1957

Fluoride means less tooth decay (1957)

American Dental Association

IN COMMUNITY WATER SUPPLIES APPLIED TO THE TEETH

fluoride

MEANS LESS TOOTH DECAY

FLUORIDE
in the drinking water

FLUORIDATION OF WATER SUPPLY. The expression, "fluoridation of water supply," refers to the adjustment of the fluoride content to the level best for dental health in waters that are deficient in the substance.

The fluoridation of water supplies is widely accepted as a method of reducing the occurrence of tooth decay in children. Of all the preventive methods in use, fluoridation offers the greatest hope for preventing tooth decay because of its easy application for large numbers of people and its low cost . . . *plus* up to 65% reduction in the amount of tooth decay normally expected to occur.

The benefits continue throughout life. Children who have used water containing 1 ppm (*part per million*) or more of fluorine have only about a third as much tooth decay as children who have drunk water lacking enough fluorine.

The American Dental Association, the American Medical Association and every other major national health organization have endorsed fluoridation. Also, the National Congress of Parents and Teachers, the A.F.L.-C.I.O., the American Legion and the U. S. Junior Chamber of Commerce have given their endorsement of fluoridation.

For further information on the fluoridation of public water supplies, write to the Bureau of Dental Health Education, American Dental Association.

FLUORIDE
applied to the teeth of children

TOPICAL APPLICATION OF FLUORIDE. Another effective preventive measure against tooth decay is the topical (*surface*) application of a fluoride solution to the teeth of children.

Clinical experience has shown that topical fluoride applications reduce the occurrence of dental decay by an average of 40 percent. The results vary somewhat in individual children.

The Council on Dental Health of the American Dental Association recommends that in areas where the drinking water is deficient in fluoride, topical fluoride treatment *"should be used routinely in private dental offices and in school and community dental health programs."*

In topical fluoride treatments the dentist cleans the teeth, dries them thoroughly and then applies the solution allowing it to dry on the teeth. A series of four separate applications is given in each complete treatment. The four applications should be given at intervals of from two to seven days. It is recommended that treatments be given at the approximate ages of 3, 7, 10 and 13, so that all the teeth will be treated soon after they erupt. Treatment may be given at other ages, however, when the applications have not been made at the recommended times.

Even when public water supplies are fluoridated, topical fluoride applications should be continued for children who have not had the benefit of fluoridated water since birth.

The fluoridation of public water supplies and the topical application of fluoride do not prevent all tooth decay. They are partial preventives only—not cure-alls. For dental health, regular dental care and mouth hygiene at home are necessary.

FLUORIDES AND FLUORIDATION
from discovery
to public health measure

WHAT IS FLUORINE? It is a chemical element whose compounds are used in fluoridation and topical applications. The compounds usually employed in fluoridation are sodium fluoride, sodium silicofluoride or hydrofluosilicic acid. For topical applications, sodium fluoride is most often used. Fluorides in large quantities are poisonous, but when used in the amounts necessary for making topical applications and for fluoridating water, they are entirely harmless. Because fluorine is a poison, however, self treatment is dangerous.

HOW WAS FLUORIDE TREATMENT DISCOVERED? Some years ago dentists noticed that in certain parts of the country the teeth of children and adults had severe mottling of the enamel (brown stains) but that there was considerably less dental decay than the national average. Investigations showed that both the mottled enamel and the lessened amount of tooth decay were the result of fluorides occurring naturally in drinking water. *At 1 ppm, the amount recom-*

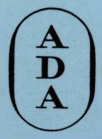
mended for fluoridation, mottling does not occur, but decay is effectively reduced.

The discovery of the fluorine-tooth decay relationship permitted others to develop the technic of topical applications.

Research also revealed that when fluorides are added to the water supply the beneficial results are similar to those found where fluorides occur naturally.

Results of the independent studies at Grand Rapids, Mich., Newburgh, N. Y., and Brantford, Ont., now more than 10 years old, show that tooth decay has been brought under a large measure of control by the fluoridation of public water supplies.

Tablets, dentifrices, mouth washes or chewing gum containing fluoride cannot be an adequate substitute for community fluoridation. Fluorides for individual use should be employed only under the supervision of a dentist or physician.



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