Fats & Oils News

Those opposing the tax emphasize it would not apply to animal fats, such as butter, which are produced mainly from EEC sources. Vegetable and marine oils, on the other hand, are derived largely from imported oilseeds or other imported fats and oils.

The tax would immediately narrow the gap between the prices of butter and margarine, perhaps inducing more Europeans to use butter as a table spread and thus help slow the growth of the EEC's butter surplus. European margarine producers trying to retain their share of market might replace some of the tax-liable vegetable oil in their formulations with untaxed animal fats (tallow and lard) in an attempt to maintain the price differential between butter and margarine. This

might mean the EEC would reduce imports of oilseeds and foreign fats and oils.

The tax also would narrow the price gap between the less expensive vegetable oils—soybean, sunflower, rapeseed—often produced from importer raw materials, and more expensive oils, such as olive. Whether a reduced price differential would increase olive oil consumption remains to be seen. The EEC's relatively recent addition of olive-oil-producing nations such as Greece, Italy and Spain has increased the total amount of EEC payments to farmers who grow oil-bearing crops-about 0.60 billion ECU in 1986 and estimated to reach 1.32 billion ECU in 1987.

The tax would create a financial wall. That is what the EEC Commis-

sion (the administrative staff in Brussels) wants. If imports are made more costly, perhaps there will be more use of EEC-produced materials. For non-EEC European nations such as Norway that sell fish oil to EEC member nations, the tax would add almost 100% to the cost of all edible marine oils and fats, according to the estimate of the European consumers' union office in Brussels. While the EEC estimates the "average" margarine price would rise about 22%, the consumers' group notes the price increase for low-cost margarines would range from 15% in Italy to 62% in The Netherlands.

The American Soybean Association (ASA) sees a direct threat to U.S. soybean growers: "The over-all result would be a decline in EC

Suggestions for modifying diet

Two or three meals of fresh fish each week per person could help reduce coronary heart disease in developed nations, according to remarks by William Connor, noted researcher in lipid metabolism, in a lecture on "Fish Oils and Omega-3 Fatty Acids in the Prevention of Heart Disease" at the University of Illinois in April.

Connor also recommended that persons eating traditional Western diets reduce fat intake to 20-25% of calories (from the present 40%), increase fiber and complex carbohydrate in the diet and consider "meat as a condiment."

"Fish oil capsules won't prevent heart disease," he said. Reporting the amounts of omega-3 fatty acids in 3.5-ounce servings of various foodstuffs, Conner noted sardines provide 3.3 grams of omega-3, salmon provides 2.0 grams, shellfish and white-fish provide 0.9 grams and tuna and fish oil capsules provide 0.3 grams.

Conner's interest in fish oils began with reports in the early 1970s that researchers had confirmed explorers' reports of relatively little coronary heart disease among Eskimo populations compared to Western cultures. That work by Dyerberg and Bang prompted Connor to put volunteers on various types of diets, including one that required eating one pound

of fresh Chinook salmon a day for four weeks. The first week the volunteers liked the diet, but by the fourth week, the enthusiasm for fresh salmon had faded, he noted. Other volunteers ate a traditional diet high in saturated animal fat or one high in vegetable oil.

Results from the fish-rich diet compared to others showed reduced serum cholesterol and blood triglyceride levels and reduced platelet aggregation. Volunteers on the vegetable oil-rich diet showed reduced cholesterol, but not reduced triglyceride levels, he noted. The study provided material for Connor's lecture at the 1981 AOCS world conference on Dietary Fats and Health. The fish oil diet reduces production of very low density lipoproteins (VLDL) in the liver, he said, and may increase the removal of existing VLDL from the liver. This is significant because VLDL give rise to the low density lipoprotein that carries potentially atherogenic cholesterol to arteries. Conner noted that liver enlargement declined among persons on the fish oil diet, whereas the vegetable oil diet led to enlarged liver.

Connor said that diseases of nutritional deficiency are now rare in Western civilization, but diseases of overconsumption—coronary heart disease, atherosclerosis and stroke—are virtually epidemic. The omega-3 fatty acids appear to affect prostaglandin and leukotriene production so as to reduce platelet aggregation. They also inhibit VLDL and LDL consumption, are hypolipidemic, provide certain immunological benefits that Connor says may reduce incidence of cancer, and provide essential fatty acids.

Connor also discussed his proposed cholesterol-saturated fat index rating system. The terms researchers use to scientifically measure cholesterol and fat may be too complex for the general public, he commented; he has devised a simpler scale to combine what he regards as the two major dietary risk factors for coronary heart disease. On Connor's scale, the lower the index rating, the more beneficial the foodstuff. Whitefish rates a 3.5 on the CSI scale, he said, while poultry and shellfish are a 7. Other examples are meat with 10% fat, a 10; red meat with 25% fat, an 18; cheese, 25; two egg yolks, about 30; and liver, near 35.

Persons interested in further material and Connor's specific suggestions for modifying diet may wish to read *The New American Diet*, written by Connor and his wife, Sonja.