EEC: Fats and oils tax debate

European Economic Community (EEC) agricultural ministers faced a crucial decision this year: whether to approve a tax on vegetable and marine fats and oils of about US$375 per ton, to take effect in July.

If the ministers approved the tax, it meant a major trade battle, if not trade war, with the United States and Third World nations, for whom the EEC is a major market.

If the ministers did not approve the tax, it meant an increasing budget deficit for the EEC's Common Agriculture Policy, the major expenditure in the EEC overall budget.

The EC Commission—the administrative branch of the EEC, based in Brussels—proposed the tax to help finance subsidies to European farmers who grow oilseed crops. The EEC seeks to encourage farmers to grow oilseeds instead of grains because the EEC already grows more grain than it consumes; thus far it does not produce more oilseeds than it consumes. Total support payments for grain surpluses surpass the oilseed support program, although on a per hectare basis, the oilseed supports cost more than those for wheat and barley.

In 1976, the EEC's Common Agriculture Policy (CAP) cost about 4.7 billion European Currency Units (ECU), with about 104 million ECU spent to subsidize oilseed production. In 1987, the CAP may cost 23 billion ECU, with 1.7-2 billion ECU for oilseed subsidies, according to estimates made the first part of the year. By early April, the EEC Commission was estimating oilseed subsidy costs at 2.75 billion ECU for 1987. (The ECU is an EEC arbitrary monetary designation, with one ECU roughly equal to one U.S. dollar; early in 1987, it was slightly higher in value than the dollar.) The EEC subsidy system provides the difference between a specified upper price level and world market prices. When world market prices fall as they have the past year, the difference widens and the cost to the EEC increases. As world market prices are based on the U.S. dollar, the declining dollar in early 1987 also meant an increase in EEC costs. The oilseed cost estimates do not include costs for olive oil support programs.

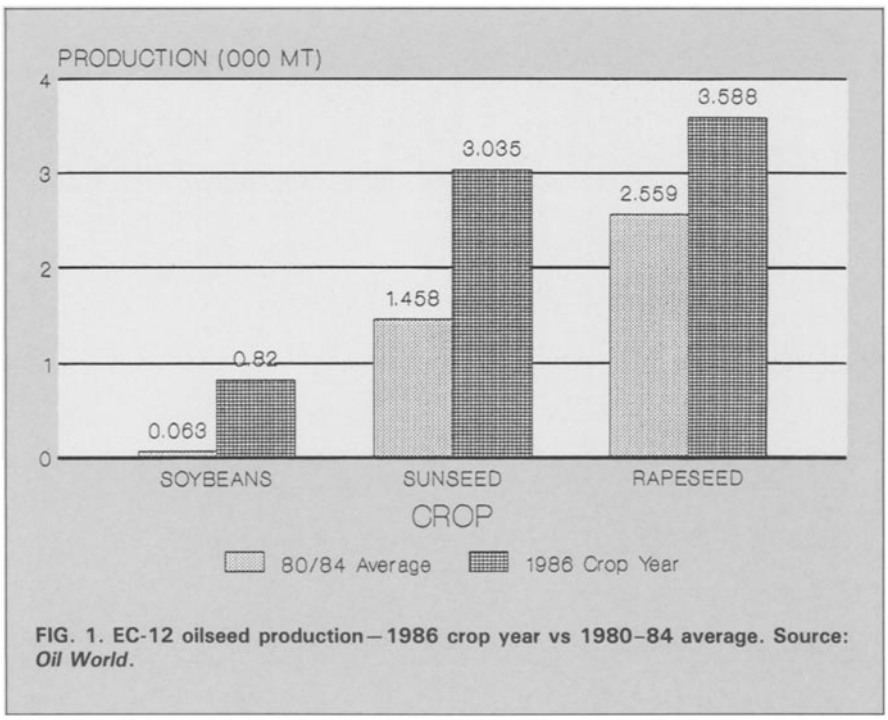

FIG. 1. EC-12 oilseed production—1986 crop year vs 1980-84 average. Source: *Oil World*.

