

Eliminating Artificial Trans Fat from Food Service Establishments in Cambridge

A Report to the Cambridge City Manager

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Submitted by:

Cambridge Trans Fat Task Force

Cambridge Public Health Department

CAMBRIDGE PUBLIC HEALTH DEPARTMENT



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Preface

New York City garnered national attention in 2006 when its board of health voted to phase out artificial trans fat use in the city's 24,000 restaurants and other food service establishments. New York City's public health leaders singled out trans fat based on recent medical studies indicating that there may not be any safe level of trans fat in the human diet.

Since then, a growing number of states and municipalities have implemented or are considering laws that would restrict or ban the use of artificial trans fat in restaurants, schools, and other venues.

In 2006, Massachusetts state representative Peter Koutoujian proposed a statewide ban on artificial trans fat use in food service establishments. As of this writing, the proposed legislation had not come to a vote. In 2007, Brookline became the first municipality in the Commonwealth to ban trans fat use. The town's 200 food service establishments, including schools, have until November 2008 to comply with the new law. Boston followed suit in January 2008 with a similar proposal.

The City of Cambridge began exploring the trans fat issue in 2006 shortly after the New York City health department announced its proposal. That October, the Cambridge City Council issued a policy order requesting that the public health department investigate a program to decrease the use of trans fat in foods served in Cambridge restaurants. The public health department responded with recommendations to reduce or eliminate trans fat use in food service establishment meals by engaging key stakeholders in a collaborative approach (see Appendix 2).

In May 2007, the Cambridge City Council issued a second policy order:

That the City Manager be and hereby is requested to appoint a task force including members of the restaurant community, the business community, the Cambridge Public Health Department and Cambridge Health Alliance, the Economic Development Division of the Community Development Department, and other stakeholders who should be involved, along with members of the City Council to look how best to eliminate trans fats from Cambridge restaurants, including a timeline, what resources the City can provide to assist small businesses and how best to work with the restaurant community.

In response to this request, the City Manager convened the Cambridge Trans Fat Task Force in August 2007. On behalf of the City Manager, the Cambridge Public Health Department facilitated monthly meetings of the task force throughout fall 2007. The task force developed a series of recommendations, which are reflected in this report.

The Cambridge Public Health Department produced this report and endorses its recommendations.

Executive Summary

The presence of artificial trans fat in foods served in restaurants and other venues poses an unnecessary, unsafe, and preventable health risk to customers. Ensuring safe and healthy dining in public establishments is a crucial part of public health and a way for Cambridge to protect the health of its citizens.

The Cambridge Trans Fat Task Force has concluded that a ban on artificial trans fat in the city's food service establishments would be an important and achievable step in improving the health of Cambridge residents. The task force decided in favor of a ban on the strength of the scientific evidence linking trans fat to coronary heart disease, the inability of consumers to know the trans fat content of meals prepared away from home, and the desire to protect patrons of all Cambridge food service establishments.

In the year leading up to the ban, resources should be dedicated to educating the restaurant community and consumers, as well as training the city's restaurant inspectors and developing inspection protocols. The implementation plan should support and recognize Cambridge food service establishments as they transition to trans-fat-free menus.

Recommendation for a Ban on Artificial Trans Fat Use

The Cambridge Trans Fat Committee recommends that the Cambridge Public Health Department promulgate a regulation that would ban artificial trans fat use in the city's food service establishments. This recommendation is endorsed by the public health department.

Establishments Affected

- All food service establishments inspected by the city's Inspectional Services Department would be affected by the proposed ban, including but not limited to: restaurants, mobile food unit commissaries, catering operations, work sites, public and private schools (K-12), and hospitals.

Foods Affected

- All foods prepared on establishment premises.
- All foods prepared off premises, including foods prepared in other municipalities. (Owners of Cambridge establishments, as well as out-of-town caterers, would be asked to sign a statement that any foods prepared in other municipalities and served in Cambridge were trans-fat-free.)
- All foods served in the city's public and private schools (K-12), including items sold in school vending machines.
- With the exception of the city's schools, the proposed ban does not apply to foods sold to patrons in the manufacturer's original sealed package bearing the "Nutrition Facts" label.

Timeframe

- Promulgation of the regulation would occur no later than July 1, 2008.
- Phase 1 of the ban would take effect on July 1, 2009, and would apply to any oils, shortenings, and margarines used for frying or in spreads.

- Phase 2 of the ban would take effect on October 1, 2009, and would apply to all other foods or ingredients containing artificial trans fat.
- In the event that compliance by the effective dates is not feasible for a food service establishment, a temporary waiver should be made available to that establishment.

City Leadership

- All foods served at city-sponsored events shall be trans-fat-free by January 1, 2009.
- New vendor contracts shall include a stipulation that all foods served are artificial trans-fat-free.

Recommendations for Implementation

If the ban is enacted, the task force recommends the following steps for implementation.

