

Meycles/sec proton resonance spectra have been observed with high-density serum lipoproteins (HDL<sub>2</sub> and HDL<sub>3</sub>) dissolved in <sup>2</sup>H<sub>2</sub>O and examined at different temperatures. Signals associated with the lipid and the amino acids of the protein are prominent. The lipid in the lipoproteins is in an extremely fluid condition and probably in a magnetically isotropic environment. The spectrum of the lipid is similar to that which is observed when lipids are dissolved in organic solvents, or alternatively, dispersed in water by bile salts or detergents or in a sonicated form. The organization of lipids and proteins in these lipoproteins is much looser than occurs in erythrocyte membranes. After reconstitution of the apoprotein with phospholipid, a similar spectrum to that of the original lipoprotein is observed. The reconstituted lipoprotein, however, appears to have a somewhat looser structure than the original lipoprotein. No marked differential broadening effect is observed with any of the signals associated with this phospholipid-protein complex.

THE EFFECT OF ESTRADIOL-17 $\beta$ -MONOPALMITATE AND SURGICAL CAPONIZATION ON PRODUCTION EFFICIENCIES, YIELDS AND ORGANIC CHARACTERISTICS OF CHICKEN BROILERS. L. R. York and J. D. Mitchell (Dept. Dairy Sci., Kansas State U., Manhattan 66502). *Poultry Sci.* 48, 1532-1536 (1969). A study was conducted to compare the effects of caponization and estradiol-17 $\beta$ -monopalmitate (EMP) injection on production, yields, chemical composition and organoleptic quality of chicken roasters. Meat strain chickens were either caponized at 4 weeks of age, administered 10 mg of EMP at 5 wks of age or untreated. All birds were processed at 11 wks of age. EMP-treated birds gained slightly more weight than controls during the 7 wk test period. Both EMP and control birds gained significantly more weight than capons. Feed efficiency was better for controls than for the treated birds. Both EMP birds and capons had a significantly higher dressing percentage than controls. Fat content of light meat, dark meat and liver was significantly increased by caponization and EMP treatment. Moisture content of light meat and dark meat was significantly decreased by EMP treatment. Moisture content of liver was significantly decreased by both caponization and EMP treatment. Thawing loss, cooking loss

and cooking time were not affected by the caponization and hormonization treatments. Although treated birds consistently received slightly higher scores for juiciness, tenderness and flavor, the differences were not significant. Treated birds averaged a slightly more desirable overall preference rating than controls. Some individuals of the taste panel preferred birds from a particular treatment.

THE GROWTH PROMOTING PROPERTIES OF CRUDE SOY PHOSPHOLIPIDS. P. Vohra and J. R. Heil (Dept. Poultry Husbandry, U. California, Davis, Calif. 95616). *Poultry Sci.* 48, 1661-67 (1969). Zinc-deficient, purified diets (about 18-19 p.p.m. Zn) containing either 33% isolated soybean protein (SB), or 25% casein and 8% gelatin (CG) as protein sources supplemented with 0.45% DL-methionine were used to compare the growth stimulating properties of the following substances, singly or in combination with each other, at the indicated dietary levels for turkey poults: 0.03% EDTA-Na<sub>2</sub> · 2H<sub>2</sub>O; 2% crude soy phospholipids (SPL); and 0.01% Zn. The gains in body weight (in gm) over 21 days were as follows with the two diets for various treatments: SB, 45; SPL, 47; SPL, EDTA, 165; SPL, Zn, 224; SPL, Zn, EDTA, 227; EDTA, An, 222; An, 212; EDTA, 126; and CG, 143; SPL, 261; SPL, EDTA, 299; SPL, Zn, 321; SPL, Zn, EDTA, 339; EDTA, Zn, 241; Zn, 256; EDTA, 265. The poults grew much better on a zinc deficient CG-diet than on a SB-diet. EDTA improved the growth on both the diets but SPL was significantly growth promoting only on the CG-diet. The improvement in growth due to SPL in CG-diets was not due to any variations in the dietary Zn, Mn, Cu or Fe contents. The data on the effect of various treatments on mineral contents of tibia and liver are given. EDTA improved the growth by improving the availability of dietary zinc from both the diets. This is ruled out for SPL because no growth improvement was observed when SB-diet was used.

BROWN FAT: ITS POSSIBLE ROLE IN IMMUNOSUPPRESSION DURING HIBERNATION. Y. A. Sidky, L. R. Daggett and R. Auerbach (Dept. Zoology, U. Wisconsin, Madison, Wis.

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## Call for Nominations for Seventh AOCS \$2,500 Award in Lipid Chemistry

### Sponsored by Applied Science Laboratories

In April 1964 the Governing Board of the American Oil Chemists' Society established an Award in Lipid Chemistry under the sponsorship of the Applied Science Laboratories Inc., State College, Pennsylvania. Previous awards were presented as follows: Erich Baer, August 1964; Ernest Klenk, October 1965; H. E. Carter, October 1966; Sune Bergstrom, October 1967; Daniel Swern, October 1968 and H. J. Dutton, October 1969.

The award consists of \$2,500 accompanied by an appropriate certificate. It is now planned that the seventh award will be presented at the AOCS Fall Meeting in Chicago, Illinois, Sept. 27-Oct. 1, 1970.

### Canvassing Committee Appointees

Policies and procedures governing the selection of award winners have been set forth by the AOCS Governing Board. An Award Nomination Canvassing Committee has been appointed. Its membership is L. N. Norcia, Chairman; J. G. Coniglio, Morris Kates, J. C. Hamilton and F. T. Lindgren. The function of this committee is to solicit nominations for the seventh award. Selection of the award winner will be made by the Award Committee whose membership will remain anonymous.

### Rules

The rules prescribe that nominees shall have been responsible for the accomplishment of original re-

search in lipid chemistry and must have presented the results thereof through publication of technical papers of high quality. Preference will be given to individuals who are actively associated with research in lipid chemistry and who have made fundamental discoveries that affect a large segment of the lipid field. For award purposes, the term "lipid chemistry" is considered to embrace all aspects of the chemistry and biochemistry of fatty acids, of naturally occurring and synthetic compounds and derivatives of fatty acids, and of compounds that are related to fatty acids metabolically, or occur naturally in close association with fatty acids or derivatives thereof. The award will be made without regard for national origin, race, color, creed or sex.

Letters of nomination together with supporting documents must be submitted in octuplicate to L. N. Norcia, Temple University, Health Science Center, School of Medicine, Philadelphia, Pennsylvania 19140, before the deadline date of April 15, 1970. The supporting documents shall consist of professional biographical data, including a summary of the nominee's research accomplishments, a list of his publications, the degrees he holds, together with the names of the granting institutions, and the positions held during his professional career. There is no requirement that either the nominator or the nominee be a member of the American Oil Chemists' Society.

Remember the DEADLINE, April 15, 1970