

Document Revision

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. Because restaurants provide so much of the caloric intake for NYC residents, safe and healthy dining options are a public health priority. All New York City FSEs and non-retail food processing establishments as defined in §81.03(j) and (p) of the Health Code are inspected and issued permits by the Department. Restaurants serve food with trans fat, which represents a dangerous and entirely preventable health risk to restaurant goers, but because restaurant patrons currently have no practical way to avoid this harmful substance, the Department proposes an amendment to the current law.

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

The Department prevents and controls diseases, including chronic disease, through approaches that address individual behavior or the community environment. An approach that addresses the community environment is restricting FSEs from serving food that contains artificial trans fat, except for food served in the manufacturer’s original sealed package, which will 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.

Researchers claim that heart disease is New York City’s leading cause of death. They show that, in 2004, heart disease killed 23,000 New York City residents, nearly one-third of whom were younger than 75. With scientific studies, researchers demonstrate that heart disease poses a higher risk for individuals who have a higher trans fat intake. They explain that most dietary trans fat is found in partially hydrogenated vegetable oil (“PHVO”), or oil that has been chemically modified. Based on evidence from scientific studies, researchers conservatively estimate that coronary heart disease events, such as heart attacks, can be reduced by 6% if we replace trans fat with currently available heart healthy alternatives, because in the studies they examined how replacing trans fat with currently available heart healthy alternatives will change cholesterol levels. Researchers believe that heart disease can be significantly reduced even if trans fat is replaced primarily by saturated fat, which is an unlikely outcome given the widespread trend to healthier fats by food producers. In other scientific studies where large groups of people are observed over time, researchers have found that coronary heart disease events can be reduced by up to 23% if we replace trans fat with healthy alternatives. Researchers have shown that cardiovascular risk to New York City diners is heightened by the continued presence of PHVO in restaurant foods because those foods contain an estimated one-third of dietary trans fat.

Scientists have determined that dietary trans fat increases the risk of heart disease by elevating LDL (“bad”) cholesterol and lowering HDL (“good”) cholesterol. They suggest that trans fat’s negative effect on “good cholesterol” makes it 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 heart disease.” In their 2005 Dietary Guidelines, the United States Department of Agriculture (“USDA”) recommend that dietary intake of trans fat be “as low as possible” and the American Heart Association issued guidelines in 2006 in which they recommend that trans fat intake be kept below 1% of total energy intake. The FDA passed legislation in January of 2006 in which they require a listing of trans fat content on the nutrition facts labels of packaged foods.

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. Approximately 20% is naturally occurring and is found in small amounts in dairy and meat products from ruminant animals.

Manufacturers produce the artificial trans fat found in PHVO when they add hydrogen 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.

Organizations in several countries have removed the major source of dietary trans fat, found in PHVO, or replaced it with currently available heart healthy alternatives. Legislators in Denmark have recently successfully removed artificial trans fat by limiting industrially produced trans fat content in food to 2% of total calories from fat. The Canadian Trans Fat Task Force has recommended limiting 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. Since the FDA's January 2006 labelling requirement became effective, US manufacturers have extensively marketed "zero grams" trans fat packaged foods, both new products and those already in production. Many existing products were reformulated and are now widely available on supermarket shelves as "zero grams" trans fat, defined by the FDA as <0.5 grams per serving. Denmark's restriction of trans fat "did not appreciably affect the quality, cost or availability of food," according to industry and government representatives cited in a recent *New England Journal of Medicine* article. Clearly, manufacturers can remove artificial trans fat without consumers noticing an effect. Alternatively, manufacturers can replace artificial trans fat with healthier alternatives. Acceptable healthier alternatives to PHVOs include traditional mono and poly unsaturated vegetable oils (e.g., canola, corn, olive, etc.) that have not been hydrogenated and newly developed oils such as those made from specially cultivated varieties of soybeans, safflowers, and sunflowers. These newer trans-fat free oils have long 'fry lives' and other favored characteristics of PHVOs. Healthier fats will be promoted by educational and enforcement efforts. Alternatives to hydrogenated oils will be increased by US manufacturers by expanding production of products to respond to increased demand.