

Perbedaan Total Bakteri Sebelum dan Sesudah Gosok Gigi Menggunakan Pasta Gigi Yang Mengandung Ekstrak Siwak

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ABSTRAK

Gosok gigi merupakan metode yang efektif dalam menurunkan jumlah bakteri pada rongga mulut. Penambahan serbuk kayu Siwak (*Salvadora persica*) pada pasta gigi diharapkan dapat menghambat pertumbuhan bakteri dalam rongga mulut karena kayu Siwak memiliki kandungan kimiawi alami. Tujuan penelitian ini adalah untuk menghitung dan menganalisa perbedaan jumlah bakteri sebelum dan sesudah gosok gigi. Sampel yang digunakan adalah air kumur sebelum dan sesudah gosok gigi dari 30 mahasiswi D3 Analis Kesehatan UNIMUS yang memenuhi syarat inklusi yaitu mahasiswi yang memiliki gigi utuh dan tidak berlubang, pemeriksaan menggunakan metode Angka Lempeng Total bakteri. Hasil menunjukkan rata-rata total bakteri sebelum gosok gigi menggunakan pasta gigi Siwak $3,5 \times 10^8$ CFU/ml dan sesudah gosok gigi menggunakan pasta gigi Siwak $1,9 \times 10^7$ CFU/ml. Uji statistik *T Test* berpasangan menunjukkan $p=0,001$ ($p < 0,005$) yang berarti terdapat perbedaan yang signifikan dengan prosentase penurunan sebesar 94,5% sebelum dan sesudah gosok gigi dengan pasta gigi ekstrak Siwak.

Kata kunci : Pasta gigi Siwak (*Salvadora persica*), jumlah bakteri, gosok gigi

The Difference Of Total Bacteria Before And After Brushing Teeth Using Toothpaste Containing Siwak Extract

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ABSTRACT

Brushing teeth is one of the effective methods in reducing the total bacteria in the oral cavity. The addition of Siwak sawdust (*Salvadora persica*) to the toothpaste is expected to obstruct the bacterial growth in the oral cavity because Siwak has natural chemical contents. The objective of this research is to calculate and analyze the difference of total bacteria before and after brushing teeth. The samples used are the mouthwashes of 30 female students of D-III of Health Analyst Study Program of UNIMUS which qualified of inclusion requirements such as having their teeth intact and not having any cavities, the examination used the method of bacterial Total Plate Count. The result shows the average number of total bacteria before using Siwak toothpaste is $3,5 \times 10^8$ CFU/ml, meanwhile the average number of bacteria after brushing teeth using Siwak toothpaste is $1,9 \times 10^7$ CFU/ml. This shows that the reduction result of total bacteria. The statistical examination of *T Test* in pairs shows that $p=0,001$ ($p < 0,005$) which means there is a significant difference with the reduction percentage in before and after brushing teeth using toothpaste containing Siwak extract as big as 94,5%.

Key words: Siwak toothpaste (*Salvadora persica*), total bacteria, brushing teeth