About 25 years ago, the EEC was preoccupied with grain and dairy subsidies. No one visualized how much oilseed consumption would increase. When the U.S. offered in the Kennedy Round of General Agreement on Tariffs and Trade (GATT) negotiations to pay import duties on grain and dairy products if the EEC would permit duty-free entry of oilseeds and certain oilseed products, the EEC readily agreed. At the time, Western Europe was importing about 2.2 million metric tons (MT) of soybeans and 900,000 MT of soybean meal annually. Soybean imports in recent years have topped 16 million MT; soy meal imports have been over six million MT.

Since the EEC cannot now impose an import duty on oilseeds without violating its treaty agreements, the fats and oils tax has been proposed. Technically it is not an import tax; the fee would be levied on all vegetable and marine oils processed in the EEC, whether the raw material was produced within Europe or abroad. As a practical matter, almost everyone acknowledges the tax's primary purpose is to reduce oilseed imports.

The packaging of the 1987 tax proposal into the general EEC farm support program and its depiction as a "price stabilization" scheme was a new wrinkle this year. In the past, the tax has surfaced as an independent consideration, as a new source of EEC revenue—in effect, a new tax. New sources of revenue must be approved by the national government of every EEC member; such approval for the fats and oils tax would be impossible.

This year, the tax is described not as a new source of revenue, but as a way to offset further deficiencies and to stabilize prices. The tax proposal has been written into the general CAP agricultural program, which requires endorsement only by the Agricultural Council of Ministers. The EEC Commission makes proposals for approval or rejection by the ministers. The CAP program must be approved by more than a

simple majority. The 12 ministers cast weighted ballots, with those from larger nations carrying more weight. The United Kingdom, France, Germany and Italy cast 10 votes each; Spain has eight; the Netherlands, Belgium, Greece and Portugal each cast five; Denmark and Ireland cast three votes each; and Luxembourg casts two votes, for a total of 76. Fifty-four votes are required for approval; 23 votes against would constitute a "blocking minority."

The split is generally along north-south lines, with northern Europe opposed to the tax and southern Europe supporting it. Southern EEC members Spain, Greece and Italy produce olive oil, which competes with oilseed-origin oils. France also favors the tax, along with Ireland, which has been described as "southern in everything except geography." Northern European nations in opposition tend to be those where oilseeds are currently imported duty-free and crushed to produce oil and meal.

The five nations regarded in March as likely to vote against the tax were Germany, the United Kingdom, the Netherlands, Portugal and Denmark, for a total of 33 votes. Countries expected as of March to support the tax were France, Italy, Spain, Belgium, Greece, Ireland, and Luxembourg, for a total of 43 votes—11 shy of the necessary 54.

The big question mark is Germany. U.K. opposition is regarded as certain; Denmark generally takes a "state's rights" position, opposing any measures that would foster growth in EEC power. If the tax is not approved and the EEC must reduce agricultural payments to dairy and grain farmers, it could mean political unrest among farmers in nations where the EEC payments represent a major source of agricultural income. If Germany were to favor the tax, the measure would be only one vote shy of passing, and the Netherlands or Portugal might switch as well.

European observers believe, however, that the German cabinet has voted to oppose the tax and has instructed its agricultural minister accordingly.

If the tax is not approved, EEC officials face a dilemma. EEC revenues come from the customs duties collected on goods entering the Common Market and 1.4% of the value-added tax (VAT) collected by the member nations. The VAT revenue source could not be increased for at least a year, as approval by every national government would be required. CAP subsidies could be reduced, but that would be politically risky. Veteran European observers note that when similar budget crunches have developed previously, the EEC administrators have found a way out. At times funds have been borrowed from national governments; sometimes the loans were repayable, other times they were "nonrefundable." In some cases, administrators reduce the current year's expenditures by postponing payments until after the start of a new fiscal year.

The tax, if approved, is scheduled to take effect in July; estimated revenue for the first year is about 2.02 billion ECU (approximately $2.75 billion). That means the EEC could afford its current oilseed subsidies, designed to divert some acreage into oilseeds that otherwise would be planted in traditional grain crops that are in surplus in the EEC.

