









1. President G. C. Cavanagh
2. T. Ogdoll, of Minneapolis Mayor's Office
3. Speakers' Table at Opening Session: G. C. Cavanagh, D. H. Wheeler, T. Ogdoll, Mrs. L. S.

4. Overall view of Plenary Session
5. D. Jal-Nazir and C. Johnson
6. Mr. & Mrs. J. R. Wynne
7. S. F. Riepma and S. C. Miksta

8. O. J. Fiala, S. F. Riepma and S. C. Miksta
9. Honor Students: C. Siegfried, Z. L. Bandi, W. A. May, W. E. Berry, R. Holman, R. Smalidge, W. J. Esselman and T. Santosusso





*43rd Fall
Meeting
Ladies Events*



1. Mrs. S. B. Crecelius, Mrs. K. E. Holt
2. L. D. Anderson, M. Walker and J. W. Sigan
3. Mrs. E. E. Rice, and Mrs. T. Rodeghier
4. Mrs. J. A. Koenig, Mrs. J. R. Crafton and Mrs. L. A. Sweet
5. Mrs. M. G. Flom, Mrs. L. A. Witting and Mrs. B. L. Walker
6. Mrs. M. Gilpin, Mrs. M. Young and Mrs. M. F. Formo
7. Mrs. B. Nadenicek and Mrs. J. W. Sigan
8. Mrs. S. Smith and Mrs. O. Bell, Jr.
9. Mrs. J. R. Wynne and Mrs. S. J. Rini
10. Mrs. B. Wheeler, Mrs. E. L. Skaw and Mrs. A. Weil
11. Mrs. E. E. Metcalfe and Mrs. A. A. Schmitz
12. S. Burnelle and S. B. Crecelius
13. Mrs. M. F. Formo and Mrs. C. L. Becker
14. Mrs. B. Link and Mrs. S. B. Crecelius









ABSTRACTS: BIOCHEMISTRY AND NUTRITION

tissue was measured by the thiobarbituric acid reaction. Incubation of isolated fat cells with adrenocorticotrophic hormone or epinephrine stimulated total lipolysis as measured by glycerol release, but not lipid peroxidation. Epinephrine inhibited the lipid peroxidation produced by ascorbate. However, prior treatment with epinephrine caused increased lipid peroxidation by epididymal fat pads. The isolated fat cells of vitamin E-deficient rats contained no detectable tocopherol. These fat cells showed no significant differences in lipid peroxidation, total lipolysis, or basal or insulin-stimulated glucose carbon incorporation into CO_2 and total lipids, as compared to fat cells from vitamin E-replete animals. Enhancement of lipid peroxidation *in vitro* by incubation of isolated fat cells with ascorbate caused no change in glucose-carbon utilization or total lipolysis. We conclude that the thiobarbituric acid test, applied to fat cells, is neither an indicator of total lipolysis, nor of vitamin E deficiency. Fat cell glucose utilization and lipolysis are not altered by either vitamin E deficiency or increased lipid peroxidation.

BIOSYNTHESIS OF FATTY ACIDS IN OBESE MICE IN VIVO. II. STUDIES WITH DL-MALATE-2- ^3H -3- ^{14}C , SUCCINATE-2,3- ^3H -2,3- ^{14}C , AND DL-ISOCITRATE-2- ^3H -5,6- ^{14}C . E. Lamdin, W. W. Shreeve, R. H. Slavinski and N. Oji (Div. Biochem., Med. Res. Center, Brookhaven Nat. Lab., Upton, N.Y.). *Biochemistry* 8, 3325-3331 (1969). Biosynthesis of fatty acids in the liver and in other tissues of the remaining carcass of obese hyperglycemic mice and their lean siblings has been investigated by isolation and counting of radioactivity in total fatty acids

of mice sacrificed 90 min. after intraperitoneal injection of trace amounts of malate, succinate or isocitrate specifically labeled with tritium and carbon-14. All ^3H - and ^{14}C -labeled carbohydrates in the present study, like those previously tested, were converted into hepatic fatty acids of obese mice in several-fold higher extent than to those of lean mice, whereas conversion into total fatty acids of the carcass was only moderately higher in the obese mice.

EVIDENCE FOR A NONABSORPTIVE ANTIHYPERCHOLESTEROLEMIC ACTION OF PHYTOSTEROLS IN THE CHICKEN. J. E. Konlande and H. Fisher (Dept. of Nutr., Rutgers Univ., New Brunswick, N.J.). *J. Nutr.* 98, 435-442 (1969). Soysterols were administered orally (1% of diet) and subcutaneously (20 mg/day) to chicks with hypercholesterolemia induced by feeding a low protein, cholesterol-containing diet (8% protein, 5% medium-chain triglycerides (MCT) and 0.5% cholesterol). Sterol levels and patterns in plasma, tissues and excreta were determined by spectrophotometric and gas-liquid chromatographic analysis. Strong evidence for a nonabsorptive antihypercholesterolemic action of soy sterols included: similar liver cholesterol reductions for both oral and subcutaneous soy sterol administration, and reduction by subcutaneous soy sterol injection of endogenous hypercholesterolemia due to ova resorption induced by feeding 0.04% Nicarbazin to laying hens. A comparison of the oral administration of 1% soy sterols and 1% wheat germ sterols to chicks given a hypercholesterolemic diet (25% whole egg powder) resulted in a greater antihypercholesterolemic response from soy sterols which contain more campesterol (36%) than from wheat germ sterols (25% campesterol). Campesterol appears to be the major active component of



