INTISARI

Plak gigi berperan penting dalam menyebabkan masalah kesehatan gigi dan mulut salah satunya yaitu, penyebab karies gigi. Akumulasi plak gigi dapat dihambat dengan berkumur larutan yang mengandung bahan antibakteri. Kulit kentang mengandung senyawa flavonoid yang mempunyai aktivitas antibakteri. Tujuan penelitian ini adalah untuk mengetahui pengaruh berkumur larutan ekstrak kulit kentang (*Solanum tuberosum* L.) konsentrasi 5% terhadap akumulasi plak gigi pada anak usia 10-12 tahun.

Penelitian eksperimental semu *pretest-posttest control group design* dilakukan terhadap 20 subjek di Rumah TahfidzQu Yogyakarta, setiap subjek menerima 2 perlakuan yaitu, berkumur aquades steril (kontrol) dan berkumur larutan ekstrak kulit kentang (*Solanum tuberosum* L.) konsentrasi 5% sebanyak 2 kali sehari, pagi setelah sarapan dan malam sebelum tidur yang dilakukan selama 3 hari. Skoring plak dilakukan pada hari ke-1 (indeks plak awal) dan hari ke-4 (indeks plak akhir), setelah *washing period* 3 hari dilakukan *crossover*. Data dianalisis dengan uji *Independent t-Test.*

Hasil penelitian menunjukkan perbedaan bermakna pada rerata selisih indeks plak berkumur aquades steril (kontrol) dan larutan ekstrak kulit kentang (*Solanum tuberosum* L.) konsentrasi 5% dengan nilai probabilitas (p) sebesar 0,000 ($p<0,05$). Terjadi penurunan indeks plak yang lebih besar pada kelompok berkumur larutan ekstrak kulit kentang (*Solanum tuberosum* L.) konsentrasi 5% sebesar (0,87±0,39) dibandingkan kelompok yang berkumur aquades steril sebesar (0,37±0,22). Kesimpulan penelitian ini adalah berkumur larutan ekstrak kulit kentang (*Solanum tuberosum* L.) konsentrasi 5% menghambat akumulasi plak gigi pada anak usia 10-12 tahun.

Kata kunci: akumulasi plak gigi, ekstrak kulit kentang, anak usia 10-12 tahun.

ABSTRACT

Dental plaque plays an important role in causing dental and oral health problems, one of it is dental caries. Dental plaque accumulation can be prevented by gargling using solutions containing antibacterial content. Potato peels contain flavonoid, which has antibacterial properties. This study is aimed to investigate the influence of gargling using potato (*Solanum tuberosum* L.) peel extract with 5% concentration towards dental plaque accumulation in children ages 10-12 years.

A quasi experimental research *pretest-posttest control group design* was conducted on 20 subjects at Rumah TahfidzQu Yogyakarta each subject received 2 treatments, gargled with sterile aquadest (control) and gargled with potato (*Solanum tuberosum* L.) peel extract with 5% concentration as much as 2 times daily, once in the morning after breakfast and at night before sleeping for 3 days. Plaque scoring was done on the first day (initial plaque index) and the fourth day (final plaque index) after a 3 day washing period *crossover* was carried out. Data were analyzed by *Independent t-Test*.

Results show a significant difference in mean plaque index differences between gargling with sterile aquadest (control) and gargling with potato (*Solanum tuberosum*) peel extract with concentration of 5%. There was a bigger decrease in plaque index in the group which gargled with potato (*Solanum tuberosum*) peel extract solution with a concentration of 5% (0.87±0.39) compared to the group which gargled with sterile aquadest (0.37±0.22). This study concludes that gargling using potato (*Solanum tuberosum*) peel extract solution can inhibit dental plaque accumulation in children ages 10-12 years.

Keywords : dental plaque accumulation, potato peel extract, children ages 10-12 years.