Book reviews


Trevor Silverstone points out in the forward to this book that obesity is not due to self indulgent gluttony and that medical treatment rather than moral exhortation is required. Over 2½ million prescriptions for appetite suppressant drugs are issued annually in the UK. This must be gross over prescription; although these drugs will cause slight loss in weight (usually less than 0.1 kg per week in the short term), this is rapidly made up when they are stopped, and behavioural therapy may be just as good. Despite these disappointing results and our present ignorance about the neuronal and hormonal control of appetite, hunger, and weight, this fascinating book contains a wealth of detailed information about the pharmacological properties of appetite-suppressant and appetite-increasing drugs. It is surprising that it has not been written before and also that the authors come not from endocrine or general medical clinics but from departments of psychology and psychiatry.

The book is about the actions of phenylethylamines on appetite and alertness in fat and thin people. The vocabulary is one of stimulant effects, flicker fusion, eating rates, calorie intake, hunger rating scales, biteometers (bite indicating telemetering eatometer), feeding latency and fasting stomachs. There is an excellent account of the pharmacokinetics, pharmacology and clinical uses of the six or seven available anorectic drugs in the UK. The measurement of hunger, appetite and feeding is a more difficult topic but discussed in some depth and in a practical manner. The use of weighed standard dental wads to measure salivation at the sight or thought of food is appealing. The most celebrated and enjoyable form of dietary obesity, the three star restaurant or to the more lowly the tasty snack, chocolate or sausage, is considered as well as the detailed effect of dextroamphetamine on noradrenaline re-uptake. I had not realised that gut hormones have a potential use as anorectic agents. Thus c-phenylalanine which is a strong stimulant of cholecystokinin release causes monkeys to eat less and humans to feel less hungry, and bombesin has a possible future as a non-vagal inhibitor of feeding. The book ends with a short review of anorexia nervosa and appetite increasing rather than anorexic drugs. Altogether this good dependable volume contains much of interest and is vital to the pharmacologist with an interest in food and highly recommended for anyone who has to manage obesity or anorexia nervosa.


This text is an extremely readable account of some modern concepts of nervous system function in health and disease. Aimed primarily at medical students, it is best described as a textbook of neurophysiology which is up-to-date with the information presented. Following a brief “overview” the author provides chapters on neurons, from their excitable membranes to their synapses, and discusses transmission and coding of information. Sensory pathways, with each of the special senses being given separate consideration, muscle activity, reflexes and the autonomic nervous system are also comprehensively covered. The discussion of control of movement, and cerebral cortical activity underlying the origin and use of evoked potentials and the electroencephalogram are notable for their clarity of presentation. The whole book is enhanced by the frequent use of diagrams and figures to illustrate points from the text, and the assumption by the author that the reader may only possess “a weak background of basic information”.

This book can be recommended to all students of the nervous system and may provide a good basic text for both psychiatrists and neurologists-in-training wishing to “firm up” their knowledge of the nervous system.

The reviewer has two reservations. First, the title of the book implies it will discuss behaviour, but the behaviour of importance to the neurophysiologist is clearly different from that of the psychiatrist or the behavioural neurologist. Higher cortical functions, the limbic system, changes in behaviour in animals and man consequent on alteration of neurotransmitter systems for example, are all only briefly considered. Secondly, in the preface, Claude Bernard is mysteriously given a knighthood.


The clinical results of spinal cord injuries have been known for many thousands of years; patients have only been kept alive with the setting up of spinal units since 1944. Over the last 20 years units have been established in North America, Europe and Australasia and the treatment has become systematised. Transection of the cord in the cervical region leads to abolition of dermal sweating and to the development of abnormal reflexes such as autonomic dysreflexia due to bladder distension. In certain circumstances benefit can be achieved by pharmacological means using drugs. The spinal cord injury patient thus provides an extraordinarily complex neuro-physiological model and few doctors treating these patients, who come from many diverse disciplines, can understand all the applications of the drugs.

Drs Halstead and Claus-Walker have produced a small book that could be carried around in the pocket for use by professionals treating these patients. They have introduced a very interesting drug guide whereby drugs are classified into, Parasympathetic muscarinic; adrenergic, alpha; Adrenergic, beta; Muscle, Somatic; Brain or Spinal Cord, which can be either stimulated or inhibited. The concept is excellent but the account would benefit from a simple account of the neurophysiology of the relevant part of the nervous system followed by how it is affected by the various drugs being described. The authors attempt to fulfil this in the appendix but the account is incomplete and extremely difficult to follow. Several of the statements are not in accordance with current concepts. They talk of bladder spasticity, the bladder consists of smooth muscle and spasticity usually refers to striped muscle.

Discussion of cold symptoms (p 22) is not satisfactory. Congestion of the nasal mucosa has been described as a complication of sympathetic paralysis by Gutmann and as such would not warrant treatment. Alternatively a viral infection in a tetraplegic patient rapidly leads to aspiration pneumonia and unless effective treatment (physiotherapy and appropriate antibiotics) is given the patient can die very rapidly. Again under fever, the use of aspirin which could cause acute gastric erosions, a recognised complication of spinal injury, would not receive universal acceptance. There is no mention of proctalgasins in bladder management.

A second edition remediying these defects would be welcome.