Effect of Soaking Effervescent Granules Peel of Cocoa (Theobroma Cacao L.) 6.5% on Surface Hardness of Hot Polymerized Acrylic Resin Plate

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Abstract. Background: Surface roughness is an important factor that directly affects the retention of bacterial plaque and stain. Daily use of denture cleanser can affect acrylic resin properties such as discoloration, surface hardness, and transverse strength. Therefore, there is an alternative material that can be used as a denture cleanser, namely 6.5% cocoa husk effervescent granules. The purpose of this study was to determine the effect of immersion of acrylic resin dental plate in 6.5% cocoa husk effervescent granules on the surface hardness of the plate. Research method: true experimental research. The samples used were 16 acrylic resin plates that had been soaked in effervescent granules of 6.5% cocoa husk extract and alkaline peroxide as a control material. Next, the plate hardness was calculated using the Vickers Hardness Tester. Through the results of the independent t-test, the results obtained were 0.554 for a hardness less than 0.05. Conclusion: Immersion in 6.5% cocoa pod effervescent granules had no effect on the surface hardness of the hot polymerized acrylic resin plate.

Keyword: effervescent granules, 6.5% cocoa husk extract, plate surface hardness, acrylic resin plate.