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Commies, Cancer and Cavities: the Conflict Over Fluoridation

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A Thesis

Presented to

The Faculty of the Department of History

The College of William and Mary in Virginia

In Partial Fulfillment

Of the Requirements for the Degree of

Masters of Arts

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by Gretchen A. Reilly 1992

This thesis is submitted in partial fulfillment of the requirements for the degree of

Masters of Arts

Approved, December 1992

Richard B. Sherman

Edward P. Crapo

Philip 1. Funigiello

Dedicated to Dr. Donald R. McNeil, whose book fanned my passing curiosity into burning interest in this subject.

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The writer also must acknowledge the unconditional support of her parents and sister, which has made all of this possible.

ABSTRACT

The purpose of this thesis is to examine the conflict over fluoridation, a public health proposal, in the late 20th century in general, and to specifically focus on the proponents and opponents of fluoridation in society.

The thesis shall discuss each side's tactics and evolving strategies. Some attention will be giving to each side's criticism of their opponents. Each side's view of themselves, their opponents, the conflict over fluoridation and the history of fluoridation will also be discussed.

Little attention will be given to debates over fluoridation within the scientific community, or to the international promotion of fluoridation. The thesis will not attempt to evaluate the validity of the scientific arguments. Individual community fluoridation fights will be discussed only when relevent to the views of each side.

Sociological research on fluoridation will be discussed only briefly. An explanation of why fluoridation has remained controversial will be expressed in the conclusion.

Commies, Cancer and Cavities:
The Fluoridation Conflict In America

Introduction

To the dental and public health professions in the 1950s, the discovery that fluoride could reduce tooth decay promised to improve people's lives. Dentists and public health officials eagerly supported fluoridation as a reasonable scientifically-proven proposal. The angry political fights it sparked across the country took them completely by surprise. Opposition seemed to spring out of nowhere-- aggressive opponents who passionately fought fluoridation with tactics that alarmed and frustrated profluoridationists. In the wake of such fierce tenacous resistance, profluoridationists struggled to explain why something they believed was proven safe, effective and efficient was repeatedly rejected by the electorate.

Equally surprising was the endurance of the antifluoridation movement, which unlike past movements directed against health innovations, did not dwindle and die off. The antifluoridation movement not only failed to weaken; at times it appeared to grow stronger. But if antifluoridationists were determined, the profluoridationists were equally committed.

The conflict over fluoridation was fought on two levels: the national level and the local level. The national level was composed of large organizations, networks and spokesmen fighting over fluoridation in the country's courts and legislatures. On the local level, community groups worked for or against fluoridation in their immediate area. Local efforts held

greater significance because fluoridation was primarily decided at the local level, but the national level was also important because of its influence on local fluoridation fights. The literature and guidance supplied by the national organizations shaped local groups' arguments, tactics and strategies. This influence gave fluoridation fights across the country a common character.

Chapter I

The National Fluoridation Conflict

The discovery that minute traces of fluoride lessened tooth decay actually began as a search for an explanation for dental mottling. The unexplained mottling of teeth, ranging from small specks on the enamel to the complete blackening of the teeth, had puzzled dentists around the world since the late 19th century, especially because it appeared linked to geography, yet no specific cause could be pinpointed. Despite the mystery, no concerted attempts had been made to find the cause of the mottling until 1901, when Dr. Frederick S. McKay, a dentist in Colorado Springs, Colorado, became concerned with the problem. Unable to arouse interest in the problem among the dentists of Colorado Springs, even though mottling was a widespread problem in the region, McKay enlisted the help of Dr. Greene Vardiman Black, a prominent Chicago dentist. For the next twenty-two years, McKay and Black conducted an extensive survey of the condition and the regions in America where it occurred.²

Years of research led McKay to believe something in the water supplies caused the mottling. In Oakley, Idaho in 1925 and Bauxite, Arkansas in 1928, McKay had observed mottling, and had advised local officials to change their

¹Frank J. McClure, Water Fluoridation: the Search and the Victory (MD: National Institute of Dental Research, 1970), 8.

²Donald R. McNeil, The Fight for Fluoridation (NY: Oxford U., 1957), 7-15.

water supplies. In both cases, when the water supplies were changed, the instances of mottling on children's teeth declined noticeably.³ Because fluoride was not normally tested for when studying water samples, the connection between fluoride and mottling continued to elude McKay.

