

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
BOARD OF HEALTH

NOTICE OF ADOPTION OF AN AMENDMENT (§81.08)
TO ARTICLE 81 OF THE NEW YORK CITY HEALTH CODE

In compliance with §1043(b) of the New York City Charter (the “Charter”) and pursuant to the authority granted to the Board of Health by §558 of said Charter, a notice of intention to amend Article 81 of the New York City Health Code (the “Health Code”), adding a new §81.08, was published in the City Record on September 29, 2006, and a public hearing was held on October 30, 2006. Approximately 2,200 written and oral comments were received in support of the proposal and 70 comments in opposition to the proposal. At its meeting on December 5, 2006 the Board adopted the following resolution.

STATUTORY AUTHORITY

This amendment to the Health Code is promulgated pursuant to §§558 and 1043 of the Charter. Section 558(b) and (c) of the Charter empowers the Board of Health to amend the Health Code and to include in the Health Code all matters to which the Department’s authority extends. Section 1043 grants the Department rule-making authority.

STATEMENT OF BASIS AND PURPOSE

The Department of Health and Mental Hygiene (the “Department”) enforces provisions of the New York City Health Code (“Health Code”) and other applicable law relating to food served directly to the consumer throughout the City, including food that is commercially prepared, and sold or distributed for free, by food service establishments, a broad category which includes restaurants, caterers and mobile food vending units. The Department also regulates non-retail food processing establishments, such as mobile food vending commissaries, as defined in Health Code §89.01, which supply food for mobile vending units.

Background

Restaurants (the term is being used interchangeably with “food service establishments” or “FSEs”) are an important source of daily food intake for New York City residents: an estimated one third of daily caloric intake comes from foods purchased in restaurants.¹ Assuring safe and healthy dining options is a public health priority. The Department issues permits and inspects all New York City FSEs and non-retail food processing establishments, as defined in §81.03(j) and (p) of the Health Code. The public health concern addressed by this amendment is the presence of trans fat in foods served in restaurants, which represents a dangerous and entirely preventable health risk to restaurant goers. Yet New York City restaurant patrons currently have no practical way to avoid this harmful substance.

Accordingly, the Board of Health has amended Article 81 of the New York City Health Code to restrict the service of products containing artificial trans fats at all FSEs.

The Department is charged with preventing and controlling diseases, including chronic disease, through approaches that may address individual behavior or the community environment. By restricting FSEs from serving food that contains artificial trans fat, except for food served in the manufacturer’s original sealed package, we can reduce New Yorkers’ exposure to an avoidable hazard in the food environment that is associated with increased heart disease risk.

Basis for restricting service of products containing artificial trans fat.

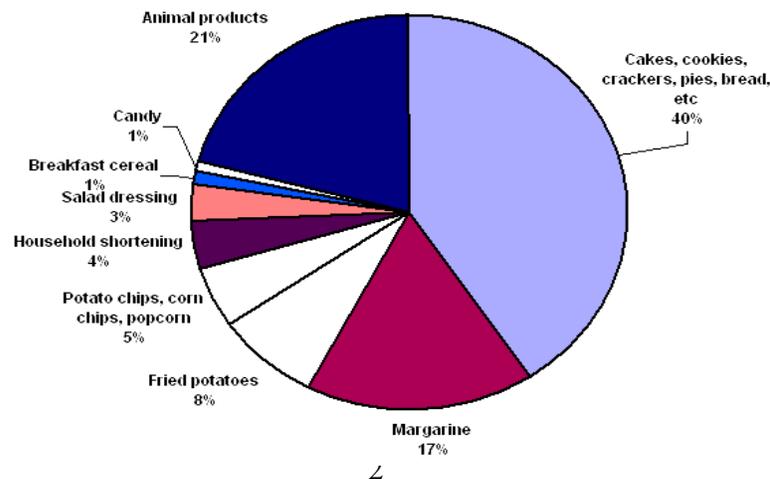
Heart disease is New York City's leading cause of death. In 2004, 23,000 New York City residents died from heart disease and nearly one-third of these individuals died before the age of 75.² Scientific evidence demonstrates a clear association between increased trans fat intake and the risk of coronary heart disease. Most dietary trans fat is found in partially hydrogenated vegetable oil ("PHVO") - oil that has been chemically modified. Scientific studies which examine the change in cholesterol levels when trans fat is replaced with currently available heart healthy alternatives conservatively estimate a reduction of 6% in coronary heart disease events such as heart attacks.³ Even in the most conservative estimates, based on replacing trans fat primarily by saturated fat - an unlikely outcome given the widespread trend to healthier fats by food producers - a significant although smaller reduction in coronary heart disease events is still expected. Other scientific studies, based upon observing large groups of people over time estimate that up to 23% of coronary heart disease events could be avoided by replacing trans fat with healthy alternatives. Because an estimated one third of dietary trans fat comes from foods purchased in restaurants, the continued presence of PHVO in restaurant foods represents an important contribution to cardiovascular risk for New York City diners.⁴

