

INTISARI

Plak dapat menyebabkan karies gigi maka diperlukan upaya untuk menghilangkan plak gigi dengan cara kontrol plak. Mengunyah buah pepaya *California* secara mekanis menyebabkan gesekan antara permukaan gigi dengan serat buah pepaya dan secara kimiawi kandungan zat aktif buah pepaya *California* dapat mengontrol plak gigi. Penelitian ini bertujuan untuk mengetahui pengaruh mengunyah buah pepaya *California* (*Carica papaya L.*) terhadap penurunan indeks plak gigi pada anak usia 10-12 tahun.

Jenis penelitian ini adalah eksperimental semu dengan rancangan *one group pre test-post test design*. Subjek penelitian ini adalah anak usia 10-12 tahun di Yayasan Rumah Singgah Bumi Damai, Kotagede, Yogyakarta berjumlah 19 orang yang dipilih sesuai kriteria. Subjek mengunyah buah pepaya *California* (*Carica papaya L.*) 76 gram sebanyak 32 kali kunyahan. Pengukuran skor plak gigi menggunakan PHP-M modifikasi Amith, dkk yang dilakukan sebelum mengunyah dan setelah 1 jam mengunyah buah pepaya *California* (*Carica papaya L.*). Data yang diperoleh dari hasil penelitian dianalisis menggunakan *Paired t-test*.

Hasil penelitian berupa data rerata dan simpangan baku skor plak sebelum dan sesudah mengunyah buah pepaya *California* sebesar $4,07 \pm 0,93$ dan $2,11 \pm 0,84$. Hasil analisis *Paired t-test* menunjukkan bahwa terdapat perbedaan skor plak yang bermakna antara sebelum dan sesudah mengunyah buah pepaya *California* (*Carica papaya L.*) ($p < 0,05$). Kesimpulan penelitian ini adalah mengunyah buah pepaya *California* (*Carica papaya L.*) dapat menurunkan indeks plak gigi sebesar $1,95 \pm 0,30$ ($p = 0,000$).

Kata kunci: mengunyah, buah pepaya *California* (*Carica papaya L.*), plak gigi, anak usia 10-12 tahun.

ABSTRACT

Plaque can cause dental caries, so that, it need to remove dental plaque by doing plaque control. Mechanically, chewing California papaya fruit causes friction between the teeth surface with the fibers in papaya fruit and chemically the active substance of the California papaya can control dental plaque. This study was aim to determine the effect of chewing California papaya fruit (*Carica papaya* L.) on decreasing dental plaque index in 10-12 years old children.

This study was a quasi-experimental with one group pre test-post test design. The subjects of this study were 10-12 years old children at Yayasan Rumah Singgah Bumi Damai, Kotagede, Yogyakarta totaling 19 people selected according to criteria. The subjects were chewing 76 grams California papaya fruit (*Carica papaya* L.) as many as 32 times chew. Dental plaque scores measurement was done by using PHP-M modification Amith, et al which was done before and after 1 hour of chewing California papaya fruit (*Carica papaya* L.). Data obtained from the results of the study and were analyzed by using Paired t-tests.

The study results were average data and standard deviation of plaque scores before and after chewing California papaya, as much as 4.07 ± 0.93 and 2.11 ± 0.84 . The results of Paired t-test analysis showed that there was significant difference in plaque scores between before and after chewing California papaya (*Carica papaya* L.) ($p < 0.05$). The conclusion of this study is, chewing California papaya fruit (*Carica papaya* L.) can reduce the dental plaque index it was 1.95 ± 0.30 with $p=0.000$.

Keywords: chewing, California papaya fruit (*Carica papaya* L.), dental plaque, 10-12 years old children.