

Scientific Evidence for Musculoskeletal, Bariatric, and Sports Nutrition

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Review the evidence for using nutrition as medicine

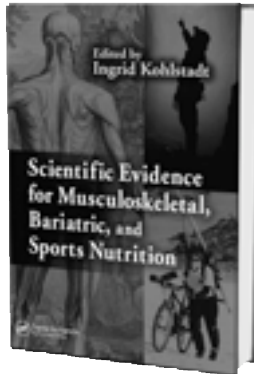
Nutrition has long been the missing ingredient in the treatment of the various musculoskeletal conditions seen daily by health professionals. The often-stated reason for giving nutrition short shrift is the lack of evidence. Responding to this need, **Scientific Evidence for Musculoskeletal, Bariatric, and Sports Nutrition** provides clinicians with an evidence-based integration of nutrition into medical treatment. Gathering biochemical information and presenting it in clinical terms, the book explores the link between fat, muscle, and bone tissue, and how nutrition can be used to enhance their metabolism and performance.

Written by doctors for doctors, the book offers a biological rationale supported by animal studies, clinical trials, ongoing research initiatives, and epidemiological findings. It provides discussions of body composition, nutrigenomics, and fetal origins of adult-onset musculoskeletal conditions. The contributors identify macronutrients, antioxidants, vitamins, minerals and even water for optimal muscle, bone and fat metabolism. They also delineate how new technology can be incorporated into practice and highlight foods and nutraceuticals with effects similar to medications.

The international, multidisciplinary panel of contributors, many of them practicing clinicians, attests to the multifaceted nature of treating musculoskeletal conditions. The book includes pearls from clinicians renowned for their innovative work in fibromyalgia, sports medicine, sarcopenia, osteoporosis, obesity, and environmental medicine. Additional clinical chapters summarize the evidence for nutritional interventions for muscle hypertrophy from steroid use, anorexia, metabolic syndrome, strained muscles, osteoarthritis, gout, fractures, perioperative muscle loss, bariatric surgery, and high body stores of xenobiotics. Approximately 100 charts, tables, and protocols allow easy access and cross-referencing. The text presents approaches to clinical management that foster more predictive, cost- and outcome-effective, integrative, and comprehensive clinical care.

Catalog no. DK6006, January 2006, 644 pp.
ISBN: 0-8493-3724-0, \$139.95 / £79.99

See reverse for contents and ordering information



FEATURES

- Delineates how strategic nutrition can create an environment that builds muscle, metabolizes fat, strengthens bone, and repairs cartilage
- Applies recent technologic advances in body composition, nutrigenomics, and the fetal environment to clinical assessment of musculoskeletal health
- Reviews clinically-relevant research on fats, carbohydrates, proteins, antioxidants, magnesium, vitamin D, water, and chromium
- Explains how neurotransmitters, gut peptides, and hormones including testosterone, estrogen and progesterone control food intake and regulate body mass
- Presents laboratory tests and clinical assessments of minerals, vitamins, toxicant burdens, gastrointestinal health, global cell-membrane permeability, and body composition
- Explores how optimizing nutrient stores can enhance performance and preserve function during surgery, sports, and challenging environments

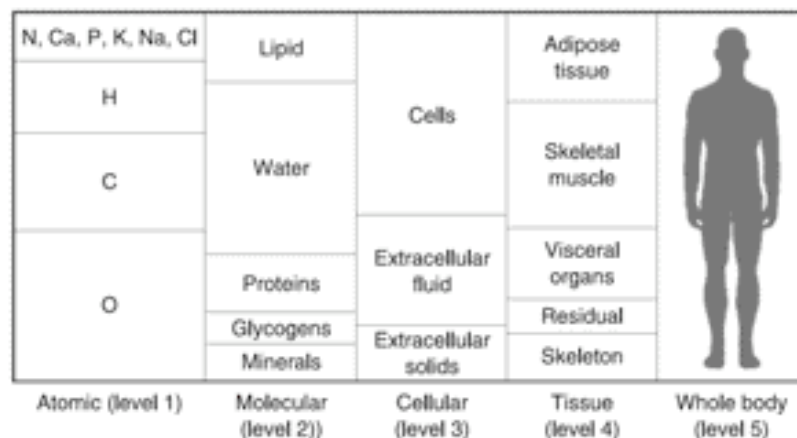


FIGURE 1.1 Five-level body composition model. (Adapted from Wang, Z.M., Pierson, R.N., Jr., and Heymsfield, S.B., *Am. J. Clin. Nutr.*, 56, 19–28, 1992.)

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