The problem of mottling in Bauxite attracted the attention of the Aluminum Company of America (ALCOA), which owned a nearby aluminum mine. ALCOA officials were concerned that the problem might be related to their mine. Because of this, McKay was able to enlist ALCOA's help in testing the water. The ALCOA research laboratories, under the administration of H.V. Churchill, chief chemist, identified traces of fluorine in Bauxite's water supply. McKay and Churchill tested the water supplies of other communities across the country troubled by mottling, and discovered that they too had traces of fluorine present. On April 10, 1931, Churchill and McKay published their findings in the *Industrial and Engineering Chemistry* newsletter; all that was needed were animal studies to confirm the connection. 5

In an unusual coincidence, those animal studies had just been completed when Churchill first published their findings. In 1930, Dr. Alexander E. Bard, puzzled by the mottling in Tucson, Arizona, encouraged H. E. Friesell, dean of the University of Pittsburgh Dental School, to investigate the mottling. Friesell arranged for Dr. Margaret C. Smith, head of the Nutrition Department of the University of Arizona, and her husband, H. V. Smith, an agricultural chemist, to begin research into the mottling in June 1930. The Smiths produced mottling on the teeth of rats by supplying them

³McClure, 17-20.

⁴McClure, 27-28.

⁵McNeil, *The Fight*, 32-33.

with water from a local community where the teeth were mottled. After isolating traces of fluorine in the water, the Smiths fed fluorine to rats and reproduced the mottling.⁶ Although the Smiths had determined the cause of mottling about six months before Churchill and McKay did, the Smiths "lost the race for priority in publication". As a result, Churchill and McKay are generally credited with the discovery. On May 18, 1931, both Churchill and Friesell, representing the Smiths, presented their work before the Pittsburgh chapter of the International Association for Dental Research.⁷

In 1933, the USPHS assigned Dr. H. Trendley Dean to confirm the conclusions of the Smiths and Churchill, and develop an index relating the severity of mottling to the fluorine content.⁸ Between 1931 and 1938, several foreign dental studies noted a possible connection between mottling and low decay rates in teeth. The link between fluorine and low decay was confirmed in 1938 by Dr. Benjamin Miller, a University of Chicago researcher who prevented decay in rats' teeth by feeding them sodium fluoride.⁹ Another study in 1939, by Dr. Gerald J. Cox of the Mellon Institute, confirmed Miller's findings, and suggested for the first time that fluoride could be deliberately added to drinking water to prevent tooth decay.¹⁰ In response to these studies, Dean and his assistant, Dr. Francis A. Arnold Jr., conducted massive statistical studies to determine the level of fluorine that would inhibit decay but not cause mottling.

When Dean and Arnold determined that the optimum level of fluorine was 1 part per million (ppm), the USPHS developed plans to

⁶McClure, 26.

⁷McNeil, The Fight, 30, 34.

⁸McClure, 39.

⁹McNeil, *The Fight*, 38.

¹⁰McClure, 109.

fluoridate water supplies on an experimental basis under carefully controlled conditions. In May, 1944, Grand Rapids, Michigan began fluoridating its water as part of the USPHS study. At the same time, Newburgh, New York initiated fluoridation in a study sponsored by the state of New York. Several other communities, such as Sheboygan, Wisconsin; Marshall, Texas and Evanston, Illinois, started fluoridation between 1944 and 1947 as part of other smaller studies.¹¹

Despite these research studies, the USPHS refrained from encouraging mass fluoridation across the country. This conservative policy frustrated many dentists, most especially a group of outspoken dentists in Wisconsin, who believed that the safety of fluoridation was proven by communities that had been drinking naturally fluoridated water for centuries without any sign of adverse effect. These dentists, forming a movement called 'the Wisconsin Idea', were "the spiritual descendants of the Progressive agitators who, years earlier, had turned Wisconsin into a laboratory for advanced social legislation. They believed they were following in the tradition of Robert M. LaFollette, Sr. and his followers, by increasing government services. The Progressive tradition made these dentists, and many average citizens of Wisconsin more receptive to new ideas and change. The supporters of community fluoridation improved on this tradition, by advocating the use of experts to advise government on policies to promote public welfare.

The idea of widespread fluoridation for Wisconsin was first mentioned at a state dental society meeting in November 1941. In early 1943, enough

¹¹McNeil, The Fight, 42-43; McClure, 109-110.

¹²Donald R. McNeil, "America's Longest War: The Fight Over Fluoridation, 1950-," *The Wilson Quarterly* 9 (Summer 1985): 144.

¹³McNeil, *The Fight*, **45**.

