

## Book Reviews

J.L. Simpson

Disorders of Sexual Differentiation, Etiology and Clinical Delineation

Academic Press, New York 1976

This is an outstanding book covering genetic, embryologic and endocrine aspects of aberrations of sexual differentiation. The volume is divided into 13 chapters. It starts with an easily understandable explanation of the principles of human genetics. The following chapters on principles of reproductive embryology and on basic endocrinology of the sex steroids are the only contribution from respective specialists. Dr. Simpson covers the clinical pictures of female and male pseudohermaphroditism; sex-reversal man; gonadal dysgenesis; Klinefelter syndrome; other forms of male and female hypogonadism; anomalies of internal ducts in females and males, and polysomy of X and Y. The closing chapter includes a very clinically oriented differential diagnostic approach based on presenting symptoms. The didactic outlay of the book is excellent. The author gives not only a practical differential diagnostic approach, but clearly delineates the pathophysiological background of the most common, as well as of the rare disorders of sexual differentiation. The book considerably expands the aspects of intersexuality covered in textbooks of pediatrics, internal medicine and gynecology. A comprehensive bibliography completes the picture of a volume which is highly appreciated. The book should attract research-oriented readers just as well as clinicians.

J.G.

M. Nitzan (ed.)

The Influence of Maternal Hormones on the Fetus and Newborn

Pediatric and Adolescent Endocrinology, vol. 5 Karger, Basel 1979 VIII + 288p.; SFr. 99.- ISBN 3-8055-2902-3

This book is a comprehensive review of a rapidly developing field of medicine, hormonal changes and influences during pregnancy. In 14 various chapters, divided up according to groups of hormones, the present state of knowledge is presented.

Each author presents a concise but still complete survey of the theoretical background, basic research and clinical studies available. Ample literature references are also given. In addition various diseases and their influence upon mother, fetus and newborn are discussed.

This book reads very fluently and offers good information about this interesting field. The editorial work is excellent. There are few books with many authors where one never

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gets the feeling that it was not written by one man. In a few years time our knowledge of fetomaternal endocrinology will probably advance. Still an accurate review like this one is very important. It can be warmly recommended for every obstetrician, perinatologist, endocrinologist, and even all pediatricians interested in progress of medicine. P.W. Nars, Basel

G. Crepaldi

Diabetes, Obesity and Hyperlipidemia

Academic Press, London 1978 XVIII+ 400 pp.; E 16.- ISBN 0-12-197035-3

This book represents the proceedings of the 2nd European Meeting on Metabolism which took place in Italy in May 1977. Six sessions were held to cover the fields of diabetes, obesity and hyperlipidemia. In each, a number of competent authors contributed papers which included largely original experimental work. Although an international meeting, the majority of contributors originated from the host country; there were only a minority of authors from northern Europe.

In contrast to many similar previous publications, the book holds what the title promises: most papers deal with topics related to clinical medicine, and a number of important clinical investigations are reported. One example is session 1 which covers the subject of insulin and glucagon regulation and metabolism. Of particular interest is a review of the altered fuel, insulin and glucagon metabolism in cirrhosis of the liver.

Session 2 includes three papers on insulin receptors both in vivo and in vitro. The subject is appropriately introduced by a review from the leading group in the field. Session 3 features a series of papers on regulating factors of body-fat mass. They point to recent discoveries on the hormonal control of adipose tissue cellularity. The 4th session is devoted to adipose tissue metabolism and obesity; the introductory review is focussed on the still unknown interrelationship between hyperinsulinism and carbohydrate excess in experimental obesity in animals and to the pathogenetic factors of obesity.

The clinician who is interested in therapeutic aspects of diabetes and obesity will not find useful information in the book.

The two last sessions are devoted to the structure and metabolism of lipoproteins and to the metabolic factors leading to atherosclerosis. Several papers deal with hereditary abnormalities of lipoprotein metabolism.

In summary, the book includes a series of interesting papers on recent developments in clinical and experimental diabetes, obesity and hyperlipidemia. It is particularly recommended to biochemists and to clinicians as a valuable collection of recent articles on metabolism research.

U. Keller

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Norbert Freinkel (ed.) Contemporary Metabolism, vol. 1 Plenum Press, New York 1979 XXVI+ 497 pp.; \$ 29.50 ISBN 0-306-40127-4

This book is in fact the third volume of 'The Year in Metabolism' but with a new title. Experts in different fields of metabolism cover the respective aspects in a concise and very readable way.

This makes it easy for us to recommend this volume. The respective chapters – they cannot cover the whole field of metabolism on 500 pages of course – will broaden the knowledge of any doctor interested in metabolism in general. But also for the specialist in metabolic diseases this book will give valuable stimulation.

For example, the chapter about purine and pyrimidine metabolism stresses the links between this disorder and immunodeficiency diseases. The interdependence of hormonal control and metabolism is a truism of course. In the daily practice of medicine, however, this fact is not always appreciated. Several chapters of this volume, e.g. on lipids, body fuel metabolism, hormone receptors, diabetes mellitus, obesity, glucagon and somatostatin, contribute to this necessary synthesis.

