



Talking about Fluoride and Fluoridation:

A Patient Engagement Guide for Dental & Medical Professionals

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Once you have greeted the patient or their parent/caregiver in your operatory or examination room, try to ask one of the two questions below. Your question will differ based on whether the patient's community water system is fluoridated (meaning the fluoride is being adjusted to 0.7 ppm—the concentration recommended by federal health officials). To find out which local water systems in your area are fluoridated, look for the map at <http://bit.do/CWFmap>



Fluoridated Community

Do you (and your family) usually drink tap water or bottled water?

If the answer is tap water:

That's good because the tap water in your community has added fluoride to help protect teeth from cavities.

Even if you brush your teeth regularly with fluoride toothpaste, drinking fluoridated water provides added protection.

If the answer is bottled water:

Water is a healthy drink, but keep in mind that most brands of bottled water do *not* contain enough fluoride to protect teeth from cavities.

Your tap water has the right amount of fluoride, so keep this mind when considering what type of water to drink.

Not Fluoridated

Do you (and your family) brush with fluoride toothpaste twice a day?

If the answer is YES:

That's good to hear because your local tap water is *not* fluoridated.

This makes it extra important for you to ensure that your teeth receive enough exposure to fluoride.

If the answer is NO:

Brushing with fluoride toothpaste is important for everyone, but it's especially important for you because you live in a community that does *not* add fluoride to its drinking water to help prevent cavities.

If you're talking with a parent:

Have you checked with the dentist or with your pediatrician to see whether your children should take fluoride supplements?

If you have a little more time, ask this question:

What questions do you have about fluoride or dental health?

Below are some typical questions they might ask you:

What exactly is fluoride? Is it a chemical?

Fluoride is a mineral that exists naturally in all public water supplies — lakes, rivers, groundwater and even in the ocean.

Fluoride strengthens the tooth enamel so it's more resistant to cavities. It can even help reverse the early stages of tooth decay.

I brush with fluoride toothpaste twice each day. If I do that, does it matter if I drink fluoridated water?

Brushing twice a day with fluoride toothpaste is very beneficial, but you can greatly strengthen your protection against cavities by also drinking water that is fluoridated.

Research shows that prevention works best when tooth enamel is exposed to fluoride throughout the course of a day. That's what makes fluoridated water so beneficial.

If the goal is to make sure fluoride coats the surface of my teeth, then what's the point of swallowing it?

Fluoride toothpaste gives your teeth an intense amount of fluoride a few times each day. Fluoridated water complements that by keeping low levels of fluoride in your mouth *throughout the day*.

Whether you are drinking water or eating soup that's made with water, trace levels of fluoride mix with your saliva — and saliva regularly comes in contact with your tooth enamel, providing fluoride's benefits.

What if a patient says they have read negative things online about fluoride?

Unfortunately, some web pages give false or misleading information about fluoride. But tell me what you have heard. If I can't address the issue, I can provide you with a few websites where you can find reliable information and learn more.*

Common Questions or Comments You Might Hear

Q-1: I read somewhere that a lot of children in America have fluorosis, which is caused by being overexposed to fluoride. What is fluorosis?

Fluorosis is a change in the appearance of the tooth enamel.

- Typically, the fluorosis we see in the U.S. is a mild, cosmetic condition that leaves faint white streaks on teeth. It doesn't cause pain, and it doesn't affect the health or function of the teeth.
- In fact, mild fluorosis is so subtle that most people don't know their teeth have fluorosis. It usually takes a dentist or dental hygienist to even notice it.
- Research shows that having teeth with fluorosis means someone is less likely to experience tooth decay.

Q-2: I wish they wouldn't add fluoride to our water. I prefer to eat organic and drink things that are natural.

- Fluoride is a mineral that exists *naturally* in lakes, rivers and other water supplies — so it's already present.
- Most community water systems in our country adjust the amount of fluoride to reach a level that has been proven to protect teeth from cavities.

Consider using a "validation phrase" when you begin your response. (For examples, see page 8.)

This kind of phrase conveys your respect — helping to reduce the odds that a patient will react negatively or defensively. We want your conversations with patients to be positive.

Q-3: I read somewhere that the fluoride that is added to drinking water is a toxic waste by-product of the fertilizer industry. Is that true?

- Fluoride is a mineral that exists naturally in lakes, rivers and other water supplies.
- Typically, the additional fluoride that is added to drinking water comes from phosphate rock. The fluoride is removed from the rock and is added to water in order to strengthen the enamel of our teeth.

Q-4: I read an article that said fluoride lowers IQ scores of children. Is that true?

- No, that claim is based on weak evidence. Most of the fluoride-IQ studies cited on social media come from China. There are several problems with those studies. For example:
 - Lead and arsenic contamination are big problems in China, but those factors weren't fully considered in the fluoride studies.
 - The biggest flaw was that they tested fluoride levels that are far higher than the levels we use for fluoridation here in the United States.
- Studies with large sample sizes have found that fluoride is *not* associated with lower IQ scores:
 - In New Zealand — a country where fluoridation is common — a study showed no link between fluoridated water and IQ scores. And the New Zealand study was a high-quality study that reviewed IQ scores over a 30-year period.

