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Around the time I started considering dental hygiene as a career path was when I started to take a closer look at my own personal oral hygiene. It made me feel a little uneasy because I knew that my teeth were not in pristine condition as brushing my teeth and tongue was the extent of my oral care. I knew someone else would be taking a closer look at my teeth and I did not know what to expect. However, I could not afford to go to the dentist so my next bet was doing it myself. I started looking up home remedies for plaque and calculus removal. I even bought a dental kit with 2 instruments and a mouth mirror to take off my supragingival calculus. I went on the internet and searched for teeth cleaning and calculus removing remedies and I saw things like oil pulling, mixing lemon, baking soda and toothpaste to brush your teeth with, using hydrogen peroxide and water as a rinse, putting baking soda on a lemon wedge and biting down and so many others. I did a little more research and I found that many of the aforementioned items can be harmful to the teeth and reckoned that there were no homemade remedies for oral hygiene that was effective or without side effects. I figured that the oral care products were made specifically with ingredients and chemicals targeted to fight bacteria that cause disease and calculus formation. So, when I saw a poster at the Greater New York Dental Meeting titled "Dental Hygiene In A Natural Light: The Holistic Approach To Oral Health Care" my interest was definitely piqued.

As I stated earlier I have looked up homemade remedies and lemon was a very common tooth whitening option, but the acidity in lemons can cause erosion on the teeth, making it an undesirable option for your teeth. This presentation poster had strawberries on a tooth brush which was what caught my attention because I have never really read about using strawberries on your teeth. If anything, I would imagine that using strawberries on your teeth could potentially stain them. So I walked up and asked questions and my imaginations were incorrect. They explained to me that strawberry juice acts as a bleaching agent for wine, soda and coffee stained enamel and there is a recent study that supports this theory. The presenters were very welcoming and eager to explain their presentation. They were dressed professionally and were well-spoken. Although there was four of them, they all took turns answering questions and that showed preparation and group work from all sides. They were well prepared, readily explained and answered questions I had. They seemed to be very passionate about the holistic approach to oral health. They had information about the propolis from bees, chitosan made from the chitin shells of shrimps and other crustaceans, lauric acid in the almighty coconut oil which have all been proven to have anti-bacterial, anti-microbial, anti-inflammatory and effective in reducing plaque formation. They also had some information on holistic alternatives to mouth rinses. According to the presenters, studies have shown that cranberry functional beverage (CFB), aloe vera and green tea are alternatives to chlorhexidine. Green tea has also shown to reduce gingival index, plaque index and pH level better than chlorhexidine. They talked about ways to incorporate these natural ingredients like strawberries, cranberries and pomegranates in the making of mouth rinses or toothpastes and possibly. Taking an holistic approach doesn't eliminate the need for a dental cleaning or check-ups as the studies are very recent but I love the fact that it offers a natural, safer, accessible and cost effective option.

As dental hygienists, we learn to treat and care for patients through conventional methods. These holistic methods and studies that supports them are relatively new, therefore a lot of dental professionals might not know about them or believe in them. However, I think that if a patient opts for the holistic approach to oral care instead the conventional way, it is our job to educate them and respect their choices. As dental hygienists I think it is important to understand and be knowledgeable on both the holistic and the conventional care options. I think it is also important to educate patients on both these approaches, especially the natural one as it is less talked about and very beneficial to the patient's overall health. When I researched natural remedies for oral care there was a lot of information that can be very harmful to the teeth and overall health even though they were natural. I did not know any better, I just wanted my teeth to look better and although I proceeded with caution not a lot of people do. They just want their teeth to look better and were willing to try anything even if it could be detrimental to their health in over time. The importance of education cannot be emphasized enough and this poster and the many others that were displayed are very educational and should be broadcasted and used to inform the general public so they have the correct information and avoid causing more damage to their health.