- **Establish an interdisciplinary implementation work group** to oversee implementation of the recommendations.
- **Allocate resources.** Successful implementation of the ban would require:
 - Staff time from various city departments.
 - Funding to hire contractors (e.g., graphic design, technical assistance) and to cover production costs of educational materials and promotional items.
- **Conduct year-long education campaign prior to implementation of ban.** Components of the campaign would include:
 - Raising awareness among food service establishments about the new law and pertinent dates for compliance.
 - Creating educational materials in key languages and disseminating them via websites, newsletters, city billboards and publications, and local cable channels.
 - Providing technical assistance to food service establishments regarding replacement products, bulk purchasing opportunities, and other issues.
 - Developing an incentives program to create positive PR opportunities for food service establishments that are trans-fat-free.
- **Train restaurant inspectors.** The success of the ban is contingent upon effective enforcement. The Cambridge Public Health Department will facilitate a training program for inspectors that would address:
 - Health risks posed by trans fat.
 - The new regulation and inspectors' role in implementing it.
 - How to identify products containing trans fat.
 - How to document violations.
 - Alternative products and other resources for establishments.
- **Enforce regulation.** Restaurant inspectors would be responsible for:
 - Checking for items containing trans fat during routine semiannual inspections of all establishments.
 - Documenting violations.

Note: A system of fines for noncompliant food service establishments would be consistent with existing enforcement policies, and would be developed as part of the implementation plan.
- **Evaluate policy impact.** A formal evaluation plan would be developed as part of the implementation plan.

Part I:

Rationale for a Trans Fat Ban

After careful consideration of this issue, the Cambridge Trans Fat Task Force has concluded that a ban on artificial trans fat* in the city's food service establishments would be an important and achievable step in improving the health of Cambridge residents. The presence of trans fat in foods served in restaurants and other venues poses an unnecessary, unsafe, and preventable health risk to customers. Ensuring safe and healthy dining in public establishments is a crucial part of public health and a way for Cambridge to protect the health of its citizens.

Elimination of trans fat from food service establishments through a ban is a measure that should not be undertaken lightly or in haste. The task force decided in favor of a ban on the strength of the scientific evidence linking trans fat to coronary heart disease, the inability of consumers to know the trans fat content of meals prepared away from home, and the desire to protect patrons of all Cambridge food service establishments.

The aim of the task force was to develop feasible recommendations that would improve the health of Cambridge residents, while supporting and promoting the rich restaurant community in Cambridge. Throughout the process of developing its recommendations, the task force strove to balance the interests of food service establishments with the goals of public health. The following sections describe in greater detail the rationale for recommending a ban on artificial trans fat in Cambridge food service establishments.

Health Risks Posed by Trans Fat

Unlike other dietary fat, artificial trans fat is neither required nor beneficial for health. Consuming artificial trans fat increases the risk of coronary heart disease – the principle type of heart disease – because it increases the level of LDL cholesterol (“bad” cholesterol) and decreases the level of HDL cholesterol (“good” cholesterol).¹

Heart disease is the second-leading cause of death in Cambridge and the state. During 2000-2005, a total of 474 Cambridge men and women died from coronary heart disease.² In 2005 alone, there were 1,295 hospitalizations among Cambridge residents due to coronary heart disease or related causes.³

The Institute of Medicine concluded that there is no safe level of artificial trans fat consumption because any incremental increase in trans fatty acid intake

*Note: Unless otherwise specified, the term “trans fat” in this document refers to “artificial trans fat.”

¹ Ascherio A. et al. Trans fatty acids and coronary heart disease. *New England Journal of Medicine*. 1999;340:1994-1998.

² Registry of Vital Records and Statistics, Bureau of Health Statistics, Research, and Evaluation, MDPH, 2001-2005.

³ Massachusetts Hospital Discharge Database, MDPH, 2001-2005.

increases risk of coronary heart disease.⁴ The 2005 Dietary Guidelines Advisory Committee recommended that trans fat consumption by all people of all ages should be less than 1% of energy intake, which is less than 2 grams per day.⁵ To get a sense of what this means, a donut or an order of medium fries each contain from 4 to 8 grams of trans fat.

Lack of Disclosure of Trans Fat Content

Every day, millions of Americans eat out at restaurants, fast-food places, school or workplace cafeterias, and other venues. About 49% of every U.S. food dollar in 2006 was spent on food prepared outside the home, including take-out meals, up from 39% in 1980.⁶ This figure may be even higher in Cambridge, given the city's large number of food service establishments.

Cambridge has more restaurants per person than New York City. In total, Cambridge has 686 establishments that prepare and serve food, including 430 restaurants, 22 bakeries, 23 mobile food vendors, 108 retail and package stores selling prepared food, and 103 other establishments.⁷

American food service establishments widely use products containing artificial trans fat. These products include cooking oils and spreads, shortenings, pre-fried foods (e.g., French fries, fried chicken, taco shells, donuts), baked goods (e.g., buns, pizza dough, crackers, cakes, pastries), and mixes (e.g., pancake, hot chocolate, salad dressing).⁸ In Cambridge, about 29% of food service establishments currently use products containing trans fat, while another 23% are unsure of their status, according to a 2007 survey conducted by the Cambridge Public Health Department.⁹

Since 2006, the Food and Drug Administration has mandated that food manufacturers disclose trans fat

What Is Trans Fat?

Artificial trans fat is created by hydrogenating (adding hydrogen atoms to) oils. This process hardens oils, making them easier to use for baking, and increases their shelf life. While there is a small amount of *naturally occurring* trans fat in meats and dairy products from ruminants such as cows, sheep, and goats, most of the trans fat in foods comes from *artificial* sources.

Major sources of artificial trans fat in the human diet are vegetable shortenings, some margarines, crackers, cookies, snack foods, and other foods made with or fried in partially hydrogenated oils.

Source: FDA Consumer Magazine (Sept.-Oct. 2003).