How have European consumers reacted to the proposed tax? There has been some opposition, but nothing to indicate the tax is among their major concerns. One observer notes that Europeans tend to regard "cooking oil as a utensil, rather than a food." Another notes that a liter of cooking oil costs less than a

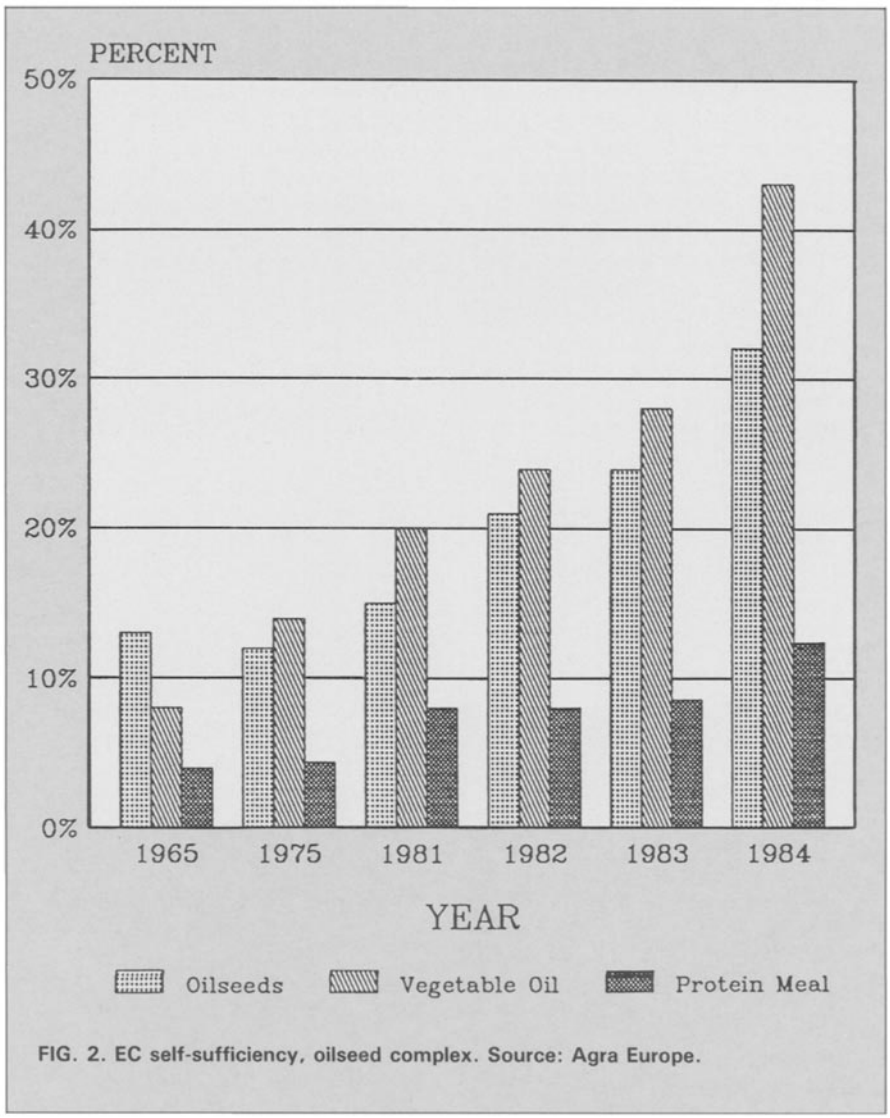

FIG. 2. EC self-sufficiency, oilseed complex. Source: Agra Europe.

