makes it a valuable addition and reference in the field of whole-body counting. The Committee and contributing investigators to this publication have truly presented a complete compilation of data for others in the field to compare or for those agencies contemplating entry into the field.

Microbiological Specifications and Testing Methods for Irradiated Foods

(Technical Report Series No. 104, Report of a Panel of Experts Organized by the FAO and IAEA in Collaboration with IAMS, International Atomic Energy Agency, Vienna, 1970)

Pages 121

Price $4.00

This monograph should be of interest to biologists, radiation biologists, public health and radiological physicists, microbiologists, food processors, bacteriologists, and food and drug personnel (administrators and staff on Federal, state, and city levels).

This monograph is an effort on the part of a panel of experts from diverse areas of specialization to compare the microbiological methods being used in most countries of the world to consolidate this microbiological information into a limited number of acceptable, reproducible methods that could form a basis for evaluating "(a) the effectiveness of the different levels of radiation processing of foods and feeds; (b) the microbiological quality of the resulting products; (c) the microbiological safety for foods and feed use; and (d) the closeness with which regulations should comply with microbiological requirements." The criteria as listed are related to proposed legislation.

Consideration of the microbiological problems to be anticipated with irradiation relate to the destruction of all organisms with the potential capacity to proliferate within the food and those specific pathogenic organisms, and particular group(s) of spoilage organisms. Considerations were also given to packaging, labeling, storage, and shelf life of irradiated foods.

A second section of this report deals with recommended methods for microbiological analysis of irradiated foods and considers various tests and techniques that might gain international acceptance as related to these irradiated foods. These tests are presented in detail, and formula(s) with considerations and limitations (if any) are noted.

A third section describes culture media, formulas, preparation, and storage abilities of some 69 preparations. In a similar manner the fourth part describes some 18 reagents with accompanying notes, directions, and concentrations.

This technical report is well prepared and should serve those in the field as a ready source of information. For those contemplating entry into the field of irradiated foods it might have been desirable on the part of the Committee to have included, perhaps as an appendix, the various dose levels for the popular foods considered for irradiation and/or sterilization.

A future work that might be considered by the Committee might include formal megarad dosimetry techniques for food irradiation.

Isotope Techniques for Studying Animal Protein Production from Non-Protein Nitrogen

(Technical Report Series No. 111, International Atomic Energy Agency, 1970, Vienna)

Pages 29

Price $2.00

This report should be of interest to veterinarians, argronomists, animal breeding and research agencies, biochemical nutritionists, and radiobiologists.

This brief 23-p. report deals with three main concerns:

1. the role of nonprotein nitrogen (NPN) in the feeding of ruminants
2. the economic feasibility of NPN as a food additive and/or supplement for certain nations
3. the use of isotopes for evaluation of NPN function.

This report is designed to provide a review of the latest information on approved methods to evaluate the feeding value of NPN with particular emphasis on those methods requiring the use of isotopes. Three isotopes were considered as especially useful:

"1.a. ^{15}N for rate of NH_3 production in rumen, b. rate of incorporation of N compounds into microbial protein, c. overall conversion of NPN to tissue or milk protein,

2.a. ^{14}C for rate of hydrolysis of C-containing NPN, b. turnover and entry rate of amino acids, c. estimates of protein synthesis,

3.a. ^{35}S for estimates of microbial protein synthesis, b. estimates of microbial contribution to synthesis of milk, wool, muscle."

Within the framework of this report the main areas of study of NPN use are outlined, with consideration given to world-wide study. This report indicates the need for study and provides those groups or individuals directly involved in this work with the latest conclusions regarding the use of NPN methods and areas for continued study.

Isotopes and Radiation in Parasitology—II

(Proceedings of a Research Coordination Meeting, Vienna, June 1969)

Pages 139

Price $4.00

These proceedings should be of interest to investigators in medical parasitology and veterinary medicine, physiologists, immunologists, radiation biologists, agriculturists, and animal scientists.

Discussed in the 17 papers of this third meeting is the use of radiation (conventional x rays and accelerators) and radioisotopes as it relates to

1. the study of the mechanism of immunity to helminth infections
2. the pathophysiology of helminthiasis with particular reference to anaemias and hypoproteinaemias so characteristic of many of these diseases
3. developments in the study of immunity to protozoal diseases.

The papers vary in length, are generally well documented, and contain suitable tables, illustrations, and