¹⁴McNeil, *The Fight*, 45-46.

interest had been generated to warrant the creation of a 'Fluoridation Study Committee', to investigate all aspects of the proposal. At the same time, the Wisconsin Board of Health also considered fluoridation, but its call for caution in 1943, and its 'watch and wait' policy adopted in 1944, did not satisfy supporters of 'the Wisconsin Idea'. The Fluoridation Study Committee, responsive to the state's stand, maintained a 'go slow' attitude, despite its favorable report to the state dental society. Nevertheless, on March 19, 1945, upon receiving the report, the house of delegates for the dental society recommended that water supplies in Wisconsin have a fluorine concentration of 1 ppm through careful dental, engineering and public health control.¹⁵

Prustrated by the conservative policies of the USPHS, the American Dental Association (ADA) and their state board of health, many individual Wisconsin dentists took a direct personal role in the promotion of fluoridation. The most aggressive vocal spokesmen were four experienced fluoridation supporters: Drs. Francis A. Bull, John G. Frisch, A. H. Finke, and Timothy A. Hardgrove. Finke's speech on fluoridation at the state dental society meeting in November 1941, had sparked the initial interest in fluoridation. Frisch and Hardgrove had been original members of the Fluoridation Study Committee. Bull, as a dental health officer, had been involved in the state's earlier assessment of fluoridation. They travelled throughout the state speaking in favor of fluoridation to city councils and civic groups. Through their persistence, by 1949, eighty-five percent of the urban population of Wisconsin drank fluoridated water. 16

¹⁵McNeil, *The Fight*, 47-49.

¹⁶McClure, 246.

Up to 1950, agitation for widespread fluoridation was confined almost entirely to Wisconsin. The struggle was mostly between conservative scientists and civic officials, who advocated scientific skepticism, and a vocal group of dentists pushing for immediate action. This latter group actively lobbied the Wisconsin Board of Health, the ADA and the USPHS. Their persistence resulted in a resolution by the Wisconsin Board of Health approving fluoridation in 1947.¹⁷ The Wisconsin dentists put pressure on the USPHS through their Congressman, Frank Keefe, who was on the House Appropriations sub-committee responsible for the USPHS's budget, and pressured the ADA through letter-writing campaigns and articles in dental journals.

When preliminary reports from Grand Rapids, Newburgh and Sheboygan showed a significant drop in the decay rate, the USPHS caved in and endorsed general fluoridation in May 1950. The ADA followed with their endorsement on November 2, 1950. Because of favorable reports from Grand Rapids and Newburgh, and lobbying by the Wisconsin dentists, the Wisconsin Medical Society, the American Medical Association (AMA) and the Association of State and Territorial Dental Health Officers endorsed fluoridation in 1951.¹⁸

Throughout their early efforts, the Wisconsin dentists met mostly public apathy. Only in Madison, Wisconsin had there been any public opposition, which the dentists successfully defeated. The conflict over fluoridation had been an internal struggle within the dental and public health communities, rather than a public struggle. In 1950, in Stevens Point, Wisconsin, the nature of the conflict changed, and fluoridation proponents

¹⁷McClure, 245.

¹⁸McNeil, The Fight, 66-68, 74, 81, 83; McClure, 249.

received their first taste of fierce public resistance to fluoridation. When fluoridation was proposed in Stevens Point, a small but dedicated group arose to oppose it. These opponents ran an angry name-calling campaign, which stressed the notion that 'outsiders' were telling the community what to do. For the first time, the proponents were confronted with the strategy question that would become the principal dilemma in future fights: should they respond to their opposition's attacks with political tactics or limit themselves to the scientific arguments. In Stevens Point, the proponents chose the latter, and lost.¹⁹

The three men who formed the core of the opposition in Stevens Point were not content to sit back and enjoy their victory. They sent letters against fluoridation to mayors, elected officials and selected citizens throughout Wisconsin, and took out ads in newspapers in Wisconsin cities and towns considering fluoridation. When they started to receive out-of-state requests for information, they began to form a loose opposition network.²⁰ The opposition arising outside of Wisconsin heralded the national status of the fluoridation conflict.

Before 1951, fluoridation had been adopted only in Wisconsin and in isolated places in New York, Michigan and Texas; between 1951 and 1952, when fluoridation was endorsed by national organizations such as the AMA, most of the communities considering fluoridation were in the Midwest. From 1953 to 1955, awareness of fluoridation spread, leading to adoptions in the South, East and in areas of the Midwest that had not already debated fluoridation.²¹ Communities were most likely to consider fluoridation if a

¹⁹McNeil, The Fight, 85-104.

²⁰McNeil, *The Fight*, 104 -105.

²¹McClure, 249-250; Robert L. Crain, "Fluoridation: the Diffusion of an Innovation Among Cities," *Social Forces* 44 (1966): 476.

neighboring community had already considered it, and more likely to adopt it if other communities around them had too.

