

cholesterol and phospholipids in liver did not alter. L-tryptophan-induced fatty liver is apparently due to the decreased level of ATP. A possible mechanism of ATP depression by administered L-tryptophan is discussed.

QUANTITATIVE STUDIES ON THE COMPLEXES FORMED BETWEEN AORTIC MUCOPOLYSACCHARIDES AND SERUM LIPOPROTEINS. M. Bihari-Varga and Marta Vegh (Third Dept. of Med., Univ. of Budapest, Budapest, Hungary). *Biochim. Biophys. Acta* 144, 202-10 (1967). The lipid composition of complexes precipitated on adding aortic mucopolysaccharides to normal and hyperlipaemic serum was found to correspond to that of the S_{10-20} β -lipoprotein fraction. There was a significant correlation between the amount of complex formed and the concentration of total lipid, total cholesterol, cholesterol ester, free cholesterol and phospholipid, respectively. Titration of mucopolysaccharides with β -lipoprotein, and of β -lipoprotein with mucopolysaccharides gave complexes in which the ratio of the two components remained the same. In complexes precipitated from the saline extracts of atherosclerotic aorta intimas the ratio of the reacting components and the distribution of lipid constituents was of the same order as that in the complexes obtained from serum. No complex formation occurred with extract of normal aortas.

EFFECTS OF PROSTAGLANDIN E_1 ON LIPOLYSIS AND PLASMA FREE FATTY ACIDS IN THE FASTED RAT. F. P. Kupiecki (Metabolic Diseases Res., The Upjohn Co., Kalamazoo, Mich. 49001). *J. Lipid Res.* 8, 577-80 (1967). Contrary to published reports, prostaglandin E_1 (PGE_1) *in vitro* and *in vivo* inhibited fasting lipolysis in rats. Adipose tissue lipolysis was inhibited when the tissue was incubated in the presence of PGE_1 and when the compound was administered intravenously. A biphasic plasma free fatty acid (FFA) response was obtained in fasted rats after intravenous injection of 80 μ g of PGE_1 per kg body weight; plasma FFA concentrations were lowered at 7 min, elevated at 15 min, and at normal concentrations at 30 min. The FFA depression at 7 min was independent of the animal's nutritional state, but the rebound at 15 min did not occur in fed rats. The plasma FFA rebound in fasted rats at 15 min may be a consequence of rapid inactivation of PGE_1 , followed by unopposed activity of factors which enhance fasting lipolysis.

PARTITION OF LIPIDS BETWEEN EMULSIFIED OIL AND MICELLAR PHASES OF GLYCERIDE-BILE SALT DISPERSIONS. B. Borgström (Dept. of Phys. Chem., Univ. of Lund, Lund, Sweden). *J. Lipid Res.* 8, 598-608 (1967). The composition of the emulsified oil and of the micellar phases obtained when a glyceride-fatty acid mixture is dispersed in bile salt solution has been defined. The micellar phase in equilibrium with the emulsified oil phase was obtained by filtration through Millipore filters. The behavior of different lipids in such systems was defined as the partition ratio, micellar/emulsified oil phase (m/o). Partition of fatty acids was found to be strongly dependent on the chain length of the fatty acids and the pH of the dispersion. The curve for partition against pH for oleic acid was interpreted to show a pK_a for oleic acid in bile salt solution of approximately 7. The partition between micellar and oil phases is given for a series of lipids of different polarity. No significant difference in behavior was found for cholesterol and sitosterol. A relationship was found between the partition m/o and filtration rates through a Millipore filter in micellar solution. The lower the partition coefficient the lower was the rate of filtration. The results obtained are discussed in relation to the mechanism of absorption of fat from the small intestine.

EFFECTS OF INSULIN ON GLUCOSE METABOLISM IN ISOLATED HUMAN FAT CELLS. R. B. Goldrick (The Kanematsu Mem. Inst., Sydney Hosp., Macquarie Street, Sydney, Australia). *J. Lipid Res.* 8, 581-8 (1967). Isolated fat cells were used for the study of *in vitro* effects of insulin on glucose metabolism in human and rat adipose tissue. In human subcutaneous fat cells, effects of insulin could be detected at concentrations of glucose in the medium from 1 to 10 μ moles/ml. Cellular responsiveness was inversely proportional to the glucose level. At a constant concentration of 6 μ moles of glucose per ml, the effects of insulin at various concentrations up to 500 μ U/ml were investigated. At the highest concentration, which gave the maximal response, there was a 100% increase in the conversion of glucose- $U^{14}C$ to glyceride-glycerol and a 40% increase in glucose oxidation. The dose-response curve was steepest between 2 and 20 μ U/ml. Rat epididymal fat cells were much more responsive to insulin. Glucose lipogenesis and pentose cycle activity could also be

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• Names in the News



Sidney Switzer

The appointment of SIDNEY SWITZER as representative for the French Oil Mill Machinery Company, Piqua, Ohio, in the South and Southwest, has been announced by A. W. FRENCH, JR., President and General Manager of French Oil. A past president of the International Oil Mill Superintendents Association, Mr. Switzer has been associated with the oil milling industry most of his life. He has served as Superintendent of S. A. Camp Oil Company for 13 years and Ranchers Cotton Oil, Shafter, Calif. for the last three and one-half years. Mr. Switzer will be permanently located in Dallas and will represent the company for oil mill machinery—both screw press and solvent—and rendering equipment from Mississippi through California in the Cottonseed Belt.

The appointment of P. K. MAHER to Director of the Adsorbents and Inorganic Specialties Research Department of the Davison Chemical Division of W. R. Grace & Co. was announced today by W. P. HETTINGER, Davison Vice-President for Research. In his new post, Dr. Maher will supervise Davison's fundamental and applied studies in adsorption products and processes, molecular sieves, and molecular sieve catalysis, and the technology of fine-particle inorganic materials. Davison's Research Department is located at the W. R. Grace & Co. Washington Research Center in Clarksville, Maryland.

CHARLES BIDDLE, President of International Flavors and Fragrances (US) has announced the following executive changes. H. S. WOLFF has been named Vice-President, Chemical Production, IFF-US. In his new capacity, Mr. Wolff takes on the primary responsibility of coordinating the operations of all existing IFF chemical plants throughout the world.

J. H. KANE (1946) has rejoined Archer Daniels Midland Company as manager of the new Industrial Oils Department. The new department will handle all sales of linseed oil, domestic fish oils, sperm whale oil and spermaceti wax. ADM produces blown, bodied, light cold pressed and refined oils, blends and oil specialties for the coatings, chemical, plastics, cosmetics, lubrication, metal working and other industries. The company has established a nationwide organization of agents and distribution centers in all major cities to augment its own sales force.

J. N. LITTLE has joined Waters Associates, Inc. as a Senior Research Chemist in the company's research and development department. He will be responsible for basic research in a newly formed gel permeation chromatography research group. His appointment was announced by K. J. BOMBAUGH, Vice President of Research and Development. Dr. Little received his PhD degree in chemistry from the Massachusetts Institute of Technology. He held fellowships from the National Institute of Health and the National Science Foundation while attending MIT.

The appointment of R. D. GRIEBEL as Manager, Marketing Planning & Sales Services of American Mineral Spirits Company, a Division of Union Oil Company of California, has been announced by H. D. STEWART, JR., Vice President, Marketing & Sales. In his new position, Mr. Griebel is responsible for marketing research, marketing administration, technical service, sales and marketing planning, advertising, and sales training for the Division. He joined AMSCO in November, 1963 as Chief Chemist in charge of the Company's Carteret, New Jersey laboratory.