



Edition: 2nd Edition 2022
pages: 516
Images: 1584
Cover: Hardcover; 21.6 x 28 cm
ISBN: 978-0-86715-949-3
Published: May 2022

Quintessenza Edizioni S.r.l.

 Via C. Menotti 65
20017 Rho (Milano)
Italy

 +39 (0)2 / 931 82 264

 +39 (0)2 / 931 86 159

 info@quintessenzaedizioni.it

 <https://www.quintessence-publishing.com/ita/it>

Book information

Authors: Kwangchul Choy

Title: Burstone's Biomechanical Foundation of Clinical Orthodontics

Short text:

Dr Charles Burstone was a pioneer in orthodontic biomechanics, and his legacy lives on in this second edition of his book, with Dr Kwangchul Choy at the helm. This textbook has taught thousands of orthodontists the importance of understanding biomechanics to ensure healthy, predictable movements in clinical practice, and this new edition will undoubtedly do the same for the new generations of students. Technology continues to advance in orthodontics, but no technology can replace a sound understanding of how the teeth move in their periodontal apparatus and how they can be pushed or pulled to get where they need to be. This book is the difference between an orthodontist who can move teeth and one who can plan cases with predictability and achieve the sought-after results.

Contents

Part I. The Basics and Single-Force Appliances

Chapter 01. Why We Need Biomechanics
Chapter 02. Concurrent Force Systems
Chapter 03. Nonconcurrent Force Systems and Forces on a Free Body
Chapter 04. Headgear
Chapter 05. The Creative Use of Maxillomandibular Elastics
Chapter 06. Single Forces and Deep Bite Correction by Intrusion
Chapter 07. Deep Bite Correction by Posterior Extrusion
Chapter 08. Equilibrium

Part II. The Biomechanics of Tooth Movement

Chapter 09. The Biomechanics of Altering Tooth Position
Chapter 10. 3D Concepts in Tooth Movement
Chapter 11. Orthodontic Anchorage

Part III. Advanced Appliance Therapy

Chapter 12. Lingual Arches
Chapter 13. Extraction Therapies and Space Closure
Chapter 14. Forces from Wires and Brackets
Chapter 15. Principles of Statically Determinate Appliances and Creative Mechanics

Part IV. Advanced Mechanics of Materials

Chapter 16. The Role of Friction in Orthodontic Appliances
Chapter 17. Properties and Structures of Orthodontic Wire Materials
Chapter 18. How to Select an Archwire

Part V. Appendices

- Hints for Developing Useful Force Diagrams
- Glossary
- Solutions to Problems
- Bender's Tool Kit

Contributors

Charles J. Burstone* • Kwangchul Choy • Giorgio Fiorelli • A. Jon Goldberg • Paola Merlo • Rodrigo F. Viecilli

*Deceased.

Categories: Orthodontics, Student literature