

School, Boston, Mass.). *J. Lipid Res.* 7, 789-92 (1966). The carbohydrate moiety of sphingoglycolipid, after preliminary acetylation, can be released by periodate oxidation catalyzed by a trace amount of osmium tetroxide, followed by alkaline treatment. Cerebroside, lactosyl ceramide, hematoside, globoside, and gangliosides were degraded to yield, respectively, galactose, lactose, sialyl lactose, a tetrasaccharide, and various oligosaccharides containing sialic acid. Oligosaccharides were separated by paper chromatography and paper electrophoresis. The procedure is useful for characterizing micromolar amounts of sphingoglycolipids.

EFFECT OF INGESTION OF SALINE, GLUCOSE AND ETHANOL ON MOBILIZATION AND HEPATIC INCORPORATION OF EPIDIDYMAL PAD PALMITATE- $1\text{-}^{14}\text{C}$ IN RATS. J. I. Kessler and S. Yalovsky-Mishkin (Div. of Gastroenterology, Dept. of Med., Jewish General Hosp., Montreal, Canada). *J. Lipid Res.* 7, 772-8 (1966). The effect of ingestion of saline, glucose and ethanol on the mobilization of radiopalmitate from epididymal fat prelabeled *in vivo* and the incorporation of the mobilized label into liver lipids was investigated in rats. The mobilization of radiopalmitate from epididymal fat and the incorporation of the mobilized label into liver triglyceride were most markedly elevated by ingestion of ethanol. Increased mobilization and diversion of epididymal adipose tissue fatty acids to liver lipids of ethanol-treated rats were shown also by the close resemblance of the fatty acids of liver triglyceride to the fatty acids of epididymal fat. The amount of radiopalmitate mobilized by the saline-treated rats, comprising approximately a third of that mobilized by the ethanol-treated animals, was larger than the amount mobilized into the liver fats.

BIOSYNTHESIS OF CHOLESTANOL: 5α -CHOLESTAN-3-ONE REDUCTASE OF RAT LIVER. Sarah Shefer, Susan Hauser and E. H. Mosbach (Dept. Lab. Diagnosis, Public Health Res. Inst. of City of N.Y., N.Y. City Dept. of Health, N.Y., N.Y.). *J. Lipid Res.* 7, 763-71 (1966). The 3β -hydroxysteroid dehydrogenase of rat liver which catalyzes the conversion of 5α -cholestan-3-one to 5α -cholestan- 3β -ol is localized mainly in the microsomal fraction. The enzyme required NADPH as hydrogen donor and differed from the known 3β -hydroxysteroid dehydrogenases of the C_{19} series in being inactive in the presence of NADH. The microsomal preparations did not reduce the 3-keto groups of cholest-4-en-3-one, cholest-5-en-3-one, or 5β -cholestan-3-one to the corresponding 3β -hydroxy compounds. The conversion of 5α -cholestan-3-one to 5α -cholestan- 3β -ol was only slightly inhibited by the reaction product or by other monohydroxy steroids, but a strong inhibitory effect was noted with cholest-5-en-3-one, 5α -cholestane- $3\beta,7\alpha$ -diol and 5α -cholestan-7-on- 3β -ol.

INTERACTIONS IN THE METABOLISM OF POLYUNSATURATED FATTY ACIDS: ANALYSIS BY A SIMPLE MATHEMATICAL MODEL. T. Lindstrom and I. J. Tinsley (Dept. of Mathematic and Agr. Chem., Oregon State Univ., Corvallis, Oregon). *J. Lipid Res.* 7, 758-62 (1966). Interactions in the metabolism of polyunsaturated fatty acids have been simulated in a simple model system. In the development of this system it was assumed that simple competitive inhibition occurs between parent acids as they are transformed (via dehydrogenation and chain lengthening) to their derivative acids. Numerical solutions of this model system give the composition of the tissue pool of polyunsaturated acids as a function of the proportion of the parent acids in the diet. Experimental data have been analyzed in the light of relations generated by the model system and the parallels observed substantiate the assumptions postulated in the development of the model system.

