

Chicago To Host AOCS-ISF World Congress

September 27 to October 1, 1970



Chicago's lake shore profile at dusk, stretching uninterrupted for several miles, should be a must for every visitor to Chicago. As the sun descends in the west, the lights of the buildings begin to glow, a view of the most beautiful lakefront city in the world before your very eyes.

An historic event will take place this Fall, when—for the first time in its history—the International Society for Fat Research will meet in joint session with the American Oil Chemists' Society. The meeting will be held at the world famous Conrad Hilton Hotel in Chicago, Illinois, September 27 to October 1, 1970.

Chicago is a city of many and varied restaurants and hotels, and therefore, can meet the special needs and wishes of people from any part of the world. Chicago is a cultural city with many fine museums, music centers, and public and private educational establishments. The Field Museum of Natural History, the Museum of Science and Industry and the Art Institute have all received high international recognition. The Lyric Opera, the Chicago Symphony and the Auditorium Theatre are widely known. Among the many well-known higher educational institutions in the area are the University of Chicago, Northwestern University and the Illinois Institute of Technology. The University of Illinois also maintains a Chicago campus. The Congress Program is designed to give all registrants an opportunity to visit the sights and hear the sounds that make Chicago a geographical, cultural and entertainment center of the United States.

Group Flight From Copenhagen to the World Congress in Chicago

A group flight for participants of the World Congress is being arranged by SAS, departing from and returning to Copenhagen. This flight should be particularly suitable for participants from Scandinavia and other Northern European countries. Two alternative schedules of two or three weeks in Chicago are being offered, i.e., departing from Copenhagen September 19 or 26.

Detailed information can be obtained from R. Marcuse, Lipidforum, c/o SIK, Fack S-400 21 Goteborg 16, Sweden, or from AOCS Headquarters, 35 East Wacker Drive, Chicago, Illinois 60601, U.S.A.

Technical Program

The Technical Program arranged for this meeting by Bob Reiners and his Committee is unquestionably the largest and most comprehensive ever offered for a meeting of this type. There will be four plenary sessions, 14 symposia and over 350 individual papers. For the first time in the history of these meetings, audio or audio-visual tapes or both will be prepared on selected presentations and made available to the registrants at a modest cost.

(Continued on page 384A)

COMMITTEE MEETINGS

DATE & COMMITTEE	TIME	ROOM
SUNDAY — 9/27/70		
Lipids Advisory & Editorial Board	9 a.m. - 12 a.m.	No. 8
Examination Board	10 a.m. - 2 p.m.	No. 5
ISF/AOCS Organizing Committee	1 p.m. - 3 p.m.	No. 8
MONDAY — 9/28/70		
Public Relations	12 a.m. - 2 p.m.	No. 5
Awards Administration	1 p.m. - 4 p.m.	No. 9
Drying Oils	1 p.m. - 2 p.m.	No. 8
Neutral Oil Loss	2 p.m. - 3 p.m.	No. 5
Society Improvement	2 p.m. - 3 p.m.	No. 8
Fats and Oils By-Products	3 p.m. - 4 p.m.	No. 5
Commercial Fats & Oils Analysis	3 p.m. - 4 p.m.	No. 8
AOAC AOCS Fiber Committee	4 p.m. - 5 p.m.	No. 5
Instrumental Techniques	4 p.m. - 6 p.m.	No. 8
Education	4 p.m. - 6 p.m.	No. 9
Flavor Nomenclature	5 p.m. - 6 p.m.	No. 5
TUESDAY — 9/29/70		
Dibasic Acids	9 a.m. - 10 a.m.	No. 5
Advertising	9 a.m. - 11 a.m.	No. 8
Blood Lipid Determination	9 a.m. - 12 a.m.	No. 9
Hydrogenated Oils	10 a.m. - 11 a.m.	No. 5
Commercial Fatty Acids	11 a.m. - 12 a.m.	No. 8
Nomenclature	1 p.m. - 2 p.m.	No. 5
Uniform Methods	1 p.m. - 3 p.m.	No. 8
Membership	2 p.m. - 4 p.m.	No. 5
Meeting Planning	2 p.m. - 4 p.m.	No. 9
Seed & Meal Analysis	3 p.m. - 5 p.m.	No. 8
Epoxidized Oils	4 p.m. - 5 p.m.	No. 5
Program Planning	4 p.m. - 6 p.m.	No. 9
International Relations	5 p.m. - 6 p.m.	No. 5
WEDNESDAY — 9/30/70		
Publications & Journal	8 a.m. - 10 a.m.	No. 8
Standards	9 a.m. - 11 a.m.	No. 5
Ways & Means	9 a.m. - 12 a.m.	No. 9
Fatty Nitrogen	10 a.m. - 11 a.m.	No. 8
Bleaching Methods	11 a.m. - 12 a.m.	No. 5
Feed Grade Fats	11 a.m. - 12 a.m.	No. 8
Industrial Oils & Derivatives	11 a.m. - 12 a.m.	No. 9
Protein Nutrition	1 p.m. - 2 p.m.	No. 5
Smalley	1 p.m. - 4 p.m.	No. 8
Communications	1 p.m. - 3 p.m.	No. 9
Biochemical Methods	3 p.m. - 5 p.m.	No. 5
Honored Student	4 p.m. - 5 p.m.	No. 8
Technical Safety	4 p.m. - 6 p.m.	No. 9
THURSDAY — 10/1/70		
ASTM D12, T5, TG5	8 a.m. - 5 p.m.	No. 5
Governing Board	8 a.m. - 6 p.m.	No. 8