⁴ Panel on Macronutrients, Institute of Medicine. Letter report on dietary reference intakes for energy, carbohydrate, fiber, fat, fatty acids, cholesterol, protein and amino acids. 2002. Washington, DC, Institute of Medicine.

⁵ Backgrounder 2005 Dietary Guidelines Advisory Committee Report. Updated June 29, 2007.

<http://www.health.gov/dietaryguidelines/dga2005/backgrounder.htm>

⁶ "Food CPI, Prices and Expenditures: Food Service as a Share of Food Expenditures, 1929-2006." U.S. Department of Agriculture, Economic Research Service. Available at:

www.ers.usda.gov/Briefing/CPIFoodAndExpenditures/Data/table12.htm.

⁷ Sullivan L. Cambridge Inspection Services. Personal Communication. March 2008.

⁸ "Does Your Kitchen Need an Oil Change? What Every Restaurant and Food Service Establishment Needs to Know About Trans Fat." The New York City Department of Health and Mental Hygiene.

⁹ Cambridge Public Health Department. Unpublished data. 2007.

content on product labels.¹⁰ No such law governs meals served at food service establishments. Consumers who dine out do not have access to information about the trans fat content of the foods served, unless the information is included on menus or the establishment doesn't serve foods containing trans fat.*

It is important to emphasize that food service establishments themselves may not be aware of the trans fat content of their cooking ingredients or prepared foods. While oils tend to be clearly labeled, other products may not be. For instance, many flours, baking mixes, and solid shortenings used in Cambridge restaurants do not have nutrition labels. In addition, outside vendors who sell "ready to serve" items such as baked goods and desserts to Cambridge food service establishments are not currently required to provide information on trans fat content.¹¹

Protection of Patrons of all Food Service Establishments

Task force members agreed that patrons of *all* Cambridge food service establishments should be equally protected from artificial trans fat.

It is for this reason that the Cambridge Public Health Department advised against the option of a voluntary ban.

Furthermore, the task force rejected the idea of menu labeling, which would require food service establishments to disclose trans fat content on menus and appropriate packaging. Menu labeling was not an attractive option because the process would be cumbersome, labor intensive, and potentially costly to restaurateurs and other food purveyors. In addition, establishments who served products with artificial trans fat might not welcome "negative" labeling.

*Note: In recent years, countless independent restaurants and dozens of national restaurant chains have voluntarily eliminated the use of artificial trans fat and received considerable positive media attention for making these changes. National chains that have already banned or are phasing out trans fat include Au Bon Pain, Legal Seafoods, Cheesecake Factory, Uno Chicago Grill, Kentucky Fried Chicken, Wendy's, Taco Bell, and Dunkin Donuts.

¹⁰"HHS To Require Food Labels To Include Trans Fat Contents: Improved Labels Will Help Consumers Choose Heart-Healthy Foods." U.S. Health and Human Services. Press release dated: July 9, 2003. Available at: www.hhs.gov/news/press/2003pres/20030709.html. Note: The purpose of the FDA regulation, which became effective on January 1, 2006, was to better inform consumers about the trans fat content of packaged foods so that they could make healthier choices.

¹¹ "Analysis of Trans Fat Usage in Central Square: A Survey of Central Square Restaurant Association Members." Central Square Business Association. 2007.

Part II:

Supporting Food Service Establishments

Removing artificial trans fat from all food service establishments in Cambridge is an important and fairly simple step toward improving the health of the community, and this is why the public health department should move forward with this approach. At the same time, the task force recognizes that such a measure may pose a hardship for some establishments.

Cambridge restaurants are an important part of the business community and contribute enormously to the city's vibrant atmosphere. In developing its recommendations, the task force engaged restaurateurs and others stakeholders to determine how best to support and promote food service establishments as they made the transition to trans-fat-free* products. In October 2007, the Cambridge License Commission invited task force members to give a presentation about trans fat at its annual mandatory meetings for all food service establishments. The presentations were an important opportunity to update the entire food service community about the proposed citywide ban on artificial trans fat use and to solicit feedback about the recommendations before they were finalized.

The task force gathered additional feedback from two surveys conducted in 2007 by the Central Square Business Association (CSBA) and the Cambridge Public Health Department (CPHD).

The purpose of the CSBA survey was to gauge restaurateurs' attitudes about switching to trans-fat-free products and whether they favored a voluntary or mandatory ban on trans fat use. In February 2007, the survey was mailed to 28 Central Square restaurant operators, of whom 15 responded. Findings were published in a CSBA report, "Analysis of Trans Fat Usage in Central Square: A Survey of Central Square Restaurant Association Members."

The goal of Cambridge Public Health Department survey was to help the task force gain a broader understanding of the prevalence of trans fat use among all Cambridge food service establishments and the perceived impact of a mandatory ban on these businesses. The survey was conducted in October 2007 at the Cambridge License Commission's annual meetings for sit-down food service establishments. The Inspectional Services Department also mailed the survey to more than 200 establishments as part of its routine permit renewal process. Restaurants, bars, bakeries, hotels, a supermarket, and corporate and university dining services were among the 165 establishments that completed the survey.

*In this document, the term "trans-fat-free" refers to serving sizes that contain less than 0.5 grams of artificial trans fat per serving, which correlates with the FDA labeling designation of *0 grams trans fat*.

Key Findings

Who Is Trans-Fat-Free?

Nearly half of all Cambridge food service establishments never used products containing trans fat or have voluntarily eliminated these products. According to the 2007 Cambridge Public Health Department survey, about 47% of Cambridge food service establishments are trans-fat-free. These establishments run the gamut from pizzerias and sandwich shops to upscale restaurants, corporate cafeterias, and university dining halls.

