BOOK REVIEW

Title: KINANTHROPOMETRY III
Editors: T. Reilly, J. Watkins and J. Borms
Price: £25.00 312 pages  ISBN 0 419 13970 2

Kinanthropometry III contains a series of papers presented at the 8th Commonwealth and International Conference on Sport, Physical Education, Dance, Recreation and Health held in Glasgow from 18th-23rd July, 1986. The word 'kinanthropometry' may be new but its scientific aims are traditional, that is to understand the relationship between structure and function in man. The book is subdivided into seven sections which in turn deal with body composition, somatotype, methodology, growth and paediatric kinanthropometry, anthropometry in females, clinical and athletic applications and muscle. Thus standard ergometry is covered, determination of body composition, energy intake and energy expenditure, dynamic exercise and muscle function. Various populations are studied, e.g. children, women, active and elite athletic populations, both male and female. The importance of physical activity on lifestyle is also commented on in some articles.

This particular volume, one of a series dealing with sport and related topics, was published soon after the July 1986 Commonwealth conference and the organisers, editors and publishers are to be congratulated. The format of the original presentations are adhered to, consequently there is not a consistent print style throughout. Some papers are easier to read than others, there are one or two spelling mistakes, a missing reference and some figures could be enlarged. These, however, are minor criticisms for a book that offers some insight into the latest research on structural and functional responses during growth and development and the effect of exercise on different populations.

There are articles to interest the general practitioner, health care worker, medical researcher and physical educationist. Therefore this book would be a valuable reference source for all those interested in recent developments in sports medicine and sports science.

Roger Ramsbottom

BOOK REVIEW

Title: LA SURVEILLANCE CARDIOLOGIQUE DU SPORTIF. ABC DE MEDECINE DU SPORT
Author: F. Carre 1988
Publisher: Masson Ed. Paris
Price: 95 Fr. francs  90 pages  10 tables  12 figures  ISBN 2 225 81330 2

This volume, containing 90 papers, is number 6 of ABC Sport Medicine Series edited by Masson (Paris). This book is divided into 5 parts:

1 — Adaptation to training
2 — Training, effects and method
3 — Electrocardiography at rest and Holter, exercise test
4 — Heart disease and Sport
5 — Principles that seek to facilitate the health and well-being of older adults through exercise, sport and physical activity.

In Part I, power production and fuel utilisation are described. The energy substrates utilised during exercise are determined by two main factors; the intensity of the exercise and its duration. In this context, exercise intensity is expressed not as the absolute power production but as a proportion of an individual’s maximal aerobic capacity (%VO2 max). Very shortly, Carre describes the fundamental basis of power production by the muscles and the different origins of energy output.

In Part II the author studies effects of exercise on heart but also cardiovascular effects of training in children and old people. This chapter is completed by a summary in relation to exercise cardiac patients. The consensus has been that the ideal programme is the highest intensity for aerobic work, longest duration and greatest frequency of training.

Parts III and IV. Coronary heart disease is the major cause of death and disability, thus the author describes electrocardiographic changes considered abnormal in untrained persons, provoked by physiological adaptation of the heart to prolonged intense physical training.

In summary it is important to perform echocardiographic evaluation, exercise electrocardiography and exercise testing for determining cardiorespiratory risk and cardiorespiratory fitness — Ruffier-Dickson test; Martinet test; STT (systolic tension time) VO2 max. Carre emphasises Arrhythmias (sinus bradycardia, sinus arrhythmias and sinus pauses, supraventricular arrhythmias); P-R intervals (prolonged and AV heart block, shortening and the WPW syndrome); S-T segment, T waves and repolarisation anomalies.

Part V. In this part, the author compares exercise coronary heart disease and risk factors, effects of exercise training on fitness. This study is done in function of physiological differences between sex and age. Individuals are encouraged to participate in sport to improve their level of fitness and to diminish the risk of ischaemic heart disease. Mass participation sport such as jogging, squash and track and field athletics have benefited from this increased popularity. This has resulted in a greater number of middle-aged, coronary prone individuals taking part in sporting activities. Recently, the statistical risk of sudden death in sport has been scrutinised (in France 2.5-8 to 100,000 sportsmen). Of these, Soccer accounted for 33% and Cycling 14%.

The book gives a very good review of today’s notions on cardiologic limits of human and athletic performance. It is especially interesting for sports medicine students. In comparison with other books on sports medicine, which are mostly physiological, this book is clinical and has a great importance for medical and sport medical practice.

P. Pilarudeau