

Northeast Section Meeting Features Talk on Vitamin E

The Northeast Section AOCs sponsored a plant tour of Hoffmann-La Roche Company in Nutley, N.J. on November 11, 1971. Bud Gormley and John Munson acted as hosts for two groups of Northeast Section members that visited the Vitamin A plant and laboratories of the Hoffmann-La Roche Complex. Following the plant trip, a meeting and social hour was held at the Robin Hood Inn in Clifton, New Jersey.

Dr. Myron Brin, Assistant Director of Biochemical Nutrition at Hoffmann-La Roche, presented an interesting and informative talk on the new developments occurring in the evaluation of Vitamin E in nutrition. The talk was thoroughly enjoyed by the 80 members and guests that attended the meeting.



Left to Right: H. Hamilton, Secretary of N.E. Section, B. Gormley and R. Christiansen of Hoffmann-La Roche.



M. Stuermer of Drew-PVO, R.B. Muller of Frank E. Sullivan Co., and J. Kern of the Fatty Acids Producers Council.



A. Renold of Colgate Palmolive Co., R.E. Bambam of Croll-Reynolds Co., Inc., and T.B. Richey, Jr., of Malstrom Chem. Corp.



J. McHugh and H. Philips of Cel-lulo Co., J.B. Munson of Hoffmann-La Roche and R. Kurkar of The Nestlé Co., Inc.



P.A. Lachance of Rutgers State University, B. Borenstein of Hoffmann-La Roche, and R. Morele of Nabisco.



N.E. Section Officers: B. Casparian, Treasurer; S. Dominik, Vice President; M. Eijadi, President; and the speaker of the evening, M. Brin, Assistant Director of Biochemical Nutrition, Hoffmann-La Roche.



F. Naughton of Baker Castor Oil Co., L. Chirgwin of American Cyanamid, Mrs. K. Chirgwin, and Lou Barta of Atlas Rfg., Inc.

• Abstracts . . .

(Continued from page 14A)

the ether extract of the 3 kinds of commercial product showed the decrease in iodine no. and the increase in peroxide no. To clarify the mechanism of *yaku*, some experiments were carried out on the mixtures of linseed oil (or its methyl esters) and wheat gluten (soybean protein, casein, or glycine) in the ratio of 1:8 or 2:8. It was observed that in high humidity oxidized oil reacted with protein resulting in the development of a brown color and a change in the character of the protein, while in low humidity browning and change of protein did not occur, though the oxidation of oil was faster and more severe. In the period of *yaku* oxidized oil may react with gluten, making the noodle more palatable.

LIPIDS IN SEA URCHIN EGGS. I. CHEMICAL CHANGE OF THE LIPIDS DURING CURING WITH SALT. Yasuhiko Fujino, Takashi Negishi and Kimiko Umatani (Obihiro Zootech. Univ., Obihiro, Hokkaido, Japan). *Nippon Shokuhin Kogyo Gakkaishi* 17, 343-9 (1970). The so-called sea urchin eggs (I) are the mixture of ovary and testis of sea urchin (*Strongylocentrotus pulcherrimus*). The lipids in I were fractionated into non-polar and polar lipids, the ratio of which was 3:1 in the raw I and 4:1 in the salted. The main nonpolar lipids are hydrocarbons, sterol esters, triglycerides, fatty acids, sterols and monoglycerides. Triglycerides decreased and free fatty acids increased by salt curing. As the main polar lipids

phosphatidyl ethanolamine and choline, sphingomyelin and lysolecithin were detected both in the raw and salted I. Phosphatidyl choline and ethanolamine decreased and lysolecithin increased by salt curing. Unsaturated fatty acids of C₁₈-C₂₂ seemed to be liberated more easily than the other fatty acids during salt curing.

ANTIOXIDANT ACTIVITY OF BROWNING PRODUCTS DERIVED FROM AUTOXIDIZED OIL. I. COMPARISON OF ANTIOXIDANT ACTIVITY IN SEVERAL MODEL SYSTEMS. Masayuki Maruyama, Kenshiro Fujimoto and Takashi Kaneda (Tohoku Univ., Sendai, Japan). *Nippon Shokuhin Kogyo Gakkaishi* 17, 281-5 (1970). The following model systems were examined: 0.8 M glycine-0.8 M glucose (I), 7.0 g autoxidized cuttle fish liver oil-0.8 M glycine (II), 7.0 g the same autoxidized oil-0.8 M glycine-0.8 M glucose (III), 7.0 g the same oil-14 ml 0.02 N NH₃ in ethyl alc. (IV), 7.0 g the same oil-14 ml 0.02 N NH₃ in ethyl alc.-0.8 M glucose (V), and 30 ml aqueous extract of 35 g the same oil-0.8 M glycine (VI). Antioxidant activity was in the order IV < V < II = III < VI = I, when compared on acetone-soluble fraction of the mixtures incubated at 78C for 10 hr. VI showed the highest reducing activity and N content in the same acetone-soluble fraction. IR spectra were also compared. It was concluded that VI resembled I, i.e. the Maillard reaction, while II = III and IV = V were different from I.

(Continued on page 16A)