## **ABSTRACT**

The consumption of soft drinks has increased radically. Earlier studies shown a strong correlation between dental erosion and the level of consumption of soft drinks. Recently, orange juice have become popular, since more than 60% peoples often consume it twice a day. Another studies reported a strong correlation between dental erosion in children and adults with the level of daily consumption of orange juice. There fore, the aim of this study was to investigate the difference between surface hardness of the enamel surface that immersed in soft drinks and in orange juice. Eighteen maxillary premolars were randomly devided into three groups. The first group was immersed in aqua, the second group in the orange juice, and the last group in Coca cola for 30 minutes. The surface hardness measurement was done before and after immersion using Digital Micro Vickers Hardness Tester. The achieved data were analyzed using Independent 't' – test. It was concluded that the immersion in soft drinks decrease more surface hardness of enamel surface than in orange juice.

Key words: surface hardness, soft drink, orange juice