Nineteen fifty-three was the peak year for adoption; 378 communities adopted fluoridation. After 1953, although adoptions increased, they increased at a decreasing rate. Referendums on fluoridation became more frequent, and fluoridation was defeated in referendums more often than it won. While in 1952, only one in seven cities held a referendum on fluoridation before adopting it, by 1954, one out of every three cities voted on fluoridation.²² Of those cities which voted on fluoridation, at least 60 percent rejected it.²³ Early antifluoridationists objected to fluoridation referendums, believing they could best defeat fluoridation by pressuring elected officials, but when fluoridation began consistently to lose in referendums, opposition leaders used referendums as a tactic for preventing fluoridation.²⁴

The rate of adoption continued to drop steadily after 1955. Few adoptions occurred in areas that did not already have fluoridated communities; after 1955, "fluoridation remained sheltered in 'safe' areas where it had already been accepted, rather than spreading into new areas." In part, this was because opposition had solidified, and negative publicity about fluoridation had increased. At the same time, those communities most accepting of new health innovations had already begun fluoridating. 26

Antifluoridationists began to take the offensive by working to end fluoridation in fluoridated communities. After 1953, as the number of

²²Crain, "Fluoridation," 470.

²³Ruth Roemer, "Water Fluoridation: Public Health Responsibility And the Democratic Process," *American Journal of Public Health* 55 (1965): 1341.

²⁴McNeil, "Time," 336.

²⁵Crain, "Fluoridation," 474.

²⁶John W. Knutson, "Fluoridation: Where are We Today?" *The American Journal of Nursing* 60 (1960): 197.

acceptances decreased, the number of discontinuations also increased.²⁷ By 1955, the loose network of opposition had developed into a few national organizations and visible spokesmen, who supported local opposition forces by supplying printed propaganda material and information on charges against fluoridation, and through personal appearances and supportive letters to the local newspaper editor. A newsletter, *National Fluoridation News*, gave "vivid accounts of local battles, new charges devised by opponents, an up-to-date record of victories and losses for opponents, and feature articles condemning particular arguments of the advocates".²⁸ Information was also distributed nationally through the mailing lists of natural food distributors, health clubs, right-wing organizations and utopian groups, all of whose supporters would likely oppose fluoridation.²⁹

The opposition to fluoridation was by no means homogeneous; distinct groups with dissimilar ideologies worked together to stop the adoption of fluoridation across the country. Ideologically, fluoridation opponents fit into one of four categories: those who opposed fluoridation for religious reasons, those who believed it violated their personal right to choose, those who truly believed it was a health threat, and those who for personal motives wanted fluoridation rejected. Because opponents from these different categories all had different arguments against fluoridation, when proponents encountered opposition in a community, they were often overwhelmed by a barrage of different, often difficult-to-refute charges against fluoridation.³⁰

²⁷Knutson, 197.

²⁸McNeil, The Fight, 159.

²⁹Robert L. Crain, Elihu Katz, and Donald R. Rosenthal, *The Politics of Community Conflict: The Fluoridation Decision* (NY: Bobbs-Merrill, 1969), 20.

³⁰William A. Gamson, "Social Science Aspects of Fluoridation: A Summary of Research," *The Health Education Journal* 19 (1961): 162.

Christian Scientists were usually the only antifluoridationists who opposed fluoridation for religious reasons, although Jehovah's Witnesses and Seventh Day Adventists sporadically objected to it. They charged that fluoridation was medication, which their religion forbad. They argued that voters should reject fluoridation because it was unconstitutional, since it violated their First and Fourteenth Amendment rights to practice their religion.³¹

Antifluoridationists who believed it violated the individual's freedom of choice included a broad range of people, from those who believed fluoridation was a communist conspiracy to destroy America, or a plot leading to socialized medicine, or a exploitive plan of Big Business, to individuals sometimes labeled professional "againsters".³² Both the Ku Klux Klan and the John Birch society insisted that fluoridation was destroying America. For some extremists, the purported health risks of fluoridation were an important part of their conspiracy theories; fluoridation would create "moronic, atheistic slaves" or weaken America in preparation for an invasion.³³ Other extremists, although they supported the contention that fluoridation was a health hazard, insisted that "the basic objection is not scientific but political and moral."³⁴ To these groups, fluoridation was an attack on the Constitution, the Bill of Rights, and "all the unalienable rights endowed by our Creator".³⁵

³¹McNeil, The Fight, 162; Crain, The Politics, 86.

³²Robert L. Heilbroner, "The Great Fluoridation Scare," Reader's Digest 69 (August 1956): 126.

³³Hearings Before the Committee on Interstate and Foreign Commerce on H.R. 2341 House of Representatives 83rd Congress, 2nd session, May 25, 26, and 27, 1954, (Wash. DC: United States Government Printing Office, 1954), 106.

³⁴Editorial, National Review, 3 May 1958, 415.

³⁵Hearings ... on H.R. 2341, 106, 152.

