



Human Anatomy and Physiology Including Pathophysiology

A Clinical Guide for Pharmacy

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Human Anatomy and Physiology Including Pathophysiology: A Clinical Guide for Pharmacy

First Volume

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Preface

The study of human anatomy and physiology forms the cornerstone of all health science education. For students in pharmacy, nursing, and allied health programs, understanding the structure and function of the human body is fundamental not only for academic competence but also for delivering safe, informed, and effective patient care. Equally important is the ability to connect physiological processes with pathological alterations and therapeutic interventions. This integrated textbook, *Human Anatomy and Physiology Including Pathophysiology: A Clinical Guide for Pharmacy*, has been developed to address these essential needs.

Unlike traditional texts that present anatomy and physiology as isolated disciplines, this book adopts a clinically oriented approach that aligns basic science with pathophysiology and pharmacological concepts. Students are guided through the foundational principles of body systems, followed by discussions on disease mechanisms, clinical manifestations, and therapeutic considerations. This design enables learners to contextualize diseases within normal physiology and understand how pharmacologic agents act to restore homeostasis. Case examples, simplified illustrations, and integrated summaries further support comprehension and retention.

The content of this book has been meticulously curated to meet curricular expectations for pharmacy education while also serving as a valuable resource for nursing and other medical-related programs. By bridging theoretical knowledge with real-world clinical relevance, the text promotes critical thinking and prepares students for professional practice in diverse healthcare settings.

It is hoped that this book will serve not only as a learning resource but also as a reference guide throughout the academic and professional journeys of its readers. The authors welcome constructive feedback from educators, students, and practitioners as part of the ongoing commitment to improve future editions and support high-quality health sciences education.

Acknowledgement

The development of *Human Anatomy and Physiology Including Pathophysiology: A Clinical Guide for Pharmacy* has been made possible through the contributions, support, and encouragement of many individuals and institutions, to whom the authors extend their sincere gratitude.

The authors express heartfelt appreciation to **Iterative International Publishers (IIP)** for recognizing the need for clinically integrated educational resources and for providing the editorial guidance, production support, and professional commitment required to bring this book to completion. Special thanks are extended to the editorial and design teams for their meticulous attention to detail and dedication to quality.

The authors acknowledge with respect the invaluable contributions of numerous educators, clinicians, and subject experts who offered insights, shared experiences, and provided critical review during the manuscript development process. Their feedback helped ensure accuracy, clarity, and relevance for modern healthcare education.

We would also like to recognize the students and faculty members across pharmacy, nursing, physiotherapy, and medical sciences programs whose academic challenges, queries, and enthusiasm became a major inspiration for the structure and pedagogy of this text. Their pursuit of knowledge continues to motivate the creation of meaningful learning resources.

Finally, the authors extend warm appreciation to family members and colleagues for their steadfast encouragement, understanding, and patience throughout the writing process. Without their support, the completion of this book would not have been possible.

To all those who contributed directly or indirectly — thank you.

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Dr. Supriya Maity has a doctorate in Pharmacy with over 19 years of extensive academic experience in pharmaceutical education. He has served at several of India's most renowned pharmacy institutions, including Vivek College of Pharmacy, now it's Vivek University Bijnor, Translam Institute of Pharmaceutical Education & Research, Rajiv Academy College of Pharmacy, Mahalwar Institute of Pharmacy, and R.S.D. Academy College of Pharmacy. Since October 2025, he has been working as a Professor at Saraswathi College of Pharmacy, Hapur, affiliated with Dr. A.P.J. Abdul Kalam Technical University, Lucknow. Under his supervision, seven M. Pharm students (Pharmaceutical Chemistry) have completed their postgraduate research work. Dr. Maity has presented and published over 30 research and review articles in reputed national and international journals, as well as conferences and seminars. He is a Life Member of the Association of Pharmaceutical Teachers of India (APTI).

