



Edition: 1st Edition 2016  
 pages: 306  
 Images: 272  
 Cover: Hardcover, 22 x 28,5 cm  
 ISBN: 978-0-86715-647-8  
 Stock No.: 10151  
 Published: January 2016

Price  
 Subject to changes!

48,00 €

**Quintessenz Verlags-GmbH**

📍 Ifenpfad 2-4  
 12107 Berlin  
 Germany

☎ +49 (0) 30 / 76180-5

📠 +49 (0) 30 / 76180-680

✉ info@quintessenz.de

🌐 <https://www.quintessence-publishing.com/deu/de>

## Book information

**Authors:** Nejat Düzgünes  
**Title:** Medical Microbiology and Immunology for Dentistry  
**Short text:**

This clinically oriented textbook explores medical microbiology and immunology as they relate to the practice of dentistry, including sections on the microbiologic basis of caries, periodontal disease, and endodontic infection. The book begins with a thorough discussion of immunology and then systematically covers the bacteria, fungi, viruses, and parasites that affect the human body as well as their oral manifestations. Extremely detailed illustrations throughout aid the reader in comprehending the complex interactions involved in processes such as cellular immunity, bacterial and fungal infiltration, biofilm and dental plaque formation, and virus entry and replication. Sections on recombinant DNA technology, molecular diagnostics, and genomics familiarize the reader with new technologies and emerging fields that will impact future practice. Notable discoveries in molecular biology are highlighted throughout, and research questions are featured as well to engage understanding and critical thinking. Finally, an appendix of cases in medical microbiology challenges the reader to pose diagnoses based on clinical symptoms. This book will no doubt become the definitive textbook on microbiology for dental students and dentists.

### Contents

#### *Part I: Immunity*

- Chapter 01. The Immune System
- Chapter 02. Antibodies and Complement
- Chapter 03. Cellular Immunity
- Chapter 04. The Immune Response to Pathogens and Immunopathogenesis
- Chapter 05. Vaccines

#### *Part II: Bacteria*

- Chapter 06. Bacterial Structure, Metabolism, and Genetics
- Chapter 07. Bacterial Pathogenesis
- Chapter 08. Antibacterial Chemotherapy
- Chapter 09. Sterilization, Disinfection, and Antisepsis
- Chapter 10. Microbial Identification and Molecular Diagnostics
- Chapter 11. Staphylococcus
- Chapter 12. Streptococcus
- Chapter 13. Miscellaneous Gram-Positive Bacilli
- Chapter 14. Clostridium
- Chapter 15. Bordetella, Legionella, and Miscellaneous Gram-Negative Bacilli
- Chapter 16. Neisseria and Neisseriaceae
- Chapter 17. Spirochetes
- Chapter 18. Enterobacteria, Campylobacter, and Helicobacter
- Chapter 19. Mycoplasma and Ureaplasma
- Chapter 20. Mycobacteria
- Chapter 21. Chlamydia, Rickettsia, and Related Bacteria
- Chapter 22. Vibrio, Pseudomonas, and Related Bacteria
- Chapter 23. Oral Microflora and Caries
- Chapter 24. Periodontal and Endodontic Infections

#### *Part III: Fungi*

- Chapter 25. Fungal Structure, Replication, and Pathogenesis
- Chapter 26. Fungal Diseases
- Chapter 27. Antifungal Chemotherapy

#### *Part IV: Viruses*

Chapter 28. Viral Structure, Replication, and Pathogenesis  
Chapter 29. Antiviral Chemotherapy  
Chapter 30. Naked Capsid DNA Viruses  
Chapter 31. Human Immunodeficiency Virus and Other Retroviruses  
Chapter 32. Hepatitis Viruses  
Chapter 33. Herpesviruses  
Chapter 34. Orthomyxoviruses: Influenza Virus  
Chapter 35. Paramyxoviruses: Measles, Mumps, and Respiratory Syncytial Viruses  
Chapter 36. Picornaviruses  
Chapter 37. Arboviruses  
Chapter 38. Rhabdoviruses, Poxviruses, and Coronaviruses  
Chapter 39. Rubella Virus, Filoviruses, Reoviruses, and Noroviruses

*Part V: Other*

Chapter 40. Prions  
Chapter 41. Pathogenic Parasites

**Categories:** [Human Medicine, General Dentistry, Student literature](#)