Dietary trans fat increases the risk of heart disease by elevating LDL ("bad") cholesterol, and lowering HDL ("good") cholesterol.⁵ Because of its negative effect on "good cholesterol", trans fat appears to be even worse than saturated fat. The Institute of Medicine ("IOM") reviewed the scientific evidence and concluded that there is "a positive linear trend between trans fatty acid intake and total and LDL concentration, and therefore increased risk of coronary heart disease"⁶. The 2005 Dietary Guidelines for Americans, issued by the United States Department of Agriculture ("USDA"), recommends that dietary intake of trans fat be "as low as possible"⁷ and the American Heart Association guidelines issued in June 2006 recommend that trans fat intake be kept below 1% of total energy intake.⁸ In January of 2006, the FDA's mandatory listing of trans fat content on the nutrition facts labels of packaged foods came into effect.⁹

Approximately 80% of dietary trans fat is found in industrially-produced PHVO, which is used for frying and baking and is present in many processed foods.¹⁰ Approximately 20% is naturally occurring and is found in small amounts in dairy and meat products from ruminant animals.

The artificial trans fat found in PHVO is produced when hydrogen is added to vegetable oil in a process called hydrogenation. Common FSE sources of artificial trans fat include: foods fried in partially hydrogenated vegetable oils; margarine and vegetable shortening; prepared foods such as pre-fried French fries, fried chicken, taco shells and donuts; baked goods such as hamburger buns, pizza dough, crackers, cookies, and pies; and pre-mixed ingredients such as pancake and hot chocolate mix.

Figure 1. Sources of Trans Fat in the U.S. Diet¹¹



The major source of dietary trans fat, found in PHVO, can be replaced with currently available heart healthy alternatives. Denmark has recently successfully removed artificial trans fat by limiting industrially produced trans fat content in food to 2% of total calories from fat. In addition, in June 2006 the Canadian Trans Fat Task Force issued a report recommending that Canada limit trans fat in food service establishments to 2% of total fat content in margarines and vegetable oils and 5% of total fat content in all other food ingredients.¹² “Zero grams” trans fat packaged foods in the US, both new products and those already in production, have been extensively marketed since the labeling requirement for packaged foods became effective in January of 2006. Many manufacturers have reformulated a number of their existing products that are now widely available as “zero grams” trans fat (defined by the FDA as <0.5 grams per serving) on supermarket shelves. A recent *New England Journal of Medicine* article reports that industry and government representatives agreed that the restriction of trans fat in Denmark “did not appreciably affect the quality, cost or availability of food.”¹³ This experience demonstrates that artificial trans fat can be replaced without consumers noticing an effect.¹⁴ Acceptable healthier alternatives to PHVOs include traditional mono and poly unsaturated vegetable oils (e.g., canola, corn, olive, etc.) that have not been hydrogenated, as well as newly developed oils such as those made from specially cultivated varieties of soybeans, safflowers, and sunflowers. Further, many of the newer trans fat-free oils have long ‘fry lives’ and other favored characteristics of PHVOs. Educational and enforcement efforts will seek to promote a shift to healthier fats. In response to increased demand, US companies are expanding production of products that will increase the market supply of alternatives to hydrogenated oils.^{15,16}

Consumer trans fat consumption and the contribution of FSEs

National surveys show that Americans spend almost half (47%) of their food dollars eating out.¹⁷ One third of daily caloric intake comes from foods purchased in restaurants.¹⁸ The continued presence of artificial trans fat in restaurant foods needlessly increases the risk for heart disease for all of our city’s residents.

