



Community Water Fluoridation

Understanding Fluoride in Drinking Water and Its Role in Preventing Tooth Decay

What Is Community Water Fluoridation?

Community water fluoridation is the adjustment of fluoride in public drinking water to a level that helps prevent tooth decay while remaining safe for daily consumption.

It has been used for more than **75 years** in many communities and is recognized by numerous public health organizations as one of the most effective population-based measures for reducing dental caries.

Community water fluoridation benefits people of all ages by strengthening tooth enamel and helping prevent cavities.

What Is Fluoride?

Fluoride is a naturally occurring mineral found in:

- Water
- Soil
- Rocks
- Some foods

Many public water systems naturally contain fluoride. In some communities, the fluoride level is adjusted to an optimal concentration that helps reduce tooth decay.

How Does Fluoride Protect Teeth?

Fluoride helps prevent cavities in several ways.

It can:

- Strengthen tooth enamel

- Replace minerals lost during early stages of tooth decay (remineralization)
- Make teeth more resistant to acid attacks
- Slow the progression of early enamel damage

These protective effects occur throughout life.

Who Benefits from Community Water Fluoridation?

Community water fluoridation benefits:

- Infants and children
- Teenagers
- Adults
- Older adults

People who drink fluoridated water regularly receive ongoing protection against tooth decay, regardless of age.

Is Community Water Fluoridation Safe?

Major scientific and public health organizations have concluded that **community water fluoridation is safe and effective when maintained at recommended levels.**

Organizations supporting community water fluoridation include:

- American Dental Association (ADA)
- Centers for Disease Control and Prevention (CDC)
- American Academy of Pediatrics (AAP)
- World Health Organization (WHO)
- U.S. Public Health Service

Public water systems are regularly monitored to ensure fluoride levels remain within recommended limits.

Does Fluoridated Water Prevent All Cavities?

No.

Although fluoridated water significantly reduces the risk of tooth decay, it **does not eliminate cavities completely**.

Good oral health still requires:

- Brushing twice daily with fluoride toothpaste
- Cleaning between the teeth every day
- Limiting sugary foods and drinks
- Regular dental examinations

Fluoride works best as part of a comprehensive preventive approach.

What If My Water Is Not Fluoridated?

Some communities do not fluoridate their public water supply.

If your water contains little or no fluoride, your dentist may recommend:

- Fluoride toothpaste
- Professional fluoride varnish
- Prescription fluoride products in selected situations

Do not begin fluoride supplements without first consulting your dentist or physician.

What About Bottled Water?

Some bottled waters contain fluoride, while others contain very little or none.

Fluoride content varies by brand.

If fluoride exposure is important for you or your child, check the product label or contact the manufacturer for information.

Can You Get Too Much Fluoride?

Like many nutrients, fluoride is beneficial in appropriate amounts.

Excessive fluoride exposure during early childhood—while permanent teeth are developing—may contribute to **dental fluorosis**, a condition that usually appears as faint white lines or spots on the teeth.

Most cases of dental fluorosis are **mild** and do not affect the health or function of the teeth.

Following age-appropriate recommendations for fluoride toothpaste and supplements helps minimize this risk.

Community Water Fluoridation and Children

Children benefit from fluoride because it helps strengthen developing teeth and protects newly erupted permanent teeth from decay.

Parents should also:

- Supervise toothbrushing.
 - Use the recommended amount of fluoride toothpaste.
 - Encourage drinking water instead of sugary beverages.
 - Schedule regular dental visits.
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Common Questions

Does Fluoride Change the Taste of Water?

No.

Fluoride at recommended levels does not noticeably change the taste, smell, or appearance of drinking water.

Does Boiling Water Remove Fluoride?

No.

Boiling water does **not** remove fluoride.

Is Fluoride a Medicine?

No.

Fluoride is a naturally occurring mineral that is present in varying amounts in water and many foods.

Common Myths

"Community water fluoridation is only for children."

False.

People of all ages benefit from drinking optimally fluoridated water.

"Fluoridated water replaces brushing your teeth."

False.

Fluoridated water supports oral health but does not replace daily brushing, flossing, and regular dental care.

"If I use fluoride toothpaste, drinking fluoridated water provides no additional benefit."

False.

Research suggests that fluoridated drinking water and fluoride toothpaste work together to provide additional protection against tooth decay.

Key Takeaways

- ✓ Community water fluoridation helps reduce the risk of tooth decay throughout life.
 - ✓ Fluoride strengthens enamel and supports the natural repair of early tooth damage.
 - ✓ Community water fluoridation is recognized by major public health organizations as a safe and effective preventive measure.
 - ✓ Fluoridated water complements—but does not replace—good oral hygiene and regular dental care.
 - ✓ Parents should follow age-appropriate fluoride recommendations for children.
 - ✓ If you are unsure whether your drinking water contains fluoride, ask your local water utility or dentist.
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References

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