Although the different conspiracy theories had their own individual twists, the basic conspiracy was that the USPHS, despite the evidence that fluoridation was poisonous or a subtle mind-controlling substance, was promoting fluoridation for ulterior motives. The USPHS was part of the Federal Security Administration, whose director, Oscar Ewing, was labelled the most prominent "socialist" in the federal government by fluoridation opponents. Those who saw fluoridation as a Big Business plot pointed out that Ewing had once been an attorney for ALCOA, which produced fluoride compounds used in fluoridation. Occasionally, antifluoridationists included the sugar industry in the conspiracy, claiming sugar manufacturers wanted to reduce cavities in children without reducing candy and soda consumption.³⁶ For some, the Russians were directly responsible for fluoridation, which had been used to take over Rumania, Czechoslovakia and Poland, and was now being used against America.³⁷ Less common theories fingered the Jews as the masterminds behind fluoridation, or simply saw fluoridation as part of an ongoing plot by the Federal government to expand its power.³⁸ Opponents, without seeing any conflict, were willing to believe that giant capitalist corporations were partners with the communists, or that the AMA was working towards socialized medicine.³⁹

Related to the argument that fluoridation was a violation of individual rights was the contention that fluoridation was socialized medicine or mass medication. Some antifluoridationists insisted that it wasn't so much socialized medicine, as totalitarian medicine, because it was compulsory.⁴⁰

³⁶James Rorty, "Introduction," in *The American Fluoridation Experiment*, ed. James Rorty (NY: Devin-Adair, 1957), 8.

³⁷Hearings ... on H.R. 2341, 168.

³⁸McNeil, The Fight, 124.

³⁹Crain, The Politics, 19.

⁴⁰Hearings ... on H.R. 2341, 78.

They contended that fluoridation was just the first step, that next public health officials would add vitamin pills and then birth control pills to the public water supplies.⁴¹ Others saw it as an even broader threat: one antifluoridationist testified at a Congressional hearing that "If this mass experimentation upon human beings is not ended, then the complete dignity of man will be lost in the totalitarian mass medication fraud and the end will be wholesale adoption of euthanasia and death by the needle for the weakly and unwanted. Fluoridation is the opening wedge."⁴² Even those in this group who did not fear such extremes did insist that "There is . . . every evidence that the primary purpose of fluoridation is not directed against dental decay; and that the real desire is for a legal precedent for compulsory medication in noncommunicable disease."⁴³

In the 1950s, a small number of doctors and dentists objected to fluoridation on the grounds that children could get the necessary amount of fluoridation through another method, such as tablets or fluoridated salt or specially prepared bottled water. In their arguments, they had much in common with those who opposed fluoridation as an infringement of personal rights. These doctors and dentists insisted that a child's dental care was the responsibility of the parents, not the state. The argument about fluoridation's safety was moot; it was a "violation of the fundamental human right to determine what shall be done to one's own body".⁴⁴ They saw the

⁴¹Mary Bernhardt and Bob Sprague, "The Poisonmongers," in *The Tooth Robbers: A Profluoridation Handbook*, eds. Stephen Barrett and Sheldon Rovin (Phila.: G.F. Stickley, 1980), 5.

⁴²Hearings ... on H.R. 2341, 49.

⁴³Frederick Exner, "Fallacies of the Fluoridation Thesis," in *The American Fluoridation Experiment*, ed. James Rorty (NY: Devin-Adair, 1957), 48.

⁴⁴Exner, "Fallacies," The American, 46.

government conspiring to usurp parental authority.⁴⁵ These doctors and dentists were important to the antifluoridation movement, especially as fluoridation became accepted by the medical, dental and scientific communities, because antifluoridationists could point to these few dissenters and claim there was still disagreement within the professions over fluoridation.

Most of those who actually objected to fluoridation as a health threat were chiropractors and other individuals who rejected the scientific evidence that fluoridation was safe, but a few doctors and dentists also publicly insisted that fluoridation was dangerous. Some of the opposition movements most vocal spokesmen were doctors, such as Drs. George L. Waldbott and Frederick B. Exner, a dentist, Dr. Royal Lee, and a research scientist, Dr. Leo Spira. Even though most were speaking outside their particular field of competence, they were able to give many voters the impression that scientific experts did not agree that fluoridation was completely safe, as proponents claimed. In many instances, they lent support to other opponents' conspiracy theories by insisting that the scientific community was censoring them and repressing evidence that proved fluoridation was hazardous.

In contrast to opposition among doctors and dentists, opposition to fluoridation was strong among chiropractors, whose national organization distributed antifluoridation literature, and a few osteopaths.⁴⁸ Profluoridation

⁴⁵Richard L. Fruin, "A Doctor's Case Against Fluoridation," *The American Mercury* 88 (Feb. 1959): 131.