Of Interest

- Ethnic restaurants represent about a quarter of establishments that are trans-fat-free, according to the health department survey. These restaurants specialize in a variety of international cuisines, including Asian, Indian, Italian, Portuguese, Caribbean, and Mexican.
- The Cambridge Public Schools' Food Services Department has phased out most products containing trans fat. The district expects to be trans-fat-free by the start of the 2008-2009 school year.

Who Is Currently Using Trans Fat?

The types of Cambridge food service establishments that currently use trans fat are not substantially different from those that are trans-fat-free. Among the establishments currently using artificial trans fat are fast food restaurants, bakeries, pubs, upscale restaurants, and university faculty clubs.¹²

Perception of Consumer Demand

Many Cambridge establishments believe their customers want foods that are trans-fat-free. Of the 15 restaurants that completed the Central Square Business Association survey, all responded affirmatively that they thought customers would

Going Trans-Fat-Free: Perceptions of the Cambridge Food Service Community

- 47% of Cambridge food service establishments are trans-fat-free, while 29% currently use oils, shortenings, or other food products containing trans fat. Another 23% of establishments are unsure if they use products containing trans fat.
- 74% of Cambridge food service establishments know where to purchase trans-fat-free products, while 26% do not.
- 32% of food service establishments believe that switching to trans-fat-free products would increase their costs, while 25% disagree. Another 44% of establishments are unsure.
- If the public health department enacted a ban on artificial trans fat use, 88% of food service establishments that currently use trans fats report they could successfully transition to trans-fat-free products within year, while 12% report they would require more than a year.

Source: Cambridge Public Health Department, 2007.

¹² Cambridge Public Health Department. Unpublished data. 2007.

appreciate their efforts to reduce the use of products containing trans fat.¹³

In the larger survey conducted by the health department, 76% of food service establishments expressed interest in a citywide recognition program for establishments that were trans-fat-free. This interest likely reflects both a perception of consumer demand for trans-fat-free dining opportunities and a desire to be recognized for being a trans-fat-free establishment.

Perception of Cost

Many Cambridge food service establishments don't know if switching to trans-fat-free products would increase their costs. According to the health department survey, 44% of food service establishments reported they were unsure if switching to trans-fat-free products would increase their costs. Another 32% of establishments believed their costs would increase, while 25% believed their costs would remain the same.

Of Interest

- Among establishments that are trans-fat-free, 31% reported that switching to trans-fat-free products increased their costs.¹⁴
- Among establishments that currently use trans fat, 48% believed that switching to trans-fat-free products would increase their costs.¹⁵

More Information and Resources Needed

Many Cambridge food service establishments would like more information about trans fat, including how to identify trans fat in products and where to purchase replacement products. According to the health department survey, about 26% of Cambridge food service establishments don't know where to purchase trans-fat-free products.

Sufficient Time Needed To Make the Transition

If the public health department enacted a ban on artificial trans fat use, 88% of food service establishments that currently use trans fats reported they could successfully transition to trans-fat-free products within a year, while 12% reported they would require more than a year.

¹³ "Analysis of Trans Fat Usage in Central Square: A Survey of Central Square Restaurant Association Members." Central Square Business Association. 2007.

¹⁴ Cambridge Public Health Department. Unpublished data. 2007.

¹⁵ Ibid.

Addressing Concerns of Food Service Establishments

If the proposed ban is enacted, it is vital that the City of Cambridge support food service establishments as they make the transition to eliminating artificial trans fat.

Based on survey data and conversations with individual owners, the task force identified three key concerns among food service establishments:

- Sufficient time to make a successful transition.
- Lack of knowledge about trans fat (e.g., how to identify trans fat in products, where to purchase and how to use alternative products).
- Cost of transition.

To address these concerns, the task force has made the following recommendations in this report:

Implement the Proposed Ban in Two Phases

If the proposed ban is enacted, food service establishments would need sufficient time to locate and purchase trans-fat-free ingredients, and reformulate menu items. Recognizing that some products are easier to replace than others, the task force has recommended a phased approach to a ban that would take effect 12 months and 15 months, respectively, after adoption of the regulation.

The first phase of the ban would affect oils, shortenings, and margarines. The transition to trans-fat-free oils and fats is fairly straightforward and typically involves a simple switch to healthier products. (Additional information on trans-fat-free products is available in Appendix 4.)

The second phase of the ban would affect all other foods or ingredients containing artificial trans fat (except foods sold to patrons in the manufacturer's original sealed package). The additional three months would give establishments time to reformulate recipes for baked goods and identify replacement products and ingredients.

(See Part III for more details.)

Develop an Education Campaign for Food Service Establishments

The goal of the campaign would be to educate food service establishments about the regulation and provide technical assistance to ensure a smooth transition. Possible activities would include developing and disseminating fact sheets and other educational materials, organizing educational forums and trade fairs, providing technical assistance to individual establishments, and developing ways for Cambridge food service establishments to share information about and jointly purchase trans-fat-free products.

(See Part IV for more details.)

Support Food Service Establishments through Incentives Program & Other Activities

In recent years, Cambridge food service establishment owners have had to comply with several new regulations, including the 2003 city ordinance banning smoking and a 2004 state statute requiring installation of automatic sprinklers in certain bars and restaurants. While phasing out trans fat will likely not be as costly or controversial as some of these earlier measures, it may inconvenience some food service establishments.

