## Fluoride - A Brief History



Over the years, we have all likely found ourselves on one side or the other of the fluoride debate. Chances are that very few of

us have considered the history of fluoride, its impact on our health, and the health of our ancestors. Today, many believe that fluoride should be removed from the drinking water supply, but how did it get there? Why was it added to drinking water? And should we get rid of it?

Dental disease was once a rampant problem in the world. As we now understand the relationship between dental health and our overall health, it seems that some of the achievements in modern medicine can be traced back (at least in part) to dental health improvements. Fluoride is a mineral found commonly in rocks and soil. Depending on where you live – those rocks and soil can have a little or a lot of natural fluoride. It was a young dentist who traveled from the East Coast to Colorado to set up a dental office that actually made the final discovery and took decades to put together. Frederick McKay was a young dentist who traveled to Colorado and noticed that several children had mottled brown teeth. Some are so severely discolored as to be the color of chocolate. Dr. McKay had no idea in 1901 that the discoloration was caused by fluoride in the local water supply, but he did notice that the teeth were protected from decay. It



would take another three decades to finally determine that fluoride was responsible for the discoloration while offering excellent protection against tooth decay. So, how can we get the benefit without having teeth the color of chocolate? Easy, it's all in the dosing. Like everything else in life, it is a question of moderation. In 1944, the Michigan Department of Health and other public health organizations agreed to add fluoride to the public water supply in Grand Rapids the following year. This became the first study of the effects of fluoride, and after 15 years, proof that tooth decay among children pre- and post-fluoride showed a 60% reduction. This information revolutionized dental care and made tooth decay a preventable disease for the first time in history.

You may wonder, with so many products containing fluoride today, is it safe? While many products contain fluoride, such as toothpaste, mouthwash, gum, and dietary supplements, the amount of ingested fluoride is low. That is why continuing to add fluoride to the community water supply is so important and why the addition of fluoride to the water supply is considered one of the best ten health decisions in history. According to the CDC, community water fluoridation has been shown to save money for families and the health care system. The medical profession agrees; The Mayo Clinic states that "your oral health might contribute to various diseases and conditions including endocarditis, cardiovascular disease, pregnancy and birth complications, and pneumonia."

If fluoride is a concern for you, please visit the CDC website and explore the history of fluoride more in-depth. In addition, our drinking water plant is open to customers for tours that can show you how drinking water is produced and how we use fluoride. Either way, just know that the decision to use fluoride and how, when, and how much fluoride is used in a community drinking water system is not made at the drinking water plant. The Federal Government sets fluoride use and fluoride levels in drinking water.