TABLE 1

European Economic Community Per Capita Annual Fat Consumption and Potential Effects of Tax (Consumption in kg/yr)

Product	Belgium/ Luxembourg	Denmark	Germany	France	Ireland	Italy	Netherlands	England	Greece	Average
Butter[a]	7.0	8.0	5.8	8.0	9.5	1.8	3.2	4.5	.7	5.0
Margarine[a]	10.3	14.4	6.4	3.1	3.8	1.1	10.8	6.3	1.1	4.9
Other vegetable/marine fats and oils	5.8	4.1	7.0	12.4	10.3	20.8	13.0	9.9	20.5	12.4
Total taxable fat/oil consumption per year	16.1	18.5	13.4	15.5	14.1	21.9	23.8	16.2	21.6	17.3
Estimated annual tax per capita in ECU	5.31	6.11	4.42	5.12	4.65	7.23	7.85	5.35	7.46	5.71

Data from the EEC Seed Crushers' and Oil Processors' Federation (FEDIOL).
[a]On basis of fat content.

newspaper in Europe, and thus the prospect of a 30% or 50% price rise hasn't left consumers worrying about their economic well-being.

Some persons are concerned about the potential effect on European diets. According to the European bureau of consumers' unions in Brussels, "The tax would discriminate in favor of those fats which nutritionists are advising consumers to reduce in their diets." This is because the tax would not affect animal fats—butter, tallow and lard—and it would make animal fat-based margarine relatively cheaper. The consumers group also says the tax may encourage food processors to use animal fats, rather than vegetable and marine oils, in restaurant and institutional food service, as well as snack foods (Table 1).

Appearing on German television recently, a former EEC agriculture official from The Netherlands noted that while the EEC carefully built barriers to cereal grains and dairy products in early GATT negotiations, it failed to build a dam against oilseeds. Now the EEC is trying to find a way to push back the sea of oilseed imports—much as the Dutch have worked to reclaim land from the sea.

Tax opposition

The EEC Commission's decision to endorse the tax was somewhat akin to raising a lightning rod in the midst of a thunderstorm. World agricultural trade already was somewhat contentious, because production of major internationally traded commodities has exceeded market demand in recent years. Virtually every nation—from the relatively small developing nations to mega-traders such as the United States—objected.

At the Intergovernmental Group Meeting on Oilseeds, Oil and Fats in Rome during February, almost every non-EEC speaker on the topic opposed the tax. "Delegate after delegate, from developed as well as developing countries, from producing and consuming countries of vegetable oils joined together to express their objection to the tax," said *The Cocomunity,* newsletter for Asian and Pacific coconut-producing nations. The newsletter for the International Federation of Margarine Associations noted, "The EC Oils and Fats Industry, together with the whole European Food and Drink Industry, the European Consumers Associations, large numbers of third [world] countries, including Lome convention countries, USA, Argentina, Malaysia, etc., as well as other parties have fiercely protested with the EC authorities and with member states' governments again the proposal."

"This tax means the virtual demise of oilseed crops of critical importance to the developing countries," one delegate said, according to a report in the Feb. 27 *Financial Times.*

Computing the tax

The proposed EEC fats and oils tax would be computed by determining the difference between the price of soybean oil during a 1981–85 base period (approximately 700 ECU/metric ton [MT]) and the current average price of soybean oil.

For 1987 and 1988, the "current average price" to be used was specified as the 1986 average price, 370 ECU/MT. The difference is 330 ECU/MT.

After 1988, the tax rate would be set annually by subtracting the previous year's average soybean oil price from the 1981–85 base figure of 700 ECU/MT. The tax would not be assessed in Spain or Portugal until 1991.

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 Commission (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 whitefish 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.

imports of soybeans. Because of the tax, EC utilization of soybean oil would decline, resulting in a reduction in the value of the soybean oil component of soybeans and a likely rise in the price of the soybean meal component of soybeans. This would, in turn, result in soybean meal becoming relatively less competitive in EC livestock and poultry feed rations."

ASA says the world market price for rapeseed is about $125 a metric ton (MT), but EEC farmers receive about $400/MT; for sunflower, the world price is slightly below $200/MT, while the EEC producer price is above $450/MT; and the world price for soybeans is about $200/MT, but EEC producers received almost $500/MT. While Italian soybean growers are receiving $16 a bushel for their soybeans, U.S. producers received about $4 a bushel in 1986.

FDA to review P&G's olestra

The Procter & Gamble Co. (P&G) May 7 announced it has petitioned the U.S. Food and Drug Administration (FDA) to seek approval of a new calorie-free fat replacement for use in everyday foods.

