



FACTS

Trans Fat: The “Phantom Fat”

OVERVIEW

Until recently, few Americans had ever heard of “*trans* fat” – found mostly in foods made with partially hydrogenated vegetable oil, like cookies, cakes, or fried foods. This is not surprising. Until January 2006, it was not listed on the “Nutrition Facts” panel for manufactured foods and is still nowhere to be found on fast food or restaurant menus. However, this lack of awareness has serious implications. Half of consumers do not know of the increased health risks associated with this “phantom” fat, including coronary heart disease and diabetes.¹

Researchers have made a definitive link between specific types of dietary fat, including *trans* fat, and cardiovascular disease (CVD). A recent study showed that women with the highest levels of *trans* fat in their blood were three times more likely to develop coronary heart disease (CHD) than those with the lowest levels.² A mere 2% increase in *trans* fat intake can increase the risk of CHD by 23%.¹ In response to this public health threat, there is a growing movement to ban or restrict *trans* fat use in the foods we eat.

TRANS FAT BASICS

Trans fat or *trans* fatty acids arise during the chemical process known as partial hydrogenation of oils. It makes liquid cooking oils into stable semi-solids, such as vegetable shortening, and helps increase shelf life. Partially hydrogenated oils also give foods like baked goods and French fries a desired feel and texture. A small amount of *trans* fats also occurs naturally in some animal foods, such as milk and beef, along with saturated fat.

Ironically, partially hydrogenated oils were once touted as healthy, cheap replacements for animal fats and tropical oils high in saturated fats, such as

butter, lard, and palm oil. But, research has shown that *trans* fat increases the risk of developing CHD, possibly due to:

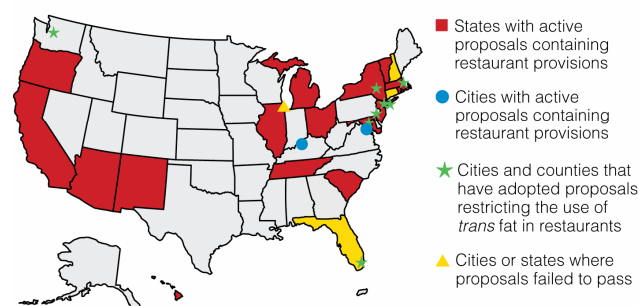
- Negative effects on a person’s LDL (“bad”) and HDL (“good”) cholesterol levels;
- Inflammation and disruption of normal cell function; and
- Interference with the metabolism of other important fats.²

Both saturated and *trans* fats are bad for heart health and should be replaced with mono- or polyunsaturated fat. However, it is difficult to avoid “bad fats” altogether. The AHA recommends that total fats should constitute 25 to 35 percent of total daily calories; saturated fat less than 7 percent of total calories; and *trans* fat less than 1 percent of total calories.³

GETTING THE TRANS FAT OUT

The evidence linking *trans* fat to CVD sparked a public health debate across the U.S. with calls to ban or limit its use in restaurants and school cafeterias. Currently, there are approximately 25 states and local jurisdictions with proposals to reduce *trans* fat in restaurants or schools. There is no similar proposed federal legislation.

States and Localities with *Trans* Fat Proposals for Restaurants — as of 11/27/07



New York City was the first to formally adopt a phase out of *trans* fat in restaurants and has served as a model for others to follow. Its regulation includes:

- maximum serving size level of 0.5g *trans* fat;
- distinction between frying and baking;
- a help center to assist restaurateurs in making the switch to healthier options; and
- plans to evaluate the regulation as well as its impact on CVD.

REAL WORLD CONCERNS

The AHA supports regulatory efforts at local levels to reduce *trans* fat in the food we eat. It applauds such a heart-healthy approach to a major CVD problem. The AHA also emphasizes the importance of timing and flexibility in regulatory efforts to avoid potential unintended consequences.

For example, banning *trans* fat from a restaurant's menu is not like banning smoking in its dining area. Healthier and competitively priced *trans* fat substitutes must be made readily available to the entire food service industry – from the big chains to the corner diner. If the healthier oils are in short supply, restaurants turn to those oils high in saturated fats. Therefore, the AHA proposes a balanced approach that meets public health needs but recognizes complex and practical implementation problems, including:

- Sufficient timeframe for phase-in;
- Regulatory safeguards that provide policy-makers flexibility in implementation; and
- Strong programmatic efforts to assist the restaurant industry in the transition.

ANNOUNCEMENTS FROM SOME RESTAURANTS THAT HAVE REMOVED TRANS FATS:

Ruby Tuesday	Panera Bread
Au Bon Pain	Wendy's
KFC	Taco Bell
Arby's	Chili's
Denny's	Kroger (chicken fryer)
Olive Garden	Red Lobster
Starbucks	Applebee's
Hooters	Carl's Jr. (by Jan. 2008)
Hardee's (by Jan. 2008)	McDonald's (by end 2008)
Burger King (testing solutions)	

SUPPLY AND DEMAND

Trait-enhanced oils, such as low-linolenic soybean oil and high-oleic canola oil, are some of the best available *trans* fat alternatives. But questions are already being raised about supply and demand.

- Under the best circumstances, it will be difficult to produce enough of these oils to replace the 9 billion lbs. of *trans* fat-laden oils used annually.²
- The national supply of healthy trait-enhanced oils is projected to be 3.25 billion lbs. in 2007—far below the 9 billion that would be needed.⁴

This situation is complicated by another factor: new incentives to plant crops for bio-fuels, such as corn for ethanol. Acreage that could have been used for trait-enhanced oil seeds may now be put to such purposes, particularly if the farmer can make a much higher profit by growing commodity soybean and corn for alternative fuels.

The implications are clear. Even as demand rises, supply could decline, resulting in higher prices for healthy oils. Without an adequate and affordable supply of healthy oils, restaurants may be forced to go back to using those rich in saturated fats. If this occurs, any health benefits gained from removing *trans* fat will be significantly undermined. Therefore, the AHA supports efforts both to remove *trans* fats and to provide an adequate and affordable supply of alternative healthy oils.

AHA ADVOCATES FOR TRANS FAT REDUCTION AND LABELING

To help prepare for the increase in demand for *trans* fat-free alternatives, the AHA supports changes to the Farm Bill (H.R.2419) that would allow for commodity quality incentive payments for the production of oilseeds with specialized traits that enhance human health. AHA also supports federal legislation that would require more accurate labeling of *trans* fat content in foods.

1. Mozaffarian D, Katan MB, et. al. Trans fatty acids and cardiovascular disease. *N Engl J Med* 2006; 354:1601-1613.
2. Sun Q, Ma J, Campos H, et. al. A prospective study of trans fatty acids in erythrocytes and risk of coronary heart disease. *Circulation* 2007; 115:1858-1865.
3. Lichtenstein AH, Appel LJ, Brands M, et. al. Diet and lifestyle recommendations revision 2006: a scientific statement from the American Heart Association Nutrition Committee. *Circulation* 2006; 114: 82-96.
4. Eckel RH, Borra S, Lichtenstein AH, Yin-Piazza SY. Understanding the complexity of trans fatty acid reduction in the American diet. American Heart Association Trans Fat Conference 2006. Report of the Trans Fat Planning Group. *Circulation* 2007; 115: 2231-2246.