⁴⁶The opposition insisted that a large number of dentists and doctors were opposed to fluoridation, but that the ADA and AMA had successfully cowed them. Proponents estimated that no more than 1 percent of all doctors and dentists objected to fluoridation for either medical or other reasons. William Attwood, "Fluoridation: Why All the Controversy?" *Look* 22 (June 24, 1958): 20.

⁴⁷Harvey M. Sapolsky, "The Fluoridation Controversy: An Alternative Explanation," *Public Opinion Quarterly* 33 (1969): 246.

⁴⁸ Crain, The Politics, 86; McNeil, The Fight, 122.

commentaries suggested that chiropractors fought against fluoridation more because of their continuing conflict with the rest of the medical profession than because of any concrete objection to fluoridation itself. In the early 1950s, when the battle lines had not yet been drawn, some chiropractors were publicly critical of the medical and dental professions "for withholding the benefits of fluoridation from the populace", by not promoting fluoridation more aggressively.⁴⁹

Medical opponents insisted fluoridation caused cancer, progressive blindness and deafness, kidney damage, baldness, nymphomania and hemorrhoids among other ailments. It was responsible for miscarriages, birth defects, especially mongolism, and heart disease. It suppressed the nervous system, attacked parts of the brain, and caused personality changes.⁵⁰ In his books, Dr. Waldbott discussed dozens of cases of fluoridation poisoning from cities across the country, including a few deaths.⁵¹ Each case had different symptoms, but he claimed all were the result of fluoridated water. The sheer volume of medical charges against fluoridation made it difficult for proponents to counter even the more absurd accusations. To a portion of the population with little scientific understanding, no claim was too outlandish. One such reader wrote to *American Mercury* that "Any dumbbell should know that a chemical which hardens teeth will also harden bone, dry up brain tissue and cause insanity, harden nerves and cause blindness".⁵²

⁴⁹Donald R. McNeil, "Time To Walk Boldly," *The Journal of the American Dental Association* 63 (Sept. 1961): 336.

⁵⁰ "Six Ways To Mislead the Public," *Consumer Reports* 43 (August 1957): 480-482; Leo Spira, "Poison in Your Water," *The American Mercury* 85 (August 1957): 70.

⁵¹George L. Waldbott, "Fluoride Poisoning In the Fluoridated Cities," in *The American Fluoridation Experiment*, ed. James Rorty (NY: Devin-Adair, 1957), 159-166; George L. Waldbott, *A Struggle With Titans-- Forces Behind Fluoridation-- A Scientist's Look at Fluoridation* (NY: Carlton Press, 1965), 98-112.

⁵²Letter to *The American Mercury* editor, in response to Leo Spira, "Poison in Your Water," *The American Mercury* 85 (Nov. 1957): 157.

Medical opponents also argued that fluoridation was not proven effective or safe. They insisted that artificially fluoridated water was different from naturally fluoridated water. They claimed that the amount of fluoride in the water could not easily be controlled, and that the amount of fluoride drunk by people would vary dangerously depending on the person's habits. They warned that people drinking fluoridated water were slowly being poisoned as fluoride accumulated in their bodies. ⁵³

National organizations and businesses devoted to good health through natural foods and nutrition, "natural scientists" and food faddists formed one of the more powerful groups against fluoridation. In the 1980s, when the efforts of other opponents, such as extreme right-wing groups, had flagged, these antifluoridationists were fighting fiercely on. Most of these groups used the fluoridation fight to promote their own ideas or products, such as water filters, health tonics and dubious cancer cures. Health food stores often used their customer mailing lists to publicize opposition to fluoridation; vitamin and patent medicine companies also helped local antifluoridationists to organize. Groups promoting certain nutritional or medical ideologies already had networks set up to protest such health measures as vaccination, immunization, pasteurization or to fight against aluminium cookware. Fluoridation was simply one more matter against which groups like Citizens Medical Reference Bureau or the American Naturopathic Association could protest. ⁵⁴

Between 1948 and 1990, fluoridation never became an issue for national political parties, and both Democrat and Republican presidents

 $^{^{53}}$ James Rorty, "Fluoridation: Is It Safe?" *Coronet* 38 (Oct. 1955): 69; "Six Ways," 480-2. 54 McNeil, *The Fight*, 116, 120.

