

Textbook of

ENDOCRINOLOGY

Edited by

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WITH CONTRIBUTIONS BY
TWENTY-ONE AUTHORITIES

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Preface to the Third Edition

ALTHOUGH this is the third edition of a textbook first written in 1950, it is essentially a new book. Rewriting has been necessitated by the tremendous progress in endocrinology and metabolism during recent years. The rapidly accumulating information indicates that hormones influence every body cell directly or indirectly. They markedly affect the metabolism of carbohydrates, fats, proteins, minerals, and vitamins. Virtually all the major diseases influence endocrine function, and vice versa. Therefore, knowledge of endocrinology and metabolism is important in every branch of medicine.

Since thousands of papers on endocrinology and metabolism are published annually, the incorporation into one book of the most pertinent information presented in a clear, concise, and authoritative manner is most important. As in earlier editions, the editor concluded that this could be done best by the selection of separate authors for most chapters, men established as excellent investigators, teachers, and authors in their respective fields. Almost all of the contributors have engaged in both basic and clinical investigations and are adept in the practical application of basic knowledge to clinical problems. This has made it possible for them to discuss the pathogenesis of clinical disorders and the rationale for therapy in terms of basic information, both old and new. Although greater emphasis is placed on new observations than on old, an appropriate balance is maintained. The authors have been encouraged to indicate where controversy exists, but also to state their own opinions, even when tentative. The editor has tried to coordinate the coverage of various subjects. Large amounts of repetition have been

avoided, although a small amount was permitted for proper emphasis. The authors were encouraged to make their reference lists selective rather than exhaustive.

As stated above, this is essentially a new book. More than 70 per cent has been written by new authors, and most of the remainder has been rewritten.

The chapters on the pituitary, testes, ovaries, pancreas, neuroendocrinology, and laboratory tests all have new authors, and there are new co-authors for the chapters on the thyroid and parathyroids. There are eight new chapters, consisting almost entirely of new content or approaches. One chapter, "Disorders in Sex Differentiation," summarizes the rapidly accumulating information in this interesting field. Similarly, "Genetics and Endocrinology" covers the most pertinent information in this increasingly important area. Two chapters with unique approaches summarize the significant effects of hormones upon protein metabolism and upon water and electrolyte metabolism. The chapter dealing with obesity in previous editions has been extensively enlarged to deal with "Lipid Metabolism and Lipopathies." This chapter highlights the progress in a rapidly advancing field in which the prominent role of the endocrines is being increasingly recognized. Consideration is given to basic aspects of various phases of lipid metabolism and to disorders in lipid metabolism (lipopathies), including atherosclerosis, obesity, xanthomatosis, and sphingolipidosis. Recent progress has made it desirable to include individual chapters on "The Pineal," "Hormones and Cancer," and "Hypoglycemia and Hypoglycemoses."

The new subjects covered are far too numerous to list, but a few examples are: actions of human growth hormone, evaluation of pituitary function by the methopyrapone test, the hyperthyroid-exophthalmos factor demonstrated in serum, the autoimmunologic aspects of thyroiditis, radical changes in policies for managing nontoxic goiter, relative evaluation of commonly used glucosteroids, ill-effects of chronic glucosteroid therapy, corticotropin-releasing factor, glomerulotropin, melatonin, oral contraceptives, genetic abnormalities in various endocrine disorders, methods of determining chromosomal sex alterations, oral drugs in diabetes, new tests for diabetes and insulinoma, neuroendocrine relationships, characterization of purified parathyroid hormone, new tests for parathyroid disorders, effects of hormones on storage and breakdown of fats, and endocrine influences on atherosclerosis and obesity.

One chapter deals with endocrine problems in children, and two short chapters deal individually with the general principles and laws of endocrinology and general principles in the diagnosis and treatment of endocrinopathies. In this last chapter, commonly used endocrine products are considered. Several chapters discuss pseudoendocrine disorders and the use of hormones (glucosteroids, sex steroids) for treating such nonendocrine disorders as cancer, collagen diseases, and allergic disorders.

This book differs also from previous editions in that the tests used largely for the evaluation of specific glands are discussed in the chapters on the respective glands. Tests useful in the evaluation of more than one gland are discussed in a special chapter by Albert, Mattox, and Mason, outstanding experts in these spheres.

The editor is grateful for the excellent performances of the authors and for their cooperation, for the great assistance in the preparation of manuscripts by Mrs. Helen Thursh, Mrs. Priscilla Crittenden, and Miss Rosemary Dedman, for the pleasant cooperation of members of the W. B. Saunders Company, and to Ciba and the Schering Corporation, for aid in the production of the colored plates.

Finally, it is with great pleasure that the editor, with the enthusiastic approval of the authors, dedicates this book to three outstanding endocrinologists.

ROBERT H. WILLIAMS, M.D.

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