



February 7, 2024

To whom it may concern,

I am writing to give my personal experience as a dentist for over 20 years. I attended the University of Kentucky for dental school from 1996-2000 and then continued in pediatric dental certification from 2000-2002. While my education taught me the knowledge of fluoride, my life experiences have taught me more about fluoride. As I know this is a very controversial subject, I am only speaking from what I have experienced as a dental practitioner.

During school, I was taught about the difference between systemic and topical fluoride. Systemic fluoride is the fluoride that is ingested through our water supply. Topical fluoride is the fluoride that is concentrated and put into pastes and rinses to harden the outer surface of the enamel of teeth. Topical fluoride has been proven to be cariostatic and helps to harden the existing enamel by making a fluorhydroxyapatite structure that is less permeable to acid. Systemic fluoride, when ingested at minimal concentrations of usually less than 1 part per million, strengthens the enamel and dentin during formation and makes teeth less susceptible to decay. There are multiple scientific studies that show the increase in caries rates after removing fluoride from community water over the first 5 years. Unfortunately for those communities, once that choice has been made, there is no chance for a reversal of the decision. I can provide multiple scientific studies to show the research done in these communities worldwide, but I can only report on my own findings.

From 2014-2019, I was able to travel to Guatemala for one week of the year and provide free dental work to children of this country. These trips gave me a first-hand view of how amazing our country is and how lucky I am to have been raised in America, but it also taught me a valuable lesson about community fluoridation. I was so accustomed to working on "American" teeth that I was perplexed when I started restoring "non-American" teeth. What my experience taught me is that the teeth in the non-fluoridated communities were much softer than in the fluoridated communities. When I would do a filling on a child in Guatemala, the decay would look the same from the outside of the tooth but would be much larger inside the tooth and the teeth were softer when I would drill through them. This was observed consistently over all 5 years of my dental mission trips. Some of the population we would see in Guatemala would be from the volunteers or employees of the surgery center where we worked, so their socioeconomic status would be higher, but the teeth would be of similar consistency.

Once those observations were made, I would see similar findings in my office. On multiple occasions, I would review a patient's dental history after a cavity was filled and find that their source of water was well-water, thus they missed optimal fluoridation during the developmental years of the tooth formation and therefore, their teeth had a similar density to the teeth I worked on in Guatemala.

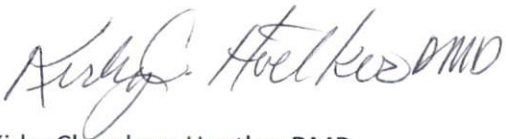
Overall, the concern I have as a dentist is that once a community decides to stop fluoridation, the effects will not be seen until 5-10 years later, when a child's permanent teeth start to erupt. By that time, it is too late to turn back, and that child has forever been affected by weaker enameled teeth. If you are uncertain as to what that means, think about how many fillings you see in the population over 50 versus those under 50. Sugar and acid ultimately play the deciding role in tooth decay, but having a stronger tooth structure most certainly makes a difference in the progression of dental caries.

Many people have the wrong perception that fluoridation benefits the dentist. Community water fluoridation only benefits the population of that community. There is no economic advantage for a dentist to promote community water fluoridation. On the contrary, removing fluoride from community water supplies will only increase dental caries which will in turn raise the cost of dentistry overall. The ultimate ending to that project would be more suffering for the community. Topical fluoride received in toothpastes, mouthwashes and treatments in the dental office, while effective to harden the outer surfaces of the teeth, do not harden the entire tooth. Once the bacteria breach the enamel surface, the decay process happens more rapidly in a tooth that has not been formed in optimal fluoride conditions.

As a pediatric dentist, I have been so surprised by the number of items, promoted as healthy for our children, that have caused massive amounts of decay. My daily struggles arise from milk, breast milk, gummy vitamins and fruit snacks, not candy and soda like I thought I would be dealing with. If something as innocent as milk keeps a pediatric dentist in business, it is obvious that as that child ages in our "instant-gratification" society, they will be tempted by many more sweet and acidic items that destroy teeth. Giving them a healthy foundation is just one way to ensure less suffering over the lifetime of that child.

I am happy to discuss any of this information and my perspective if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Kirby Chambers Hoetker DMD". The signature is written in black ink and is positioned above the printed name.

Kirby Chambers Hoetker DMD