

wonder if a degree of overenthusiasm had not contributed to their interpretation of the statistics. Nevertheless, *Computed Tomography of the Brain and Orbit* is an excellent introductory text on computerized tomography of the head and the authors must be commended for assembling this volume of information from the correlative data.

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INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION. NO. 23. REPORT OF THE TASK GROUP ON REFERENCE MAN. W. S. Synder, M. J. Cook, L. R. Karhausen, E. S. Nassct, G. Perry/Howalles, and I. H. Tipton, eds. Oxford, Pergamon, 1975, 480 pp, \$50.00.

This book is one in a series of reports prepared by a task group of Committee II of the International Commission on Radiological Protection. The purpose of the work was to develop human references in order to better estimate radiation dose to the human body, whether from external or internal sources. In order to calculate radiation exposure in different situations, it was necessary to compile information on intakes of substances, excretions, and elimination rates and also data on size and composition of the body relative to sex, age, and weight.

The book is organized into three sections: (A) anatomic values for reference man; (B) gross and elemental content of reference man; and (C) physiologic data for reference man. The first section, which provides information on anatomic values, is subdivided into total body, the various organ systems, and a section on pregnancy. In each subdivision of the anatomic section, each organ system is further subdivided; for example, under the integumentary system, skin, hair, and nails are listed separately. In each of the anatomic sections the data on individual organs are tabulated with respect to the applicable parameters and include information on both the newborn and the adult. The tables provide a complete comparison for those organ systems in which sex may involve differences in values. In many instances, the variations of organ parameters are analyzed with respect to the different periods of life. This portion of the book, which is well referenced, appears to furnish most of the relevant data currently available in the literature.

The second section, on growth and elemental content, has numerous tables that provide values for the physical properties, growth content, blood content, and elemental content of the total body and of the various organs and tissues of man. The values reported were those considered to be normal and not pathologic. These tables are again most exten-

sive and in many instances include information on trace elements.

The third section presents those characteristics of man that relate directly or indirectly to intake, metabolism, and excretion of stable elements in man's environment. Data are first provided for the physiologic model of reference man, and then the metabolic balance of the individual stable elements is discussed.

This reference book provides very extensive information that should be of great help to those interested both in research and physiology. It should be of great assistance in structuring research programs and analyzing data.

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PRACTICAL RADIOIMMUNOASSAY. A. J. Moss, Jr., G. D. Dalrymple, and C. M. Boyd. St. Louis, C. V. Mosby, 1976, 1,558 pp, \$11.95.

The title of this short work reflects accurately the purpose of the book, namely, to provide an elementary introduction to radioimmunoassay and radioassay procedures. The first three chapters deal adequately with the immunologic principles that relate to radioimmunoassay, the chemical principles that support radioimmunoassay technology, and the critical problem of the separation methods used in these methods. The overall concept of radioimmunoassay is developed in terms that are relatively easy to understand, and this provides a base from which to build. The fourth chapter discusses the measurement of radiation, particularly as used in radioimmunoassay procedures, and the authors successfully explain this information to the uninitiated. The fifth chapter, "Numerical Procedures Needed for Radioimmunoassay," is in essence a short treatise on the mathematics of radiation counting and radioimmunoassay. The last three chapters discuss quality control, ranges, variation of radioimmunoassays, and safety principles. In addition, two appendices discuss radioimmunoassay kits and phlebotomy techniques. Although this text is not large, it provides extensive information for the beginner in radioimmunoassay and, which is of paramount importance, provides it in a manner that is easily understood. I would recommend *Practical Radioimmunoassay*, not only for the beginner in radioimmunoassay, but also for those not deeply involved in the subject and whose knowledge of radiation physics and statistical mathematics lacks depth.

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