

#### **CE Course Handout**

## Talk the Talk: Educating Patients about Community Water Fluoridation

Saturday, June 20, 2015 10:00am-1:00pm









### **Community Water Fluoridation:**

A Chairside Guide for Dental Hygienists

Fluoridated Community		Non-Fluoridated Community	
Do you (and your family) usually drink tap water or bottled water?		Do you (and your family) brush with fluoride toothpaste twice a day?	
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 important added protection.	If the answer is bottled water:  You should know that most brands of bottled water do not contain enough fluoride to protect teeth from cavities. Your tap water has the appropriate level of fluoride, so please keep this mind as you consider which water to drink.	If the answer is YES:  That's good to hear because — as you may know — your local drinking water is not fluoridated. This makes it extra important for you to ensure that your teeth receive ample exposure to fluoride.	If the answer is NO:  Brushing with fluoride toothpaste is important for everyone, but it's especially crucial for you because you happen to live in a community that does not add fluoride to its drinking water to help prevent cavities.
		If the patient is a parent of a child:  Have you checked with the dentist or with your pediatrician or family physician to see whether your children should take fluoride supplements?	

If you have more time, ask this question:

#### Do you have any questions about fluoride?

#### Here are some typical questions they might ask you:

### What exactly is fluoride? Is it some kind of chemical?

Fluoride is a mineral that exists naturally in all water supplies — even in the ocean.

Fluoride helps to re-mineralize 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 really matter if I drink fluoridated water?

Brushing twice a day with fluoride toothpaste is very beneficial, but the way to maximize your protection against cavities is to also drink fluoridated water.

Research shows that prevention works best when we expose the enamel of our teeth to fluoride on a regular basis throughout the course of a day.

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

Fluoride is beneficial even when it's swallowed. It's naturally drawn to your teeth.

As you're drinking water or soup or a drink made with it—like iced tea—trace levels of fluoride remain in your mouth where they mix with saliva, which periodically comes in contact with your tooth enamel.

#### What if a patient says they heard negative things about fluoride?

Unfortunately, there is a lot of inaccurate information on the internet about fluoride.

Let me give you a few websites where you can find reliable information if you want to learn more.\*

If you are asked about the change in the recommended fluoride level:

# I heard that health officials lowered the amount of fluoride that people should receive. Is that true?

Health officials still believe that Americans need the same amount of fluoride that they've recommended for many years, but they recognize that people today are receiving fluoride from more sources than they used to — sources such as fluoride mouth-rinses.

For this reason, we can lower slightly the amount of fluoride that is added to drinking water while still ensuring that people receive enough fluoride overall to protect their teeth.

## Does the lowering of the fluoride level in water mean that we were being overdosed with fluoride?

Not at all. Even before this change was announced, the amount of fluoride used to fluoridate drinking water was 70% lower than the limit set by federal health officials.

The key factor in this new recommendation is that people today receive fluoride from more sources than they used to — sources such as fluoride mouth rinses. For this reason, we can lower slightly the amount of fluoride that is added to drinking water while still ensuring that people receive enough fluoride overall to protect their teeth.

#### I heard that the fluoride level was lowered because a lot of people are getting a condition called "fluorosis." Is that the reason?

Fluorosis is a change in the appearance of the tooth enamel. Typically, fluorosis is a mild, cosmetic condition that doesn't affect the health or function of the teeth. That's why many people don't know their teeth have fluorosis.

There are two key reasons for this updated recommendation. First, people today receive fluoride from more sources than they used to. For this reason, we can lower slightly the amount of fluoride that is added to drinking water while still ensuring that people receive enough fluoride overall to protect their teeth. Second, we've learned that people in different regions of the U.S. drink roughly the same amount of water — so the fluoride level doesn't need to vary from one region to another.

#### Other 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. That's kind of scary.

Let me explain why fluorosis is. Fluorosis is a change in the appearance of the tooth enamel. Typically, the fluorosis we see here in the United States 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, it's so subtle that most people don't even know their teeth have fluorosis. It usually takes a dentist or dental hygienist to even notice it.