To support food service establishments during the transition and thereafter, the task force recommends that the City of Cambridge:

- Develop an incentives program to generate positive publicity for Cambridge food service establishments that are trans-fat-free.
- Create trans-fat-free catering opportunities for city-sponsored events and meetings.
- Provide technical assistance to establishments such as lists of appropriate trans-fat-free products, product sources, and information and education about their proper usage.
- Organize educational forums, such as replacement product trade fairs and trainings.
- Develop a system for linking up food service establishments that want to jointly purchase trans-fat-free oils and fats, which may only be available in pallet-size bulk orders.

(See Part III and Part IV for more details)

Part III:

Recommendation for a Ban on Artificial Trans Fat Use

The Cambridge Trans Fat Task Force recommends that the Cambridge Public Health Department promulgate a regulation that would ban artificial trans fat use in the city's food service establishments. This recommendation is endorsed by the public health department.

To guarantee a smooth transition, the task force strongly supports a phased approach so that the food service community has sufficient time to receive training and education, locate and test healthier alternative products, and resolve other outstanding issues. The following sections describe what type of establishments and foods would be affected by the proposed ban, as well the timeframe for implementing it.

Establishments Affected

All food service establishments that are inspected by the city's Inspectional Services Department would be affected by the proposed ban. However, only food service establishments that sell prepared foods that do not have a "Nutrition Facts" label would be impacted, with the exception of schools. As of this writing, approximately 79% of the 869 operations that are permitted by the Inspectional Services Department sell prepared foods. These operations include, but are not limited to: restaurants, hotels, mobile food unit commissaries, catering operations, supermarkets, retail stores, work sites, public and private schools (K-12), and hospitals. (For details, see Appendix 5.)

Foods Affected

The proposed ban would apply to all prepared foods sold in Cambridge food service establishments, including:

- All foods prepared on establishment premises.
- All foods prepared off premises, including foods prepared in other municipalities. Because out-of-town vendors are beyond the jurisdiction of the city's Inspectional Services Department, owners of Cambridge establishments, as well as out-of-town caterers, would be asked to sign a statement of good faith that foods prepared in other municipalities and served in Cambridge were trans-fat-free. This signed statement would be submitted with the establishment's permit application to Inspectional Services.

City Leadership

The City of Cambridge can lead the way in eliminating artificial trans fat use by requesting that caterers for city-sponsored events and meetings serve food that is free of artificial trans fat. This change—which should not affect choices available on catering menus—would help spur demand for trans-fat-free food from restaurateurs. It would also demonstrate to food service establishments and the community that city government stands behind its policies.

- All foods served in the city’s public and private schools, including items sold in school vending machines. Although packaged items bear the “Nutrition Facts” label, most children eat what is served to them and do not have the skills to make educated food choices.

For the purposes of local enforcement, food products will be considered “trans-fat-free” if they contain less than 0.5 grams of artificial trans fat per serving, which correlates with the FDA labeling designation of *0 grams trans fat*. For more information, see Appendix 3.

The ban does not apply to:

- Foods sold to patrons in the manufacturer’s original sealed package bearing the “Nutrition Facts” label (e.g., Twinkies). Since these items clearly display nutrition information, consumers are able to make an informed dietary choice. The exception is foods served in schools (see previous bullet).

Timeframe

The task force recommends implementing the proposed ban in two phases so that food service establishment owners would have adequate time to locate and purchase trans-fat-free ingredients and reformulate menu items. It is important to support food service establishments during this process, especially smaller businesses that have fewer resources.

The task force proposes the following timelines for:

City-Sponsored Events

- All foods served at city-sponsored events shall be trans-fat-free by January 1, 2009. New vendor contracts shall include a stipulation that all items are trans-fat-free.

Food Service Establishments

- A regulation banning artificial trans fat use in Cambridge food service establishments shall be promulgated no later than July 1, 2008.
- The first phase of the ban affecting food service establishments would take effect on July 1, 2009, and would apply to any oils, shortenings, and margarines containing artificial trans fat that are used for frying or in spreads.
- The second phase of the ban would take effect on October 1, 2009, and would apply to all other foods or ingredients containing artificial trans fat except foods sold to patrons in the manufacturer’s original sealed package.
- In the event that compliance by the effective dates is not feasible for a food service establishment, a temporary waiver should be made available to that establishment.

This proposed timetable is similar to the ones enacted by the New York City and Brookline health departments. For a detailed timetable for phasing out trans fat in Cambridge food service establishments, see Appendix 1.

Part IV:

Recommendations for Implementation

In developing its recommendations to the city, the Cambridge Trans Fat Task Force gave deliberate consideration to ensuring a smooth and successful transition period. Input from the restaurant community suggests that with adequate time and education, a ban would be received with minimal opposition or difficulty. From the viewpoint of enforcement, the city needs to provide thorough training and support for food service establishment inspectors.

If the Cambridge Public Health Department promulgates a regulation banning trans fat use in the city's food service establishments, the task force recommends the following steps for implementation.

Interdisciplinary Implementation Work Group

Immediately upon passage of the regulation, an interdisciplinary implementation work group should be established to design and oversee the implementation of the education, incentives, training, and enforcement plans for the year prior to the start of the ban.

Resource Allocation

The proposed ban – as well as the planning, education, training, and incentives components – would require staff time from various city departments, as well as the services of contractors to produce the education materials and provide technical support.

