Fluoride: Friend or Foe?

**Why I Care About Fluoride**

 Last summer my mother was diagnosed with breast cancer. After the cancer was gone, she decided to resort to more natural alternatives for health and hygiene. When discussing with my mom whether fluoride was good for you or not, I decided to do some research.

**What is Fluoride?**

Fluoride can be used in multiple ways; by varnish, through drinking water, in toothpaste, in mouthwashes, etc. It is extremely effective at reducing cavities, but excessive ingestion of fluoride can lead to many health problems outlined in this paper. With this being said, do the negative effects of fluoride outweigh the positive effects?

**A Cure for Cavities**

Fluoride is an effective way to reduce cavities in children and adults. Dental professionals have discovered that naturally occurring fluoride in water supply led to decreased rates of cavities in the populations that consume it. If children do not receive fluoride through their water, these dental professionals recommend fluoride supplements. Fluoride use is pushed in young children while primary teeth are forming. About 20 years ago, Adair and his colleagues made it know that rather than taking fluoride supplements, a varnish should be applied.

**Fluoride: The Silent Killer**

According to multiple sources, excessive fluoride use weakens skeletal health, causes arthritis, is toxic to the thyroid, cause early puberty in females, is harmful to the cardiovascular system, and causes dental fluorosis. The most common health issue caused by excessive fluoride intake is fluorosis, where the appearance of enamel is changed to look mottled. Although fluoride is endorsed in pediatric settings, fluorosis is commonly developed in children as their primary teeth are forming but have not appeared in the mouth yet. Non-fluoridated water is shown to reduce the risk of fluorosis in children who consume it on a daily basis.

**Proposed Alternatives**

Many alternatives to fluoride have been discovered and studied, but one stands out over most: Chlorhexidine. Chlorhexidine is an antiseptic agent and when used as a mouth rinse is extremely effective at reducing mouth bacteria.

Another alternative to fluoride is diet modifications involving vitamin D consumption. Vitamin D not only protects your teeth against cavities, but also keeps your gums healthy. Vitamin D can be accessed through foods such as, mushrooms, green leafy vegetables, salmon, tuna and catfish. These foods create an antimicrobial protein that attacks the oral bacteria that causes cavities.

The use of oils such as coconut oil, olive oil and oregano oil as a toothpaste have antibacterial properties also. Other foods that prevent decay in your mouth are yogurt, cheese, almonds, apples and pears.  Green tea, black tea, and red wine also have benefits that provide a healthy balance in the mouth.

**Do the Positive Effects of Fluoride Outweigh the Negative Effects?**

Although fluoride is commonly used and very effective, excessive fluoride use can cause chronic effects. In order to eliminate the intense effects of fluoride, one should use safer and healthier alternatives. These alternatives should be introduced and endorsed in and out of the dental office. Along with these alternatives; drinking plenty of water, avoiding sports drinks, juice, and sticky foods, including gummy vitamins can all prevent cavities.

**What’s Next?**

Since city water contains fluoride, it should be tested to see how much fluoride is too much fluoride. After this test has been conducted, water should be filtered before entering homes, restaurants, and other places if possible.

 Another important issue in dental care as a whole is that those with low incomes as well as the elderly may have little or no access to restorative or preventive clinical care. More affordable dental care should be proposed and offered.

 As stated previously, other alternatives should be introduced into the dental office, in the school system, and in the home as these are extremely effective means for dental health.

Through this research, I have decided to cut back on how much I use fluoride. Since my mom had breast cancer and excessive fluoride use has the ability to cause breast cancer because of early puberty in females, I have concluded that I will not use fluoridated toothpaste, will filter any city water, and only get fluoride varnish at the dentist once a year. As I cut back on the amount of fluoride I consume, I will revert to the healthier alternatives I have previously outlined in this paper.

Works Cited

Adair, S. M. (2007). Evidence-Based use of Fluoride in Contemporary Pediatric Dental Practice. *Oral Health,97*(1), 44-60.

Autio-Gold, J. (2008). The Role of Chlorhexidine in Caries Prevention. *Operative Dentistry,33*(6), 710-716. doi:10.2341/08-3

delitedental (2016, October 10). Are There Alternatives to Fluoride to Prevent Cavities?? Retrieved from https://delitedental.net/alternatives-fluoride-prevent-cavities/

dredwardfroup (2015, November 16). 9 Shocking Dangers of Fluoride Exposure. Retrieved from https://www.globalhealingcenter.com/natural-health/9-shocking-dangers-of-fluoride/

Fluoride Action Network | Health Effects. (n.d.). Retrieved March 1, 2018, from http://flouridealert.org/issues/health/

Fluoride in Water | What You Need to Know About Fluoride. (n.d.). Retrieved from https://draxe.com/is-fluoride-bad-for-you/

Kaminsky, L. S., Mahoney, M. C., Leach, J., Melius, J., & Miller, M. J. (1990). Fluoride: Benefits and Risks of Exposure. *Critical Reviews in Oral Biology & Medicine,1*(4), 261-281.

Oral Health America (2003). Keep America smiling: 2003 oral health report card. Chicago: Oral Health America. http://www.oralhealthamerica.org/pdf/2003ReportCard.pdf

Tabari, E., Ellwood, R., Rugg-Gunn, A., Evans, D., & Davies, R. (2000). Dental fluorosis in permanent incisor teeth in relation to water fluoridation, social deprivation and toothpaste use in infancy. *British Dental Journal,189*(4), 216-220. doi:10.1038/sj.bdj.4800726a

 “Vitamin D.” *Focus for Health*, 22 June 2016, www.focusforhealth.org/vitamin-d-deficiency/.