photoeffect may be obtained from sum-rule calculations and are independent of the model assumed for the nuclear ground state. The nuclear systematics derived from sum rules are compared with experimental results, and reasonable agreement is demonstrated.

In the chapter devoted to models Levinger points out that both of the apparently conflicting models — the shell model and the collective model— are incomplete and that the truth surely includes them both. The relationships between the models are discussed, and distinctions are made between those features of the photon absorption cross section that are model-dependent, and therefore can be used to decide between models, and those that are model-independent.

The remaining chapters are devoted to deuteron photodisintegration, electromagnetic transitions between discrete energy levels, and the products of nuclear photodisintegration; they summarize experimental results and relate them to existing theories.

This little book is clearly a must for the specialist in photonuclear reactions. Those working in other branches of nuclear physics will find it a helpful summary, and the atomic physicist will enjoy seeing the connection between the atomic and nuclear problems.

EVANS HAYWARD
High Energy Radiation Section,
National Bureau of Standards

Food, the Yearbook of Agriculture, 1959. U.S. Department of Agriculture, Washington, D.C., 1960 (order from Supt. of Documents, GPO, Washington 25). xii + 736 pp. Illus. $2.25.

Food is important in keeping our people and our country strong. An abundance of food and the means of purchasing it are blessings of our economy. But do we know how to obtain the maximum vigor and vitality from the food we use? This question cannot be answered in the same affirmative sense. Despite spectacular progress made in biochemistry and nutrition during the last 30 years (about 50 essential nutrients have been discovered), the chapter on unidentified substances (by George M. Briggs) shows that we do not yet know all of the nutrients and that many new discoveries—such as the discovery that compounds containing selenium have important nutritional properties—are to be expected. On the other hand, the vast amount of knowledge already collected in the nutritional field has not yet reached the consumer; this could help the consumer in selecting his food and in preparing it in such a way that he could obtain the best possible nutritional benefits without sacrificing any of the pleasures of a well-prepared meal.

Because of the complexity of the subject matter, the outstanding textbooks of nutrition require a background in chemistry and physiology which even educated laymen do not possess, while most of the volumes written as popular books do not offer the information necessary for rational food planning and, in many instances, they even offer misinformation. This broad gap between two much and too little science is filled in an admirable way by the recently published *Yearbook of Agriculture, 1959*; its 65 chapters, written by eminent experts in all fields of nutrition, constitute a comprehensive presentation of our present knowledge of food and nutrition. While most of the well-written chapters are of a practical nature—for example, Elsie H. Dawson explains what happens to food in cooking—some chapters will appeal to scientists and will provide balanced information to those who have not specialized in the particular field of research covered in the chapter. I will mention only the chapter on metabolism (by Raymond W. Swift), the chapters on proteins and amino acids (by Ruth M. Leverton), and the one on fats and fatty acids (by Callie Mae Coons). The chapter on fat-soluble vitamins, written by the old master of nutrition, E. V. McCollum, shows that either too little or too much of a vitamin—for instance, vitamin C—may have harmful effects; the chapter on vitamin B complex (by Grace A. Goldsmith) records many interesting details about vitamin B_{12} and other less known vitamins of the group which, in minimal amounts, may exert a profound influence on our well being. Thus, the book will offer scientists and laymen alike a storehouse of theoretical and practical knowledge.

Hazel K. Stiebeling, of the Institue of Home Economics, organized the work and wrote an interesting chapter on the impact of food on human life.

FRANCIS JOSEPH WEISS
1541 N. Edgewood Street,
Arlington, Virginia

New Books

General

American Assembly, Columbia University. *The Federal Government and Higher Education.* Prentice-Hall, Englewood Cliffs, N.J., 1960. 205 pp. $3.50. Final report of the 17th American Assembly.

Battista, O. A. *Commonscience in Everyday Life.* Bruce, Milwaukee, Wis., 1960. 122 pp. $2.75.

Corte, Nicolas. *Pierre Teilhard de Chardin.* His life and spirit. Translated by Martin Jarrett-Kerr. Macmillan, New York, 1960. 140 pp. $3.25.

Edfeldt, Åke W. *Silent Speech and Silent Reading.* Univ. of Chicago Press, Chicago, Ill., 1960. 172 pp. $3.50. In the first part of this book, Edfeldt discusses the search for a proper method for investigating the true nature of silent speech, reviews earlier work, and describes the electromyograph (the instrument used in his experiment). Part 2 is a report of an actual experiment and a discussion of prevalent theories of silent speech.

Iverson, Robert W. *The Communist and the Schools.* Harcourt, Brace, New York, 1959. 435 pp. $7.50. The second volume in a series of studies of Communist influence in American life. The editor for the series was Clinton Rossiter; the survey was supported by the Fund for the Republic.

Kindler, Herbert S. *Organizing the Technical Conference.* Reinhold, New York; Chapman and Hall, London, 1960. 150 pp. $6.

Morris, Richard T. *The Two-Way Mirror.* National status in foreign students' adjustment. Univ. of Minnesota Press, Minneapolis, 1960. 229 pp. $4.50. The subjects of this study were 318 students from some 65 countries who were enrolled at the University of California at Los Angeles. The study seeks to determine to what extent the image of their native countries which the students believed Americans held influenced the foreign students in their reactions to their American experiences. It is the fifth study in a series of monographs resulting from a program of research sponsored by the Committee on Cross-Cultural Education of the Social Science Council.

Reinfeld, Fred. *What's New in Science.* Sterling Publishing Co., New York, 1960. 204 pp. $3.95.

Rubin, Theodore Isaac. *Jordi.* Macmillan, New York, 1960. 73 pp. $2.95.

Salzman, Michael H. *New Water for a Thirsty World.* Science Foundation Press, Los Angeles 3, Calif., 1960. 227 pp. $5.95.

Steen, Edwin B. *Dictionary of Abbreviations in Medicine and the Related Sciences.* Davis, Philadelphia, Pa., 1960. 102 pp. $2.50. Examples of contents: "HE viruses: human enteric viruses"; "RE: Radium emanation, reticuloendothelium, right eye."

Steiner, Rudolf. *Friedrich Nietzsche.* Fighter for freedom. Translated from the German by Margaret Ingram deRis. Rudolf Steiner Publications, Englewood, N.J., 1960. 222 pp. $4.75. Volume 2 of the major writings of Steiner, published in commemoration of the hundredth anniversary of his birth (1861).