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ASA Growth and Increased Crop Demand Noted at Convention

Unparalleled expansion in the soybean crop industry and a similar growth in the American Soybean Association combine to make the 46th annual convention at Des Moines and Ames, Iowa, on August 17-19 the most important in ASA history, states G. M. Strayer, the Association's vice president.

Now the nation's No. 1 export crop, a phenomenal increase in demand for soybeans this past year has turned an expected 90-million-bushel carryover into a near deficit and has pushed market prices to among the highest levels in the past 30 years.

Growth in membership in the Association has kept pace with the growth of the crop, notes Strayer. ASA now has eight affiliated state associations: Iowa, Minnesota, Land of Lincoln (Illinois), Tennessee, South Carolina, and Mississippi. All will send delegations to Des Moines.

The state of the current market stimulates utmost interest in the two main topics on the agenda: problems of increasing soybean yield, and problems of marketing.

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made of subunits, probably identical, of an average molecular weight of 21,000; (b) the difference in antigenic behavior between HDL₂ and HDL₃ is due to the presence in the latter of a lipid-poor protein; (c) antigenic polymorphism of α P is probably related to the presence in solution of monomeric and polymeric forms having different reactivity against anti-HDL and anti- α P sera.

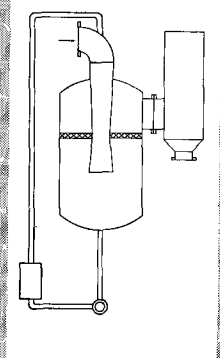
RNA BIOSYNTHESIS IN ADIPOSE TISSUE: EFFECT OF FASTING. W. Benjamin and A. Gellhorn (Dept. of Med. and the Inst. of Cancer Res., College of Physicians and Surgeons, Columbia Univ., New York, N.Y.). *J. Lipid Res.* 7, 285-94 (1966). RNA metabolism has been examined in intact adipose tissue and isolated fat cells from rats. The lipocyte contains three species of RNA with sedimentation rates corresponding to those of ribosomal and transfer RNA. The *de novo* biosynthesis of RNA by adipose tissue cells *in vitro* was demonstrated. The base ratios of the RNA formed indicate that it was synthesized from a DNA template. Starvation for 48-72 hr significantly depressed the synthesis of the heavy RNA components as measured by *in vitro* uridine incorporation into the individual RNA classes. Refeeding the fasted rat with glucose repaired the defect in RNA biosynthesis before the biosynthesis of monoenoic fatty acid was completely restored. Actinomycin D administered at the time of refeeding prevented the repair of monoenoic fatty acid synthesis. It is concluded that RNA metabolism is intimately involved in the control of biosynthetic reactions in adipose tissue.

SYNTHESIS AND CHARACTERIZATION OF 1- AND 2-MONOGLYCERIDES OF ANTEISO FATTY ACIDS. B. Serdarevich and K. K. Carroll (The Collip Med. Res. Lab., The Univ. of Western Ontario, London, Canada). *J. Lipid Res.* 7, 277-84 (1966). The branched-chain fatty acids D-(+)-12-methyltetradecanoic acid (C₁₅ anteiso) and D-(+)-14-methylhexadecanoic acid (C₁₇ anteiso) were isolated from the lipids of *Listeria monocytogenes* and their 1- and 2-monoglycerides were prepared. Reaction intermediates and products were purified without isomerization by column chromatography. Thin-layer chromatography on Florisil impregnated with boric acid and nuclear magnetic resonance were used in characterizing the 1- and 2-monoglycerides. The value of the latter method for analyzing glyceride structure is discussed.

EFFECTS OF PROLONGED INGESTION OF GLUCOSE OR ETHANOL ON TISSUE LIPID COMPOSITION AND LIPID BIOSYNTHESIS IN RAT. R. Scheig, N. M. Alexander and G. Klatskin (Dept. of Internal Med. and Biochem., Yale Univ. School of Med., New Haven, Conn.). *J. Lipid Res.* 7, 188-96 (1966). The effects on lipid metabolism of long-term feeding of large amounts of ethanol or glucose differed from those that have been reported in short-term experiments. Three groups of male rats were investigated. The first was fed lab chow and 15% (v/v) ethanol *ad lib.*; the second was pair-fed with the first and given isocaloric amounts of glucose in lieu of ethanol; the third was fed lab chow and water *ad lib.* All three groups consumed nearly the same number of calories, and about 30% of the calories in the first group were derived from ethanol. Ethanol decreased while glucose increased the quantity of lipid in fat depots, and each altered the fatty acid composition of the lipids in adipose tissue, kidney, liver and hepatic subcellular fractions in a different manner. The most striking of these changes was the relative increase in monounsaturated fatty acids and the decrease in essential fatty acids produced by glucose.

USE OF CONSTANT COMPOSITION POLYVINYLPIRROLIDONE COLUMNS TO STUDY THE INTERACTION OF FAT PARTICLES WITH PLASMA. D. D. O'Hara, D. Porte, Jr. and R. H. Williams (Dept. of Med., Univ. of Washington, Seattle, Wash.). *J. Lipid Res.* 7, 264-9 (1966). Fat particles (lipoproteins of S_r > 400) have been obtained from dog and human lymph and from human post-alimentary plasma. They were flocculated by a solution of 5% polyvinylpyrrolidone (PVP) in 10% NaCl and layered at the bottom of tubes of PVP of various concentrations between 2% and 5% (w/v). As the concentration of PVP increased, a greater proportion of the particles accumulated at the top of the tube ("primary" particles). When the concentration of PVP in the tube was held constant at 3% PVP, dilution of the sample with plasma was found to produce an increased proportion of bottom particles ("secondary" particles). This observation suggests that bottom particles result from an interaction of top particles with plasma.

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