**ABSTRACT**

**Background:** Gingivitis in children is caused by bad oral hygiene, material alba, and calculus. Subgingival plaque is the cause of gingivitis and periodontitis. Green tea is one of the herbs that can be used as a treatment of gingivitis because it has a variety of therapeutic effects such as antioxidant, anti-collagenase, anti-inflammatory, anti-caries, anti-fungal, anti-viral, and antibacterial. **Purpose:** The aim of this study was to observe the inhibition of green tea extract towards subgingival bacteria by using Minimum Inhibitory Concentration (MIC) and Minimum Bactericidal Concentration (MBC). **Method:** The research was done in-vitro experiment from subgingival plaque children aged 8-11 years with gingivitis, using orthodontics devices, were not taking antibiotic, and without systemic disease. Green tea leaves was picked ±500 grams, dried and was blended until in the form of powder, later the extraction was taken using ethanol 96%. Minimum Inhibitory Concentration was obtained using dilution method which green tea extract was suspended with Brain Heart Infusion Broth (BHIB) and serial dilution method was used until 3 samples of each concentration between 100%, 50%, 25%, 12.5%, 6.25%, 3.125%, and 1.56%. For determination of MIC, the cloudiness of each sample was observed and compared with positive control, then calculation of total bacteria colony used to determine MBC. **Result:** Green tea extract had antibacterial effect against subgingival bacteria children with gingivitis at the lowest concentration of 25%, can kill the bacteria with total count 0 CFU/ml. **Conclusion:** Green tea extracts had inhibitory effect on subgingival plaque bacteria.

**Keywords:** gingivitis, green tea extract, subgingival plaque