

Your Dental Health

The contents of this series of "Dental Health Talks" was originally prepared by the American Dental Association. They are made available for Tundra Times through the Public Health Education Office of the Alaska Native Health Service.

It is well known that our dental health program in Interior Alaska has not yet reached everyone needing dental services. This is especially true about the people in the rural communities. However, everyone understands how important it is to take care of our teeth which is a part of our total well-being.

No. 8 — The Effectiveness of Fluorides

If someone offered you an opportunity to reduce the number of cavities in your child's teeth by 65 per cent for the amazingly low cost of 10 cents a year, would you take it?

More than 80 million Americans are benefitting from such an opportunity. Not only have they been able to dramatically reduce the decay problem but they have also saved themselves a considerable amount of money in dental repair bills in the process.

The 10-cent remedy is water fluoridation. The fluoridation of public drinking water — costing approximately 10 cents per person per year — is regarded as the most important public health measure ever taken to help prevent tooth decay — in fact, one of the greatest public health measures of all time.

It is safe — not a single case of ill effect from fluoridated water has been found in America — and it effectively reduces decay.

As with any public health measure, fluoridation has met with some opposition, usually based on emotion instead of fact.

Just how effective fluoridation is was dramatically shown to the residents of Antigo, Wis., during the four years after a vote to end fluoridation in 1960. They had previously benefitted from fluoridation for 11 years. By 1964 the number of decayed teeth shot up an average of 92 per cent in kindergarten children, 183 per cent in second graders and 41 per cent in fourth graders.

Fluoride is a mineral that exists naturally in all community water supplies and much of

our food. The natural fluoride in the water supplies of some communities is about one part per million, the ideal level for preventing tooth decay. Other communities have to add fluoride to the water to bring the level to one part per million parts water. Others remove fluoride to bring it to the ideal level.

Fluoride is chemically incorporated into the tooth enamel crystals, making them more resistant to decay. The protection is particularly effective in children who drink fluoridated water from birth, since tooth enamel is formed during the early years of life. The benefits are lifelong.

Older children who begin drinking fluoridated water also may not be as great as for those who drink fluoridated water from birth. Some studies have indicated that even adults introduced to fluoridated water can realize some degree of protection.

Although fluoridation is widespread, still 40 per cent of Americans on public water supplies are not getting this protection.

A number of states have statewide fluoridation laws, and the residents of such large cities as New York, Chicago, Baltimore, Philadelphia, Cleveland, Washington, St. Louis and Detroit have had fluoridated water for many years.

The United States Public Health Service estimates that the delay in extending fluoridation throughout the country costs more than \$450 million a year in cavity repair in children that could be prevented.

(Next article: "New Preventive Techniques in Dental Practice")