Publications

Book Reviews

Nutrition, Hypertension and Cardiovascular Disease, by Ronald S. Smith (The Lyncean Press, 885 Eighth St., Gilroy, CA 85020, 1984, 210 pp., \$12.95).

This is an unusual book in that it attempts to bring together all the important nutrition topics as they related to hypertesion and cardiovascular disease in one fairly small volume. The author was trained in zoology and chemistry, practiced his profession of chemistry and nutrition for several years and now devotes full time to literature research, writing and lecturing.

The book is divided into 17 chapters. The first is the inroduction which explains atherosclerosis, fatty streaks and fibrous plaques, and discusses prostaglandins and prostaglandin therapy. The second chapter deals with lipids. Here, lipids are defined, the function of lipoproteins is described and the question of the roles of saturated fat, cholesterol and oxidized cholesterol in cardiovascular disease is discussed. The author also discusses essential fatty acids and includes a summary of the current interests in the n-3 fatty acids and of eicosapentaenoic acid (20:5 n-3) in particular as agents for lowering the risk of heart disease.

The following chapters discuss magnesium, copper and zinc, chromium and selenium, vitamins B₆ and C, vitamin E and niacin, and vitamin D, trans fat and lecithin in cardio-vascular disease. The author then goes on to discuss the roles of protein, carbohydrate and fiber, milk and alcohol, and garlic and carnitine. The next five chapters deal with nutritional aspects of hypertension and include accounts of sodium, potassium, calcium and magnesium in hypertension. These chapters are followed by the role of weight, fiber, lipid, protein in hypertension, and the effects of caffeine, alcohol and sugar. The book ends with a chapter entitled "A Broad Perspective."

In general the chapters appear to give brief but balanced accounts and describe both sides of various stories of the role of nutrients in hypertension. The author does go overboard on the dangers of "oxidized" cholesterol and fails to note that many studies in this area have not been wisely designed, nor is there definitive evidence for the presence of oxidized cholesterol in any foods. Cholesterol is not as readily oxidized as he and others suggest.

The last chapter is a disappointment. Here the author gives blanket advice on what to eat and what not to eat. He divides nutrients into "good guys" and "bad guys." He advises avoidance of foods containing oxidized cholesterol in particular and includes avoidance of eggs and many egg products, which are excellent sources of good quality protein. This chapter was a mistake and perhaps reflects the author's lack of recent experience in experimental design and interpretation.

This book is not for the specialist and is therefore of limited interest to readers of JAOCS. Provided it is read with caution and readers are aware of the book's limitations, it is of use to health professionals and the informed layman. It is a paperback, and its cost at \$12.95 is reasonable.

Patricia V. Johnston

Malnutrition: Determinants and Consequences, Current Topics in Nutrition and Disease. Vol. 10, edited by Philip L. White and Nancy Salvey (Arthur R. Liss Inc., 150 Fifth Ave., New York, NY 10011, 1984, 494 pp., \$96).

This volume is the proceedings of the Western Hemisphere Nutrition Congress VII held in Miami Beach, Florida, in August 1983.

The opening plenary session deals with malnutrition in the Western Hemisphere and includes malnutrition in tropical America, the Caribbean Islands, urbanized Latin America and industrialized North America. This is followed by George H. Beaton's W.O. Atwater Memorial Lecture, "Energy in Human Nutrition: Perspectives and Problems."

Five presentations are given under the general heading "The Maternal/Infant Dyad." In the following section there are three articles and one abstract on "Nutrition and Performance." The next sections deal with the effects of urbanization and demographic changes on food habits and food intake; nutrition and the immune responses; determinants of an individual's food intake and impediments to the increased use of technology.

There is an entire section on "Malnutrition: Determinants and Consequences; Caribbean Case Studies," which includes a summary of the open discussion. A section on self-treatment follows. This includes articles on iatrogenic contributions to cancer cachexia, effects of fad diets on weight reduction, food and nutrition mythology, and food ideology and medicine in Mexico. It is disappointing that the contribution on hospital malnutrition appears in abstract form only. The volume concludes with articles on "The Search for Solutions."

There is a lot of information in this book. The length and usefulness of the articles vary greatly, as does the quality of presentation. At \$96, it is doubtful that this book will appear on many private bookshelves.

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New Publications

Modern Methods of Food Analysis, edited by Kent K. Stewart and J.R. Whitaker, Food and Nutrition Press Inc., PO Box 71, Westport, CT 06881, 1984, 406 pp., \$55.

Surface Coatings, Vol. II, Oil and Colour Chemists Association of Australia, Methuen Inc., 733 Third Ave., New York, NY 10017, 1985, 480 pp., \$65.

