

ABSTRAK

Nama : Nabilah Mumtaz Azkiya
Program Studi : Kedokteran Gigi
Judul : Efektivitas berkumur teh hitam 2% (*Camellia sinensis*) terhadap pH dan kadar fluor saliva pada anak usia 7-8 tahun di SDN 012 Pagi Sumur Batu dan tinjauannya menurut Islam

Latar belakang: Teh adalah salah satu jenis minuman yang populer di dunia. Di Indonesia, teh hitam adalah jenis teh yang paling sering dikonsumsi. Teh hitam diketahui memiliki efek antibakteri dan dapat menghambat perlekatan *Streptococcus mutans* ke email. Namun belum diketahui efektivitas berkumur dengan teh hitam 2% selama satu bulan terhadap peningkatan pH dan kadar fluor saliva pada anak usia 7-8 tahun dan tinjauannya menurut pandangan Islam. **Tujuan:** Mengetahui perbandingan efektivitas antara berkumur dengan seduhan teh hitam 2% dan larutan fluor 0,2% dalam meningkatkan pH dan kadar fluor saliva pada anak usia 7-8 tahun. **Metode:** Penelitian ini merupakan penelitian eksperimental lapangan dengan desain *randomized controlled trial* metode *double blind*. Subjek adalah siswa-siswi kelas I SDN 012 Pagi Sumur Batu yang berjumlah 28 orang yang dipilih berdasarkan *simple random sampling*. Pengukuran pH saliva menggunakan digital pH meter dan pengukuran kadar fluor saliva menggunakan Spektrofotometer UV-VIS TECAN Infinite M200 Pro®. **Hasil:** Hasil uji *Independent T-Test* menunjukkan bahwa tidak ada perbedaan yang bermakna antara kelompok yang berkumur dengan teh hitam 2% dengan larutan fluor 0,2% ($p < 0,05$). **Kesimpulan:** Berkumur dengan seduhan teh hitam 2% memiliki efektivitas yang sama dengan larutan fluor 0,2% dalam meningkatkan pH saliva dan kadar fluor saliva, dan dalam pandangan Islam berkumur dengan teh hitam bermanfaat bagi kesehatan gigi, teknik mengolahnya tidak bertentangan dengan syariat Islam termasuk tidak menggunakannya secara berlebihan hukumnya diperbolehkan.

Kata kunci: Berkumur; teh hitam; pH saliva; kadar fluor saliva

ABSTRACT

Name : Nabilah Mumtaz Azkiya
Study Program : Dentistry
Title : The effectiveness of mouthwash using 2% of black tea (*Camellia sinensis*) towards pH and saliva fluoride levels in children aged 7-8 years in Primary State School 012 Pagi Sumur Batu and its review according to Islam

Background: Tea is one of the most popular beverages in the world. In Indonesia, black tea is the most common type of tea consumed. Black tea have an antibacterials effect and can inhibit the attachment of *Streptococcus mutans* to teeth enamel. However, it is unknown the effectiveness of mouthwash with 2% of black tea for 1 month against the increase of pH and saliva fluoride levels in children aged 7-8 years. **Objective:** To compared the effectiveness of mouthwash with 2% of black tea and 0.2% of fluoride solution in increasing pH and saliva fluoride levels in children aged 7-8 years and its review according to Islam. **Method:** This research was experimental study with randomized controlled trial design of double blind method. The subject involved 28 students of first grade of Primary State School 012 Pagi Sumur Batu which were selected based on simple random sampling method. The salivary pH is measured with digital pH meter and saliva fluoride levels using UV-VIS TECAN Infinite M200 Pro® Spectrophotometer. **Results:** The results of the Independent T-Test showed that there was no statistically significant difference between the mouthwash group 2% of black tea compared with 0.2% of fluoride solution ($p < 0.05$). **Conclusions:** Mouthwash with 2% of black tea has equally effectiveness to 0.2% of fluoride solution in increasing pH and saliva fluoride levels, and according to Islam, rinsing with black tea that is beneficial to dental health is allowed, including the processing technique of cultivating it which is not in conflict with Islamic law and not using it excessively.

Keywords: Mouthwashing; black tea; saliva pH; saliva fluoride levels