

NEW BOOKS

Foodstuffs—Their Plasticity, Fluidity, and Consistency

Edited by G. W. SCOTT BLAIR. xv + 264 pages. Interscience Publishing Co., New York, N. Y. 1953. \$7.25. Reviewed by W. R. FETZER, Clinton Foods Inc., Clinton, Iowa.

This book has eight chapters, each dealing with a particular type of material by an authority in that particular field. G. W. Scott Blair is the Editor-in-Chief. The various chapters and authors are:

Starch, J. Hoftee and A. H. A. De-Willigen; Cereals, D. H. Greup and H. M. R. Hintzer; Milk and Milk Products, G. W. Scott Blair; Butter, H. Milder; Cheese, M. Baron and G. W. Scott Blair; Honey, J. Pryce-Jones; Miscellaneous Food Products, H. G. Harvey; Psycho-Rheology, R. Harper.

The Dutch authors have done a remarkable job in preparing their text in English.

The text is profuse in literature references which makes the book a valuable reference work for the average laboratory dealing with foodstuffs. Many of these references undoubtedly have escaped the notice of American chemists. Much space has been given to the employment of instruments to measure various rheological characteristics of foodstuffs and the more important are illustrated. A very important contribution in this connection is the evaluation of the various instruments in which the good points as well as the shortcomings are pointed out. Too often chemists and laboratories engage in controversies over results on apparent viscosity which merely reflects the condition of measurement of the specific instrument used.

Chapter I on Starch, as would be expected, carries much more information on potato starch than corn starch. However, it contains much pertinent information on all starches and its evaluation of paste testing is excellent.

Chapter VIII on the Psycho-Rheology of Foodstuffs is most valuable for it covers the basis for all instrumentation, namely to improve control, quality, and correlation of the physical properties in the foodstuffs which appeal to customers and on which sales depend. In this connection Harper states—"Physical criterion cannot and must not be assumed to be more effective for these purposes than the skilled human judgment made under carefully controlled and standardized circumstances. No matter how accurate the physical data may be in observation, the relative merits of the subjective and objective methods must be assessed

in their effectiveness in fulfilling their intended functions and the ease with which they may be carried out."

The text is remarkably free from errors. In the copy which was reviewed Figure 4 in Chapter I had been omitted. The writer wishes that a chapter on mayonnaise and salad dressings might have been included as these products are important items in foodstuffs in this country.

Present Knowledge in Nutrition

Edited by the Editorial Staff and Advisory Board of Nutrition Reviews. The Nutrition Foundation Inc., New York, N. Y. 1953.

This monograph is composed of review papers which were originally published in the journal *Nutrition Reviews*. The importance of foodstuffs: Carbohydrates, proteins, and fats, and also minerals and vitamins are discussed in their relation to human nutrition.

A chapter is devoted to each of the vitamins recognized as essential to human nutrition. The results of deficiencies of these factors and effects on human physiology are discussed.

Safety Data Sheets

National Safety Council, 425 N. Mich. Ave., Chicago 11, Ill. Single copies free.

The National Safety Council has recently published a series of four safety

data sheets of interest to the Chemical Industry. The sheets cover: Xylene and Toluene, Amyl Acetate, The Acid Plant, and Oxides of Nitrogen. The two latter sheets should be of interest to fertilizer formulators.

Recommendations for personal protection, safety devices to be used when handling the materials and methods of detection of the materials are also presented.

The National Safety Council is making single copies available to those who request them, whether or not they are members of the council.

Major Metabolic Fuels

Number 5 of a series of symposia sponsored by the Biology Department, Brookhaven National Laboratory, Upton, N. Y. Offices of Technical Services, Department of Commerce, Washington 25, D. C. \$1.35. July 1953.

This is a collection of the papers presented at a symposium at Brookhaven on the metabolism of body fuels. Most of the studies reported concern, or are the result of, work with radioactive tracers. The papers discuss: The Rate of Glucose Utilization, Hormonal Controls, New Metabolic Pathways, and Fatty Acids and Ketone Bodies.

The book serves as a good barometer of current work on the metabolism of carbohydrates and fats.

