

US lowers recommended fluoride levels in drinking water (Update)

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Photo: Robin Foster

Move is attempt to prevent teeth staining caused by overexposure to the mineral.

(HealthDay)—The U.S. government has decreased its recommended level of fluoride in drinking water for the first time in a half-century, to prevent staining of tooth enamel caused by overexposure to fluoride.

The optimal fluoride level in drinking water to prevent tooth decay should be 0.7 milligrams of fluoride per liter of water, the U.S. Department of Health and Human Services (HHS) announced Monday.

The new level falls at the bottom end of the previously recommended fluoridation range of 0.7 to 1.2 milligrams per liter, which was issued in 1962.

Health experts recommended the change because Americans now have access to more sources of fluoride, including toothpaste and mouth

rinses, than they did when municipal officials first began adding the mineral to water supplies across the United States, according to the HHS.

As a result, more people are exposed to too much fluoride and suffering from fluorosis—white stains in the enamel of their teeth caused by too much fluoride.

Mild fluorosis takes the appearance of scattered white flecks, frosty edges or lacy chalk-like lines on teeth. The white spots become larger with severe fluorosis, and in extreme cases the surface of teeth become rough and pitted, according to the U.S. Centers for Disease Control and Prevention.

Federal health officials say the new recommended level will maintain the protective benefits of water fluoridation and reduce the occurrence of dental fluorosis.

"While additional sources of fluoride are more widely used than they were in 1962, the need for community water fluoridation still continues," said U.S. Deputy Surgeon General Rear Admiral Boris Lushniak.

"Community water fluoridation continues to reduce tooth decay in children and adults beyond that provided by using only toothpaste and other fluoride-containing products."

About three out of every four Americans served by public water systems receive fluoridated water, the CDC says.

The benefits of fluoride were first observed in the 1930s, when dental scientists found that tooth decay was less frequent and less severe among people whose water supplies contained higher levels of natural fluoride, the CDC says. Extensive follow-up research determined that fluoride can become concentrated in dental plaque and saliva, helping to prevent the breakdown of tooth enamel.

Grand Rapids, Mich., in 1945 became the first American city to add fluoride to its municipal water system, according to the CDC.

The fluoridation of water—while opposed by some—has led to significant declines in both the prevalence and severity of tooth decay, according to the CDC. The agency named it one of 10 great public health achievements of the 20th century.

More information: For more on fluoride, visit the [U.S. Centers for Disease Control and Prevention](#).

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