endorsed it, but Congress did consider the issue on more than one occasion.⁵⁵ Two separate committees held hearings on fluoridation, but no legislation was ever passed, with the exception of a bill fluoridating the water supply of the District of Columbia. In June 1951, Representative A. L. Miller of Nebraska introduced the bill to fluoridate the water supply of the District of Columbia, but by February 1952, he had become an opponent of fluoridation. Exactly why he changed his position was never clear; he claimed that he sponsored the bill because he had been "misled by the Public Health Service", and became an opponent after "hearing the experts on the subject".⁵⁶ As a member of the House Select Committee to Investigate the Use of Chemicals in Foods and Cosmetics, which was chaired by Representative James J. Delaney of New York, Miller was able to convince the committee to hold hearings on fluoridation for seven days in March 1952. The committee dealt exclusively with the questions of safety and effectiveness, with scientific and medical witnesses representing each side.⁵⁷

The opposition-- three biochemists, two doctors and the Smiths, who had carried out some of the earliest research-- spoke on the inadequacy of the scientific knowledge about fluoridation. All of them complained that the USPHS was moving too quickly, that more research needed to be done before mass fluoridation could be recommended. Eleven representatives from various national organizations who had endorsed fluoridation, including the USPHS, the ADA and AMA, spoke in favor of fluoridation. They refuted the charges that not enough research had been done, and justified their organizations' support of fluoridation.

⁵⁵Presidents Eisenhower, Kennedy and Johnson publicly endorsed fluoridation. The Carter, Reagan and Bush Administrations all supported fluoridation.

⁵⁶Hearings ... on H.R. 2341, 88.

⁵⁷McNeil, *The Fight*, 145-150.

Representative Miller had hoped that the Delaney hearings would lead to the defeat of the District of Columbia fluoridation bill, but in May 1952, Congress appropriated money to begin fluoridation. The Delaney report, released in July 1952, also took a weaker stand than Miller had wanted. It noted that none of the witnesses had completely opposed fluoridation, and recommended that, based on the conflicting views presented, a 'wait and see' policy be adopted towards fluoridation. It also did not recommend federal legislation on fluoridation; it concluded that the question of fluoridation should be settled at the local level. Miller added two addition pages of his own views to the report, in which he attacked the USPHS for overstepping their authority by promoting fluoridation. Miller accused other endorsing organizations of parroting the USPHS policy.⁵⁸

Despite the Delaney report's recommendation against national fluoridation legislation, in May 1954, Representative Roy W. Wier of Minnesota sponsored a bill prohibiting fluoridation. The bill would have prevented not only federal authorities from fluoridating federal facilities, such as military bases, or promoting fluoridation, but also would have barred state and local authorities from adding fluoride to their water supplies, even if it was approved by referendum. The hearings for the bill were held by the House Committee on Interstate and Foreign Commerce, chaired by Representative Wolverton, in late May, 1954. ⁵⁹

Representative Wier explained that he had sponsored the bill because "During my six years here . . . I have received more mail and

⁵⁸McNeil, *The Fight*, 150; James Rorty, "The Truth About Fluoridation," *The Freeman* (June 29, 1953): 697-698; McClure, 277-278.

⁵⁹James Rorty, "The Fluoridation Resistance Movement," in *The American Fluoridation Experiment*, ed. James Rorty (NY: Devin-Adair, 1957), 222-223; McClure, 278-279; McNeil, *The Fight*, 188-190.

communications and material for the bill . . . than on any other subject or issue pending in the Congress during those six years."60 The bill was more than just an attempt by antifluoridationists to defeat fluoridation in one fell swoop; it reflected their conviction that the USPHS's support was the heart of the fluoridation movement. Repeatedly throughout the hearings, witnesses in favor of the bill insisted that the only reason communities voted for fluoridation was because of USPHS pressure and propaganda.⁶¹ While profluoridationists, insisted that each community had the right to decide for itself, antifluoridationists were convinced that "A vote for fluoridation is always based on insufficient information on both sides of the question, and so cannot represent an intelligent and considered judgement." That the bill was as much an attack on the USPHS as on fluoridation itself was evident when one antifluoridationist explained that even if the bill were ultimately overturned in the courts as unconstitutional, it "would be a long step toward bringing to public attention the fact that the Congress does not look with favor upon the propagandizing methods of one of the Government agencies."62

The Wolverton committee, unlike the Delaney committee, which had considered only scientific evidence, heard every opposition argument. Drs. Spira, Waldbott and Exner represented the medical views against fluoridation; a representative from the Christian Scientists spoke on religious freedom, while numerous political extremists presented their conspiracy charges. Witnesses at the Delaney committee had been scientific skeptics advocating more research; the opponents at the Wolverton committee

⁶⁰Hearings ...on H.R. 2341, 6.

⁶¹Hearings ... on H.R. 2341, 16-17, 49, 52, 152,-155, 161, 172, 178-9, 184.

