

*English
edition*

Library *English edition - Biomedicine*

ESSENTIALS OF DENTAL MEDICINE

Editors
Marin Vodanović and Kurt W. Alt



Publisher

"NAKLADA SLAP"

Dr. Franje Tuđmana 33, 10450 Jastrebarsko, Croatia

www.nakladaslap.com

Director

Biserka Matešić

Editor in chief

Krunoslav Matešić

Library English edition - Biomedicine

Editor

Marin Vodanović, School of Dental Medicine, University of Zagreb, Croatia

Language editing

Elsevier, Oxford, England

Reviewers

Ivana Čuković-Bagić, School of Dental Medicine, University of Zagreb, Croatia

Huw F. Thomas, Tufts University School of Dental Medicine, Boston, USA

Nairn H. F. Wilson, College of General Dentistry, Cheshire, UK



University of Zagreb



Danube Private University
Fakultät Medizin/Zahnmedizin

Essentials of Dental Medicine

Editors

Marin Vodanović and Kurt W. Alt



Copyright © 2022 by Naklada Slap

All rights reserved.

No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, photocopied, photographed, or duplicated in any information system for storage and usage without prior consent of the copyright owner.

The publication of this university textbook was approved by the Senate of the University of Zagreb under decision 032-01/20-01/55 of 8th June 2021.

CIP Cataloguing-in-Publication data available in the
Online Catalogue of the National and University Library
in Zagreb under CIP record 001122202.

ISBN 978-953-191-953-1

Graphic design NAKLADA SLAP, 2022.
Printed by Grafički zavod Hrvatske

Contents

Foreword	xii
Preface	xiii
Authors	xv
I. Dentistry as a passion	1
Marjana Knežević	
II. A short history of dentistry	5
Kurt W. Alt and Nicole Nicklisch	
III. Science and social aspects of dental medicine	19
3.1 Dental education as a milestone to dental career	20
Corrado Paganelli and Simona Dianiškova	
3.2 Career in dentistry	26
Ana Badovinac and Larisa Musić	
3.3 Stress in dental students	31
Tina Poklepović Peričić and Mona Nasser	
3.4 Occupational diseases in dentistry	37
Marin Vodanović and Ivan Galić	
3.5 Ethics in dentistry	45
Eddy De Valck	
3.6 Communication in dentistry	53
Anastasia Mitsea and Kety Karayianni	
3.7 Dental terminology and health literacy	58
Ana Ostroški Anić and Marin Vodanović	
3.8 Oral health and quality of life	64
Maria Gabriela Haye Blazevic and Edgard Michel-Crosato	
3.9 Oral and dental human anatomy	71
Kurt W. Alt and Nicole Nicklisch	
3.10 Dental anthropology	85
Kurt W. Alt and Marin Vodanović	

Contents

3.11	Dental bioarchaeology	97
	Sandra L. Pichler and Kurt W. Alt	
3.12	Comparative odontology and veterinary dentistry	107
	Dean Konjević and Ana Nemec	
3.13	Organizations in dentistry	116
	Aman Chowdhry and Priyanka Kapoor	
3.14	Dental tourism	122
	Marin Vodanović and Damir Krešić	
3.15	Culturally sensitive oral health care	126
	Aida Selmanagić and Ksenija Zelić Mihajlović	
3.16	Social media in dentistry	133
	Joško Viskić and Tea Vukušić Rukavina	
3.17	Information technologies and artificial intelligence in dentistry	143
	Marin Vodanović and Marko Subašić	
IV. Understanding dental medicine		149
4.1	Dental team	150
	Zorana Ivanković Buljan and Sanja Jurišić	
4.2	Dental workplace	157
	Selma Zukić	
4.3	Organization of dental care	167
	Ivana Savić Pavičin	
4.4	Dental specialties	173
	Fusun Ozer and Nuray Tugoglu	
4.5	Paediatric dentistry	182
	Klaus Neuhaus and Hrvoje Jurić	
4.6	Preventive dentistry	191
	Amila Zukanović	
4.7	Cariology and other pathologies of dental hard tissues	197
	Danijela Marović	
4.8	Restorative dentistry	207
	Eva Klarić Sever and Tobias T. Tauböck	
4.9	Endodontics	217
	Anja Baraba and Ivana Miletic	
4.10	Periodontology	224
	Michael Patyna and Adrian Kašaj	
4.11	Oral surgery	233
	Ivan Salarić and Darko Macan	

4.12	Fixed prosthodontics	238
	Josip Kranjčić and Venera Bimbashi	
4.13	Removable prosthodontics	249
	Samir Čimić and Hady Haririan	
4.14	Implant dentistry	258
	Mariam Margvelashvili-Malament and Vladimer Margvelashvili	
4.15	Oral medicine	264
	Božana Lončar Brzak	
4.16	Orthodontics: treating the smile	273
	Stjepan Špalj	
4.17	Family dentistry	280
	Jelena Dumančić	
4.18	Essentials of geriatric dentistry	287
	Renata Chałas and Rodrigo A. Giacaman	
4.19	Forensic dentistry	294
	Hrvoje Brkić and Cristiana Palmela Pereira	
4.20	Dental imaging	302
	Ingrid Różyło-Kalinowska and Vlasta Mišura-Peranović	
4.21	Human diseases relevant in dentistry	316
	Ruwan Jayasinghe and Kalani Hettiarachchi	
4.22	Dental sleep medicine	326
	Tea Galić and Marc Braem	
4.23	Dental anxiety	333
	Katarzyna Wochna	
4.24	Oral and dental pain	341
	Ivona Bago	
4.25	Local anaesthesia in dentistry	348
	Birant Şimşek and Jeta Kelmendi	
4.26	Pharmacology in dentistry	360
	Kristina Peroš	
V.	The future of dentistry and dental technology – a digital destiny	365
	Patricia A. Reynolds and Kenneth A. Eaton	
	Correct answers	375
	Index	379
	Photo credits	392