(Continued from page 382A)

at C_w2 was synthesized and administered to man together with estradiol-4-¹⁴C. Tritium displaced by metabolism at C-2 appeared in the body water and its rate and extent was compared with that following estradiol-17 α -³H administration. The isotope content of urinary metabolites obtained after enzyme acid hydrolysis showed that 2-oxygenated compounds represented 22% of the dose.

THE CHARACTERIZATION AND OCCURRENCE OF AN S_r 20 SERUM LIPOPROTEIN. W. R. Fisher (Dept. Medicine, Univ. Florida, Gainesville, Florida 32601). *J. Biol. Chem.* **245**, 877-84 (1970). In the serum of patients with hyper-pre- β -lipoproteinemia, there frequently occurs in abundance an ultracentrifugally distinct low density lipoprotein component of the S_r 20 class. This study concerns the characterization of this component, present in the serum of 14 to 15 patients. The lipoprotein has been isolated ultracentrifugally; it has the electrophoretic and immunological properties of a β -lipoprotein but is distinct from very low density lipoproteins. It has a buoyant density of 1.004 g per ml which is lighter than the major low density lipoproteins of normal serum, and this observation is consistent with its higher triglyceride content. This lipoprotein has a sedimentation coefficient corrected for concentration and viscosity of -68 S, measured in a solvent of density 1.20 g per ml, and a molecular weight of approximately 4.2 million. Electron microscopy of this larger low density lipoprotein shows spherical macromolecules with a diameter approximating 256 Å.

EFFECT OF DIET AND INSULIN ON THE MORPHOLOGY AND TPNH GENERATING ENZYME ACTIVITIES OF RAT ADIPOSE TISSUE. P. Fabry, R. Kleinfeld, H. M. Tepperman and J. Tepperman (Dept. of Pharm., State Univ. of New York, Upstate Med. Cen., Syracuse, N.Y. 13210). *Proc. Soc. Exp. Biol. Med.* **133**, 577-81 (1970). The activities of TPNH malic enzyme and aggregate hexomonophosphate shunt dehydrogenases were determined in epididymal fat pads of rats subjected to the following treatment: (1) *ad libitum* chow fed; (2) fasted 72 hr; (3) refed sucrose diet 72 hr; (4) refed sucrose diet plus insulin; (5) refed high-fat diet; and (6) refed high-fat diet plus insulin. Refeeding the sucrose diet for 72 hr resulted in more than a six-fold increase in malic enzyme activity, and approximately a doubling of the activity of the shunt enzymes over the prefast levels. Refeeding the high-fat, carbohydrate-free diet resulted in restoration of enzyme activities to prefast levels. Administration of exogenous insulin resulted in no change beyond that produced by the respective diets alone. Fasting resulted in a decrease in nucleolar and cytoplasmic RNA staining and a reduction of

the mean cell size. Refeeding sucrose induced a marked enlargement of nucleoli and increased cytoplasmic basophilia with essentially no changes in mean cell size. Refeeding the high-fat diet produced a striking hypertrophy of fat cells, whereas the nucleolar and cytoplasmic RNA staining was comparable to the prefast state. Exogenous insulin did not produce marked differences in either of the two diet groups.

FATTY ACID SYNTHESIS IN THE CELL SAP AND MITOCHONDRIA OF RAT BROWN ADIPOSE TISSUE. Z. Drahot, P. Coratelli and C. Landriscina (Dept. of Biochem., Univ. of Bari, 70126 Bari, Italy). *FEBS Letters* **6**, 241-44 (1970). The data presented in this paper indicate that cell sap and mitochondria from rat brown adipose tissue synthesize fatty acids by the same mechanism as corresponding subcellular fractions of rat liver. However mitochondria from brown fat exhibit a behavior different in respect to liver mitochondria in that they appear permeable to NADH, NADPH and acetyl-CoA.