The proposed generic name of this ingredient is olestra, formerly referred to as sucrose polyester.

The petition requests FDA approval to use olestra in shortenings, oils and salted snacks. Products containing olestra cannot be marketed until FDA reviews and approves its use. P&G said it cannot predict how long FDA's review process might take.

According to P&G, olestra provides the rich taste of full-calorie fats and oils but is calorie-free because it is not absorbed by the body. It also has the same cooking properties as fats and oils and is made from natural edible oils and sugar. It does not contain any cholesterol.

The petition is the result of more than 20 years of testing and analysis of the ingredient. FDA will extensively review the studies, conducted by both P&G and leading independent researchers whose results, P&G says, confirm its safety.

If approved, olestra would be an important development, allowing consumers to enjoy some of the foods they want without the calories.

What's next?
A tax on oil covers one major component of imported oilseeds that compete with EEC-grown oilseeds. If the fats and oils tax is successfully implemented, many observers expect a protein tax proposal to follow soon thereafter. That would construct a financial wall around the EEC covering both the oil and protein content of imported oilseeds.

Calgene project

Calgene Inc. has entered into a funded multiyear product development agreement with Nippon Steel Corp., under which Calgene will genetically engineer a novel specialty vegetable oil.

Citing the increasingly competitive nature of the biotechnology industry, both Calgene and Nippon Steel declined to name the target crop or potential use of the oil. Nippon Steel will have exclusive distribution rights in the Pacific Basin while Calgene will retain exclusive North American marketing and production rights.

The agreement closely followed Calgene's announcement that it had successfully demonstrated seed-specific gene expression in rapeseed. Calgene also developed the first successful transformation/regeneration of rapeseed and the first cloning of a fatty acid biosynthesis gene, acyl carrier protein.

Hershey plan

Hershey Foods Corp. and Nabisco Brands Inc. have announced plans for Hershey's wholly owned subsidiary, Hershey Canada Inc., to acquire the assets and trademark rights of Nabisco Brands Ltd.'s Canadian confectionery and snack nut businesses.

Terms of the transaction, expected to be completed by June 30, 1987, were not disclosed.

The Canadian confectionery and snack nut businesses include bar candy sold under the brands Oh Henry! and Lowney, hard roll candy sold under the brand names Life Savers and Breath Savers, peanuts and other nuts sold under the brand name Planter's, chocolate chips sold under the brand Chipits, boxed chocolates sold under the Moirs brand name, and gum and chewy candy sold under the CareFree and Bubble Yum brands. In 1986, these businesses had sales totaling approximately 185 million Canadian dollars.

Coconut project

The United Nations Industrial Development Organization (UNIDO) has commissioned the Tropical Development Research Institute (TDRI) to construct a small-scale unit for extracting coconut oil from copra in the Cook Islands.

The system includes a knife mill for chopping the copra, seed cooker/conditioner, oil expeller and filter press. Coconut oil produced will be used for edible purposes and for soap making, while the cake will be used in animal feed, according to a report in *The Cocomunity* newsletter.

Plant expansion

Pan-Century Edible Oils Sdn Bhd, Malaysia's largest palm oil refinery, will expand operations and also undertake palm kernel oil refining, according to *The Cocomunity* newsletter.

The new palm kernel oil refinery will be established in the Pasir Gudang industrial area in Johore.

Currently, the company exports a range of fractionated palm oil products to India, Pakistan, the U.S. and several other Western countries.

Plant closings

Ag Processing Inc. (AGP) of Omaha, Nebraska, has closed its soybean processing plant at Van Buren, Arkansas, and has announced dismantling of two other soybean processing plants.

James W. Lindsay, general manager and chief executive officer, said AGP was dismantling a soybean processing plant at Fort Dodge, Iowa, and the original soybean processing plant, with a capacity to handle 50,000 bushels a day, at Eagle Grove, Iowa. Both plants had been previously shut down. The new plant built at Eagle Grove during the 1980–82 expansion is not affected and will continue to operate.

The Van Buren closing and the dismantling of the two other plants reduces AGP's daily processing capacity by 100,000 bushels, approximately 22% of the company's processing capacity.

