

## Contact angle evaluation of two different basic mouth-rinse on two tooth color restorative materials

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### Abstract

**Background and Aim:** The most important features of dental materials is physical surface. One of these features is interfacial effect of solid–fluid that evaluated in standard situation with contact angle and the surface tension is directly related to it. This study was aimed to evaluate two mouth-rinse contact angle with difference base on two restorative materials.

**Materials and Methods:** In this experimental study we has made 15 composites dick, 15 Glass Ionomers) disk with 6mm diameter and 2mm thickness and good surface roughness and used artificial saliva as control group, chlorhexidine and persica mouth-rinse and Contact angle of each instilled drop of liquids on the surface of restorative materials was measured whit profile imaging in the same condition. The obtained data were analyzed by ANOVA and Tukey.

**Result:** The most contact angle was in artificial saliva on composite surface (55.7°) and the least of them was chlorhexidine in Glass Ionomer surface (33°). Also there was Significant differences between all conditions studied ( $P < 0.001$ ), except persica and artificial saliva on the composite ( $P = 0.324$ ).

**Conclusion:** In this study Between two restorative materials, composite (hydrophobic) and glass ionomer (hydrophilic) contact angle of artificial saliva, persica and chlorhexidine on the more hydrophilic material (glass ionomer) is lower and among the solutions used, chlorhexidine contact angle on the both restorative material is less.

**Keywords:** Contact angle, Mouth-rinse, Chlorhexidine, Tooth color restorative materials