luoridation

- Statement by Arthur S. Flemming,
 Secretary of Health, Education, and Welfare
- Report on Fluoridation in the United States
- Statements on Proposed Alternatives to Fluoridation of Water Supplies

Statement by Secretary Flemming

Surgeon General Leroy E. Burney has called my attention to a very significant setback in the progress of the fluoridation program during the last 2 years.

Although controlled fluoridation has been proved over and over again to be an inexpensive and completely safe means of preventing 65 percent of dental decay, only one out of every four people in this country today has this protection.

Moreover—and this is the most disturbing fact of all—the proportion of the population not benefiting from this remarkable health measure is actually increasing.

Why every community with a public water supply has not availed itself of the proved dental health benefits of controlled fluoridation is difficult for me to understand in the light of the following facts:

- 1. Intensive research over a quarter of a century shows conclusively that water containing a proper amount of fluoride reduces dental decay by about 65 percent.
- 2. Equally conclusive research has demonstrated that controlled fluoridation is completely safe, causing no bodily harm of any kind.
- 3. The American Dental Association, the American Medical Association, and virtually all other scientific and professional organizations having competence in the field have recommended the fluoridation of public water supplies.
- 4. This protection costs only a few cents per person per year. If started in childhood, the protection is effective over a lifetime.
- 5. Controlled fluoridation does not mean adding a foreign substance to water; all water contains some fluoride. Fluoridation of water as a public health measure simply means controlling the amount of fluoride in a public water supply.
- 6. Even water containing as much as eight times the amount of fluoride recommended for prevention of tooth decay does not injure a person's health. Too much fluoride in water does cause discoloration of tooth enamel but has never been known to injure health.
- 7. Public opinion polls reveal that the majority of people who are informed about fluoridation are favorably disposed to the idea.

I have inquired into why, in the light of all these factors, the extension of fluoridation has been lagging in the last 2 years.

I have come to the conclusion that it amounts basically to this: the opponents of fluoridation are a militant minority; the proponents of fluoridation, as is so frequently the case with proponents of new health measures, are an unmilitant majority.

In my review of the situation with Surgeon General Leroy E. Burney and his associates in the Public Health Service, it seems to me that what is needed is a militant majority for fluoridation.

I am convinced that fluoridation would be proceeding rapidly if the question were decided on its merits by informed people.

Some informed people will, of course, continue to oppose fluoridation as a matter of principle. I respect their views even though I cannot, on the basis of the scientific evidence, concur in their conclusions.

But such persons are not, by and large, the ones who succeed in blocking local fluoridation projects.

For example, some of the most vocal opponents of fluoridation are persons who have been charged by the Food and Drug Administration with making false health claims for nostrums and devices and thereby influencing their customers against seeking needed medical service.

Dr. George F. Lull, then secretary and general manager of the American Medical Association, in an editorial in *Today's Health*, June 1955, used these words to describe the opposition to fluoridation:

"In addition to the sincere opposition which merits respect, there is the usual hue and cry from those who take every opportunity to discredit medical science and legitimate public health progress. We will find in the antifluoridation camp the antivaccinationists, the antivivisectionists, the cults and quacks of all descriptions, in short, everyone who has a grudge against legitimate scientific progress. They bring all manner of irresponsible charges, including the allegation that fluoridation is promoted for commercial profits by those who manufacture the chemicals and machinery and that irresponsible scientists and public officials have been 'bought.' The ridiculousness of such a charge evaporates into thin air when one merely looks at the official and professional bodies that have endorsed fluoridation."

As Dr. Lull implies, the kind of opposition to fluoridation which we are now experiencing is by no means new in the public health field. Indeed, this opposition is very similar to that which arose in the early days of such invaluable health measures as chlorination of public water

supplies, pasteurization of milk, and vaccination. Owing in large part to such opposition, it has taken 50 years, for example, to get widespread acceptance of chlorination. I hope that urban communities which have not yet fluoridated their water supply will not be denied this health benefit for a comparable period.

It is nothing short of tragic to deny millions of children the benefits, now and in their later years, of healthy teeth, particularly when, in addition to the scientific evidence that points to the efficacy of fluoridation, public opinion polls indicate that a majority of citizens desire to take advantage of this established health measure.

Yet this is clearly what is happening in a

Dental decay is recognized as

number of communities large and small. For example, a poll by Elmo Roper and associates in 1957 showed that 57 percent of the people in cities of 1 million and over said fluoridation was a good idea, while only 20 percent said it was not. In communities of 100,000 to 1 million the response was 50 percent for and 19 percent opposed, while in communities of 2,500 to 100,000 it was 54 percent for and 24 percent against.

As long ago as 1953, when fluoridation was still relatively new and before the opposition became fully organized, a poll by Dr. George Gallup showed that people who knew about fluoridation favored its adoption as a community health measure by a margin of nearly four to one.

Report on Fluoridation in the United States

man's most widespread chronic Few persons escape. No social disease. stratum or age group is immune. A decayed tooth never heals by itself, by prescription, or by advice. About 97 million people in the United States have decayed teeth requiring treatment; more than 21 million others are edentulous; the average high school graduate has had 10 teeth attacked; and family dental bills total \$1.7 billion annually although only 40 percent get treatment. If everyone who needed dental care wanted it, there would not be enough dentists to provide it. The current progressive accumulation of dental disease is a heavy national burden—painful, costly, and disfiguring. This serious health problem remains largely neglected because of the undramatic nature of the disease, cost of treatment, the widespread tendency not to regard dental decay as a hazard, and insufficient professional manpower to provide care. This combination of factors points to the need for a preventive measure that is effective, safe, in-

Prepared by the Division of Dental Public Health, Bureau of State Services, Public Health Service. expensive, convenient, widely acceptable, and automatic. The fluoridation of community water supplies meets these requirements.

Fluoridation is the adjustment of fluoride-deficient communal water supplies to the optimal level by adding small, but precise amounts of fluoride-containing compound to yield in solution one part of fluoride in every million parts of water. In effect, it supplements the daily ingestion of fluoride to a level which effectively and safely prevents up to 65 percent of the dental decay among children, and provides protection and benefits that continue into adult life. In principle, water fluoridation is similar to standardized water-treatment procedures designed to promote the health of consumers.

Research

The early history of the fluorine and dental decay relationship goes back to the last quarter of the 19th century, when clinicians noted that less tooth decay accompanied mottled enamel. In 1916, Dr. Frederick McKay reported mottled enamel to be a waterborne disease, which in 1931 was discovered to be caused by excessive fluorides. A hypothesis evolved that trace amounts