

The use of Fluoride in dentistry is a topic that has brought about a lot of controversy over the years and likely will for many more to come. Like many other things in life, there are pros and cons to the choices we make about Fluoride and it will ultimately come down to a personal choice.

At PURE Dental Hygiene Care we respect your right to choose your treatment options including fluoride applications in office or at home. We will provide guidance if you choose a more natural alternative in an attempt to stay Fluoride free.

Fluoride Facts

 Fluoride is a compound that is neither naturally occurring in our body nor required for proper health and function of our body.

- ✓ Fluoride is a known toxin that in the right dosage can cause serious harm and even death to humans as well as other species
- ✓ Fluoride can be found in natural water sources, like well water, in extremely high concentrations. This in part is due to Fluoride being a by-product from some agricultural practices. (note: Fluoride added to water supplies is produced in a different method)
- ✓ Fluoride is added to the water supply in many parts of the world. The City of Peterborough Bylaw 1973-1 requires the Peterborough Utilities Group to fluoridate the City's drinking water to levels of 0.50 and 0.80 mg/L leaving the <u>Peterborough Water Treatment</u> <u>Plant.</u> Optimal fluoride concentration is 0.7 milligrams per litre (mg/L), or 0.7 parts per million (ppm). The maximum acceptable concentration is equal to 1.5 ppm (mg/L)
- ✓ Some studies conclude when Fluoride is incorporated into the teeth it can help make the tooth mineral stronger and more resistant to acid attack from cavity causing bacteria
- ✓ If Fluoride is incorporated into developing teeth in too high of a concentration it can cause white and yellow spots, and in severe cases, cause the teeth to be very brittle and crumble away
- ✓ Fluoride is not recommended for children under 6 months and should not be used when making infant formula for children in this age group

Pros to use of Fluoride

- 1. Fluoride can make the teeth stronger and more resistant to cavities, saving on future dental bills
- 2. Fluoride can provide an added source of minerals for helping to repair damaged teeth where cavities are still in their early stages
- 3. Fluoride is cheap and readily available.

Cons to use of Fluoride

- 1. For children under age 8, most of their adult teeth are still developing. Ingestion of too much Fluoride prior to age 8 can adversely and irreversibly damage the developing adult teeth. The younger and smaller a child is, the greater the risk of Fluoride damage to the developing teeth.
- 2. With Fluoride so readily available in so many sources, and no regulations forcing manufacturers to indicate the level of fluoride in their products (when not added as an ingredient), it can be very hard, if not impossible, to gauge the total daily doses of Fluoride people receive. It is very difficult to fully quantify the risks of Fluoride exposure as well as its benefits. There are too many variables and biases involved to do the research required to fully assess whether Fluoride should or should not be used.

Fluoride Free Alternatives

As the controversy over Fluoride, and push for Fluoride free alternatives continues, newer products are hitting the market to meet the need. As this area of dentistry is still relatively new, and dental health care professionals are advised to follow scientific research when making decisions, it is hard to fully endorse new products or even to be aware of all the new products on the market.

To further add to the complexity, many manufacturers and marketers for products will make claims that are not fully substantiated, or claims that are very misleading.

At PURE Dental Hygiene Care for clients who need added protection from cavities and are looking for Fluoride free alternatives, we have started to suggest:

1) Oral Science

X-Pur Remin toothpaste

X-PUR Remin's main ingredient, Medical Hydroxyapatite is almost the same substance as the naturally occurring hydroxyapatite (primary mineral of tooth enamel) in the mouth but in nanoparticle size. It is the gold standard ingredient to fight cavities in Japan. 2) Fluoride Free MI Paste.

<u>MI paste</u> uses Recaldent instead of Fluoride to help remineralize and protect teeth. Recaldent is a milk-derived protein that can help remineralize teeth, reduce sensitivity, reduce white spot lesions on teeth, and more. Although it is derived from milk proteins, it is lactose safe, but should be avoided in patients with a milk protein allergy and/or are sensitivity or allergic to benzoate preservatives.

3) Hydroxyapatite containing toothpastes

Can a non-fluoride toothpaste be effective in the fight against decay? Indeed it can, according to Poznan University researchers who have shown that toothpastes containing hydroxyapatite are as effective as those with fluoride <u>Hydroxyapatite</u>

We may suggest a different product/rinse as they become available.

Other Fluoride Free Alternatives

At PURE Dental Hygiene Care we are very open to other ideas and products. If you have heard of different ways and products for dealing with your specific oral health needs, and would like our help in providing that service, just let us know. The hygienist will look into the product and help guide you to ensure your oral health needs are still being protected. If you would like to know more about your options, or need help determining which option is best for you, contact us today, we would love to help any way we can.