



AOCS
World
Conference
on

Oilseed and Edible Oil Processing

Exposition to accompany world conference

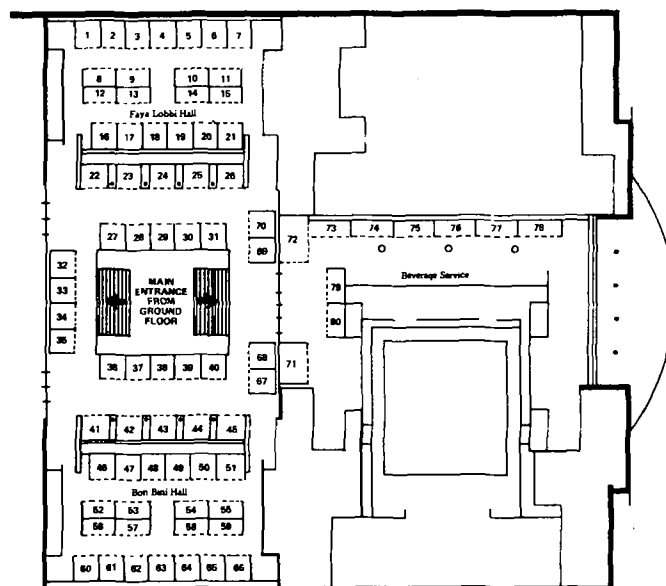
Suppliers to the fats and oils industry worldwide have begun to reserve space for the exposition that will accompany the World Conference on Oilseed and Edible Oil Processing to be held Oct. 3-8, 1982, in The Hague.

The exposition provides an opportunity for registrants to see what these suppliers regard as the latest, most important new developments the suppliers provide. The array of exhibitors will include firms that provide heavy equipment and machinery through engineering firms as well as producers and processors of chemicals and other supplies.

Firms participating in the program have a chance to display their products and services before what will be the year's most concentrated, relatively high level gathering of edible fats and oils industry representatives.

The exposition will open on Sunday, Oct. 3, at 2 p.m. and remain open through 6 p.m. It will be open Monday, Oct. 4; Tuesday, Oct. 5; and Thursday, Oct. 7, from 10 a.m. to 6 p.m. daily.

The accompanying diagram shows the floor plan for the exhibit. Firms interested in arranging to exhibit should contact Pat Graham or Joan Dixon at AOCS, 508 S. Sixth St., Champaign, IL 61820.



World conference to accept volunteer papers

Program details for the 1982 World Conference on Edible Oilseed and Oil Processing are being completed by the program committee. Plenary session subjects and speakers have been designated by the committee to provide a comprehensive program treating all aspects of the industry's technology. An outstanding group of invited speakers has been selected and most have already accepted.

These plenary session speakers will endeavor to cover all pertinent work in their subject area and will be soliciting the help and advice of other experts in the field to meet this objective.

The program committee expects to receive requests from

other authors who have items of potential interest to the conference which have not been previously published. The committee plans to provide time in the program for abbreviated presentations of such subjects which fit into the general objectives of the conference.

Authors desiring to submit papers should request a copy of the Guidelines for Volunteer Papers from the program chairman (N.H. Witte, Central Soya Co., Inc., 1300 Fort Wayne National Bank Bldg., PO Box 1400, Fort Wayne, IN 46801-1400). Abstracts must be submitted to the program chairman by June 1982. □

800 attend sunflower meeting

The recently formed National Sunflower Association, a commodity producer organization, held its first meeting in Bismarck, North Dakota, this past January with great enthusiasm among attendees for the crop, but also with signs the infant U.S. sunflower processing industry faces some rough times during the next few years.

The major unanswered questions are (1) will farmers produce enough sunflower to keep the new large processing facilities operating efficiently and (2) if there is enough sunflower, what will be done with all the oil and meal?

■ About 800 producers, processors and industry suppliers were told processors will need between 1.0 million and 1.5 million tons of seed from the 1982 crop. The lower estimate came from Cargill's Allan Housch; the higher estimate from Midwest Processing's Tom Brokl. Cargill opened the first U.S. all-sunflower plant in the fall of 1980 in Riverside, North Dakota, with a capacity of about 1,500 tons per day. Midwest Processing hopes to begin operations this spring at a 1,000-ton-per-day plant at Velva, North Dakota.