Excess capacity in the U.S. soybean processing industry and increasing processing competition in other parts of the world were factors in the closings.

Henkel sells

Henkel KGaA has sold its refining and processing plant Noblee & Thoerl in Hamburg-Harburg, West Germany, to Oelmuehle Hamburg AG, according to *Oil World.*

Noblee & Thoerl, founded 132 years ago, reached a turnover of 161 million deutsche marks, with a staff of approximately 300, in 1986. The facility produces fully refined, hydrogenated and fractionated oils as well as shortenings.

Toxic oil trial

Thirty-eight persons went on trial during late March in Madrid, Spain, in connection with the 1981 distribution of adulterated edible oil in Spain.

Approximately 600 persons died after consuming the oil, and more than 25,000 were treated. Observers estimate the trial will last six months or more, with 2,500 witnesses to testify.

Authorities are not sure of the precise processing conditions of the oil sold door to door in Madrid and provinces northwest of Madrid. Also, no one has pinpointed the etiology of the disease. The oil was represented as being olive oil, but later analysis showed it was a mixture of several oils.

Per capita cost

U.S. per capita expenditures for fats and oils should rise by 13.6% between 1980 and the year 2005, according to a report released by the U.S. Department of Agriculture.

All food expenditures are expected to rise by 22.7%, the report said. USDA admitted the projections are very tentative, but indicate what would happen if 1980 consumption patterns remained constant among various economic and cultural groups to the year 2005. The report is included in the April 1987 issue of USDA's *Agricultural Outlook.*

Meanwhile, in Great Britain, the latest National Food Survey report released by the Ministry of Agriculture showed butter consumption dropped 12% in 1986, compared to 1985, while consumers bought more margarine and other fats.

Lipase report

A new report, "Lipases: Production and Use," analyzing the technology and economics of lipase production and use in the chemical industry has been prepared by Chem Systems Inc.

The report looks specifically at cocoa butter, fatty acids and l-menthol, chemicals representative of the specialty, commodity and fine chemicals markets producible by lipase-catalyzed processing.

According to Chem Systems, intensive research and development efforts are underway for a variety of applications for specialty chemicals production via lipases. These include the hydrolysis of oils and fats for better color and odor in the production of soaps, partial hydrolysis and/or esterification to produce specialty monoglycerides, interesterification of fats and oils to produce valuable and novel triglyceride mixtures, stereospecific esterification to resolve dl-enantiomers and specialty polymerizations.

Perhaps the most advanced technology for producing a cocoa butter equivalent from inexpensive raw materials using lipases is being developed at Unilever, where a semicommercial-scale plant is in operation, according to the report. The study analyzes the concept of producing 50 million pounds of cocoa butter equivalent a year. The resulting price, it reported, is about half the cost of natural cocoa butter.

In addition, a conceptual process for lipase-catalyzed production of 100 million pounds per year of full-range coconut fatty acids was developed, and the economics compared with conventional Colgate splitting. The study showed that conventional fat splitting seems to be more efficient and economical.

The study also analyzed results of racemic mixtures of dl-menthol in the area of lipase stereoselectivity, and concluded that a lipase-based process seemed superior to conventional crystallization technology.

For more information on the study, contact R.L. Mednick, project manager, or S.J. Barer, director, of Process Evaluation/Research Planning Program, Chem Systems Inc., 303 S. Broadway, Tarrytown, New York 10591.

Cottonseed oil

A consumer awareness effort promoting the healthful aspects of cottonseed oil has been launched by the National Cottonseed Products Association (NCPA).

In April, NCPA distributed copies of a pamphlet, "Cottonseed Oil: One of the Healthful Domestic Vegetable Oils," to its members, who were encouraged to channel them to doctors, grocers, pharmacists and friends. According to Lynn Jones, NCPA's research director, NCPA originally ordered 5,000 copies for distribution but then ordered an additional 25,000 due to members' demand.

The NCPA and other U.S. oilseed trade groups this year are actively undertaking campaigns to promote the consumption of domestically produced vegetable oils high in polyunsaturates.