Consumer concern about trans fat in food is evidenced by the increase in national sales of products labeled “no trans fat” by 12% to \$6.4 billion for the 52 weeks ended October 2, 2004, compared with the previous 52-week period.¹⁹ Nutrition ranks second after taste as the factor most frequently influencing food purchases.²⁰ Moreover, artificial trans fat can be replaced with heart-healthier oils and fats without changing the taste of foods.

Prevalence of use of partially hydrogenated vegetable oil in NYC FSEs

In June 2005, the Department launched the Trans Fat Education Campaign. The campaign called on all NYC FSEs to voluntarily remove PHVO from the foods they were serving. This was supported by extensive educational outreach to food suppliers, consumers and to every licensed restaurant in New York City.

To assess use of PHVO-containing products by FSEs, the Department conducted two surveys: one prior to the campaign (May 9 through June 10, 2005) and another nine months after the campaign (April 3 through May 5, 2006).

In both the 2005 and 2006 survey findings, the prevalence of PHVO-containing oils used for frying, baking or spreads was approximately 50% at FSEs where product content could be determined. While a lack of labeling or product identification of some products precludes a precise estimate of the prevalence of use, the data show that PHVO use remained common and has not declined substantially despite the Trans Fat Education Campaign.

Why focus on trans fat over other fats?

The IOM conclusion that there is no safe level of artificial trans fat consumption²¹ is in contrast to other dietary fats which, when consumed in moderation, are a natural part of a healthy diet. Artificially produced trans fat is relatively new to our food supply and confers no known health benefit. Because healthy, inexpensive alternatives exist for the most common source of trans fat, PHVO, their continued use by FSEs poses an unnecessary public health threat.

Why use 0.5 grams per serving of trans fat as a threshold?

Current FDA labeling regulations allow manufacturers of foods packaged for direct sale to consumers in retail markets to list trans fat content as “0 grams” if the product contains less than 0.5 grams per serving.²² This allows for the presence of naturally occurring trans fat in meat and dairy foods as well as newer “low trans fat” foods, which may have PHVO listed as an ingredient. The proposed provision intentionally allows for products that have less than 0.5 grams per serving (evidenced either on a Nutrition Facts label or in information provided by the manufacturer) in order to accommodate most of the newly formulated low trans fat margarines on the market, and allows for substitute spreads.

Response to comments

The Department received more than 2,200 written and oral comments in favor of the amendment, and 70 comments opposed to the proposed amendment. It was brought to the Department’s attention that the term “margarine” is found in some ingredients lists on labels of products, and that margarines may contain artificial trans fat. While only subdivision (d) of the original proposal included the term “margarine,” the proposal has been amended to clarify that it is intended to restrict use of margarine that contains artificial trans fat. In addition, since some comments stated that in practice it could take longer to reformulate recipes to accommodate the restriction on artificial trans fat in baked goods and deep fried yeast dough and cake batter, the proposal has been amended. Accordingly, the effective date of the restriction on use of oils, margarines and vegetable shortenings containing artificial trans fats that are used for frying and as spreads will remain July 1, 2007, but the effective date for oils and shortenings used for deep frying yeast dough and cake batter and for all other foods containing artificial trans fat has been extended to July 1, 2008.

STATEMENT PURSUANT TO SECTION 1042 – REGULATORY AGENDA

The proposed amendment was not included in the Department’s Regulatory Agenda because it resulted from a recent analysis by the Department.

The proposal is as follows:

Note-matter in brackets [] to be deleted

Matter underlined is new

RESOLVED, that Article 81 of the New York City Health Code, set forth in title 24 of the Rules of the City of New York, as amended by resolution adopted on the seventh of June, two thousand five, be and the same hereby is further amended by adding a new §81.08, to be printed together with explanatory notes, as follows:

§81.08 Foods containing artificial trans fat.