Two other processing plants under construction in North Dakota are expected to open within 18 months. In Ipswich, Sun Products Processing expects to buy 1982 crop sunflower seed for its 800-ton-per-day plant, Wayne Palmer of Sun Products told the NSA. In Enderlin, National Sun Industries is completing a 1,000-ton-per-day plant with start-up scheduled for fall of 1982, according to John Frievalds of that firm.

The 1.0 million to 1.5 million ton estimate for domestic crushing contrasts sharply with the 600,000 tons available for domestic crushing in 1981, according to Housch's estimate. The U.S. 1981 sunflower oil crop totaled roughly 2 million metric tons, with 1.4 million metric tons exported and 600,000 available for seed, crushing or other domestic uses, according to Housch. By January, half the crop had been exported or crushed, Housch said, with the next harvest still nine or ten months away. Brokl estimated domestic producers will need 2.0 million metric tons within two years. Housch said U.S. producers need to expand to at least 5.0 million acres from the 1981 acreage of 3.9 million acres. In 1979, U.S. producers planted about 5.5 million acres, but domestic crushing capacity was then limited to four converted linseed plants in Minnesota, which could not absorb the surplus crop.

The increased crushing capacity is coming on-line following a decline in domestic consumption of sun oil products. Judi Adams, NSA's marketing specialist, said that when sun oil products were introduced following the 1979 acreage explosion, they were supported by massive advertising campaigns, including discount coupons provided to shoppers. This past year, however, sun oil consumption was down 15% to 20%. Sun oil products used about 77,000 metric tons of sun oil in 1979/80, Adams estimated, while 1980/81 usage has been estimated at a low of 40,000 metric tons and a high of 68,000 metric tons. Adams speculated the major reason for the decline was that sun oil products this past year no longer were supported by introductory discount coupons or advertising, so shoppers have opted for less expensive products. Currently on supermarket shelves are Promise margarine by Lever

Brothers and two cooking oils—Sunlite by Hunt Wesson and Puritan from Procter & Gamble. Fleischmann's is nearing the end of a six-month test marketing of a 100% sun oil margarine called Sunburst.

Adams did note an upswing in use of confectionery sunflower in various products, including candy bars, snack mixes and specialty bakery goods.

Texas A&M's E.W. Lusas reported on the potential for use of sunflower protein in animal feed and in human foods. Sunflower meal has been successfully fed to all types of animals, Lusas said, with protein contents ranging from 28% to 45% and fiber contents from 28% down to 10%.

■ Processors are hoping to expand overseas markets for sun oil. Leon Mears, deputy director of the Foreign Agricultural Service's oilseed and products division, said that based on minimum FAS estimates, the U.S. can expect to export 500,000 tons of oil and 2.0 million tons of seed by 1986. Mears specifically cited Japan and Spain as potential customers. Cargill's Housch noted increases in world population and living standards will create more demand for all fats and oils, including sunflower, and identified Pakistan and India as two major oil importers that presently do not use sunflower oil because it costs more than other oils such as palm and soybean. U.S. processors also are looking for help from producers to try to get the U.S. government to ask the European Economic Community (EEC) to rescind or reduce import duties of 10% on crude sunflower oil and 15% on refined oil. The EEC, however, faces massive olive oil surpluses with the addition of Spain and Greece as members.

■ Housch said U.S. sunflower must become more price competitive through increased yields and oil content. William Roath of USDA's oilseeds research unit in Fargo noted experimental yields have gone as high as 3,000 pounds per acre, while yields in that region have averaged 1,100+ pounds per acre in recent years. U.S. sunflower usually has about 40% oil content, but some experimental varieties reach 50%, and Soviet literature reports up to 60% oil content, Roath said. Housch said Cargill's sunflower plant in Amsterdam reports 39% oil yield from U.S. sunflower, but 45% oil from South African sunflower.

Housch presented a table showing central North Dakota farmers would get a better net return per acre from sunflowers, at 1981 prices and average yields, than from alternative crops such as spring wheat, durum, feed barley or corn. Housch's chart showed a net return of \$43.24 per acre from sunflower at 10.2 cents per pound, compared to \$19.08 per acre for spring wheat at \$3.68 a bushel.

■ Consulting meteorologist Bruce Watson told the producers the upper U.S. should have a warm spring with adequate moisture for crops. A 40-year cycle has completed its dry portion, Watson said, which means upper U.S. farmers will have relatively favorable growing conditions for the next decade. The 40-year sunshine cycle in the upper U.S. is the most reliable in worldwide weather patterns, he said, which means U.S. farmers generally can expect to fare better than growers elsewhere with less dependable cycles.