Retirements

DEAN BREDESON

AOCS member Dean Bredeson, vice-president of the Process Machinery Division at the French Oil Mill Machinery Co., retired March 31 after more than 30 years with the company. Bredeson had been involved

Dean Bredeson

with the oilseed processing industry since 1945 and with dewatering and drying machinery for polymers since 1959.

After serving in the U.S. Army Air Force in World War II, he was a superintendent and plant manager at Cargill Inc. plants at Savage, Minnesota, and Philadelphia, Pennsylvania, for eight years. He then represented an oil mill machinery company in Fort Worth, Texas, for four years. He began working out of Memphis, Tennessee, for French Oil in 1956 as manager of sales for southern states. In this capacity, he was involved with the sale, erection and start-up of many screw press and solvent extraction plants for cottonseed and soybeans throughout the South. He has helped modify screw presses and cookers for rendering and has designed and sold many complete rendering and poultry by-products plants in the southern states. He also was instrumental in developing and selling large-size screw presses for dewatering and drying synthetic rubber along the Gulf Coast and in such cities as Borger, Texas, and Louisville, Kentucky.

In 1965, Bredeson was named vice-president of French Oil and moved to Piqua, Ohio. There he began 21 years of extensive foreign travel, during which he was instrumental in the sale and installation of plants and machinery in some 38 countries. He has been a speaker at various Oilseed Superintendents and American Oil Chemists' Society meetings and short courses. He served on the steering and program committees for the AOCS world conferences on Vegetable Oilseed and Vegetable Oil Processing held in the Netherlands, as well as being a chairman and speaker. He holds 11 patents on screw presses, cookers and rubber dewatering/drying process machinery.

Bredeson and his wife, Mary, will maintain their residence at 1345 Stratford Dr., Piqua, Ohio 45356, and plan extensive travel in the U.S. and Canada in their motor home. He also expects to keep up contact with many of his friends in the U.S. and in the countries he has visited, to keep in contact with the industry to which he devoted his career.

Bredeson joined AOCS in 1955.

STUART A. REED

AOCS member Stuart A. Reed has retired as deputy chairman of Marfleet Refining Co., Hull, England, after 37 years with the company.

He began his career at Marfleet in 1950 as a laboratory technician. Promoted to technical manager in the 1960s, he was responsible for research and development that helped the organization expand, increasing cod liver oil production for home and export consumption, introducing mineral and vitamin supplements and producing animal fats for animal feeds and bulk oil refining. He became managing director and chief executive in 1975 and had been deputy chairman for four years.

Reed's research centered on the chemistry of fish oils, including work to produce a standardized product with a high and uniform eicosapentaenoic acid (EPA) level. The company, originally specializing in processing and marketing cod liver oil, now is known for its Seven Seas brands of fish oils and vitamin and mineral supplements.

Reed, who joined AOCS in 1985, is a Fellow of the Royal Society of Chemists.

News briefs

NYK, a leading Japanese shipping company, has reached an agreement with **Stolt Tankers and Terminals (Holdings) S.A.**, under which NYK will take a 14% minority interest in Stolt-Nielsen.

Varian Associates Inc. and **Siemens** have completed a plan to form a joint venture to make and market nuclear magnetic resonance imaging spectroscopy systems. The new company, **Spectroscopy Imaging Systems Corp.**, is in Fremont, California.

AOCS member **Norman J. Smallwood** has been named vice-president of manufacturing for **Zapata Haynie Corp.** As such, he is responsible for the operation of the company's five menhaden processing plants, 56 fishing vessels and 23 spotter aircraft. Zapata Haynie's processing facilities are in Abbeville, Cameron and Dulac, Louisiana; Moss Point, Mississippi; and Reedville, Virginia.

The African Groundnut Council, representing six African nations, closed its European office in Brussels, Belgium, effective May 31, 1987, and has transferred its operations to Lagos, Nigeria. The council's mailing address is PO Box 3025, Lagos, Nigeria, telephone 880 982, telex 21366. The member countries include Gambia, Mali, Niger, Nigeria, Senegal and Sudan.

