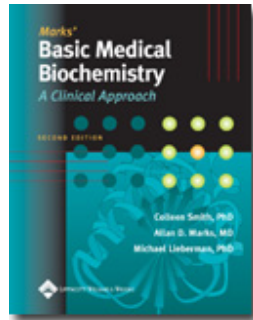



[Login](#) • **New Visitors:** [Register](#)

Find A Site by:

- Home
- Disciplines
- Medical Education
- Biochemistry
- Marks' Basic Medical Biochemistry, 2e
- Faculty Resource Center
- Table of Contents
- Sample Material
- Additional Resources
- Order your review copy
- Mac Users

Marks' Basic Medical Biochemistry: A Clinical Approach, 2nd Edition



Marks' Basic Medical Biochemistry: A Clinical Approach, 2nd Edition

Colleen M. Smith PhD
Allan D. Marks MD
Michael A. Lieberman PhD

ISBN: 0-7817-2145-8

Now in its second edition, *Basic Medical Biochemistry* continues to provide a unique clinically based approach to the subject that is perfect for medical students. The authors use patient vignettes throughout the book to emphasize the importance of biochemistry to medicine, delivering a text that is specifically oriented toward clinical application and understanding. [More >><< Less](#)

Patients have unique and humorous names that serve as mnemonics to help students remember the vignettes. Facts and pathways are also emphasized, showing how the underlying biochemistry is related to the body's overall physiologic functions. The result is a clear, comprehensive, and easy-to-read text that helps medical students understand the all-important role the patient plays in the study of biochemistry.

Other features and highlights include:

- A new back-of-book CD offers 9 animations on biochemical topics (oxidative phosphorylation, DNA replication, DNA mutation, protein synthesis, PCR, TCA cycle) as well as patient "files," disease links, and over 200 additional review questions not found in the book.
- A well-organized icon system quickly guides you to the information you need.
- Marginal notes provide brief clinical correlations, short questions and answers, and interesting asides.
- Each chapter ends with "Biochemical Comments" and "Clinical Comments"; both sections summarize the key biochemical and clinical concepts presented in the chapter.
- USMLE-style questions at the end of each chapter help students review for course or board exams.
- Two-color art program includes illustrations of chemical structures and biochemical pathways as well as conceptual diagrams.
- A new section on tissue metabolism has been added that summarizes common clinical problems such as liver disease and alcoholism.

To learn biochemistry in the context of clinical problems, you won't find a better resource than *Basic Medical Biochemistry*.

[Faculty Resource Center](#)

[Table of Contents](#)

[Sample Material](#)

[Additional Resources](#)

[Order your review copy](#)

[Mac Users](#)

Copyright © 2005 Lippincott Williams & Wilkins - All Rights Reserved

[Privacy Statement](#)

[Disclaimer](#)

[Linking Policy](#)



[Login](#) • **New Visitors:** [Register](#)

Find A Site by:

- [Home](#)
- [Disciplines](#)
- [Medical Education](#)
- [Biochemistry](#)
- [Marks' Basic Medical Biochemistry, 2e](#)
- [Faculty Resource Center](#)
- [Table of Contents](#)
- [Sample Material](#)
- [Additional Resources](#)
- [Order your review copy](#)
- [Mac Users](#)

Table of Contents

Section One: Fuel Metabolism

- Chapter 1: Metabolic Fuels and Dietary Components
- Chapter 2: The Fed or Absorptive State
- Chapter 3: Fasting

Section Two: Chemical and Biological Foundations of Biochemistry

- Chapter 4: Water, Acids, Bases, and Buffers
- Chapter 5: Structures of the Major Compounds of the Body
- Chapter 6: Amino Acids in Proteins
- Chapter 7: Structure-Function Relationships in Proteins
- Chapter 8: Enzymes as Catalysts
- Chapter 9: Regulation of Enzymes
- Chapter 10: Relationship between Cell Biology and Biochemistry
- Chapter 11: Cell Signaling by Chemical Messengers

Section Three: Gene Expression and Protein Synthesis

- Chapter 12: Structure of the Nucleic Acids
- Chapter 13: Synthesis of DNA
- Chapter 14: Transcription: Synthesis of RNA
- Chapter 15: Translation: Synthesis of Proteins
- Chapter 16: Regulation of Gene Expression
- Chapter 17: Use of Recombinant DNA Techniques in Medicine
- Chapter 18: The Molecular Biology of Cancer

Section Four: Oxidative Metabolism and the Generation of ATP

- Chapter 19: Cellular Bioenergetics: ATP and O₂
- Chapter 20: Tricarboxylic Acid Cycle
- Chapter 21: Oxidative Phosphorylation and Mitochondrial Function
- Chapter 22: Generation of ATP from Glucose: Glycolysis
- Chapter 23: Oxidation of Fatty Acids and Ketone Bodies
- Chapter 24: Oxygen Toxicity and Free Radical Damage
- Chapter 25: Metabolism of Ethanol

Section Five: Carbohydrate Metabolism

- Chapter 26: Basic Concepts in the Regulation of Fuel Metabolism by Insulin, Glucagon, and Other Hormones
- Chapter 27: Digestion, Absorption, and Transport of Carbohydrates
- Chapter 28: Formation and Degradation of Glycogen
- Chapter 29: Pathways of Sugar Metabolism: Pentose Phosphate Pathway, Fructose, and Galactose Metabolism
- Chapter 30: Synthesis of Glycosides, Lactose, Glycoproteins, and Glycolipids
- Chapter 31: Gluconeogenesis and Maintenance of Blood Glucose Levels

Section Six: Lipid Metabolism

- Chapter 32: Digestion and Transport of Dietary Lipids
- Chapter 33: Synthesis of Fatty Acids, Triacylglycerols, and the Major Membrane Lipids
- Chapter 34: Cholesterol Absorption, Synthesis, Metabolism, and Fate
- Chapter 35: Metabolism of the Eicosanoids
- Chapter 36: Integration of Carbohydrate and Lipid Metabolism

Section Seven: Nitrogen Metabolism

- Chapter 37: Protein Digestion and Amino Acid Absorption
- Chapter 38: Fate of Amino Acid Nitrogen: Urea Cycle
- Chapter 39: Synthesis and Degradation of Amino Acids

- Chapter 40: Tetrahydrofolate, Vitamin B₁₂, and S-Adenosylmethionine
- Chapter 41: Purine and Pyrimidine Metabolism
- Chapter 42: Intertissue Relationships in the Metabolism of Amino Acids

Section Eight: Tissue Metabolism

- Chapter 43: Actions of Hormones Regulating Fuel Metabolism
- Chapter 44: The Biochemistry of the Erythrocyte and Other Blood Cells
- Chapter 45: Blood Plasma Proteins, Coagulation and Fibrinolysis
- Chapter 46: Liver Metabolism
- Chapter 47: Metabolism of Muscle at Rest and During Exercise
- Chapter 48: Metabolism of the Nervous System
- Chapter 49: The Extracellular Matrix and Connective Tissue

Appendix: Answers to Review Questions

Copyright © 2005 Lippincott Williams & Wilkins - All Rights Reserved
[Privacy Statement](#) [Disclaimer](#) [Linking Policy](#)