

(Continued from page 417A)

The new plant covers an area of 5,000 square meters, exclusive of surrounding park and parking areas.

In the main building, a constant temperature basement supplies the storage area for olive oil in tanks of reinforced concrete lined with sandstone. The bottling hall, at the loading level, contains modern filling-inspecting-sealing-tinning machines. The new equipment has a filling capacity, in eight working hours, of 200,000 liters of olive oil as follows: 100,000 bottles of various sizes; 80,000 tins, from 1/16 to 1-gallon size for export; and more than 10,000 tins from 5 to 25 kilograms for domestic market.

The automated and semi-automated processes are continuously under the control of technicians; transmitted light inspections, before and after filling, eliminate the smallest impurities in the bottles, which are previously sterilized by steam.

All pipes and machinery in contact with the olive oil are made of stainless steel or pure aluminum, and the containers are of enamelled steel.

The new Bertolli plant represents a strong contribution to the development of a traditional Italian product.

Conseil Oléicole International Meets

From May 4 through 10, 1966, the 14th Meeting of the Conseil Oléicole International (COI) was held at Bari. The Conseil, whose administrative office is in Madrid (Spain), represents the United Nations and is preparing the international Codex Alimentarius for olive oil. The Italian correspondents of the Codex are Prof. A. Montefredine, President 1967-68 of the Italian Oil Chemists' Society, and Prof. G. Jacini, Director of Experimental Station for Oils and Fats of Milan.

Milan Meeting on Detergents, October 7-8

The Italian Oil Chemists' Society (Milano, 3 via del Lauro) will organize a meeting devoted to the methods for the evaluation of detergent performance, to be held in Milan, Oct. 7-8, 1966.

New Periodical Published

The periodical *La Rivista Italiana delle Sostanze Grasse* (Milano, 79 via Giuseppe Colombo) will publish a supplement devoted to the problems of lubrication. The first issue of the supplement was published in June of this year.

• Industry Items

THE UNIVERSITY OF TEXAS M. D. ANDERSON HOSPITAL and Tumor Institute will participate in the development of the new Infotronics CRS-70 Automated Data System. The new system, designed and manufactured by Infotronics Corporation of Houston, Texas, will be used in general hospitals and cancer institutions to speed laboratory test results to the physician, permitting faster diagnosis.

A new sales, warehouse and service facility at 9520 Midwest Avenue, Garfield Heights, Ohio, was announced recently by E. H. SARGENT & Co. Al Klees, Cleveland divisional manager for Sargent, stated that the new plant includes an inventory of the items listed in the 1300-page Sargent catalog of scientific instruments and chemicals.

CHEMETRON CORPORATION has broken ground for a chemical specialties plant in Livonia, Mich., a suburb of Detroit. The plant will be part of Northwest Chemical Company, a unit of the corporation's Chemetron Chemicals Division. Eugene McCauliff, division president, said that the facility will double the present production capacity of Northwest and that it is designed for further expansion in the future.

FINE ORGANICS, INC., culminated a recent series of expansions at their Lodi, N. J., facility with the installation of a new Wyssmont Turbo-Dryer. With these additions, Fine Organics will substantially increase its production capacity of TEMASEPT I AND TEMASEPT II.

is unstable at pH 9, but can be differentiated from the preceding enzyme by its stability at pH 4 and its pH optimum of 9.0.

ROLE OF THE INTESTINAL BRUSH BORDER IN THE ABSORPTION OF CHOLESTEROL IN RATS. J. S. K. David, P. Malathi and J. Ganguly (Indian Inst. of Science, Bangalore). *Biochem. J.* 98, 662-8 (1966). Results of studies involving short-term incubation of everted intestinal sacs of rats in media containing cholesterol oleate or cholesterol plus oleic acid indicated that the sequence of events in the absorption of cholesterol appears to be: the dietary cholesterol esters are hydrolyzed by the cholesterol ester hydrolase of pancreas or of the mucosal brush border or both, after which the brush border rapidly absorbs the de-esterified sterol and transfers it into the mucosal cell, by a mechanism of displacement where it is slowly re-esterified for transport through the lymph.

