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CORRECTION

T. P. Hilditch reports that in his Letter to the Editor, appearing in the October 1954 issue of the Journal of the American Oil Chemists' Society, page 433, there were two errors. Lines 11-12 in column 2 should read: "the GS_2U glycerides form a smooth curve." Lines 21-22 should read "but monosaturated glycerides never more than 45-50%."

ABSTRACTS . . . . . R. A. Reiners, Editor

• Oils and Fats

Ralph W. Planck, Abstractor
Dorothy M. Rathmann, Abstractor
Sin'itiro Kawamura, Abstractor

Chemical composition of cerebral arteries. The concentration of lipids and minerals compared with those in the internal carotid. R. C. Buck, J. C. Paterson, and R. J. Rossiter(Dept. Biochem., Univ. Western Ontario, London, Ontario). *Can. J. Biochem. and Physiology* 32, 539(1954). The concentration of total cholesterol, total phospholipid, nonlipid phosphorus, calcium, and fat-free dry residue was determined in the internal carotid and cerebral arteries obtained at autopsy from a series of 14 male subjects ranging in age from 40 to 85 yr. By the method of rank correlation it was found that for both vessels the concentration of total, free, and ester cholesterol was significantly correlated with both age and severity of the atherosclerosis. Ester cholesterol expressed as a percentage of total cholesterol was also significantly correlated with age and the severity of the disease process.

Doedorizing vegetable oils. Anon. *Chem. Eng.* 61(10), 256 (1954). A discussion of U. S. Patent 2,674,609 is given. In this process oil is deodorized at 20-60 microns pressure and 190°-250°F. for 10-48 minutes.

X-ray diffraction and electron microscope studies on the brain lipide strandin. J. B. Finean(Dept. Biology, Mass. Inst. Tech., Cambridge, Mass.). *Arch. Biochem, Biophys.* 52, 38(1954). The electron micrographs of thin layers of strandin show a fairly regular rectangular arrangement of particles measuring approximately 60 x 100 x 100 A., the smallest dimension corresponding to the thickness of the layers. X-ray diagrams of thick crystalline plates show intense low-angle diffractions in three mutually perpendicular directions which correspond roughly to these dimensions. The diffraction spacings of different strandin preparations vary somewhat, and the effects of alcohol, and more particularly of water, suggest that strandin may be a complex or series of complexes in which some of the association of components is more physical than chemical.

A system of characterization of common organic acids. R. T. Wendland and D. H. Wheeler(North Dakota State College, Fargo, N. D.). *Anal. Chem.* 26, 1469(1954). Organic acids containing carbon, hydrogen, and oxygen only can be divided into four well-defined classes based on common physical properties and simple chemical tests. Identification of the drying oil acids calls for ultraviolet absorption studies, or chemical processes of bromination, hydroxylation, and isomerization. Practical significance of the work lies in the increased ease of identification of a large number of compounds encountered frequently in research and industrial operations.

Product control at Colgate-Palmolive Ltd. *Canadian Chemical Processing*, 38, No. 10, 96(1954). A description is given of the new $1,500,000 control laboratory at Colgate-Palmolive in Canada.

Vegetable oils. III. Mallotus philippinensis Muell. Arg. seed oil. R. C. Calderwood and F. D. Gunstone(The University, Glasgow). *J. Sci. Food Agr.* 5, 382-7(1954). Characteristics of kamala-seed (*Mallotus philippinensis* Muell. Agr.) oil are tabulated and compared with previously reported values. Low temperature fractional crystallization, spectrophotometric examination before and after alkali-isomerization, hydrogenation, acetylation, methylation, and fractional distillation yielded data which show that the mixed acids of kamala-seed oil consist of palmitic 18, oleic 28, linoleic 18, and kamlolenic acid 36%. Because the oil polymerizes when heated with acetic anhydride, acetyl values were determined on the mixed hydrogenated esters. The isolation of α-kamlolenic acid and isomerization to β-kamlolenic acid by ultraviolet irradiation of a benzene solution containing iodine are described. α-Kamlolenic acid had m.p. 72°-5°C., and absorption maxima at 262, 271 and 282 mμ. β-Kamlolenic acid had m.p. 85°-7°C. and absorption maxima at 259, 269 and 280 mμ. Repeated recrystallization of β-kamlolenic acid lowered the $E^{1\%}_{1cm.}$, presumably by oxidation. Ozonolysis of methyl α-kamlolenate yielded methyl 8-formyloctanoate, confirming previous reports that α-kamlolenic acid is an 18-hydroxyoctadeca-9:11:13-trienoic acid. During the isomerization of α- to β-kamlolenic acid, one or more *cis* bonds change to *trans* bonds. The relationship of kamala-seed oil to other oils from plants of the Euphorbiacae family, and the possibilities of using kamala-seed oil as a drying oil are discussed briefly.

Soybeans and products futures markets. J. S. Schonberg(Uhlmann Grain Co., Chicago, Ill.). *Soybean Digest* 14(11), 48-51 (1954). Futures contract markets for soybeans, oil and meal are discussed.

Loss of fat during souring of cream. J. E. Roe and H. Edelson (Food and Drug Admin., Dept. of Health, Education and Welfare, Kansas City 6, Mo.) and W. E. Polzen. *J. Assoc. Off. Agr. Chemists* 37, 849-56(1954). Analyses of 24 samples of coffee cream (18% fat) and 26 samples of whipping cream (30% fat) during souring at room temperature showed that loss of fat is not measurable by the Babcock method over a 4-day storage period. Losses are detectable by the Roese-Gottlieb method, but over a 7-day period amount to only about 0.1% of the total per cent of fat per day.

Report on ether extract in fish. H. M. Risley(Food and Drug Admin., Dept. of Health, Education and Welfare, Seattle 4, Wash.). *J. Assoc. Off. Agr. Chemists* 37, 605-7(1954). Results of a committee test of a suggested rapid method for the determination of fat in canned salmon are summarized. A modification in the drying method and extension of the work to other species of fresh, frozen and canned fish are recommended.

Surplus butter disposal and soybean oil. S. Riepma(National Assoc. Margarine Manufacturers). *Soybean Digest* 14(11), 72, 74, 76(1954). Possible methods of disposing of Commodity Credit Corporation-held surpluses of fats and fat products are discussed in terms of effects on normal food fat markets.

World fat and oil supplies. P. E. Quintus(Fats and Oils Div., Foreign Agricultural Service). *Soybean Digest* 14(11), 46-7 (1954). World production and distribution of fats and oils are reviewed. Although per capita supplies are now probably ahead of the prewar levels, total supplies do not appear excessive. Distribution problems create local imbalances. U. S. has substantial reserves for export.

Report on eggs and egg products. F. J. McNall(Food and Drug Admin., Dept. of Health, Education and Welfare, Cincinnati 2, Ohio). *J. Assoc. Off. Agr. Chemists* 37, 818(1954). Several