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

Fluoride is a mineral that *already* exists in drinking water. It's even found in the ocean. The only question is what level of fluoride is the best. Most community

water systems in our country adjust the amount of fluoride to reach the level that has been proven to protect teeth from cavities.

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

The fluoride that is added to drinking water is *not* toxic. It comes from phosphate rock. Instead of wasting this valuable mineral, it's removed from the rock so it can be added to water and strengthen the enamel of our teeth.

Consider using a "validation phrase" when you begin your response. (For examples of validation phrases, go to page 7.) This kind of phrase conveys your respect and professionalism — helping to reduce the odds that a patient will react negatively or defensively. The goal is to have a positive, productive conversation.

## Q-4: I read an article recently that said fluoride can lower IQ scores of children. I wouldn't want to take a chance of anything like that happening to my kids.

You should know that claim is based on flawed studies that were mostly done in China. Lead and arsenic contamination are big problems in China, and these studies didn't fully take those factors into account. But the biggest flaw was that they tested fluoride levels that were much higher than the levels we use here in the United States.

## Q-5: If fluoride is so effective, why have I (or my kids) gotten cavities in recent years?

Fluoride in various forms 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 routine dental care. But we know from decades of research that fluoridation *does* reduce the rate of decay.

Q-6: From what I understand, 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 throughout the lifespan, and fluoride benefits people of *all ages*. The research confirms that. Nearly all middle-aged adults have



experienced some tooth decay, but the decay rate has fallen dramatically over the past 50 years thanks to fluoridated water and fluoride toothpaste. One way that older adults benefit from fluoridation is because it helps prevent decay on the exposed root surfaces of teeth — a condition that especially affects this age group.

### Q-7: I read somewhere that fluoride reduces IQ scores in children. Should we be worried?

That would probably worry me too if I hadn't looked into the studies that this claim is based on. This assertion about IQs is based on a group of flawed studies, mostly from China. Here are the 2 key things to know:

- 1. Those studies tested fluoride levels that were far higher than the levels used to fluoridate water here in the U.S.
- 2. Those studies failed to rule out other factors that can affect IQ scores for example, lead and arsenic. In many areas of China, the air and water are heavily polluted with lead, arsenic and other contaminants.

Besides, a high-quality study in New Zealand with a much larger sample was published in 2014 showing no link between fluoride and IQs.

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

America has a tradition of fortifying foods and beverages to protect human health. Fluoridation is only one example of this. Other examples are adding Vitamin D to milk, adding iodine to salt, and adding folic acid to breads and cereals. I respect your point of view, but most people seem to be fine with these health practices because they realize that they improve health and they're based on scientific evidence.

## Q-9: Isn't the trend running against water fluoridation? Aren't a lot of communities taking the fluoride out?

Actually, the trend continues to be moving *in favor* of fluoridation. In fact, since the year 2006, the number of Americans served by fluoridated water systems has grown by 26 million. A handful of communities have voted to stop fluoridation, but most communities have decided to continue fluoridation after the issue has been discussed. The communities that stop fluoridating are likely to see higher cavity rates for children and adults.

## Q-10: 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 appear in a child's mouth, their developing enamel has been strengthened by the fluoride in water. Second, fluoridated water works topically because trace levels of fluoride combine with saliva and get incorporated 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.

#### **Validation Phrases**

Your clinical knowledge is what makes you a dental professional. Even so, your knowledge and experience has the potential to lead patients to ask questions in a defensive tone or wording — or not ask questions at all. Validation phrases are one way you can communicate that you are open and receptive to questions.

- I've had that question asked by 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...
- It can be hard to find accurate information about this topic online, so let me do what I can to shed light on this...
- I'm a parent too, so I can see why you might ask that question. Let me explain why we as parents have nothing to worry about ...

www.cdc.gov/fluoridation

The Centers for Disease Control and Prevention

www.iLikeMyTeeth.org/fluoridation

A website managed by the American Academy of Pediatrics

<sup>\* –</sup> Please direct patients to the following websites to get additional, accurate information about community water fluoridation: