



Good Food, Good Life

Not all *Trans* fatty acids are equal!

Lausanne, SWITZERLAND 7 March 2008 - The effects of natural and industrially-produced sources of *trans* fatty acids on cardiovascular disease markers in healthy men and women were examined by a multidisciplinary research team from worldwide research institutes (TRANSFACT project). This study shows that *trans* fatty acids derived from natural sources *versus* industrially-produced sources yield different effects on cardiovascular disease (CVD) factors. Furthermore, results revealed that women are more sensitive than men to the effects of certain TFA.

The TRANSFACT study, a collaboration between the French National Institute for Agricultural Research (INRA), Clermont-Ferrand, France, the Nestlé Research Center (NRC), Lausanne, Switzerland and the French Dairy Council (CNIEL), Paris, France, found that natural TFA - from milk, do not have the same impact on CVD risk factors as industrially-produced TFA. Results suggest that the deleterious HDL-C lowering property of TFA is specific to industrially-produced sources. Additionally, the biological responses to TFA were more significant in women than in men; the mechanism underlying these effects warrants further investigation.

Research on *trans* fatty acids (TFA) and their potential effects on human health is of widespread interest to scientists and public health officials. Restrictions on the use of TFA are based on significant scientific evidence that industrially-produced TFA are detrimental to human health. Consumption of these TFA results in decreased levels of “good cholesterol” (HDL-C) and increased levels of “bad cholesterol” (LDL-C), markedly enhancing the risk of CVD.

Interestingly, a similar study was recently performed by researchers at Laval University, Canada, evaluating the consequences of naturally-occurring vs. industrially-produced TFA on LDL and HDL cholesterol levels. Results revealed that consumption of moderate amounts of natural TFA do not alter CVD risk, whereas TFA from industrial sources did elevate LDL-C levels.

These new findings suggest that consumption of TFA from natural sources, even at levels well above current human consumption, does not impact CVD risk. As indicated in the American Journal of Clinical Nutrition editorial by WC. Willett and D. Mozaffarian, *the critical public health question remains - to find healthful ways to reduce intake of industrially-produced TFA*. This comes as no surprise to Nestlé, who has had a policy since 2003 to reduce the industrially-produced TFA content in Nestlé's products.

Nestlé, CNIEL and INRA are independently performing more in-depth studies to better understand the differential effects of *trans* fatty acids and their underlying biological mechanisms, to assist food safety agencies and regulatory authorities in providing recommendations for optimal CVD health.



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Article Reference:

Do Trans Fatty Acid from Industrially-Produced Sources and from Natural Sources Have the Same effect on Cardiovascular Diseases Risk Factors in Healthy Subjects? Results of the *trans Fatty Acids* Collaboration (TRANSFACT) Study.

Web version of the paper at the following link:

<http://www.nutrition.org/media/publications/ajcnMarch6.pdf>

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