In the year leading up to the ban, resources should be dedicated to:

- Developing and conducting necessary training and support for food service establishment inspectors.
- Creating and disseminating educational materials (i.e., brochures, website content, incentives), as well as organizing events (i.e., trainings, a trade fair).
- Helping food service establishments identify healthier substitute products and address questions about recipe reformulation. The local business associations, trans-fat-free food service establishments, and the Cambridge Public Health Department could work together to provide this support.

Education Campaign & Incentive Program

If the proposed ban is enacted, it is vital that the City of Cambridge support food service establishments as they make the transition to eliminating artificial trans fat. Educating both restaurateurs and consumers is an important part of this process.

Food service establishments need clear and accurate information on how to identify sources of trans fat, work with their suppliers to locate the healthiest possible trans-fat-free replacements, and develop alternative recipes if needed.

All education materials for food service personnel need to be available in the primary languages spoken in Cambridge.

The following sections describe the four components of the education campaign, which would be developed in greater detail by the interdisciplinary implementation work group if the ban is enacted.

1. Raise awareness about the regulation

If the public health department promulgates a trans fat regulation, owners of food service establishments must be fully informed in writing about the new regulation and pertinent dates for compliance.

Possible components of an awareness campaign:

- Individual meetings with Inspectional Services staff. Upon enactment of the regulation, city inspectors would continue to visit individual food service establishments as part of their scheduled inspections, and distribute information about the new law.
- Make educational materials available online. Educational materials would be posted on a new website or a section of an existing website.
- Use City of Cambridge media channels to educate consumers. Information about the new regulation could be included on the city's website, cable channels, and billboards, as well as in city publications and department newsletters.

The Skinny on Fat

Policy makers should be aware that replacing artificial trans fat with another type of fat will not slim waistlines. All types of fats have the same caloric content. A donut fried in trans-fat-free oil packs the same number of calories as one fried in oil containing trans fat.

Equally important, trans-fat-free oils and fats can be unhealthy. Some tropical oils and animal fats, for example, contain high amounts of saturated fat. Good alternatives include non-hydrogenated, traditional monounsaturated and polyunsaturated vegetable oils such as canola, olive, and corn oils.

More details regarding alternative products can be found in Appendix 4.

2. Education on Making the Transition

Once awareness of the new regulation had been raised, owners of food service establishments would need help making the transition to a trans-fat-free environment. Possible ways the city could support food service establishments during this period would be to:

- Provide information on healthier alternative products and where to purchase them.
- Provide detailed information on how to prepare foods with trans-fat-free products. This information might include fact sheets on the proper use of trans-fat-free replacement fats, safe cooking temperatures, and types of fat to use for particular cooking techniques.
- Organize interactive educational forums, such as trade fairs, and Q&A sessions, for food service establishment owners and staff.

3. Technical Assistance For and Between Food Service Establishment Owners

In addition to general education, food service establishment owners and staff may have specific questions or problems they want addressed. Possible ways the city could support food service establishments include:

- Requesting restaurant inspectors to provide guidance to food service establishments during routine site visits prior to the implementation of the ban.
- Developing a self-assessment tool for food service establishments so they can track their progress in eliminating trans fat and identify areas that need attention. Trained culinary students from the Cambridge Rindge and Latin High School could be hired to provide technical assistance.

In some cases, food service establishments may be able to share their knowledge with peers. Opportunities to pool information might include:

- Maintaining a list of food service establishments that have eliminated trans fat and would be willing to be a resource for others.
- Developing a system for linking up food service establishments that want to jointly purchase trans-fat-free oils and fats, which may only be available in pallet-size bulk orders.
- Developing ways for sharing information about newly identified trans-fat-free products.

4. Incentives

The availability of incentives would make phasing out trans fats more attractive to food service establishment owners, and would encourage and reward a swift and complete transition to trans-fat-free menu items. The following incentives would serve to educate consumers, provide positive publicity for compliant food service establishments, and promote a unified effort throughout Cambridge. Incentives could include the following:

- A publicly available list of food service establishments that are trans-fat-free. The list could be published online, in local newspapers, and in other venues.
- A decal program in which food service establishments could submit a completed self-assessment tool in exchange for a decal. Decals would be awarded in good faith in the year prior to implementing the ban.
- Trans-fat-free catering opportunities for city-sponsored events and meetings.

Training Food Service Establishment Inspectors

The success of the ban is contingent upon effective enforcement. Inspecting food service establishments for products that contain trans fat will increase the amount of time it takes to conduct inspections. Over time, trans fat checks would become a routine part of the regular inspections and more easily fit within the regular workload. In addition, as food service establishments become used to working with trans-fat-free products, and products with trans fat become less available, the load on inspectors would likely decrease. New York City has not hired extra inspectors to enforce the trans fat ban, the first phase of which went into effect in July 2007.¹⁶

It is critical that food service establishment inspectors receive appropriate training before the ban takes effect, so that they can become both knowledgeable and efficient in an unfamiliar area. New York City's health department has developed training modules for inspectors that it is willing to share with Cambridge.

Training would need to address the following areas:

- Health risks posed by trans fat.
- The new regulation and inspectors' role in implementing it.
- How to identify products containing trans fat.
- How to document violations.
- Alternative products and other resources for establishments.

¹⁶ Silver LD. et al. The New York City Trans Fat Regulation: Preventing Heart Disease by Changing the Food Environment. American Public Health Association Conference, Washington, DC. November 2007.

