

ABSTRACT

THE EFFECTIVENESS OF AVOCADO (*Persea americana* Mill.) ASCORBID ACID IN INCREASING TOOTH COLOR BASED ON DIFFERENT IMMERSION DURATION

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Introduction: Tooth color is one of the factors that influence self confidence and appearance. Chemicals ingredient in whitening teeth can cause negative effects such as reduced enamel hardness, sensitive teeth and irritation of the oral mucosa. Avocados contain ascorbic acid which can be used as an alternative ingredient to whiten teeth. **Objective:** To determine the effectiveness of ascorbic acid in avocado (*Persea americana* Mill.) 100% concentration in improving tooth color with a difference of 2, 3 and 4 days immersion time in vitro. **Method:** This research is a type of experimental laboratory research with pre-test-post-only control group design. The 24 post extraction premolars were used as samples immersion in tea solution for 6 days and replaced every 2 days to make discoloration. Samples were divided into 4 groups, immersion of the sample in 100% ascorbic acid within 2, 3 and 4 days, and the control group immersed in sterile aquades. Tooth color measurements before and after immersion with a spectrophotometer. **Result:** One Way ANOVA test results ($p < 0.05$) showed a significant difference between treatment groups. Post-Hoc test results can be concluded that the 2 day immersion is the most effective in improving the color of teeth with a mean rank is 39.47. **Conclusion:** From the results showed that the comparison of 2 day immersion group was the most effective for increase the color of teeth than 3 day and 4 day immersion groups.

Keywords: *teeth whitening, avocado ascorbic acid, immersion duration, spectrophotometer*