Eugene P. Kennedy of the Department of Biochemistry, Harvard Medical School, Boston, Massachusetts, has been awarded the 1986 Heinrich Wieland Prize for work on the metabolism and function of membrane lipids. He received the award in a ceremony held in Munich in late 1986. His award address was published in *Klinische Wochenschrift 65*:205 (1987).

Jens-Peter Schaefer, deputy member of the **Metallgesellschaft AG** board of management since Jan. 1, 1987, succeeded **Dietrich Ertl** as president of **Lurgi GmbH** on April 1, 1987.

Lonza Inc. has named AOCS member **Joseph E. Nolan** sales manager of food chemicals for its specialty chemical division. **William Raleigh**, formerly product manager of carbohydrates, was appointed business manager of food chemicals.

Michael duBois, former vice-president of sales and marketing in **Firmenich Inc.'s** flavor division, has

been appointed vice-president of the company's U.S. flavor division. In other Firmenich changes, **G.MacDonald Birtwistle** is now director of sales and marketing in the flavor division, while **D.Richard Ensor** is slated to become a member of the general management of the flavor division group at the Geneva, Switzerland, headquarters.

Nabisco Brands USA has named **Norman Jungmann** vice-president of operations for its Planters+Life Savers division.

Campbell Soup Co. has appointed **Thomas J. Grabowski** vice-president of operations logistics for its **Campbell USA** division.

Sungene Technologies Corp. has appointed **Craig R. Cowley** vice-president of plant breeding. Sungene, headquartered in Palo Alto, California, specializes in the commercial application of plant biotechnology for the seed, food, chemical and pharmaceutical industries.

Jose Romero has been named new chairman of the **Philippine Coconut Authority**, to succeed **Oscar Santos**, who resigned earlier this year.

The International Olive Oil Council has announced that agreement has been reached on updating the international trade standard applying to olive oils and olive-pomace oils. The agreement was forwarded to member governments for adoption in domestic legislation.

Unilever has announced plans to divest itself of its **Stauffer** chemicals business, acquired when it purchased Chesebrough-Pond's last year.

Buitoni, the Italian pasta and chocolates group controlled by Carlo de Benedetti, has announced it is buying majority control of **Olio Sasso**, one of Italy's leading manufacturers of olive oil.

Obituaries

MAHINDER K. BAHL

AOCS has been informed of the death of Mahinder K. Bahl, who had been senior research physicist at Colgate-Palmolive Co. in Piscataway, New Jersey.

Bahl, born Aug. 1, 1944, earned his doctorate in physics from the University of Delhi, India, in 1972. His research area was X-ray spectroscopy. He served as a research associate at Northwestern University in 1979 and a research physicist at the University of Illinois in 1980. He was hired by Colgate-Palmolive in 1981. He joined AOCS in 1983.

VIRGIL F. GREEN

Virgil F. Green, an emeritus member of AOCS who joined the society in 1942, died Jan. 17, 1987. Green lived in Cincinnati, Ohio, and worked for many years for Procter & Gamble Co.

He earned his B.S. in chemical engineering from Purdue University in 1929. At the time he joined AOCS, he was a chemical engineer with P&G in Ivorydale, Ohio.

JOHN A. MATTEI

AOCS has been informed of the death of John A. Mattei, who served as executive director of the Almond Research Center for the California Almond Growers Exchange, Sacramento, California.

Mattei joined AOCS in 1963 when he was director of quality control and product development for the California Almond Growers Exchange. He earned a B.S. in 1952 from the University of Connecticut and an M.S. in 1953 from the University of California-Berkeley. Before joining the California Almond Growers Exchange, he worked for the Woodruff Seed Co. for five years and Morton Chemical Co. for a year.

SAVINAY S. PATEL

Savinay S. Patel, a member of AOCS since 1972, died March 20, 1987. At the time of his death, he was manager of oils technology support for Frito Lay Inc., Plano, Texas.

Patel earned his masters of science and doctorate from Cornell University, Ithaca, New York. He did graduate teaching and research at Cornell from 1961 to 1968, conducted consulting assignments during 1969-70 and became manager of the research and development