

ABSTRACT

Dental plaque is the main cause of caries. Caries prevalence is increasing every year. Plaque control is needed one of them with antibacterial. Plaque control can be done chemically using antibacterial product. Probiotics may prevent bacterial adhesion. Another way is apple abstraction (pyrus malus) due to their catechin as a bacteria catalyst. This study aims to determine difference the effect of probiotics and apple against dental plaque index.

This type of method used was Randomized Clinical Trial with the design of pre-post test control group design to the 45 students of Panti Asuhan Aisyah Semarang. Subjects were divided into 3 groups, each group consist of 15 people. Distribution of groups: the treatment group with probiotics, treatment group with apple solution and control group with mineral water. Plaque measurements performed using the Personal Hygiene Performance Index (PHP). Data were analyzed using One-way ANOVA and Paired T-test.

Based on One way ANOVA test there was no difference in each group with a significance of 0.988 ($p > 0.05$). Based on Paired T-test result there was no difference effect on the probiotics and there was a difference between pre and post dental plaque index with a significance of $p < 0.05$.

These results can be concluded that the effect of apple solution is more effective than probiotics in one day against dental plaque index.