## Teeth re-whitening effect of strawberry juice on coffee stained teeth

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### ABSTRACT

Many people favor coffee. However, regarding health and aesthetic dentistry, coffee gives a negative effect. Tanin in coffee causes a brown stain on the tooth surface. Therefore, in aesthetic dental care, teeth whitening has become popular matter. One of the natural ingredients used for teeth whitening treatment is strawberry. The purpose of this study was to obtain data regarding the effect of strawberry juice on the re-whitening process of the coffee-stained tooth enamel surface. This study was a pure experimental in-vitro using Friedman and Wilcoxon Matched Pairs Tests for statistical analysis. The population of this study was anterior teeth. The samples were maxillary central incisors. The sampling technique using sample size determination based on the testing formulas of the difference of two average data pairs resulted in 11 specimens. The result of the research showed that all coffee-stained teeth sample had an increasing enamel colour index. The samples were then applied with strawberry juice resulted in a significant average difference colour index value indicated by  $p < 0.001$ . The conclusion of this research indicated that there was an effect of strawberry juice on the coffee-stained teeth re-whitening process.

**Keywords:** Strawberry juice, coffee stained, teeth whitening.

### INTRODUCTION

Coffee is one of the most popular beverages for many people. Coffee has become a very lucrative business. Coffee is a type of beverage derived from the processing and extraction of the coffee beans contains high concentration of caffeine.<sup>1</sup> Caffeine is a compound resulted from the alkaloid secondary group metabolism of the coffee plant.<sup>2</sup> The role of caffeine inside the body system is to increase the psychomotor function thus makes the body stay awake and provide physiological effects by energy increased,<sup>3</sup>

reduce the risk of cancer, diabetes, gallstones, and cardiovascular disease.<sup>4</sup> However, regarding aesthetic aspect in dentistry, coffee gives a negative effect. The tannin deposits present in coffee cause brown staining on the buccal, lingual, labial, and palatal surfaces of teeth.<sup>5</sup> This condition will affect individual appearances and may decrease confidence.

Nowadays, the general population chooses modern dentistry to improve facial aesthetics, health, and social success.<sup>6</sup> Techniques and materials available for dentists have also developed rapidly. This fact supports a better and more

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## The antiplaque efficacy of propolis-based herbal toothpaste: A crossover clinical study

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**Background:** In recent years, herbal products have been suggested as an economic, safe and probably effective alternative for prevention and control of various oral diseases. But still there are some products which need to be evaluated. Of lately, Propolis is one such product. To assess and compare the efficacy of herbal dentifrice containing Propolis with Miswak and Colgate total toothpastes in controlling plaque formation. **Materials and Methods:** A double blind, randomized, crossover study design was conducted among thirty healthy dental students. After oral prophylaxis all subjects were given a washout product for one week period. Subjects were then made to brush with (washout product) for 1 minute followed by 1 minute brushing with assigned test product. The baseline MGMPi plaque scores were recorded. Subjects were then refrained from oral hygiene for 24 hours, and were recalled to be re-disclosed and re-measured for plaque formation. This procedure was repeated according to crossover design after a washout period of (2 week). Statistical tests used were Kruskalwallis and Wilcoxon sign rank test. **Results:** There was a significant difference in 24 hour score between the test products evaluated. When the change from baseline to 24 hours was analyzed, the test product Propolis resulted in a consistently and significantly ( $p < 0.05$ ) lower MGMPi mean scores than the Colgate Total and Miswak toothpastes. **Conclusion:** Propolis was found to be safe and effective in reducing plaque accumulation when compared to Miswak and Colgate total toothpaste.

### INTRODUCTION

Association of periodontal infection with organ systems such as cardiovascular system, endocrine system, reproductive system, and respiratory system makes periodontal infection a complex multiphase disease. [sup][1] Dental plaque is considered to be the key factor associated with both dental caries and gingival inflammation. The latter, if untreated may extend beyond the gingival margin and progress to periodontitis. This may ultimately lead to the loss of teeth. Approaches to control dental plaque center on mechanical removal by tooth cleaning or by the use of chemicals, which prevent or reduce bacterial multiplication. [sup][2] Self-performed mechanical plaque removal is one of the most accepted methods of controlling plaque and gingivitis. [sup][3] The fact that most people experience difficulty in maintaining adequate levels of plaque control, particularly at interproximal sites, necessitates the use of chemicals for control of plaque as an adjunct to mechanical plaque control procedures. [sup][4] There has been a search for years for chemical agents that could supplant patient-dependent mechanical plaque control and thus reduce or prevent oral disease. [sup][5]

