The irresponsible opposition to fluoridation

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It is unfortunate that every advance in public health brings to light a group of crusaders who are determined to save the public from the imaginary dangers of the new public health procedure. Even today, in spite of the many years' experience with chlorination of water supplies and pasteurization of milk, and in spite of the innumerable lives that have been saved and the tremendous improvement in public health resulting from these procedures, there are still some individuals trying to save the public from the "hazards" of chlorination and pasteurization.

Today, with the widespread interest in fluoridation and the dental benefits which it has been shown to provide, a flock of so-called "experts" can be found who are opposing fluoridation just as vigorously as chlorination was opposed 30 years ago by the same type of individual. Since scientific fact has a way of eventually penetrating the barriers of confusion and misinformation, there need be no concern for the ultimate acceptance of fluoridation.

It is unfortunate, however, that thousands or even millions of the younger children of today could be denied the dental benefits of fluoridation because of the lies and half-truths being disseminated by a relatively small but vocal group which is apparently dedicated to the perpetuation of misinformation.

Since the general public is ordinarily not in a position to evaluate technical statements and does not have ready access to the medical and scientific literature which describes the studies bearing on fluoridation, many persons are particularly susceptible to flamboyant charges by irresponsible individuals who manage to surround themselves with an aura of expertness, and, like Don Quixote, manage to find innumerable "windmills" which threaten the health, sanity and well-being of the American public. It is unfortunate that these individuals must be dignified and given further publicity through the necessity of correcting the misinformation which they are spreading.

Since it is impossible here to describe in detail the many investigations which demonstrate the effectiveness and the safety of fluoridation, one must resort to the procedure of sifting the charges of the fluoridation opponents with the view to a determination of their possible logic and common sense. That procedure may be applied to a recent article by James Rorty entitled "The Truth About Fluoridation." This article appeared in *The Freeman*, June 29, 1953, page 697. The following points may be noted in this article:

1. It uses the old propaganda trick of attempting to inflame emotions through the use of a name which is expected to be distasteful to a large number of indi-

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viduals. The author of the article attempts to convey the impression that fluoridation is simply a scheme which the former Federal Security administrator attempted to foist on the public by means of the U.S. Public Health Service. He therefore conveys the impression that this was another line in the attempt to sell the public on the scheme of "socialized medicine." These implications may be contrasted with the actual fact that studies of the dental significance of the fluorides began many years before the Federal Security Agency came into being. It is important to note also that two organizations, namely the American Medical Association and the American Dental Association, that led the fight against the Federal Security administrator's proposal of compulsory health insurance have both endorsed the fluoridation procedure. Thus, instead of being a visionary political scheme, fluoridation is shown to be a carefully considered recommendation of conservative professional organizations.

2. The article in question, along with many other antifluoridation articles, selects portions of the scientific reports which, when taken out of context, seem to support the opposition viewpoint. Thus Mr. Rorty quotes the report in the Journal of the American Water Works Association by George S. Bratton. Since, however, he presumably examined the journal which carried this article, it is remarkable to note that he fails to refer to an article in the same issue of that journal by W. Victor Weir.2 Perhaps this failure is not so remarkable in view of the fact that the second article provides all of the auswers to the questions raised by Mr. Bratton.

3. This and similar antifluoridation articles continually hammer away with the "big lie" technic. Thus we have a repetition of the old charge that there has been little study of the various factors relating to the safety of fluoridation. Contrast this charge with the fact that

about 5,000 titles of scientific articles bearing on the physiological effects of fluorides appear in the list3 which was compiled at the Kettering Laboratory at the University of Cincinnati School of Medicine. It may be true that Mr. Rorty is not familiar with research studies pertaining to fluoridation but it is not true that such studies have not been made. It is especially noteworthy to observe that nature herself demonstrated the safety of fluorides at the recommended level of approximately one part per million by providing a huge laboratory in numerous sections of the United States where several million persons have, for many years, used drinking waters which contain varying amounts of fluoride up to a level as high as 14 parts per million. In no instance has anyone demonstrated undesirable effects except with regard to mottled enamel in those areas where the fluoride concentration is distinctly higher than that recommended in controlled fluoridation.

4. The Rorty article again uses the well-recognized propaganda trick of suggesting that fluoridation may cause a wide variety of ailments including "retardation of mental development," without actually asserting that such effects have actually been demonstrated. This is a method of insinuating apprehension and uncertainty into the minds of many individuals.

One of the apparent causes of apprehension in the minds of uninformed individuals is the fact that large quantities of fluoride are toxic. Many individuals, without a background in pharmacology, will therefore infer that even in small

I. Bratton, George S. Impact of municipal water fluoridation on the food and beverage industries, J. Am. Water Works Ass'n. 45:364 April 1953.

^{2.} Weir, W. Victor. Considerations in supplying fluoridated water to industries. J. Am. Water Works Ass'n. 45:369 April 1953.

^{3.} Kettering Laboratory, Department of Preventive Medicine and Industrial Health, College of Medicine, University of Cincinnati. Classified bibliography of publications concerning fluorine and its compounds in relation to man, animals and their environment.

amounts fluoride must also be toxic. It will perhaps allay the apprehension of many to know that a number of substances which are essential parts of our everyday diet are toxic when consumed in concentrated form, and in large, uncontrolled amounts. Thus toxicity is not a matter of what material is consumed but of how much is consumed.

In view of the apparent quandary which faces the American public, it is suggested that each individual answer for himself the following question: Which of the following groups is more likely to have reliable information regarding the effectiveness and safety of fluoridation: (1) professional organizations in the health field, including the American Medical Association, the American Dental Association, the National Research Council, the American Public Health Association and other similar groups, or (2) "food faddists," purveyors of so-called health foods, publicity seekers and writers of "sensation" articles, together with a very few members of the health professions? In this latter connection it should be remembered that out of approximately 216,000 physicians and 92,000 dentists and several hundred thousand other scientists, it is not remarkable to find a dozen or so representatives who oppose fluoridation largely on the basis of the

idea that the proponents of fluoridation should be willing to guarantee that no harmful effect, however insignificant, will ever result from this procedure. One may pose the rhetorical question: Can anyone guarantee that any individual's most trivial activity may not sometime result in injury? Can any scientist therefore be honest and be willing to provide such a dogmatic guarantee? When millions of people for many years have used drinking water bearing one part per million of fluoride without any evidence of adverse effect and when dozens of careful animal tests show that fluoride must be consumed at levels at least 50 to 100 times this high before toxic effects (other than mottled teeth) can be detected, then the public can know that the statement. "There is no evidence that fluoride in water at one part per million will have any undesirable effect," is an adequate assurance of safety.

In conclusion, therefore, contrary to Mr. Rorty, fluoridation is not one of the problems on the "President's doorstep." Rather, the fact that Mr. Eisenhower was born in a fluoride area and now resides in a community where the drinking water is fluoridated is a fortunate circumstance and has not in any way impaired his ability to serve as President of the United States.