

**Assessment of the effect of home bleaching
on surface roughness and micro hardness of
The Enamic Hybrid Ceramic compared with
Feldspathic one**

(An in vitro study)

Thesis

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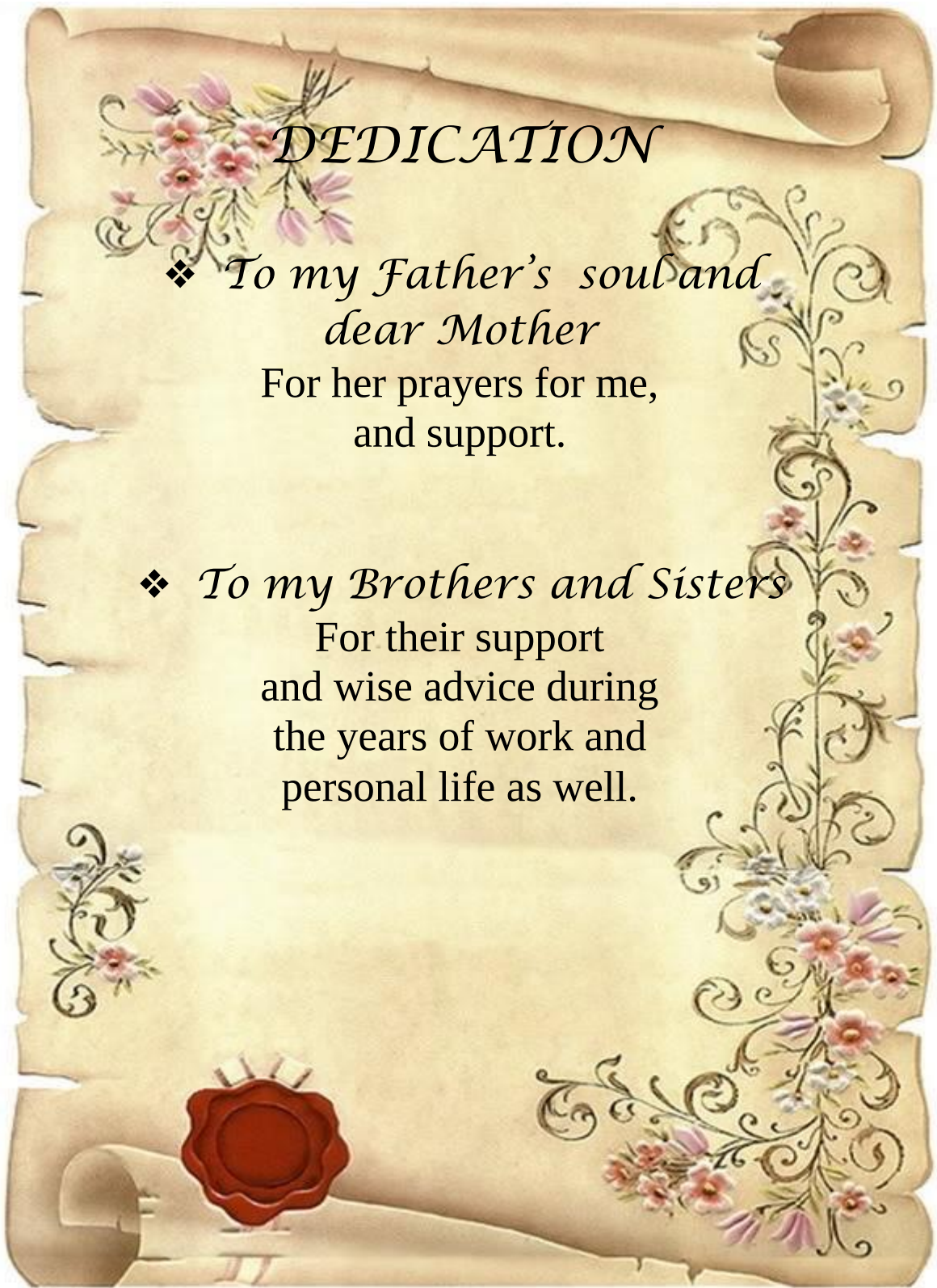
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وَقَدْ نَزَّلَ عَلَيْنَا

سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ

The image depicts a vintage-style scroll with a light beige, aged paper texture and irregular, torn edges. The scroll is adorned with several floral illustrations: a cluster of pink and white flowers in the top left corner, a vertical vine with small white and pink blossoms running along the right edge, a small floral sprig in the bottom left corner, and a larger, more elaborate floral arrangement with pink and white flowers in the bottom right corner. A prominent red wax seal, shaped like a flower, is located at the bottom left of the scroll. The word "DEDICATION" is written in a black, serif, all-caps font across the upper middle of the scroll.

DEDICATION

❖ *To my Father's soul and
dear Mother*

For her prayers for me,
and support.

❖ *To my Brothers and Sisters*

For their support
and wise advice during
the years of work and
personal life as well.

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Introduction

INTRODUCTION

Esthetics, by definition, is the beauty science , that particular detail of an animate or inanimate object that makes it appealing to the eye . Several factors may alter the appearance of smiles, including alterations in the form, texture, position and color of the teeth . Discolored teeth could be an esthetic challenge make patient seeking for such restorative treatments, for example direct composite veneers, indirect ceramic veneers, ceramic crowns.

Vital tooth bleaching is a treatment modality that has presented an exponential increase to treat tooth discoloration. Hydrogen peroxide or peroxide releasing agents, such as carbamide peroxide are the most common agents used for vital tooth whitening. Overall, when in contact with outer enamel surface, the peroxide-containing whiteners break down into water and oxygen, which diffuse through the enamel, causing oxidation of organic pigments which are mainly located within dentine.

New products and a number of methods have been available for tooth vital bleaching using At-home tooth whitening applied in custom trays. The benefits achieved with tray-based systems are widely known: lower incidence of tooth sensitivity or gingival irritation , less visits to the dental office , achievement of the same whitening results as higher concentrations agents, safety and efficacy of carbamide peroxide that has already been established in published clinical trials.