Enforcement by Inspectional Services

There are four inspectors for all food establishments in the City of Cambridge, and establishments are inspected twice a year on average. A realistic enforcement strategy should be developed, which builds on the training prior to the ban.

If the proposed ban is enacted, an inspection protocol and assessment form need to be developed. (Note: The New York City health department has offered to share its protocols for trans fat inspections with Cambridge.)

The task force recommends a visual inspection of product labels in store rooms and refrigerators. This would result in minimal paperwork for the food service establishments and also would ensure that the inspection reflects products in current use.

Food service establishments that are found to be in violation during inspection should be subject to penalties that might include a warning, fines, and permit suspension. The implementation work group should develop a detailed proposal.

Evaluation

If the public health department decides to go forward with a trans fat ban, a formal plan for evaluation should be developed by the implementation work group.

Evaluation of the implementation process would allow the city to measure progress, as well as highlight areas that require extra support. To assess progress, the task force recommends that:

- Inspectional Services staff provide regular updates to the Cambridge Public Health Department on trans fat inspection results. Updates would include data on violations and compliance, as well as overall trends.
- Follow up surveys of Cambridge food service establishments would be conducted at appropriate intervals to document the success of the ban and the various components of the implementation plan. An initial survey was conducted by the Cambridge Public Health Department in October 2007 to establish baseline use of trans fats among Cambridge food service establishments and to document attitudes about phasing out trans fats.
- Local business associations (Central Square, Harvard Square, Inman Square) would be asked to provide updates on how restaurants are managing the transition and the ban's impact on business.

Appendix 1:

Implementation Timetable

Timetable for phasing out trans fat from Cambridge food service establishments	
July 1, 2008	Promulgation of regulation
September 2008	Development and planning of education campaign: <ul style="list-style-type: none">▪ Education materials▪ Web pages▪ Translation▪ Self assessment tool▪ Decal program
October 2008	Basic training for Inspectional Services staff.
November 2008	Inspectional Services staff start distributing education materials
January 2009	Activities: <ul style="list-style-type: none">▪ Trans-fat-free catering opportunities at city sponsored events▪ An informational forum will be held for owners or managers of all food service establishments
April 2009	Advanced technical training for Inspectional Services staff and assessment of progress
July 1, 2009	Phase 1 of the ban begins. Food service establishments discontinue use oils, shortenings and margarines containing artificial trans fat for frying or in spreads.
October 1, 2009	Phase 2 of the ban begins. Food service establishments discontinue use of all other foods or ingredients containing artificial trans fat, except foods sold to patrons in the manufacturer's original sealed package.
January 2010	The city will conduct a follow-up survey of Cambridge food service establishments. (The initial survey was conducted by the public health department in October 2007.)

Appendix 2:

Cambridge Public Health Department Response to City Council Policy Order #17, dated 10/16/06

Text of Order: *That the City Manager be and hereby is requested to direct the Public Health Department to investigate a program to decrease trans fats in food served in Cambridge restaurants.*

Improving the diet of the American public is critical if we, as a society, hope to win the battle against cardiovascular disease and diabetes, and curb the obesity epidemic.

Recently, the New York City Department of Health proposed an amendment to its health code that would phase out artificial trans fat in the city's 24,000 restaurants and other food service establishments. The NYC Department of Health singled out trans fat based on recent medical studies indicating that there may not be *any* safe level of trans fat in the human diet.¹⁷

What's *so bad* about trans fat?

After reviewing the medical literature and consulting with physicians and nutritionists, the Cambridge Public Health Department has concluded that artificial trans fats pose an unnecessary and avoidable human health risk, and where possible, should be replaced with heart healthy alternatives.

Trans fat, like saturated fat, increases the risk of coronary heart disease by raising "bad" (LDL) cholesterol. Unlike saturated fat, however, trans fat also decreases "good" cholesterol (HDL), increases blood levels of triglycerides as compared with the intake of other fats, and may also influence other risk factors for coronary heart disease.¹⁸ Based on these effects, Harvard medical researchers estimate that 72,000 to 228,000 coronary heart disease events (heart attacks and deaths) could be averted every year in the United States by the near-elimination of industrial produced trans fat.¹⁹

While trans fat occurs naturally in low levels in milk and beef, the majority (about 80%) of trans fat consumed in the United States is in the form of partially hydrogenated vegetable oil, an artificial fat manufactured by the food processing industry. Partially hydrogenated vegetable oils have long been popular with the food industry because of their long shelf life and stability during deep-frying.

¹⁷ Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids. Institute of Medicine: 2002.

¹⁸ Mozaffarian D, et al. Trans Fatty Acids and Cardiovascular Disease. *New England Journal of Medicine*: 2006; 354: 1601-13. (April 13, 2006).

¹⁹ *Ibid.*

Artificial trans fat can be found in²⁰:

Cooking oils and spreads

- Vegetable oils used for frying, baking, and cooking
- Shortening (hard vegetable oil)
- Margarine and other spreads

Prepared foods

- Pre-fried foods, such as French fries, fried chicken, chicken nuggets, fish fillets, chips, taco shells, and doughnuts
- Baked goods, such as hamburger buns, pizza dough, crackers, cookies, cakes, pies, and pastries
- Pre-mixed ingredients, such as pancake mix, hot chocolate, salad dressing, croutons, and bread crumbs.

