Book Reviews

Therapeutic Exercise: Foundations and Techniques. 2nd Edn

Carolyn Kisner and Lynn Allen Colby
F. A. Davis: Philadelphia, 1990. 190 × 235 mm. 714 + xxi pages. Illustrated in black-and-white. £23.20

This book is written by physiotherapists for physiotherapists and would be an excellent addition to any library, whether it be in a school of physiotherapy or in a clinical practice. This edition has been updated by the incorporation of current research in the basic and clinical sciences which provides new and expanded information for many exercise procedures, the response of soft tissue to injury and therapeutic intervention, together with up-to-date information on neck and back care, the use of isokinetics, and the management of surgical and cardiopulmonary patients. Principles of exercise for the obstetric patient are included, together with current information on TMJ dysfunction, self traction and positional techniques, continuous passive motion and aerobic conditioning in patients with special conditions.

The book is divided into three major sections. The first part discusses the rationale and techniques of therapeutic exercise to develop strength, cardiovascular fitness, mobility, flexibility and relaxation.

The next part deals with when and how to apply therapeutic exercise techniques. A chapter in this section deals with the design of therapeutic

exercise programmes during the acute, subacute, and chronic phases of soft tissue and joint healing. For this reason one is referred back to this chapter throughout the book.

The final part deals with therapeutic exercise principles and techniques in chest therapy, principles of aerobic exercise and the general clinical application of aerobic training. The last chapter in this section deals with a critical analysis of exercise programmes, how to design an exercise programme, and how to establish a base-

line by which improvement can be measured. It gives examples of many commonly misunderstood and misused tests and exercises, together with common errors in flexibility tests, strengthening programmes and the use of biochemically unsafe exercises.

This book is full of clear diagrams and practical advice which can be dipped into at any time for a quick reference and would be useful to those in all specialities of physiotherapy.

Rose Macdonald BA, MCSP, MCPA

Basic Biomechanics of the Musculoskeletal System

M. Nordin and V. H. Frankel
Lea and Fabiger: London, 1989. 216 × 278 mm. 323 +xxiii pages softback. Illustrated in black-and-white

Any textbook author has to make the fundamental decision as to the level at which the topic should be pitched. This textbook has chosen that of the health professional assuming a basic understanding of human anatomy and physiology. The authors, professors and heads of departments, expand a wealth of knowledge and experience in their respective chapters. Since this book is of North American origin, there are concepts and current trends which are followed in North America but not necessarily elsewhere. (An example being the North American treatment of the lumbar spine with

flexion, extension being regarded as harmful.)

As treatment methods improve, the necessity for correct diagnosis becomes ever more important. The blanket approach of painkillers, ice and massage is no longer acceptable. This textbook is of great value in understanding the biomechanical effects of load on human tissue, accurate diagnosis follows as a logical step. If the biomechanics of injury can be more clearly understood, diagnosis and treatment are an easy sequel.

The book is in two sections, the first being an explanation of the biomechanics of the elementary tissues of the human body. Bone, articular cartilage, nerve and muscle are covered, each with a review of anatomy and the effects of loading. This is an excellent section with many interesting facts, e.g. the ability of tendon to withstand greater load than muscle, the proven benefits of stretching etc.

The second section covers the biomechanics of the principle joints. The knee, hip, foot, ankle, lumbar and cervical spine, shoulder, wrist and hand are discussed. Anatomy and static and dynamic kinetics are the format of each chapter. Most are well and clearly written but may lack in areas of particular interest to the health professional treating sports-related injuries. There is for example no mention of the biomechanical cause of intrinsic injury.

Through a thorough review of relevant papers on the biomechanics of the musculoskeletal system this book provides a comprehensive reference of the possible forces behind and causes of injury. This would benefit any health professional.

Wendy Wilson BSc