(a) Artificial trans fat restricted. No foods containing artificial trans fat, as defined in this section, shall be stored, distributed, held for service, used in preparation of any menu item or served in any food service establishment or by any mobile food unit commissary, as defined in §89.01 of this Code or successor provision, except food that is being served directly to patrons in a manufacturer's original sealed package.

(b) Definition. For the purposes of this section, a food shall be deemed to contain artificial trans fat if the food is labeled as, lists as an ingredient, or has vegetable shortening, margarine or any kind of partially hydrogenated vegetable oil. However, a food whose nutrition facts label or other documentation from the manufacturer lists the trans fat content of the food as less than 0.5 grams per serving, shall not be deemed to contain artificial trans fat.

(c) Labels required.

(1) Original labels. Food service establishments and mobile food unit commissaries shall maintain on site the original labels for all food products:

(i) that are, or that contain, fats, oils or shortenings, and

(ii) that are, when purchased by such food service establishments or mobile food unit commissaries, required by applicable federal and state law to have labels, and

(iii) that are currently being stored, distributed, held for service, used in preparation of any menu items, or served by the food service establishment, or by the mobile food unit commissary.

(2) Documentation instead of labels. Documentation acceptable to the Department, from the manufacturers of such food products, indicating whether the food products contain vegetable shortening, margarine or any kind of partially hydrogenated vegetable oil, or indicating trans fat content, may be maintained instead of original labels.

(3) Documentation required when food products are not labeled. If baked goods, or other food products restricted pursuant to subdivision (a) of this section, that are or that contain fats, oils or shortenings, are not required to be labeled when purchased, food service establishments and mobile food commissaries shall obtain and maintain documentation acceptable to the Department, from the manufacturers of the food products, indicating whether the food products contain vegetable shortening, margarine or any kind of partially hydrogenated vegetable oil, or indicating trans fat content.

(d) Effective date. This section shall take effect on July 1, 2007 with respect to oils, shortenings and margarines containing artificial trans fat that are used for frying or in spreads; except that the effective

date of this section with regard to oils or shortenings used for deep frying of yeast dough or cake batter, and all other foods containing artificial trans fat, shall be July 1, 2008.

Notes: Section 81.08 was added by resolution adopted on December 5, 2006 to restrict use of artificial trans fat in food service establishments in New York City in an effort to decrease the well-documented risk of ischemic heart and other disease conditions associated with consumption of such products.

RESOLVED, that the list of Section Headings in Article 81 of the New York City Health Code, set forth in title 24 of the Rules of the City of New York, as amended by resolution adopted on the seventh of June, two thousand five, be, and the same hereby is, further amended, to be printed together with explanatory notes, as follows:

ARTICLE 81

FOOD PREPARATION AND FOOD ESTABLISHMENTS

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§81.07 Food; sanitary preparation, protection against contamination.

§81.08 Foods containing artificial trans fat.

§81.09 Food; temperature requirements

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Notes: Section 81.08 was added by resolution adopted on December 5, 2006 to restrict service of unhealthful artificial trans fat by food service establishments

¹ Guthrie JF. et al. Role of Food Prepared Away from Home in the American Diet, 1977-78 Versus 1994-96: Changes and Consequences. *Society for Nutrition Education* 2002; 34:140-150.

² NYC DOHMH, Office of Vital Statistics. NYC Vital Statistics 2004, Accessed on EpiQuery. 2006.

³ Mozaffarian D. Katan MB. Ascherio A. Stampfer MJ. Willett WC. Trans Fatty Acids and Cardiovascular Disease. *New England Journal of Medicine*. April 13, 2006. 354;15:1601-13.

⁴ Guthrie JF. et al. Role of Food Prepared Away from Home in the American Diet, 1977-78 Versus 1994-96: Changes and Consequences. *Society for Nutrition Education* 2002; 34:140-150.

