

Fluoride

Fluoride is a naturally element occurring in water and many foods. All humans ingest fluoride on a daily basis. Approximately 40 percent of Canadians get fluoride in their tap water. Fluoride is not present in the water here in the Bow Valley. Other products commonly used that contain fluoride are toothpastes and mouth rinses, and even some floss can be coated with fluoride.

Food and Environmental Sources of Fluoride

- Seafood contains fluoride from the natural sodium fluoride found in the ocean
- Tea
- Gelatin
- Fresh fruits or vegetables sprayed with a fluoride pesticide
- Eggs
- Milk
- Common in air in industrial work places
- Teflon pans
- Mechanically deboned meat (for example chicken nuggets or fish fingers)

Oral Health Functions of Fluoride

Overall, fluoride has a positive effect on oral health. The fluoride molecule is very similar in size and shape to the calcium molecule. Calcium is an important part of tooth enamel and dentin. When a tooth begins to get a cavity, calcium is lost from the weakened tooth enamel. When fluoride reaches the tooth, the fluoride molecule enters the weakened tooth enamel and takes the place of calcium to strengthen the tooth structure. This slows or prevents early cavities from progressing.

Fluoride in the Dental Office

Professionally administered fluoride treatments are recommended once every 6 months. In the dental office, we apply fluoride through foam, gel, rinses or varnishes. We currently use 5% sodium fluoride varnish. Fluoride drops or an extra-strength fluoride toothpaste may also be recommended for some individuals who get cavities frequently. These items can be purchased at any pharmacy. Some elementary schools have programs where fluoride varnish is “painted” on children’s teeth as a preventative measure. Please make a note of when this is done, so we can better monitor how much fluoride your child is getting as it is only recommended topically 2x/year. Dental office fluoride does not contain allergens such as tree nuts, peanuts, corn, shellfish, eggs, milk protein, soy, gluten or triclosan.

Indications for Fluoride Treatment

- Children or teens during development of their teeth
- After whitening to rehydrate the enamel
- For those with recession and exposed root surfaces in the mouth (root sensitivity)
- High risk of decay
- Those who consume lots of acidic foods
- Those with enamel wear
- Dry mouth

Precautions for Fluoride

Fluoride is not intended to be ingested systemically. This is why we do not recommend fluoride for children until they are able to spit out all toothpaste when brushing without swallowing. The age to start using fluoridated toothpaste is approximately 3-4yrs of age, however this can be better determined by the guardian. Swallowing fluoride can cause nausea and vomiting. To counteract this reaction it is suggested to drink milk. If ingested it is also a good idea to contact poison control or emergency services.

Fluorosis

Ingesting too much fluoride systemically while teeth are developing can cause fluorosis. This is a condition that can cause teeth to erupt with discoloration (either white or brown) and rough, pitted enamel. This condition is not bad for the teeth; its only effects are cosmetic. There are treatments available now to return the teeth to a normal look. One treatment is a topical calcium cream called MI Paste, which rehabilitates the tooth structure chemically. It slowly returns the coloration to normal over time, with no drilling of tooth structure. It can be used at home or applied using special techniques in the office. Another option in severe cases is the placement of white fillings, or porcelain veneers or crowns to cover the discoloration.

Controversy about Fluoride

In some areas, fluoride is added at a very low dose to the public water supply. Some people are opposed to this because they feel that the fluoride could cause health problems, and they feel they are being forced to consume it. However, there is no conclusive evidence of health problems caused by the doses normally used in water. There is substantial evidence that fluoride in the water decreases the rate of cavities. At Banff Dental Care, we recommend the use of fluoride toothpaste and fluoride treatments, while using common sense and avoiding ingestion of large amounts of fluoride.

Our local Banff branch of Alberta Health Services offers free fluoride varnish for age 12-35 months based on income, please contact them for information.

