

INTISARI

Derajat keasaman (pH) dan kapasitas *buffer* saliva merupakan salah satu faktor yang dapat mempengaruhi terjadinya karies. Susu adalah salah satu makanan yang dapat mempengaruhi pH saliva. Penelitian ini bertujuan untuk mengetahui perbedaan pH saliva setelah mengkonsumsi susu sapi dan susu kedelai pada anak usia 10-12 tahun.

Penelitian ini merupakan penelitian Eksperimental Semu dengan rancangan penelitian *Pretest and Posttest Control Group Design*. Pengambilan subjek dilakukan di SDN Catur Tunggal 7 yang dilakukan secara randomisasi sehingga didapatkan subjek sebanyak 27 anak terbagi menjadi 3 kelompok. Sembilan anak konsumsi susu sapi, 9 anak konsumsi susu kedelai, dan 9 anak kelompok kontrol. Masing-masing subjek diukur pH saliva awal kemudian diinstruksikan minum susu sebanyak 100 ml. Lima menit setelah perlakuan dilakukan pengukuran pH saliva kembali. Data yang diperoleh dianalisis menggunakan uji *One-way ANOVA* dan *Post-Hoc LSD* ($p < 0,05$).

Hasil analisis *One-way ANOVA* menunjukkan terdapat perbedaan yang signifikan pada rata-rata nilai pH saliva kelompok yang mengkonsumsi susu sapi ($6,94 \pm 0,08$), susu kedelai ($6,83 \pm 0,11$), dan kelompok kontrol ($6,84 \pm 0,10$) dengan nilai $F=2,698$ dan $p=0,032$. Hasil uji *Post-Hoc LSD* menunjukkan bahwa terdapat perbedaan signifikan antara susu sapi sebelum perlakuan dan susu sapi 5 menit setelah perlakuan, susu sapi 5 menit setelah perlakuan dan susu kedelai sebelum perlakuan, susu sapi 5 menit setelah perlakuan dan susu kedelai 5 menit setelah perlakuan, serta kelompok susu sapi 5 menit setelah perlakuan dan kelompok kontrol. Disimpulkan bahwa konsumsi susu sapi lebih tinggi dalam meningkatkan pH saliva dibanding susu kedelai.

Kata kunci: susu sapi, susu kedelai, derajat keasaman (pH) saliva

ABSTRACT

The degree of acidity (pH) and salivary buffer capacity is a factor that can affect the occurrence of caries. Milk is a one diet can affect salivary degree of acidity. The purpose of this study is to investigate the differences of salivary pH after consuming cow's milk and soy milk at the children age 10-12 years.

This study is a Quasi Experimental Design with a Pretest and Posttest Control Group Design. The subject selection was conducted at SDN Catur Tunggal 7 which was conducted randomly so that the subject of 27 children were divided into 3 groups. Nine children consumed cow's milk, 9 children consumed soy milk, and 9 children as the control group. Each subject measured initial salivary pH and then instructed to drink 100 ml of milk. Five minutes after treatment, the pH of the saliva was measured again. The data analyzed using One-way ANOVA and Post-Hoc LSD ($p < 0,05$).

The results of One-way ANOVA analysis showed that there were significant differences in the mean salivary pH value of the group consuming cow's milk ($6,94 \pm 0,08$), soy milk ($6,83 \pm 0,11$), and control group ($6,84 \pm 0,10$) with a value of $F=2,698$ and $p=0,032$. Post-Hoc LSD test showed that cow's milk group before treatment and cow's milk group 5 minute after treatment, cow's milk group 5 minute after treatment and soy milk group before treatment, cow's milk group 5 minute after treatment and soy milk 5 minute after treatment, cow's milk group 5 minute after treatment and control group had significant difference. It can be concluded that consumption of cow's milk was higher in increasing salivary pH than soy milk.

Keywords: cow's milk, soy milk, salivary degree of acidity (pH)