⁵ Ascherio A. Katan MB. Zock PL. Stampfer MJ. Willett WC. Trans fatty acids and coronary heart disease. *New England Journal of Medicine*. 1999; 340:1994-1998

⁶ Panel on Macronutrients, Institute of Medicine. Letter report on dietary reference intakes for trans fatty acids drawn from the Report on dietary reference intakes for energy, carbohydrate, fiber, fat, fatty acids, cholesterol, protein, and amino acids. 2002. Washington, DC, Institute of Medicine. Page 14.

⁷ Dietary Guidelines Advisory Committee. King J, et al. Dietary Guidelines for Americans 2005. January 12, 2005. <http://www.health.gov/dietaryguidelines/dga2005/document/pdf/ExecutiveSummary.pdf>

⁸ American Heart Association Nutrition Committee. Lichtenstein, A. et al. Diet and lifestyle recommendations revision 2006: a scientific statement from the American Heart Association Nutrition Committee. *Circulation*. 2006 July 4;114(1)e27.

⁹ US Food and Drug Administration. Trans Fatty Acids in Nutrition Labeling, Nutrient Content Claims, and Health Claims. Published July 11, 2003 Accessed October 15, 2004 a 5 A.D. October 20; URL:

<http://www.cfsan.fda.gov/~dms/qatrans2.html#s2q1>

¹⁰ *FDA Consumer magazine*. [September-October 2003 Issue](#). Pub No. FDA04-1329C. URL:

http://www.fda.gov/fdac/features/2003/503_fats.html

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- ¹¹ FDA Consumer magazine. [September-October 2003 Issue](#). Pub No. FDA04-1329C. URL: http://www.fda.gov/fdac/features/2003/503_fats.html
- ¹² Report of the Trans Fat Task Force submitted to the Minister of Health. TRANSforming the Food Supply. June 2006. URL: http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/nutrition/tf-gt_rep-rap_e.pdf
- ¹³ Mozaffarian D. Katan MB. Ascherio A. Stampfer MJ. Willett WC. Trans Fatty Acids and Cardiovascular Disease. *New England Journal of Medicine*. April 13, 2006. 354;15:1601-13.
- ¹⁴ Stender S. et al. *A Trans World Journey*. *Atherosclerosis Supplements* 7 (2006) 47-52.
- ¹⁵ Staff Reporter. Cargill Expands Trans-fat Lowering Soybean Production. FoodNavigator-USA.com. February 2, 2006. URL: <http://www.foodnavigator-usa.com/news/ng.asp?id=65561-cargill-monsanto-vistive>
- ¹⁶ Monsanto Press Release. *Monsanto Research Platform Focuses on Reducing Unhealthy Fats in Soybean Oil*. URL: <http://www.monsanto.com/monsanto/layout/media/03/10-27-03.asp>
- ¹⁷ National Restaurant Association (NRA). "Industry at a Glance." 2005.
- ¹⁸ Guthrie JF. et al. Role of Food Prepared Away from Home in the American Diet, 1977-78 Versus 1994-96: Changes and Consequences. *Society for Nutrition Education* 2002; 34:140-150.
- ¹⁹ Staff Reporter. Cargill Expands Trans-fat Lowering Soybean Production. FoodNavigator-USA.com. February 2, 2006. URL: <http://www.foodnavigator-usa.com/news/ng.asp?id=65561-cargill-monsanto-vistive>
- ²⁰ Guthrie JF, Derby BM, Levy AS. What people know and do not know about nutrition. In: Frazao E, ed. *America's Eating Habits: Changes and Consequences*. Washington, DC: Economic Research Service, United States Dept of Agriculture; 1999. Agriculture Information Bulletin No. 750:243-280.
- ²¹ Panel on Macronutrients, Institute of Medicine. Letter report on dietary reference intakes for trans fatty acids drawn from the Report on dietary reference intakes for energy, carbohydrate, fiber, fat, fatty acids, cholesterol, protein, and amino acids. 2002. Washington, DC, Institute of Medicine.
- ²² US Food and Drug Administration. Trans Fatty Acids in Nutrition Labeling, Nutrient content Claims, and Health Claims (68 Fed. Reg. 41443 (July 11, 2003)) accessed on October 15 at <http://www.cfsan.fda.gov/~lrd/fr03711a.html>

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