AUTOMATIC TITRATION OF PLASMA FATTY ACIDS BY PHOTOCOLORIMETRY. R. P. Noble (Sharon Res. Inst., Sharon Hosp., Sharon, Conn.). *J. Lipid Res.* 7, 745-9 (1966). A photocolormeter for rapid automatic titration of free fatty acids is described. The solvents, absolute ethanol and hexane, form a single-phase titration mixture containing Nile blue indicator. The titrant, NaOH in 60% ethanol, is delivered by a motor-driven microsyringe; as alkali is added and the titration mixture turns pink, the intensity of light reaching a photocell through a 600 m μ interference filter increases. Increased current is generated until at a preselected number of microamperes a cut-off switch is activated which halts the drive motor. Titrations of FFA in the range 150-1500 $\mu\text{eq/liter}$ of palmitic acid standard are accomplished in approximately 1 min with a standard error of the mean of ± 1.3 -6.5 $\mu\text{eq/liter}$. The titration end point is independent of the operator. The solutions are stable and the daily titration blank and calibration remain constant.

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Cottonseed Clinic Considers Research Trends

The Cottonseed Processing Clinic, sponsored annually by the Southern Utilization Research and Development Division in cooperation with the Mississippi Valley Oilseed Processors Association, was held Feb. 13-14 at the Roosevelt Hotel in New Orleans. The meeting's purpose was to acquaint representatives of the cottonseed industry with current developments in utilization research and to provide for an exchange of information beneficial to industry and future research.

Among the subjects on the program were advances in the development of glandless cottonseed with acceptable quantities of good-quality lint; the trend to move oilseed cake, including that from cottonseed, out of the feed market into food for human consumption; the problem of pesticide residues in oils and meals; and the broadening of mill operations from the processing of one oilseed to several.

R. C. Woodruff, of the Delta Products Company, Wilson, Ark., was general chairman for the conference, with B. H. Wojeik, an assistant director of the Southern Division, as co-chairman.

Helping to organize the clinic were AOCs members C. H. Fisher (1951), R. C. Woodruff (1962), Henry L. E. Vix (1946), and L. A. Goldblatt (1952). Contributing papers were Vix and fellow AOCs members F. G. Dollear (1939), G. A. Harper (1959), S. P. Clark (1949), R. A. Phelps (1961) and Allen Smith (1929).

New Food Science Facilities Dedicated at MSU

The dedication of Michigan State University's Food Science Building will be marked by a scientific symposium on food research developments March 23-24 in East Lansing.

B. S. Schweigert (1958), chairman of MSU's Department of Food Science, said that scientific leaders in the food and allied industries, universities and governmental agencies are invited to attend both the symposium and the dedication. Tours of the new research facility will include views of the underground cobalt-60 chamber for radiation studies, some of the 22 controlled environment cubicles for measuring effects of food storage, and special rooms for nutritional studies with small animals. The symposium will begin in the morning of Thursday, March 23, and conclude at noon on Friday.

• Industry Items

L. A. SALOMON & BRO., INC., is celebrating the completion of a century in business by moving their office and laboratory to Port Washington, Long Island, N. Y. Begun as an importing firm for paints and dyes, they today supply activated carbon, clay adsorbents, waxes, and talc. They will maintain their Brooklyn warehouse.

New warehousing facilities totaling 24,000 square feet are being built adjacent to the Louisville plant of the GIBDLER CATALYSTS department of the Chemetron Chemicals division of Chemetron Corporation.

DOTY LABORATORIES, INC., of Kansas City has purchased the A. D. Wilhoit Laboratories of Minneapolis; the combined operation will be known as the Doty Wilhoit Laboratories, a Division of Doty Laboratories of Kansas City. The laboratory, directed by J. M. Doty (1949), specializes in cereal analysis, fats and oils and feed analysis.

WITECO CHEMICAL COMPANY'S INTERNATIONAL DIVISION has established new headquarters in Brussels, Belgium. It will be headed by R. A. Saunders, vice president and general manager of Witeco's International Division. The new facility will coordinate operations in France, England, Holland, Italy, and Belgium.