

**EVALUATION OF FIBER REINFORCED RESIN ON  
TRANSVERSE STRENGTH OF REPAIRED COMPLETE  
DENTURES**

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CAIRO UNIVERSITY

BY

**HISHAM IBRAHIM SALLAM**

B.D.S.CAIRO UNIVERSITY

٢٠١٥

## SUPERVISORS

*Dr. Hussein Gameel El-Sharkawy*

Professor of prosthodontics department  
Faculty of oral and dental medicine  
Cairo University

*Dr. Hoda Mohie El-Dein*

Professor of prosthodontics department  
Faculty of oral and dental medicine  
Cairo University

بسم الله الرحمن الرحيم

﴿ قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ  
الْعَلِيمُ الْحَكِيمُ ﴾

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*The spirit of my father*

*And my beautiful twin daughters*

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## **Introduction**

Complete dentures are necessary for edentulous patients to restore, preserve and improve the appearance, speech and masticatory ability. In the past poly-methyl methacrylate (PMMA) was considered the material of choice in the fabrication of complete dentures. But due to some weaknesses in its mechanical properties <sup>(1, 2)</sup> many attempts were done to improve the properties of conventional (PMMA).

Among those attempts was development of the metallic meshwork in acrylic denture base, to avoid its fracture <sup>(3)</sup>. The addition of thin section of wire may increase the strength but also, gave unacceptable esthetics <sup>(4)</sup>.

Another attempt was done by the addition of vinyl and hydrophilic monomers,