STUDIES ON METABOLISM OF VITAMIN A. THE EFFECT OF THE STAGE OF VITAMIN A DEFICIENCY ON SULPHATE ACTIVATION IN RAT LIVER. K. Subba Rao and J. Ganguly (Indian Institute of Science, Bangalore). *Biochem. J.* 98, 693-5 (1966). The synthesis of "active sulphate" (PAS, adenosine 3'-phosphate 5'-sulphatophosphate) in rat liver was studied at various stages of vitamin A deficiency, with the corresponding pair-fed controls. The activity was significantly decreased even at the onset of the deficiency and at the acute stage there was further loss. Only at the earlier stages of the deficiency was the addition of retinol, *in vitro*, fully effective in restoring the lost activity; retinoic acid was partially active. No such restoration was possible at the acute deficiency stage.

EFFECT OF A CHOLESTEROL-BIOSYNTHESIS INHIBITOR ON THE FATTY ACID COMPOSITION OF PHOSPHOLIPIDS IN THE SERUM AND TISSUES OF RATS. P. Hill (Ayerst Res. Labs., Montreal). *Biochem. J.* 98, 696-701 (1966). Treatment with AY-9944 (*trans*-1,4-bis-(2-chlorobenzylaminomethyl)cyclohexane dihydrochloride) produced the following changes in the fatty acid composition: (a) a marked decrease in the percentage of linoleic acid and an increase in oleic acid in the total fatty acids in the liver; (b) in the serum, an overall decrease in the percentage of linoleic acid in neutral lipids and phospholipids; (c) an increased content of linoleic acid in the β -acyl chain of phosphatidyl cholines in the liver and in sphingomyelins in the brain and lungs; (d) an increased content of palmitic acid and oleic acid in the β -acyl chain of phosphatidylcholines in the liver, heart and lungs; (e) an increased content of phosphatidylcholines and sphingomyelins, together with an increased percentage of saturated fatty acids in these phosphatides in the lungs.

THE CONVERSION OF 7-DEHYDROCHOLESTEROL INTO CHOLESTEROL. D. C. Wilton, M. Akhtar and K. A. Munday (Univ. of Southampton). *Biochem. J.* 98, 29C-31C (1966). The origin and stereochemistry of the 2 hydrogen atoms at positions 7 and 8 during the conversion of 7-dehydrocholesterol into cholesterol with rat-liver homogenates by the enzyme 7-dehydrocholesterol reductase is described. The 7 α - and 8 β -hydrogen atoms are derived from NADPH and a suitable proton source, respectively. The overall addition is *trans*-diaxial. The crucial step is apparently the formation of the C₆-H bond, thus generating a highly stable allylic carbonium ion at C₇ that in accordance with chemical expectations is neutralized by the delivery of a hydrogen by NADPH from the α -side of the steroid molecule.

COLORING AGENT CONTAINING CAROTENOID PIGMENT, AND PREPARATION OF SUCH AGENT. H. Mima, M. Terasaki and M. Kato (Takeda Chemical Industries, Ltd.). *U.S.* 3,227,561. A method for preparing a stable and safely utilizable coloring agent containing carotenoid pigment comprises dissolving carotenoid pigment in a solvent such as abietic acid, hydrogenated abietic acid or a lower aliphatic alcohol ester thereof while heating to a temperature of 90 to 140C.

ANTI-HYPERCHOLESTEROLEMIC ACTION OF SCLEROGLUCAN AND PECTIN IN CHICKENS. P. Griminger and H. Fisher (Dept. of Animal Sci., Rutgers—The State Univ., New Brunswick, N. J.). *Proc. Soc. Exp. Biol. Med.* 122, 551-3 (1966). Pectin and the polysaccharide scleroglucan reduced dietary hypercholesterolemia in chicks; this reduction was accompanied by an increased excretion of chloroform-methanol extractable lipid, including cholesterol. The chemical dissimilarity of pectin and scleroglucan suggests that the anti-hypercholesterolemic activity of the two materials may be due to their physical rather than to their chemical properties.