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AOCS Conference on **Dietary Fats and Health**

400 attend conference

The approximately 400 persons who attended the Conference on Dietary Fats and Health during December in Chicago heard some spirited discussions and papers on that topic.

Attendance was not as high as organizers had hoped, but the technical program content drew favorable comments with cochairmen E.G. Perkins and W.J. Visek both saying speakers had prepared excellent papers. The papers will be published as a monograph by AOCS later this year. Dr. Perkins is a professor of food science and Dr. Visek a professor in the schools of clinical medicine and basic medical sciences at the University of Illinois. They will be primary editors for the monograph.

As was expected, most interest centered on the days when the relationships of dietary fat to heart disease and to cancer were discussed.

Papers on theories on dietary fat and heart disease led David Kritchevsky to comment it "just goes to show how diverse the view can be among people all dealing with the same numbers (data)."

In summarizing the cancer session, Dr. Visek noted that "Epidemiological data show positive correlations between

levels of dietary fat and cancer of the breast, colon, rectum, prostate and ovary. The mechanism of action of dietary fats on carcinogenesis is not known. Under certain conditions, polyunsaturated fats are more effective than saturated fats in promoting cancer. Other dietary components such as protein or fiber modify the effects of dietary fats."

The first day's session on methodology may have struck the right keynote. In his summary talk on "Interaction of Lipids with Nutrition, Cancer and Coronary Heart Disease," Dr. Kritchevsky concluded by noting "I think the problem before us is aimed to get better diagnostic methodology. We need to try to more more closely to try to come out, not with a consensus, but with the right answers."

Dr. Herbert J. Dutton, cochairman of the methodology session with Dr. Ragnar Ohlson, commented in his summary that research discoveries tend to follow the directions that new methodologies and analytical techniques permit. Dr. Dutton said he hoped the session on chemistry and methodology provided all participants, processors, dietitians and biomedical researchers with a better understanding of each others' roles in dietary fats and health.



Full tables greeted Dr. H.J. Dutton, session chairman, as first day program began.

In relation to cancer, cochairmen Dr. Kenneth Carroll and Dr. Visek summarized that "More epidemiological data are needed to establish risks that can be related to certain diets. All aspects of cancer causation and the role of fat in these processes need more study. Soybean oil should be included in more experiments since it is widely used in the diet of man. Investigations of diet in relation to cancer causation need to give more attention to experimental design and known dietary requirements of the species being studied."

On the topic of normal metabolism of fats and oils, cochairmen Joyce Beare-Rogers and J.J. Gottenbos identified several potential areas for further study. These included more work on the metabolism and physiological effects of linoleic and linolenic fatty acids, and particularly on linolenic fatty acid with regard to pre- and post-natal development, study of linolenic's relationship to prostaglandin synthesis, and the study of fatty acid metabolism not only under extreme conditions, but also with diets supplying all essential nutrients; and work on the incorporation of specific isomers into specific organs.

With regard to effects of diet on high density lipoprotein, session chairman Frank Lindgren said it appeared that "until it is determined with assurance what the effects of altering serum HDL levels have on health, it is probably better to make no (public) recommendations on this subject currently, other than to recommend that further research be conducted as expeditiously as possible." He said more detail is needed on the effect of dietary fat on HDL metabolism, subfractions, apoproteins and molecular composition, as well as the role of dietary carbohydrate on HDL metabolism and the physiological consequences."

Plenary papers apparently provoked intense discussions. The scheduled discussion groups the first four afternoons of the conference often extended to 6 p.m. or beyond, while informal discussions sprang up during coffee breaks, in hotel restaurants and lounges, or in hallways outside meeting rooms where registrants would take brief breaks from programs that began each day at 8:30 a.m.

The general reaction of registrants was one of enthusi-

asm for the content and quality of the program, although one registrant, walking out of a 2½-hour discussion on isomeric fats, commented rather wearily, "They could have just said, 'You are what you eat.'"

That was why the conference was held—to thoroughly explore the current knowledge of dietary fats in health and possibly point the direction for future research. The body is made up of what we eat, but how and why does each part of the diet affect the body? □



Conference cochairmen E.G. Perkins, left, and W.J. Visek meet with speakers.



Speakers Robert Hastert, standing, and Frank Norris discuss a balky slide projector.



Speakers, from left, H.A. Tyroler, David Kritchevsky and Fred Mattson.



Enzo Fedeli and Helmut Mangold confer at registration desk.