.gov/agenda/item/?id=bf933a08-c1b5-43dc-b520-858d15e353a4
- 35. Letter to Dr. Gerry Predy, Urban Public Health Network, from Dr. Samuel Godefroy, dated February 28, 2011.
- 36. Arango M. 2010. TRANSforming the Food Supply A Case Study in Trans Fat Advocacy. Heart and Stroke Foundation of Canada. Presentation to Championing Public Health Nutrition 2010 Conference. October 26, 2010. http://cspinet.org/new/pdf/manuelarango.pdf
- 37. Government of Canada. 2010. 40th Parliament, 3rd Session Standing Committee on Health. Study: Health Canada's Trans Fat Monitoring Program. Evidence Contents. Evidence from Paul Hetherington, President and CEO of the Baking Association of Canada. Thursday, May 6, 2010. See:

 http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=4505680&Language=E&Mode=1&Parl=40&Ses=3

- 38. Government of Canada. 2010. 40th Parliament, 3rd Session Standing Committee on Health. Study: Health Canada's Trans Fat Monitoring Program. Evidence Contents. Evidence from Ms. Phyllis Tanaka (Vice-President, Scientific and Regulatory Affairs (Food Policy), Food and Consumer Products of Canada). Thursday, May 6, 2010. See: http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=4505680&Language=E&Mode=1&Parl=40&Ses=3
- 39. Government of Canada. 2010. 40th Parliament, 3rd Session Standing Committee on Health. Study: Health Canada's Trans Fat Monitoring Program. Evidence Contents. Evidence from Mr. Ron Reaman (Vice-President, Federal, Canadian Restaurant and Foodservices Association). Thursday, May 6, 2010. See: http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=4505680&Language=E&Mode=1&Parl=40&Ses=3
- 40. Heart and Stroke Foundation. Eliminating Trans Fat. (Posted January 2010). Available at http://www.heartandstroke.com/site/c.ikIQLcMWJtE/b.3479251/k.5271/Eliminating_t rans fat.htm
- 41. Government of Canada. 2010. 40th Parliament, 3rd Session Standing Committee on Health. Study: Healthy Living. Evidence from Bill Jefferies, Centre for Science in the Public Interest. Thursday, February 3, 2011. See:

 http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=4928518&Language=E&Mode=1&Parl=40&Ses=3#Int-3716669
- 42. Minister of Health, the Honourable Mme Leona Aglukkaq. Response to Ontario Society for Nutrition Professionals in Public Health, Received April 6, 2010. http://www.osnpph.on.ca/pdfs/Response-HC_reTransFat-6Apr10.pdf
- 43. Dietitians of Canada. Undated. Trans Fats. http://www.dietitians.ca/Dietitians-View/Trans-Fats.aspx
- 44. Ontario Public Health Association. Letter to Federal Minister of Health, Honourable Leona Aglukkaq. Re: Regulation of Trans Fat is Urgently Required. March 25th, 2010. http://www.opha.on.ca/our_voice/letters/Transfat-FSWG-ltr-25Mar10.pdf
- 45. Association of Local Public Health Agencies. alPHa RESOLUTION A09-4. Trans Fat in the Food Supply. http://www.alphaweb.org/docs/lib_011863629.pdf