Background: One of the methods of cleaning denture is by immersing acrylic denture into denture cleanser solutions. Pineapples contain bromelin which can reduce colonies of Candida albicans on resin acrylic and polyphenol that can cause damage to resin acrylic.

Purpose: The purpose of this research is to observe the effect of immerse acrylic in pineapple juice to the impact strength of heat cured resin acrylic. Materials and Method: The sample’s form is a 65x10x2.5 mm slab made out of heat cured resin acrylic. The sample’s are then divided into 6 groups of treatment, 3 groups are immersed in the pineapples juice and the other 3 are immersed inside aquadest as the control group 4, 8 and 12 days. The samples used are 7 for each group. The impact strength is measured using mini impact tester KRY 28.5.1959 type. The analysis of the data will be using Kolmogrov-smirnov analytic and One-Way ANOVA. Results: The results of the research showed pineapple juice have effect toward its impact strength Conclusion: Pineapple juice can be used as a denture cleaning solution resin acrylic heat cured.

Key words: Pineapple juice, resin acrylic, impact strength