Book Reviews


This book is a record of two conferences held in 1966 and 1967. Not surprisingly, most of the interesting contributions have been overtaken by subsequent events. The contents of Cheek's two chapters for example are much better read in the recent book he edited on Human Growth. Rabinowitz's chapter on human growth hormone is good, but inevitably dated. The first conference dealt chiefly with nutrition during adolescence. Heald and his colleagues contribute a useful chapter on the intakes of calories, proteins, etc. of some American adolescents, and show that the 1964 National Research Council recommendations are comprehensively wrong, particularly in the timing of the adolescent growth spurt. Most of the rest of this symposium dealt with obesity.

The second symposium is the more interesting and has the best chapter in the book, by Garn and Wagner, on the estimated growth curves of the total mass of the skeleton. They show what a large increase in cortical thickness of bone occurs at adolescence, and estimate that whereas before the growth spurt children retain about 100 mg./day of calcium, during the growth spurt girls retain 200 and boys as much as 300 mg./day. They rightly stress individual differences in the age at which the spurt and hence the increased requirement takes place, pointing out that early maturing boys have very much greater growth spurts than late-maturing girls.

The book has some interest to the paediatrician and the adolescent medicine specialist. Most of its interest can be extracted in a couple of hours.


Dr. Donald Cheek is well known for his metabolic work, and with the help of 31 all-American contributors, the majority from the Johns Hopkins Hospital, he has produced an original book on human growth. Watching the infinite variations of normal growth and trying to prevent or influence abnormal growth surely provides much of the essence and excitement of paediatrics, and many will turn eagerly to this volume. As its Editor says in the Preface, it is not a textbook—but a presenta-

tion of the work of many investigators on the physiology, biochemistry, and psychology of growth in normal and abnormal children; and the debt to Daniel Darrow's inspiring teaching is generously acknowledged.

Normal children, those with endocrine and congenital heart disease, and male infants admitted for hernia operations have been investigated from 5 years of age, though in relatively small numbers; and with much complementary animal experimental work, a three-dimensional study of growth in size, functional achievement, and time is presented. A section on the clinical and anthropometric approach is followed by one on the laboratory aspects of estimation of body size and composition. The section on cellular growth is of particular interest, and is followed by one on energy metabolism. Finally cerebral function and psychological growth are discussed; methods for studying body composition are given; and tables on body composition provided in an extensive appendix. It is disappointing to find the work of Dobbing ignored in the subsection of growth and development of the brain; and genetic factors appear to have been deliberately left out.

For the research worker, much of the methodology and general approach to the investigation of the subject will be helpful. Even those who never wish to step inside the laboratory will find a wealth of material with important clinical implications, though they should not imagine it is light bed-time reading. They can, however, abstract much of value, and gain an understanding of how work in this field is likely to develop. In his summing up, Dr. Cheek reminds us that maximum and optimal growth may not be synonymous, and that the former may be accompanied by the earlier onset of degenerative disease, thoughts with which paediatricians should increasingly concern themselves. There is a great deal of food for thought in this important book.


This is the second edition of a book first published some 13 years ago, dealing with the development, congenital abnormalities, and some acquired abnormalities of the bones in children from birth to puberty. It has now been brought up to date, and considerable new material and illustrations have been added. Professor Swoboda is the Director of the G. von Freyer'schen Children's Hospital in Vienna, and the