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Fluoride and Water

Keeping kids' teeth healthy means more than just daily brushing. During a routine well-child exam, you may be surprised to find the doctor examining your child's teeth and asking you about your water supply. That's because fluoride, a substance found naturally in water, plays an important role in healthy tooth development and cavity prevention.

About Fluoride

Fluoride, which exists naturally in water sources, is derived from fluorine, a common element in the Earth's crust. It is well known that fluoride helps prevent and even reverse the early stages of tooth decay.

Tooth decay happens when plaque — that sticky film of bacteria that builds up on teeth — breaks down sugars in food. The bacteria produce damaging acids that dissolve the hard enamel surfaces of teeth.

If the damage is not stopped or treated, the bacteria can penetrate through the enamel and cause tooth decay (also called cavities or caries). Cavities weaken teeth and can lead to pain, tooth loss, or even widespread infection in the most severe cases.

Fluoride combats tooth decay in two ways:

1. It is incorporated into the structure of developing teeth when it is ingested.
2. It protects teeth when it comes in contact with the surface of the teeth.

Fluoride prevents the acid produced by the bacteria in plaque from dissolving, or demineralizing, tooth enamel, the hard and shiny substance that protects the teeth. Fluoride also allows teeth damaged by acid to repair, or remineralize, themselves. Fluoride cannot repair cavities, but it can reverse low levels of tooth decay and thus prevent new cavities from forming.

Despite the good news about dental health, tooth decay remains one of the most common diseases of childhood. According to the Centers for Disease Control and Prevention (CDC):

- more than 25% of 2- to 5-year-olds have one or more cavities
- half of kids 12 to 15 years old have one or more cavities
- tooth decay affects two thirds of 16- to 19-year-olds

Fluoride and the Water Supply

For more than 60 years, water fluoridation has proved to be a safe and cost-effective way to reduce dental caries. Today, water fluoridation is estimated to reduce tooth decay by 20%-40%.

As of 2012, CDC statistics show that more than 60% of the U.S. population receives fluoridated water through the taps in their homes. Some communities have naturally occurring fluoride in their water; others add it at water-processing plants.

Your doctor or dentist may know whether local water supplies contain optimal levels of fluoride, which is 0.7 milligrams per liter of water (previously it was a range of 0.7 to 1.2 milligrams). If your water comes from a public system, you also can call your local water authority or public health department, or check online at the Environmental Protection Agency's (EPA) database of local water safety reports.

If you use well water or water from a private source, fluoride levels should be checked by a laboratory or public health department.

Some parents buy bottled water for their kids to drink instead of tap water. Most bottled waters lack fluoride, but fluoridated bottled water is now available. If fluoride is added, the manufacturer is required to list the amount. If fluoride concentration is greater than 0.6 ppm (parts per million), you might see the health claim "Drinking fluoridated water may reduce the risk of tooth decay" on the label.

The Controversy Over Fluoride

Opponents of water fluoridation have questioned its safety and effectiveness; however, there has been little evidence to support these concerns.

Scientific research continues to show the benefits of fluoride when it comes to prevention of tooth decay and its safety. Dramatic reductions in tooth decay in the past 30 years is attributed to fluoridation of the water supply, and parents and health professionals should continue to ensure that kids receive enough fluoride to prevent cavities. The American Dental Association (ADA), the United States Public Health Service (USPHS), the American Academy of Pediatric (AAP), and the World Health Organization (WHO), among many other national and international organizations, endorse community water fluoridation. In fact, the CDC recognized fluoridation of water as one of the 10 greatest public health achievements of the 20th century.

Kids' Fluoride Needs

So how much fluoride do kids need? In general, kids under the age of 6 months do not need fluoride supplements. Your child's 6-month checkup offers a great chance to discuss fluoride supplementation with your doctor.

If you live in a nonfluoridated area, your doctor or dentist may prescribe fluoride drops, tablets, or vitamins after your baby is 6 months old. The dosage depends on how much fluoride naturally occurs in the water and your child's age. Only kids living in nonfluoridated areas or those who drink only nonfluoridated bottled water should receive supplements.

Here are some other tips:

- Use a fluoride-containing toothpaste that carries the ADA's seal of acceptance.
- Brush babies' teeth as they come in with an infant toothbrush. Use water and a tiny bit of fluoride toothpaste (about the size of a grain of rice). If you are using baby toothpaste without the fluoride, keep it to the same amount because you still want to minimize any toothpaste that is swallowed.
- Kids ages 3 and up should use only a pea-sized amount of fluoride toothpaste.
- Kids younger than 6 may swallow too much toothpaste while brushing. Supervise them when brushing and teach them to spit, not swallow, the toothpaste.
- Kids under age 6 should never use fluoride-containing mouth rinses. But

older kids at high risk for tooth decay may benefit from them. Your dentist can talk with you about risk factors such as a family history of dental disease, recent periodontal surgery or disease, or a physical impediment to brushing regularly and thoroughly.

Your family dentist or pediatric dentist (one who specializes in the care of children's teeth) is a great resource for information about dental care and fluoride needs. A dentist can help you understand more about how fluoride affects the teeth, and may even recommend applying a topical fluoride varnish during routine dental visits.

