WHAT IS FLUORIDE, ANYWAY?

Fluoride is a natural occurring mineral found prevalently in the Earth’s crust and throughout nature. It was discovered in the 1930’s that fluoride actually helped to help strengthen the teeth of children. After that initial discovery, it began to be implemented in drinking water and included in toothpastes and mouthwashes.

Have you ever wondered how they figured that out? Well wonder no more!
The Story of Fluoride

In 1901, there was a young dental school student named Frederick McKay who, after graduating, set out to Colorado Springs, Colorado to open his own dental practice. Upon his arrival, McKay was shocked to discover that a very high number of residents had darkly stained brown teeth.

In all of his studies, he had never heard of such a disorder. The fact that no medical journals had ever mentioned such a condition particularly piqued his interest.

He reached out to try and find answers to his query, only to fall on deaf ears. Others in the dental industry flat out didn’t believe that this “condition” even really existed since there were no other reports of such an occurrence. What was most puzzling was that the “Colorado Brown Stain,” as it was called, did not exist at all in towns as few as five miles away.
In time, other instances came to light and McKay became certain that it had to be some element in these particular environments. He began analyzing the water in these particular areas and finally, after nearly three decades of research, he found the answer.

In each of these particular cities, they found the water to have extremely high levels of fluoride. They were significantly higher than the fluoride levels in the water of those surrounding towns. This research led to the regulation of fluoride levels in all drinking water across the country.

So Why Do We Use Fluoride Then?

In the years of studying the mysterious brown stains, it also revealed a positive outcome. It was noted in each of the patients that while their teeth had been stained brown, they were nearly immune to cavities and tooth decay.

In fact, in those areas studied, the number of cases of cavities and tooth decay was dramatically lower than that of the surrounding towns with low or no level of fluoride in the water. This research led to what is now the standard for the fluoridation of our drinking water, as well as fluoride toothpaste.
How Does Fluoride Actually Help?

Fluoride protects your teeth in a few different ways. It actually helps to protect the developing teeth of children by hardening the teeth before they even emerge.

Once your child’s permanent teeth have emerged, fluoride continues working to harden the enamel and prevent cavities.

As the fluoride comes into contact with the teeth, the enamel absorbs it. This helps the teeth to repair any damaged enamel while replenishing any lost calcium or phosphorous, which helps keep your teeth hard.

As this process of “remineralization” takes place, the teeth will continue to strengthen, and the newly introduced minerals will work to prevent any further dissolution, or tooth decay.
Can I Get Too Much Fluoride?

As noted in the initial story, it is possible to overexpose your child’s teeth to fluoride. If your child ends up ingesting too much fluoride, they could develop a condition known as “enamel fluorosis,” which causes a streaked or mottled appearance. It can also cause spots or discoloration in their permanent teeth, even if they are still below the surface.

If your water is fluoridated, and you are brushing his or her teeth with fluoride toothpaste, then they are most likely getting a healthy amount. If you let your child apply their own toothpaste to their toothbrush, make sure they are using the proper amount.

How Much Toothpaste Should My Child Be Using?

Your child can begin using fluoride toothpaste as soon as they are able to spit. Younger toddlers are more likely to swallow the toothpaste instead, so it’s best to wait until they understand not to swallow it.

At that time, your child only needs just a smear of toothpaste on his or her brush, about the size of a grain of rice. After they reach the age of 3, they can use a peasized amount for each brushing.

If your water supply is not fluoridated, ask your dentist whether or not your child needs a fluoride supplement. If you are not sure if your water is fluoridated or not, you can contact your community water district and they will be able to tell you.
Have more questions?

If you would like to schedule an appointment for your child, or have any other questions regarding your child’s dental health, don’t hesitate to give us a call!

Ensure your child is receiving the best dental care by selecting the right provider for your family’s needs. At Dentistry for Children and Adolescents, we deliver oral health care that is comprehensive, accessible and family-centered for children and adolescents.

To learn more about us and the services we can provide your family, call either one of our locations:

Creve Coeur, MO at 314-567-1122
St. Charles, MO at 636-946-5225