

Republic of Iraq
Ministry of Higher Education
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College of Dentistry



Chitosan and its Applications in Dentistry

A project submitted to the College of Dentistry, University of Baghdad, Department of Pediatric and Preventive Dentistry in partial fulfillment for the Bachelor of Dental Surgery

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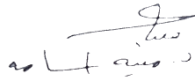
B.D.S., M.Sc.

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DECLARATION

This is to certify that this project was organized and prepared by the graduate student Laith Riadh Abdulkhaliq under my supervision in the Department of Pedodontic and Preventive Dentistry, College of Dentistry / University of Baghdad, as partial fulfillment of requirements for the Bachelor's Degree in Dentistry.

Signature:



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DEDICATION

I dedicate this work to God. I would not be where I am today without his guidance and endless blessings throughout my entire life, for which I am truly grateful.

No matter how many times I say it, “Thank you” will never express my gratitude to my family for always helping me and supporting me to achieve my dreams and goals.

To my friends, who were always by my side through the hardships of life: you are a blessing to me.

Special thanks to my supervisors, Assist. Prof. Dr. Shahbaa Munther Aljorani and Lect. Meena Osama Abdulwadood and all my teachers for their scientific support and for all the experience and knowledge they helped me acquire.

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List of Abbreviations

Abbreviation	Whole words
CaCO ₃	Calcium carbonate
NaOH	Sodium hydroxide
PMN	Polymorphonuclear leukocytes
pH	Potential of hydrogen
Sn	Stannous
CSNP	Chitosan nanoparticle
GI	Glass ionomer
COS	Chitosan oligosaccharide
HGF	Human gingival fibroblasts
TGF- β 1	Transforming growth factor- β 1