A wide range of toothpastes are commercially available and recently interest in natural products has increased. A number of controlled clinical trials have demonstrated that tooth brushing with herbal dentifrices reduces supragingival plaque and gingivitis. [sup][2],[3],[6] As a result, a number of these agents have been incorporated into toothpastes and mouth rinses. Meswak is one such scientifically formulated herbal toothpaste with pure extract of the Miswak plant "Salvadore Persica," which has been used for centuries. [sup][7] Recently, several studies have reported the antibacterial effects of Miswak (chewing sticks) on cariogenic bacteria and periodontal pathogens, and inhibitory action on dental plaque formation. [sup][8],[9],[10]

More recently, another active agent Propolis has been used for treating different diseases and inflammatory conditions as both local and systemic applications. [sup][11] Propolis is available in the world markets in different forms as capsules, lozenges, tincture, and cream and recently added to the list are mouth rinses and toothpastes. Based on literature reports showing that propolis resin is a product with anti-inflammatory and bactericidal activity, several in vitro and some in vivo studies [sup][12],[13],[14] have been conducted in America, Australia, United Kingdom, and Europe and especially in Eastern Europe. [sup][15],[16],[17],[18] Only a few studies have been conducted to assess the effects of propolis on oral health. Owing to this dearth of literature, the present study has

## Effect of coconut oil in plaque related gingivitis — A preliminary report

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### Abstract

#### Background:

Oil pulling or oil swishing therapy is a traditional procedure in which the practitioners rinse or swish oil in their mouth. It is supposed to cure oral and systemic diseases but the evidence is minimal. Oil pulling with sesame oil and sunflower oil was found to reduce plaque related gingivitis. Coconut oil is an easily available edible oil. It is unique because it contains predominantly medium chain fatty acids of which 45-50 percent is lauric acid. Lauric acid has proven anti inflammatory and antimicrobial effects. No studies have been done on the benefits of oil pulling using coconut oil to date. So a pilot study was planned to assess the effect of coconut oil pulling on plaque induced gingivitis.

#### Materials and Methods:

The aim of the study was to evaluate the effect of coconut oil pulling/oil swishing on plaque formation and plaque induced gingivitis. A prospective interventional study was carried out. 60 age matched adolescent boys and girls in the age-group of 16-18 years with plaque induced gingivitis were included in the study and oil pulling was included in their oral hygiene routine. The study period was 30 days. Plaque and gingival indices of the subjects were assessed at baseline days 1,7,15 and 30. The data was analyzed using paired t test.

#### Results:

A statistically significant decrease in the plaque and gingival indices was noticed from day 7 and the scores continued to decrease during the period of study.

#### Conclusion:

## PART 2

### References

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## PART 3

The GNYDM experience was a first for me. I had never been to anything of the sort and did not really know what to expect. I went alone and met with a friend at the center. Before I got to the convention center, while waiting for at the bus stop, I met a very nice woman and it turned out we were heading to the same destination. We struck up a conversation and she told me she was a dentist and she had been one for 15 years. I told her I was a dental hygiene student and we talked about that for a little bit. She was also kind enough to answer all my questions about the convention and advised me not to limit myself or my abilities. On the short ride to the Javits center, we talked about many things. From the rainy weather to her career as a dentist and even about her struggles to becoming a dentist both in Brazil, her home country and then in America. I had never met her before and she had never met me either but her kind words were exactly the kind of pick me up I needed and they really put me in a wonderful mood and got me excited for my future. We parted when we got to the center and she gave me her business card and left for her meeting while I met up with my friend. The center itself was huge and although there were a lot of people it was not jampacked. This eased my anxiety a lot as I am not the biggest fan of crowded places. We found our way to the posters and started skimming through them to see the ones that I could write about. A lot of them were interesting to me. In fact the first one that caught my attention was about the link between dementia and gum disease but ultimately I decided to go with the Holistic approach topic and I really enjoyed learning about it.

After reading enough posters and hearing different presentations and taking pictures of the ones that I wanted to write about, it was time to explore the booths and different products they had to offer. They had everything on display from dental chairs to mouth mirror keychains. We went from booth to booth basically window shopping and got some free toothpaste, tote bags, identification card holders. They were a lot more available but they had very long queues and unfortunately I could not wait that long. Overall this was a very fun and interesting experience, I met new people, learnt new things and got some free stuff. I also saw some of our senior students presenting topics, if it is part of the curriculum then I look forward to participating next year.