National trends

Since the 1990s, public health advocates have been calling attention to the health risks posed by trans fatty acids. As a result of a petition filed in 1994 by the consumer group Center for Science in the Public Interest (CSPI), the Food and Drug Administration now requires (as of January 1, 2006) that packaged foods and dietary supplements list trans fat content on their “Nutrition Facts” label.

CSPI petitioned the Food and Drug Administration again in 2004, this time requesting the agency prohibit the use of partially hydrogenated oil as a food ingredient. CSPI has also launched a major grassroots campaign to encourage food manufacturers to reformulate their products and filed lawsuits against high profile fast food chains to force them to stop using partially hydrogenated oils.

Meanwhile, municipalities have begun addressing the use of trans fat in restaurants and other food establishments. New York City’s proposed ban on trans fat in restaurants followed a year-long education campaign aimed at voluntary reduction. A Chicago city alderman is currently asking fast food chains in the Windy City to greatly limit their trans fat usage or face a potential ban. North Carolina requires its public schools to use trans-fat-free oils in preparing lunches.

Finally, some national restaurant chains are choosing to eliminate or significantly reduce the use of trans fat in their cooking. These chains include:

- Wendy’s
- Cheesecake Factory
- Au Bon Pain
- Uno Chicago Grill
- Legal Sea Foods
- California Pizza Kitchen
- KFC

²⁰ Does Your Kitchen Need an Oil Change? What Every Restaurant and Food Service Establishment Needs to Know About Trans Fat. The New York City Department of Health and Mental Hygiene.

Recommendations

Given the substantial health risks posed by trans fat, the Cambridge Public Health Department believes that the city's restaurants and other food purveyors should reduce or eliminate trans fat in their cooking, frying, and baking. This would be an important part of the city's overall obesity prevention strategy which includes *Healthy Living Cambridge* activities, transportation and pedestrian initiatives, and successful school-based programs.

To accomplish the goal of reducing trans fat use in restaurant meals, the public health department recommends working in partnership with appropriate city agencies (e.g., Inspectional Services, Licensing Commission), local business associations, and Cambridge restaurants and other food establishments to develop an educational program aimed at the following activities:

- Assessing current use of trans fat in the city's 425 restaurants.
- Educating restaurant owners and staff about health risks posed by trans fat.
- Engaging restaurant inspectors and licensing commission staff in this issue.
- Examining availability and cost of healthier, unsaturated fats and oils.
- Developing incentives for restaurants and food establishments to go "trans-fat-free."
- Evaluating effectiveness of overall effort.

At this time, the Cambridge Public Health Department is not considering regulating trans fat use in the city's restaurants and other food establishments. The department strongly believes that the opportunity to build a lasting relationship with the restaurant community outweighs the short-term benefit of banning trans fat use through regulation.

Appendix 3:

Criteria for Determining Trans Fat Content of Products

Restaurant inspectors and owners of food service establishments will need to be able to easily identify whether a food product meets the criteria for being free of artificial trans fat. Most food products bear a federally regulated "Nutrition Facts" label containing information about the amount of trans fat per serving.

Foods that contain less than 0.5 grams of trans fat per serving are allowed by the Food and Drug Administration (FDA) to be labeled as zero grams trans fat. This criterion will be used in Cambridge food service establishments to determine acceptability.

For foods that do not bear a "Nutrition Facts" label, the ingredients list will be used to determine whether it is acceptable for use. Foods will be acceptable if they do not contain partially hydrogenated vegetable oil or if the words "partially hydrogenated" do not appear on the label.

It should be noted that the FDA criterion of less than 0.5 grams of trans fat per serving minimizes consumption of trans fat, but does not eliminate it.

Appendix 4:

Alternatives to Products Containing Artificial Trans Fat

In response to the changes in the market, manufacturers are developing more alternative products to hydrogenated oils. As a result, numerous acceptable and heart healthy alternatives are available to replace trans fat. Many of these special new oils have long “fry lives” and other desirable characteristics. As more companies purchase these products, more suppliers will carry them.

While it may take time to assess the trans fat content of foods used in food service establishments and find replacement products, it is generally not too complicated to switch to trans-fat-free oils for frying and food preparation. Many ethnic food service establishments, for instance, have always cooked with soybean or olive oils, neither of which contains trans fat.

Substituting trans-fat-free products in baking, however, is more complicated and will often require the development of new recipes, which may be a time-consuming process.

Appendix 5:

Operations Regulated by the Inspectional Services Department

Any public or private operation that sells food in Cambridge must be inspected and permitted by the city's Inspectional Services Department (ISD). As of this writing, more than 800 businesses and institutions are inspected by ISD. The following list illustrates the wide array of operations that the proposed ban could impact.

Note: Operations inspected by ISD that only sell foods with "Nutrition Facts" labels would not be impacted by the proposed ban.

Types of Operations Regulated by Inspectional Services		
Categories	Number of Operations that serve prepared foods	Examples of Operations
Non-alcohol	331	Sit-down restaurants, worksite cafeterias, school cafeterias, fast food chain stores, university food services, clubs, concession stands, daycares
Alcohol	201	Sit-down restaurants, bars, concession stands, clubs, hotels
Retail	88	Supermarkets, department stores, gyms, drugstores, gas stations, bookstores, video stores, convenience stores, skating rinks, cinemas
Mobile food commissaries	23	Food vending trucks, popcorn carts, caterers
Package stores	20	Liquor stores, markets which sell liquor
Bakeries	22	Bakeries
Wholesale	1	Wholesale food companies