Only one point of criticism on a minor point may be allowed. The titles of some chapters should not be devoted to some concept of the editor (?) but to the content. For instance, chapter 11 deals

with 'Divalent ion metabolism', the content, however, deals with vitamin D, its metabolism and with phosphorus metabolism (phosphate is trivalent by the way).

But on the whole this volume can be recommended to anybody interested in human metabolism.

H. Wick, Basel

K.W. McKems (ed.)

Biochemical Endocrinology – Structure and Function of the Gonadotrophins

Plenum Press, New York 1978 XVIII+ 628 pp.; \$59.40 ISBN 0-306-40097-9

This book presents papers discussed in the symposium held in September 1977 at the Asticou Inn in Maine. It is divided into 25 chapters dealing with the mechanism of action of gonadotropins, lutotropin and follicle-stimulating hormone, and gives an excellent review of recent basic research concerning the structure of gonadotropins and their role in the regulation of ovarian and testicular activity. Biosynthesis of prolactin, HCG, placental lactogen, drug effect on lutropin action and the effect of FSH and LH on RNA synthesis in

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the testis are discussed. An attempt has been made to elucidate the mechanism of HCG-induced refractiveness in Leydig cells at the membrane receptor and intracellular level. The function of the Sertoli cells and their hormonal regulation, particularly the role of these cells in FSH feedback regulation, are discussed. It is stressed that the gonadotropin-binding sites are not restricted to the plasma membrane, but may be found inside the cell and occasionally in the nucleus. An additional chapter is devoted to the interaction between protein hormones and their target cells. Chemical approaches to the structure-relationship of luteinizing hormone, structural and immunochemical properties of HCG and some aspects of the secondary and tertiary structure of glucoprotein hormones are also discussed. The numerous charts and figures allow a better understanding of the structure and function of gonadotropins.

This monograph is an important contribution to the structure and function of the gonadotropins and can be recommended to all those interested in gonadotropins.

J. Hadziselimovic

A. Fabbrini and E. Steinberger (eds.)

Recent Progress in Andrology. Proceedings of the Sero Symposia, vol. 14

Academic Press, London 1978

XIV+506 pp.; £ 17.60

ISBN 0-12-247350-7

This book includes the lectures and short papers presented at the symposium on 'Recent Progress in Andrology' held in L'Aquila. It is a multidisciplinary work which includes topics on endocrinology, testicular pathophysiology, physiology of sperm, genital tract, antifertility agents and therapy in andrology. The volume is divided into five parts. The first part which covers the cerebral cortex and the hypothalamo-pituitary-gonadal axis gives good account of current investigations in this field. The second part concerns testicular pathophysiology and physiology with an excellent contribution on molecular mechanisms concerned in hormonal control of the seminiferous epithelium from Steinberger and coworkers.

The third part, 'Sperm and Genital Tract', as well as the fourth part, 'Antifertility Agents and Therapy in Andrology', are devoted to the transport and survival of spermatozoa, radiologic exploration in andrology as well as steroid antagonist and androgens. Various short communications concerned with andrology – the study of male reproduction – make up the last

part of the book. Although the progress in andrology has been relatively slow, it is today a well-established discipline. This book is an important contribution to the understanding of this new discipline. It can be recommended to the endocrinologist, urologist, psychiatrist, neurologist, seminologist, pediatrician, geneticist, gynecologist and all those interested in andrology.

J. Hadziselimovic

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L. Carezza, P. Pancheri and L. Zichella (eds.)

Clinical Psychoneuroendocrinology in Reproduction

Academic Press, London 1978 IV+470 pp.; £ 16.80 ISBN 0-12-159450-5

This book contains the proceedings of the 22nd Sero Symposium. More than comparable books, it contains papers of a very disparate kind, disparate in content, in the aim and in quality. The title of the book covers such a wide range that it can head every topic from pure neurochemistry to psychodynamics, from work done in the splendid isolation of the laboratory to crude clinical observation. The reviewer is confronted with the unsolvable task of finding the common denominator of nearly 40 heterogeneous papers. Several chapters are reviews themselves, often without any connection to reproduction. Reviews on peptide hormones and their effects on animal behaviour are always of great interest, especially if they end as here in somewhat different conclusions. Other reviews cover both, neuroendocrinology and reproduction, as a paper on LHRH and one on stress in pregnancy and labor. Some papers report experiments in animals: LHRH receptor binding, induction of ovulation, lesions influencing sexual behaviour. The vast majority of papers are clinical: contributions to pharmacology (e.g. bromocryptine), physiology (e.g. feedback of sexual hormones), psychology (e.g. psychodynamics of anorexia nervosa). In a book of such disparity everybody may find a grain. Yet one who wants to be informed in detail prefers a book treating only one topic and if one looks for a digest on the endocrinology of reproduction a textbook is preferable.