A COMPARISON OF THE LYMPHOLYTIC EFFECTS OF CORTICOSTERONE AND TESTOSTERONE PROPIONATE IN IMMATURE COCKERELS. M. P. Dieter and R. P. Breitenbach (Zool. Dept., Univ. of Missouri, Columbia, Mo.). *Proc. Soc. Exp. Biol. Med.* **133**, 357-64 (1970). Intact cockerels were injected with selected levels of corticosterone or testosterone propionate (TP) for 2 weeks. At 5 weeks of age (immediately after hormone treatment), and at 7 weeks (2 weeks after hormone withdrawal), the weights, histology, and tissue oxygen consumptions of the bursa Fabricii, thymi, and spleens were determined. TP caused a greater involution of lymphoid organs than corticosterone, but tissue sensitivity to corticosterone was greater. It is postulated that the effects of TP are one of the differentiation and development of stem cells necessary to the propagation of bursal lymphocytes.

LIPOTROPIC EFFECT OF DEXTRIN VERSUS SUCROSE IN CHOLINE-DEFICIENT RATS. A. Chalvardjian and S. Stephens (Res. Inst., Hosp. for Sick Children, Toronto 101, Can.). *J. Nutr.* **100**, 397-403 (1970). The effect of the type of dietary carbohydrate was determined on the amount of triglycerides accumulating in the livers of rats during the first 8 days of choline deficiency. Animals fed a choline-deficient diet with sucrose as the major carbohydrate accumulated about twice as much triglyceride in the liver as animals fed a diet in which dextrin replaced sucrose. This difference in lipid accumulation between the two groups was maintained even though one group was fed sucrose to which enough choline was added to simulate a small degree of contamination of dextrin with choline while another group of animals was fed dextrin from which most of the choline had been extracted by repeated washings with alcohol. In the choline-deficient rats fed dextrin, the ceca were larger and the color of the stools lighter than in the animals fed sucrose. We believe that the partially protective effect of dextrin against fatty livers of choline deficiency is mediated through a change in intestinal bacterial flora making choline, or some related lipotropes, available to the choline-deficient rat.

OBESITY: ABSENCE OF SATIETY AVERSION TO SUCROSE. M. Cabanae and R. Duclaux (Lab. de Physio. Fac. de Med., 69-Lyon 8, France). *Science* **168**, 496-7 (1970). In obese subjects, injection of glucose did not cause the transformation of the gustative sucrose sensation from pleasant to unpleasant as in normal subjects. This result is consistent with the theory of a decreased sensitivity to internal signals on the control of food intake of obese people.

COMPARATIVE STUDIES OF BILE SALTS. I. G. Anderson and G. A. D. Haslewood (Guy's Hospital Med. School, London S.E.1). *Biochem. J.* **116**, 581-87 (1970). GLC examination of bile alcohols prepared from the sucker *Catostomus commersoni* Lacépède (family Catostomidae) showed that although 5 α -cyprinol (5 α -cholestane-3 α , 7 α , 12 α , 26, 27-pentol) was a minor constituent, the principal bile alcohol was an undescribed substance, probably present in the bile as the C-26 sulphate ester, whose i.r., n.m.r. and mass spectra agreed with the structure 5 α -cholestane-3 α , 7 α , 12 α , 24, 26-pentol. M_D studies suggest that this 5 α -chimaerol is the 24(+),25S enantiomer and that 5 β -chimaerol (chimaerol from *Chimaera monstrosa* bile) also has the 24(+),25S configuration. These findings imply that bile alcohol biosynthesis in suckers and chimaeras includes stereospecific oxidation of cholesterol at C-26. *C. commersoni* bile acids (present in minor amounts) probably consist largely of 3 α , 7 α , 12 α -trihydroxy-5 α -cholestan-24-oic acid (allocholic acid). 5 α -Chimaerol sulphate and 5 α -cyprinol sulphate are probably biochemically equivalent as bile salts, and can be considered as arising by parallel evolution.

• AOCs-*ISF* World Congress . . .

(Continued from page 364A)

Entertainment

A variety of entertainment has been arranged for the Congress registrants and their wives, beginning with a Reception Sunday evening, September 27th. Monday evening is left free, so that everyone may enjoy the lovely restaurants and varied entertainment offered by Chicago. On Tuesday evening, there will be a Cocktail Party at 6:00 PM, followed by a concert by an internationally known Swedish Choral Group. The traditional banquet will be held on Wednesday evening, followed by dancing until midnight. Jimmy Blade and his Orchestra will provide the music, and Don Rice, well-known comedian, who has appeared many times on the Dean Martin Television Show, will provide the entertainment.

Ladies

The Ladies' Hospitality Committee, under the direction of Miss Toni Trinchese, has some most interesting plans for the ladies during their visit to Chicago. These plans include tours of the Museum of Science and Industry, Museum of Contemporary Art, as well as both the University of Chicago and University of Illinois Campuses.