

INTISARI

Minuman bergula dapat mempengaruhi pH saliva. Susu merupakan minuman yang mengandung kalsium dan lemak yang bermanfaat dalam mendukung kapasitas *buffer* diduga berfungsi untuk menetralkan pH saliva. Penelitian ini bertujuan untuk mengetahui efek kadar kalsium susu rendah lemak kemasan terhadap derajat keasaman (pH) saliva.

Penelitian ini merupakan penelitian eksperimental dengan desain penelitian *pre and post test only*. Subjek yang digunakan sebanyak 10 orang untuk kelompok yang mengonsumsi susu dengan kadar kalsium tinggi (kelompok 75% Ca) dan 10 orang subjek yang mengonsumsi susu dengan kadar kalsium rendah (kelompok 35% Ca). Masing-masing subjek diukur pH saliva awal kemudian diinstruksikan minum susu sebanyak 100 ml. Pengukuran pH saliva setelah minum susu dilakukan setelah minum susu langsung (0 menit), menit ke-5, menit ke-10, dan menit ke-15. Data dianalisis menggunakan uji *Independent t-test*, *One-way ANOVA*, dan *Post-Hoc* ($p < 0,05$)

Hasil uji *Independent t-test* menunjukkan terdapat perbedaan yang signifikan antara kelompok 75% Ca dan kelompok 35% Ca. Hasil analisis *one-way ANOVA* menunjukkan perbedaan yang signifikan pada semua kelompok. Disimpulkan bahwa konsumsi susu dengan kadar kalsium 75% dan 35% dapat mempengaruhi kenaikan pH saliva. Derajat keasaman (pH) saliva setelah minum susu rendah lemak tinggi kalsium (kadar kalsium 75%) lebih tinggi dibandingkan dengan pH saliva setelah minum susu rendah lemak biasa (kadar kalsium 35%).

Kata kunci : susu, kalsium, derajat keasaman (pH) saliva

ABSTRACT

Sugary beverages may affect salivary pH. Milk is a beverage that contains calcium and fat that supports the buffer capacity which expected to neutralize the salivary pH. The purpose of this study was to investigate the calcium level low-fat of packaging milk effect on salivary degree of acidity (pH).

This research is an experimental research with pre and post test only study design. 10 people were used as subject for the group who consumed high calcium milk (Ca level 75%) and another 10 people consumed low calcium milk (Ca level 35%). Initial salivary pH will be measured in each group then given 100 ml of milk. Measurement of salivary pH after drinking milk is done directly (0 minute), 5th minute, 10th minute, and 15th minute. The data were analyzed using Independent t-test, One-way ANOVA, and Post-Hoc ($p < 0,05$).

Independent t-test showed that there was a significant difference between the 75% Ca and 35% Ca groups. The result of one-way ANOVA analysis showed significant differences in all groups. It can be concluded that the consumption of milk with calcium level of 75% and 35% can increase salivary pH. The salivary degree of acidity (pH) after drinking high-calcium low-fat milk (Ca level 75%) was higher than regular low-fat milk (Ca level 35%).

Keywords: milk, calcium, salivary degree of acidity (pH)