H. Feer, Basel

V.H.T. James (ed.)

The Endocrine Function of the Human Adrenal Cortex

Proceedings of the Sero Symposia, vol. 18 Academic Press, London 1978 X + 628 pp.; £ 19.50 ISBN 0-12 380160 5

This book is a record of some 36 papers presented at the Sero Symposium held in October 1977, in Florence.

The authors deserve the compliment having accomplished for all those who have been unable to attend this Symposium to summarise the most valuable and instructive information presented. Most of the 36 papers represent an excellent review on the endocrine function of the human adrenal cortex. The text is usually updated prior to publication and completed with the most important references. The papers are largely original communications which are not easily available in such an exhaustive form elsewhere. The volume will be understandable even for the nonspecialist in this field. Comprehension of the chapters dealing with

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more complex aspects is facilitated by an introductory section reviewing the actual knowledge of adrenocortical steroid biosynthesis and of the regulation of ACTH secretion.

The section giving an excellent oversight of the quite discordant views on the interrelationship between arterial hypertension and adrenal cortex has to be recommended particularly to all

physicians interested in clinics or in the investigation of hypertension. A further section presents some topics often neglected by those not particularly involved in pediatric problems, such as adrenal function in the fetus, the normal infant and the prepubertal child as well as in puberty. Other chapters contribute to elucidate the role of adrenal steroids in hirsutism and the embarrassing ACTH suppressive effect of a well-known and quite commonly used anti-androgenic drug.

This fascinating volume provides a particularly large and comprehensive picture of the endocrine function of the human adrenal cortex. It should be read by every endocrinologist working in the field, but it can be recommended as an excellent and up-to-date review to every clinician, physiologist or pathologist interested in the current views of adrenal cortical function.

M. Birkhäuser, Basel

G. Giebisch, D.C. Tosteson, H.H. Ussing and M.T. Tosteson (eds.) Membrane Transport in Biology

Springer, Berlin 1978

Vol. 1: Concepts and Models

XX+537 pp.; DM 148.-

ISBN 3-540-08687-0

Vol. 2: Transport across Single Biological Membranes

XX+443 pp.; DM 148.-

ISBN 3-540-08780-X

Vol. 3: Transport across Multi-Membrane Systems

XVIII+ 459 pp.; DM 148.-

ISBN 3-540-08596-3

Vol. 4: Transport Organs, Parts A + B

XXVII + 939 pp.; DM 296.- (not available separately)

ISBN 3-540-08895-4

These four volumes are the first edition of a unique collection of articles on the most recent research in the area of membrane transport. The chapters are written by authorities in the field, and the editions are attractive both in regard to presentation and to thoroughness.

Volume one contains an introduction into concepts and models. It includes chapters on the theoretical basis of investigation in transport processes, in experimental models frequently used by scientists in the field. It introduces chemical and biological properties common to most biological membranes, it describes planar bilayers as models for biological membrane.

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Volume two contains a collection of articles on transport across single biological membranes. Four chapters describe the transport of different types of molecules and ions across the plasma membrane of mammalian red cells. Two essays concern the excitable membranes of nerve and muscle cells, whereas the remaining four chapters deal with transport across several types of intracellular membranes.

Volume three covers the topic 'transport across multi-membrane systems'. The chapters describe transport phenomena in multimembrane systems and simple epithelia. Substantial progress has been made in the area of transport of fluid across artificial membranes in vitro. The functional organization of directional solute and solvent transport through and between cells is analyzed, and an attempt is made to extrapolate the two transport phenomena to the whole organ.

Volume four consists of two volumes covering the topic of 'transport organs'. Volume 4a extends the material presented in volumes 1-3 to define the properties of directional solute and solvent movement across complex epithelia, mostly from kidney tubules and from the gastrointestinal tract. Emphasis is placed on the subject of transport operations across renal tubular and gastrointestinal epithelia, a field in which the techniques have advanced significantly. The described models indicate that transport across epithelial membranes are more than a single step phenomenon but include more complex individual cellular and intracellular transport routes.

U. Keller

London and New York: Academic Press. 563 p. Rashad MN, Morton WRM. 1969. Selected topics on genital anomalies and related subjects. Springfield, Ill.: Charles C Thomas. 931 p. Simpson JL. 1976. Disorders of sexual differentiation: etiology and clinical delineation. New York: Academic Press. 466 p. Young HH. 1937. Genital abnormalities, hermaphroditism and related adrenal diseases. Disorders of Sexual Differentiation book. Read reviews from world's largest community for readers. Goodreads helps you keep track of books you want to read. Start by marking "Disorders of Sexual Differentiation: Etiology and Clinical Delineation" as Want to Read: Want to Read saving... Want to Read. Currently Reading. Read. Disorders of Sexual Di by Joe Leigh Simpson. Other editions. Want to Read saving... Error rating book. Refresh and try again. Rate this book. Clear rating.