ABSTRACT

**Background:** The fixed partial denture always contact with saliva, foods, and drinks. Increased accumulation of plaque can happened on the use of fixed partial denture. Plaque was important role in the process of tooth tissue damage and inflammation in the soft tissue. For a more fixed partial denture can last a long time, the prevention of denture care remains with a plaque control. Probiotics lozenge used in this study, it contains *Lactobacillus reuteri* that can provide beneficial effects of the host's health. **Purpose:** The aim of study was to inhibit plaque’s formation on the fixed partial denture after ingestion of probiotic lozenge. **Method:** 20 healthy adults with porcelain fused to metals fixed partial denture on the posterior teeth were recruited into one Group Pre -Post Test Design study. The aim was to assess before and after effects of a probiotics lozenge. First, the operator cleaned the denture and the patients were instructed daily oral hygiene. On day 14, the subjects visited for outcome index plaque *Quigley Hein*. After that, the second cleaned the denture and to used the probiotics lozenge twice daily. On day 28, the subjects visited for outcome index plaque. The score were submitted to Paired t-test. **Result:** Paired t-test used standard of faith 95%. P= 0.000 ; (p<0.05) it means there were difference plaque index before and after used probiotics lozenge. **Conclusion:** The probiotic lozenge effective in inhibit plaque’s formation on the fixed partial denture.

**Keywords:** *Fixed partial denture, Probiotics (lozenge), plaque index.*