

White tea Green tea Oolong tea Black Tea



DENTAL FLUOROSIS





NORMAL

MILD

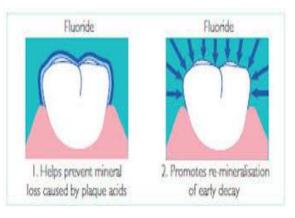




MODERATE

SEVERE

https://www.healthychildren.org/English/healthy-living/oral-health/Pages/Fluorosis-Facts-Information-Parents-Caregivers.aspx



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Fluoride in Tea

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http://blog.mass.gov/publichealth/wp-content/uploads/sites/11/2014/04/Pouring-tea.jpg





http://www.hairboutique.com/tips/tea-13_250h.jpg

What is Fluoride?

- Fluoride is a naturally occurring mineral found in soil, water, foods, and several minerals
- Has beneficial effects such as prevention of caries, cavities, and remineralization of the tooth
- Excessive intake of fluoride can be linked to dental fluorosis and skeletal fluorosis, while an inadequate intake of fluoride can be linked to dental caries
- Fluoride is found in tea leaves which are consumed globally

Benefits of Fluoride

- Prevention of dental cavities (tooth decay)
- Prevents dental and skeletal fluorosis
- Tooth remineralization
- Strengthens enamel
- Helps reduce dental hypersensitivity

Risks of Fluoride

Excessive Fluoride:

• May lead to dental / skeletal fluorosis

Inadequate Intake Fluoride:

• May lead to higher risk for dental caries

FLUORIDE LEVELS IN TEA

| Type of Tea | Fluoride (mg/8 ounces) |
|-------------|------------------------|
| Green | 0.3-0.4 |
| Oolong | 0.1-0.2 |
| Black | 0.2-0.5 |

http://lpi.oregonstate.edu/mic/food-beverages/tea

"Dry tea contributes 3-4 more times as much fluoride to the brewed tea as does the water"

Skeletal Fluorosis



http://www.inrem.in/fluorosis/about.html

"Skeletal Fluorosis is a result by chronic, excessive exposure to fluoride through ingestion or inhalation."

"Dental Fluorosis is change in the appearance of the tooth's enamel. These changes can vary from barely noticeable white spots in mild forms to staining and pitting in the more severe forms." (Only occurs in children who consume too much.)

Adequate Intake of Fluoride (USA)

Adult Males: 4 mg/day Adult Females: 3 mg/day Children: 1-2 mg/day

Role of Dental Hygienist

The role of a dental hygienist is to educate patients about what a healthy fluoride intake level should be. The dental hygienist should inform the public of the benefits and risks of fluoride intake in all age groups. Also, explain to the general public, that the effects of other contributing factors added to tea can alter the total intake. Certain factors such as kidney disease, milk intake, and the type of water can affect the amount of fluoride levels in an individual's body.

Conclusion

Fluoride intake is important to dental health. The proper amount of fluoride can prevent and reverse early signs of dental caries. It acts to repair areas that are attacked by acid. However, excessive amounts of fluoride can cause dental fluorosis and skeletal fluorosis. There are many factors that may alter the total intake of fluoride on an individual level. The type of water (well or tap), milk, or how the tea was brewed can contribute to the final fluoride intake level.