

**BIOLOGICAL SCIENCE**

*The Human Machine: Biological Science for the Armed Services.* By Charles W. Shilling. (Pp. 292+xii; illustrated. \$5.) Annapolis, Maryland: Naval Institute. 1955.

This book is primarily addressed to members of the United States Armed Forces, but much of its content will appeal to a wider audience. It is an expression of a view which is beginning to gain wide acceptance, particularly on the other side of the Atlantic—namely, that some general knowledge of human biology is of value to the ordinary man in his personal life and everyday work.

Part I is an orthodox elementary account of the structure and functions of the body, with some interesting observations on the potentials of human performance. Part II gives a reasonable and not too austere prescription for a healthy life. The reviewer would have been inclined to omit Chapter 9 altogether. It amounts to little more than a nominal list of diseases—a gloomy catalogue of disaster which does little to advance the book's general argument. The sections on first aid and emergency treatment follow generally accepted lines. It is noted with regret, however, that on page 31 the use of oxygen and carbon dioxide breathing mixtures is still advocated.

The third part will probably be new to many British readers and is the most interesting one in the book. Entitled "The Human Machine as Part of the War Machine," it deals with man in relation to the various special environments created by war and military equipment. It will probably engender in the non-medical reader a clearer appreciation of the importance of welding man, equipment, and operation into a single harmonious design. This is a lesson which has not yet been fully learned in all quarters.

The production and printing are of a high standard, though some of the diagrams will tax the presbyopic. Only one minor misprint was noticed.

J. M. HOLFORD.

**VITAMINS**

*Vitamins in Theory and Practice.* By Leslie J. Harris, Sc.D., D.Sc., Ph.D., F.R.I.C. Fourth edition. (Pp. 366+xxii; illustrated. 35s.) Cambridge: University Press. 1955.

It is a pleasure to welcome once more a new edition of this book, the previous edition having appeared as long ago as 1938. Many notable contributions to our knowledge of the vitamins have, of course, been made in the intervening period, but the text has been revised and brought up to date wherever necessary, and new chapters have been introduced to deal with some of the more important additions to our knowledge of the subject.

It is as well to point out, in view of the long interval which has elapsed since the notices of the previous edition appeared, that this account of the vitamins can be read with pleasure and profit by the "ordinary" reader, as well as by medical students, doctors, dietitians, and others with a professional background of interest in nutrition. The book is profusely illustrated and thoroughly deserves the continuation of the support it has received in the past.

S. J. COWELL.

**POTASSIUM METABOLISM**

*Potassium Metabolism in Health and Disease.* By Howard L. Holley, M.D., and Warner W. Carlson, Ph.D. (Pp. 131+xii; illustrated. \$4.50.) New York and London: Grune and Stratton. 1955.

This book provides a concise and readable summary of current information on normal and abnormal potassium metabolism. The two authors write from the Departments of Medicine and of Biochemistry in the University of Alabama, and their collaboration has given us an exceptionally lucid account of the ways in which potassium metabolism influences and is influenced by energy metabolism. The part played by potassium in nerve and muscle activity is also outlined. Some exception may be taken to the authors' belief, implicit on page 17 and explicit on page 22, that "transfer of potassium between the intracellular and

extracellular compartments is a relatively slow process"; for isotope studies, both *in vitro* and *in vivo*, indicate that transfer of potassium across the cell wall takes place very rapidly indeed.

The various clinical causes of potassium depletion and excess are adequately summarized; overdosage with deoxycortone acetate is mentioned, but aldosterone is referred to by its "old" name of electrocortin, and Conn's new syndrome of primary aldosteronism has not been anticipated. There is an appendix giving the potassium content of foods, and even of the public water-supply in 150 American cities; from this it would appear that only in Aberdeen, S. Dak., Galesburg, Ill., and Kansas City, Mo., could anyone expect to get as much as 1 mEq of potassium daily from the tap. This evidence of painstaking preoccupation with the needs of American readers may console any British kaliologist who happens to notice that in a list of 41 references it has not been found necessary to include any British work more recent than that of Sidney Ringer in 1883.

D. A. K. BLACK.

**MARRIAGE GUIDANCE**

*Your Marriage: A Book for the Married and the About to be Married.* By Kenneth Walker, F.R.C.S. Foreword by F. A. E. Crew, F.R.C.P., F.R.S., and a psychological postscript by Peter Fletcher. Second edition. (Pp. 150+xvi. 8s. 6d.) London: For British Social Biology Council by Secker and Warburg. 1955.

*My Wife or Any Husband: A Book for Couples who have met Sexual Difficulties and for Doctors.* By Medica (Dr. Joan Graham). Second edition. (Pp. 147. 10s.) London: William Heinemann, Ltd. 1955.

These books were first published within a few months of each other, and it is remarkable that their second editions appear almost simultaneously. For they have no obvious connexion except their subject, and even to this they bring a different approach.

Mr. Walker's book has changed its title from *Marriage*, the possessive adjective being added to give it a more personal appeal. A psychological postscript also appears for the first time and discusses the role of emotional independence of the partners, and of social and economic factors, in determining stability of marriage. Otherwise the book consists of a simple short account of sex, adolescence and its problems, the choice of a marriage partner, the consummation of marriage, coital technique, the having and the avoiding of children, and mothers-in-law and other threats to domestic bliss. All will regard Mr. Walker's views on premarital chastity as realistic and honest, but some may find them unnecessary, at any rate in this context. The subtitle of this work, "A book for the married and the about to be married," is important in that it indicates its scope and also that it is intended for lay readers.

Medica's subtitle is equally important and revealing and reads, "A book for couples who have met sexual difficulties and for doctors"—a phrase which intrigues by its several possible interpretations. Difficult though her task may appear, there is no doubt that the author, a grandmother herself, has written something which should prove of the greatest help to the general practitioner and gynaecologist, and yet it is sufficiently non-technical to hand on to patients of average intelligence for their profit. It does not anticipate trouble, but has something practical to say to those who have tried and failed. It describes and comments usefully on the common disorders of sex encountered by both men and women: impotence, frigidity, lack of orgasm, dyspareunia, homosexuality, and various forms of maladjustment. Moreover, it answers reassuringly the many doubts and fears which a host of patients have always had but which they are more likely to ventilate to the doctor now than in the past.

The two books cannot be compared; their individual appeals vary according to whether one believes that it is better not to jump fences until they are reached or whether one accepts that to be forewarned is to be forearmed.

T. N. A. JEFFCOATE.