Lange's Handbook of Chemistry, 13th Edition, edited by John A. Dean, McGraw-Hill Book Co., 1221 Avenue of the Americas, New York, NY 10020, 1985, 1,792 pp., \$57.

Advances in Cereal Science & Technology, Vol. VII, edited by Y. Pomeranz, American Association of Cereal Chemists, 3340 Pilot Knob Rd., St. Paul, MN 55121, 1985, 362 pp., \$49 AACC members, \$60 nonmembers.

Publications

Powder Surface Area and Porosity, by S. Lowell and J.E. Shields, Chapman & Hall, Methuen Inc., 733 Third Ave., New York, NY 10017, 1984, 248 pp., \$50.

Cosmetic and Drug Preservation: Principles and Practice, Cosmetic Science and Technology Series Vol. 1, edited by Jon J. Kabara, Marcel Dekker Inc., 270 Madison Ave., New York, NY 10016, 1984, 784 pp., \$99.75 U.S. and Canada, \$119.50 elsewhere.

JLR marks anniversary

The Journal of Lipid Research has published a special 25th

anniversary issue that is available for \$16 a copy from the JLR, c/o Federation of American Societies for Experimental Biology, 9650 Rockville Pike, Bethesda, MD 20814.

The 214-page issue includes 28 invited mini-reviews by diverse specialists on developments in lipid research areas during the past 25 years. Review topics include adipose tissue, cholesterol, bile acids, membranes, plant lipid biosynthesis, eicosanoids, plasmalogens, sphingoids, enzymes, lipoproteins and many others. The issue includes a brief article on the history of the journal and another on the "lore of lipids," a review of pre-20th century developments in lipid research.

New Products



LABORATORY GLASSWARE

Safe-Glass laboratory glassware from Markson Science features a thick exterior coating of transparent PVC plastic over chemically inert borosilicate. The plastic coating is designed to keep bottles, test tubes and filter flasks from shattering when subjected to nicks and blows. Glassware holds together to allow time for transferring reagents to another container. Contact: Markson Science, 7815 S. 46th St., Phoenix, AZ 85040.

LABORATORY WASHER

Labconco's FlaskScrubber is a laboratory washer specifically designed for hard-to-clean flasks, test tubes, beakers and graduated cylinders. The Flask-Scrubber, a washing and drying unit for narrow-neck glassware, features 36 spindles to hold flasks in place during operation. Spindles can be adjusted to handle different size flasks. The unit offers 27 cycle variations and is available in mobile, freestanding or underthe-counter models. Contact: Labconco Corp., 8811 Prospect, Kansas City, MO 64132.

ROTARY SHUNT METERS

Kent Process Control's rotary shunt meters are designed to measure steam flow over a wide range of operating conditions. The company claims accuracy of ±2% over the complete flow turndown. A frequency or analog output linear to flow is available to provide input to EMS systems or circular chart recorders. Both Meehanite and Cast Steel versions are offered for maximum working conditions up to 300 psi and 600 F. Contact: Kent Process Control Inc., 165 Fieldcrest Ave., Edison, NJ 08837.

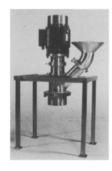


HPLC MODULAR SYSTEMS

LDC/Milton Roy offers a series of modular systems for HPLC. For integration and data reduction, two units are available to offer stand-alone integration or complete system control. In addition, solvent delivery systems range from single piston pumps to pulseless units with a 0.3% precision of the specified flow rate. Detectors available include both filter and continuously variable uv and visible absorbance detectors, filter fluorescence detectors, refractive index detectors, electrical conductivity detectors and amperometric detectors. Contact: LDC/Milton Roy, PO Box 10235, Riviera Beach, FL 33404.

LEAKPROOF PUMP

Kontro offers what it terms is a leakproof centrifugal pump in full compliance with API-610 6th Edition standards. The Model API Seal/Less magnet drive pumps are available in 26 models to deliver up to 5000 GPM with total dynamic heads to 600 ft. Material classes include S1, S5, S9, C6, D6 and A8. Standard system pressures include 400 psig design (600 psig test) and 600 psig design (900 psig test). Contact: Kontro Co. Inc., 450 W. River St., Orange, MA 01364.



GRINDING MILLS

Quadro's new line of material-size-reduction comminution mills meets GMP, USDA and other standards, and is compatible with autoclave sterilization. The Quadro "COMIL" features a conical screen containing a low rpm impeller for particle reduction, sizing and mixing. Sizes are available to handle 100 to 70,000 pounds per hour (50 to 30,000 kg per hour). Contact: Quadro Inc., 184 Riverdale Ave., River Vale, NJ 07676.

A-C DRIVE

Reliance Electric has designed a general