ILLUSTRATED MEDICAL BIOCHEMISTRY

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Biochemistry is a core subject at undergraduate level for all medical and dental students. They are required to pass their biochemistry exam at the end of the first year’s study before advancing in their career. There are a number of large, classic biochemistry textbooks available in the market, but a medical student nowadays wants a shorter, simply written and well illustrated book to get him through the exam. This is that book. Equally divided into two sections – general biochemistry and metabolism and biochemical genetics – containing 46 chapters, this user-friendly textbook will become a valuable addition to the medical undergraduate’s personal library.

Contents:

**Unit 1 – General Biochemistry**
- Cell Structure and Function
- Chemistry Review
- Intro to Biological Macromolecules
- Chemistry of Amino Acids and Proteins
- Chemistry of Carbohydrates
- Chemistry of Lipids
- Glycosaminoglycans and Proteoglycans
- Collagen
- Hemoglobin is an Allosteric Protein
- Heme Metabolism
- Calcium and Phosphate
- Water and Electrolytes
- Acid-Base Regulation
- Vitamins and Coenzymes
- Oxidative Phosphorylation
- Free Radical Formation
- Enzymes-Basic Concepts and Kinetics
- Hormones and Receptors
- Nutritional Needs
- Biochemistry of Nerve Impulse Transmission
- Contractile Proteins (Muscle)
- the Sarcomere
- Blood Coagulation

**Unit 2 – Metabolism and Biochemical Genetics**
- Signal Transduction Cascades
- Amino Acid Metabolism
- Nitrogen Metabolism
- Specialized Products of Amino Acids
- Intestinal Uptake and Transport of Lipids
- Fatty Acid Metabolism
- Metabolism of Triglycerides and Phospholipids
- Cholesterol and Bile Acid Metabolism
- The PDH Complex and TCA Cycle
- Insulin Function and Diabetes
- Glycogen Metabolism
- Glucose Metabolism
- Fructose Metabolism
- Chemistry of Nucleotides
- Nucleotide Metabolism
- Nucleic Acid Structure and Function
- DNA Synthesis (Replication)
- RNA Synthesis (Transcription)
- Protein Biosynthesis (Translation)
- Protein Modifications and Targeting
- Control of Gene Expression
- Proto-oncogenes and Cancer
- Molecular Tools in Medicine

KEY SELLING POINTS
- Full colour illustrations & diagrams throughout explain concepts of biochemistry
- Clear simple page designs for ease of study
- A chapter on molecular tools in medicine explains advances made in biochemistry and their medical applications

BOOK INFORMATION
- ISBN: 1 904798 322
- Pub Date: June 2005
- Format: Paperback
- Extent: 506 pages