- In Sweden, researchers studied fluoride levels in drinking water and found “zero effects on cognitive ability” of people born over a seven-year period.

Q-5: My family brushes with fluoride toothpaste. If fluoride is effective, why have I (or my kids) gotten cavities in recent years?

Fluoride has significantly reduced tooth decay, but fluoride alone cannot guarantee someone a life without any cavities. Diet and nutrition play a role, and so do other factors—like the frequency that people get dental care. But we know from decades of research that fluoridation *does* reduce the rate of decay. The average adult in the early 1960s had 18 decayed or missing teeth. Fluoride has helped us to bring down the decay rate a whole lot.

Q-6: From what I’ve heard, fluoridated water is supposed to benefit children, not adults. If that’s true, then it doesn’t really matter whether adults like me drink tap water or bottled water.

Tooth decay is a health concern for both children and adults. Fluoridated water is proven to benefit people of *all ages*. The decay rate for adults has fallen dramatically over the past 50 years, thanks to fluoride in water and toothpaste. One way that older adults benefit from water fluoridation is because it helps prevent decay on the exposed root surfaces of teeth. Because gums tend to recede as we age, this is a condition that especially affects older adults.



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Q-7: The warning label on the back of fluoride toothpaste tells parents to contact a poison control center if their young children swallow toothpaste. That label makes fluoride seem dangerous. What about that?

- Almost anything can be harmful — including Iron and Vitamin D — if consumed in unusually high amounts. That’s why you will find similar warning labels on many vitamins and minerals that are sold in stores.
- Consider the warning label on toothpaste as a reminder that parents should supervise their young children while they’re brushing their teeth. This is recommended because the fluoride in toothpaste is much more concentrated than the fluoride found in drinking water.
- The label isn’t there to frighten parents, but we do want them to monitor the tooth-brushing of their kids until they reach the age of 6.

Q-8: I don’t believe cities or towns should add anything to my drinking water without my individual consent.

- Fluoride exists *naturally* in lakes, rivers and other water supplies, so it’s really a question of how much fluoride is in our water.
- America has a tradition of fortifying foods and beverages to protect human health. Fluoridation is only one example. Other examples are adding Vitamin D to milk, adding iodine

to salt, and adding folic acid to breads and cereals. I hear what you're saying, but many people seem to appreciate these decisions to fortify foods and drinks because they help us to prevent disease.

Q-9: I have read that fluoride works when it's applied topically to teeth, so I understand why we're encouraged to brush our teeth with fluoride toothpaste. But what's the point of swallowing fluoride?

Fluoride in drinking water works in two ways.

- First, the fluoride that is swallowed is naturally drawn to teeth and bones. Even before teeth first appear in a child's mouth, their developing enamel has been strengthened by the fluoride that is swallowed through water or other beverages.
- Second, fluoridated water also works topically because trace levels of fluoride combine with saliva and get mixed into dental plaque — so they bathe the enamel of the teeth. Fluoride protects teeth from cavities and can even help to reverse the decay process after it has started.

Q-10: Ever since the Flint water crisis, I have wondered about the quality of our tap water. It makes me worry when I hear talk about adding fluoride or other things to drinking water.

I hear you. What happened in Flint was tragic. What I've learned is that the problems in Flint happened after the city changed its water source. Flint used to receive fluoridated water from the Detroit water system. To save money, Flint officials decided to draw their water from the local river — and that's when the problems surfaced. They exposed residents to high lead levels and they also stopped providing the protection of fluoride.

Q-11: I read that a lot of communities have decided to stop adding fluoride. Is that true?

Actually, the trend is *in favor* of fluoridation:

- Although a handful of communities have voted to end fluoridation, most communities have decided to continue this practice after the issue has been raised and carefully examined. During 2017, for example, 81% of the communities that considered fluoridation chose to either start or continue fluoridating their drinking water.
- Since 2004, the number of Americans with access to fluoridated water has grown by nearly 21 million people.
- Communities that stop adding fluoride are likely to see higher cavity rates. The cavity rate soared after fluoridation ended in Calgary — one of Canada's largest cities.

Validation Phrases

Your clinical knowledge is what makes you a health professional. Unfortunately, some patients may fear asking a “dumb question” or may ask a question in a defensive tone. Your goal is to make them feel comfortable sharing their questions or concerns. Using validation phrases is one way to communicate that you respect them and that you are receptive to their questions.

- I’m a parent too, so I can understand why you might ask that question. Let me explain what the research shows...
- I’ve had that question asked by some other patients, so I’m happy to clarify what the evidence shows about that...
- I understand what you’re saying. Let me walk you through what the scientific evidence says...
- There’s a lot of false and confusing information about fluoride posted on the Internet. Let me suggest a few reliable websites where you can find answers to the questions you may have...

* – We recommend that you direct patients to the following websites to get additional, accurate information about community water fluoridation:

<https://ILikeMyTeeth.org/>

A website for parents and the public that is managed by the American Academy of Pediatrics

<https://WashingtonWaterFluoridation.org/>

A website for the general public that is managed by a coalition that includes the Arcora Foundation

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