Overexposure to Fluoride

If some fluoride is good, why isn't more fluoride better? As with most medications, including vitamins and mineral supplements, too much can be harmful. Most kids get the right amount of fluoride through a combination of fluoridated toothpaste and fluoridated water or supplements.

Too much fluoride before 8 years of age, a time when teeth are developing, can cause enamel fluorosis, a discoloration or mottling of the permanent teeth. For most, the changes are subtle. In one study, 94% of identified fluorosis cases were very mild to mild. Most cases are due to accidental swallowing of fluoride-containing dental products, including toothpaste and mouth rinses. Sometimes kids take daily fluoride supplements but may be getting adequate fluoride from other sources, which also puts them at risk.

Recently, the National Research Council found that some naturally occurring fluoride levels exceeded the optimal levels used in community fluoridation programs, putting kids under 8 years old at risk for severe enamel fluorosis. The CDC recommends that in communities where natural fluoride levels are high, parents should give kids water from other sources.

The ADA also recognizes that infants need less fluoride than older kids and adults. Some infants may be getting too much fluoride in the water used to reconstitute infant formula. If you're concerned that your infant may be getting too much fluoride, talk with your doctor or dentist, who may recommend ready-to-feed formula or formula reconstituted with fluoride-free or low-fluoride water.

Very rarely, fluoride poisoning can happen if large amounts of fluoride are ingested during a short period of time. Kids under age 6 account for more than 80% of reports of suspected overingestion. Although this is generally not serious, fluoride poisoning sends several hundred children to emergency rooms each year.

Symptoms of fluoride poisoning may include nausea, diarrhea, vomiting, abdominal pain, increased salivation, or increased thirst. Symptoms begin 30 minutes after ingestion and can last up to 24 hours. If you suspect your child may have eaten a substantial amount of a fluoridated product or supplement, call the poison control center (1-800-222-1222) or 911.

Be sure to keep toothpaste, supplements, mouth rinses, and other fluoride-containing products out of kids' reach or in a locked cabinet. Also, supervise young kids when they brush their teeth to prevent swallowing of toothpaste or other fluoridated products.

If you have any questions about your water's fluoride content, the fluoridated products your child uses, or whether your child is receiving too much or too little fluoride, talk to your doctor or dentist.

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National Recovery Month September 2018 (Recovery Month)) increases awareness and understanding of mental and substance use disorders and encourages individuals in need of treatment and recovery services to seek help. Recovery Month celebrates individuals living their lives in recovery and recognizes the dedicated workers who provide the prevention, treatment, and recovery support services that make it possible.

Health Benefits of Sobriety

The process of getting sober isn't always the easiest, but it's definitely worth it. Aside from the obvious reasons that come with breaking bad habits to live a better life, sobriety has so many positive aspects and comes with several health benefits

not everyone understands as they embark on the journey. Here are a few health benefits you can expect with sobriety.

Less Toxins

When you stop polluting your body with toxins from drugs and alcohol, your body begins to detox and cleanse itself. You are no longer putting those chemicals in your body and this allows your internal systems to reset, offering our bodies the chance to work more efficiently and with less strain. This creates an environment in our body that is much closer to what it was intended to be and you will start to notice that you begin to function at a much more optimal level.

Mental Clarity

The less we fill our bodies with toxins and chemicals that are not supposed to be there, especially in excess, the first thing we notice is much more mental clarity. Pollutants no longer weigh us down and this offers our brain a chance to function on a level that is much less clouded. We don't wake up with hangovers, fuzzy memories and over time our mentality begins to shift as we realize that being present is more enjoyable than numbing reality.

Better Sleep

Sobriety gets your body back into a more normal rhythm. Instead of staying out drinking and partying until the early morning hours, we give ourselves a chance to rest and get

quality sleep. Not only that, but the peace of mind being sober offers makes for a very soft pillow.

More Energy

As you can see, all of the health benefits of sobriety go hand-in-hand. When you are not putting unnecessary toxins in your body and you are sleeping better, you're naturally going to have increased energy levels. Drugs and alcohol are depressants, so in their absence, you'll find that you can get more done without tiring.

Better Skin

One of the first noticeable changes in most people is their skin. The complexion becomes more radiant. Eyes begin to brighten and skin becomes more clear. Sometimes we don't realize that what we put into our bodies really plays a role in our physical appearance. Within the first 6 months sobriety, most people undergo visible and positive changes in their skin, face and eyes that others take notice of.

Better Eating Habits

When you begin to live a healthier lifestyle free from substances, you begin to be more conscious of what you eat. When you drink and party, you don't always make the best choices of what to eat when you are drunk or hungover. Fast food and pizza are quick ways to feel better and a greasy meal is always tempting in that state of mind. But when you live in

sobriety, your judgments around eating become more informed and aware. Not only has that, but your body become much less dehydrated which helps us to fight unhealthy cravings.

Happier

Overall well-being is a huge health benefit of sobriety. When you are doing good for yourself, feeling better, looking better and functioning on a higher level, you feel less shame and this in turn leads to more happiness. Sobriety brings so much peace in to your life and allows you to become more present and aware. The sober lifestyle helps you to start really understanding who you are and what makes you tick. You feel more connected to yourself, your spirituality and life in general becomes something you look forward to each day.

Written by: Carly Benson <https://www.orlandorecovery.com/blog/7-health-benefits-sobriety/>

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