⁶²Hearings ...on H.R. 2341, 23.

rejected the principle of fluoridation completely. Many of the proponents who had testified at the Delaney hearings, including Dr. H. T. Dean, spoke again at the Wolverton hearings. The Secretary of the Army, the Assistant Director of the Executive Office of the President, and the acting Secretary of the Interior, and numerous state boards of health and state dental societies sent letters against the bill. The antifluoridation efforts during the three days of hearings failed to win over the Wolverton committee; the bill died in committee.⁶³

Although neither of these hearings resulted in any legislative victory for the antifluoridationists, the hearings had "strategic value" because they provided "a national forum" for opponents.⁶⁴ In their letters to editors, pamphlets and advertisements, they were able to quote negative testimony from both hearing without mentioning the results of those hearings. The Delaney hearings provided numerous scientific quotes from experts which opponents could manipulate to support the notions that not enough experimentation had been done, or that the USPHS was aware of the hazards, but chose to ignore them. The record of the Wolverton hearings became a source book for quotes supporting a wide range of arguments, and to many people gave legitimacy to the more outlandish conspiracy theories.⁶⁵

Like the United States Congress, state legislatures faced heavy lobbying from both pro and antifluoridation groups. In 1953, the Connecticut, Massachusetts and California legislatures each defeated bills prohibiting fluoridation. The Wisconsin legislature killed an antifluoridation bill in 1955; similar bills in Virginia died in committee hearings. Other bills that did

⁶³McNeil, *The Fight*, 188-189; Rorty, "The Fluoridation," *The American*, 222-223; McClure, 278-280.

⁶⁴Rorty, "The Fluoridation," The American, 223.

⁶⁵McNeil, *The Fight*, 190.

not ban fluoridation outright, but required a referendum, were defeated in Illinois and New Hampshire.⁶⁶ In many states, antifluoridation bills were considered annually: 70 antifluoridation bills were filed in the Massachusetts legislature between 1969 and 1978.⁶⁷

In the 1960s, profluoridationists could point to a number of victories in state legislatures. In 1965, Connecticut passed a law requiring all communities over a set size to fluoridate their water supplies. Minnesota and Illinois also passed laws requiring fluoridation in 1967, but did not set firm deadlines for compliance. Michigan's profluoridation law, passed in 1968, required all communities over a set size to fluoridate, and gave a deadline for compliance, but allowed communities to decide not to fluoridate through a referendum. Ohio and South Dakota passed similar laws in 1969. Georgia and Nebraska followed suit in 1973. Kentucky did not pass a law requiring fluoridation, but set up a state standard for community water supplies, in which only fluoridated water would be given the highest approval rating.⁶⁸

Profluoridationists also suffered what they considered defeats in various states throughout this same period. Profluoridationists considered state laws requiring referendums before fluoridation could be introduced to be defeats for fluoridation, because fluoridation did so poorly in referendums. Statistical data justified this view: Maine, New Hampshire, Delaware, Nevada, and Utah, the five states which enacted referendum laws between

⁶⁶McNeil, The Fight, 190-191.

⁶⁷Myron Allukian, Josephine Steinhurst, and James M. Dunning, "Community Organization and a Regional Approach to Fluoridation of the Greater Boston Area," *Journal of the American Dental Association* 102 (April 1981): 493.

⁶⁸Cora Sharon Leukhart, "An Update on Water Fluoridation: Triumphs and Challenges," *Pediatric Dentistry* 1 (March 1979): 33.

1957 and 1976, were also the least fluoridated of the fifty states in 1979.⁶⁹ Massachusetts had such a law from 1958 until 1968. In 1968, when the law was repealed, only 7 percent of Massachusetts' population was drinking fluoridated water; by 1978, without the law, over 50 percent of the population had fluoridated water.⁷⁰

A referendum law passed in Utah in 1976 was especially troublesome for profluoridationists. It was enacted not by the state legislature like other such laws, but through a new antifluoridation strategy: the state-wide referendum. In 1976, antifluoridation groups, aided by the National Health Federation (NHF) were able to get state-wide initiatives in Oregon and Washington to prohibit fluoridation outright, and in Utah to require a referendum.⁷¹ Those three states were chosen because of their low percentage of fluoridated communities, the low percentage of fluoridated communities in surrounding states, repeated antifluoridation victories in their state legislatures, and because they were close to the NHF headquarters in Monrovia, California. Of the three states, only Utah passed its initiative.⁷² These referendums were only the opening volley in a renewed effort by antifluoridationists that included an attempt in 1979 to push a state-wide ban

⁶⁹Maine (1957) 40.6 percent; New Hampshire (1959) 13.3 percent; Nevada (1967) 3.0 percent; Delaware (1974) 39.5 percent; Utah (1976) 2.4 percent.

⁷⁰Leukhart, 33.

⁷¹The National Health Federation was founded by Fred J. Hart. In 1963, the Food and Drug Administration (FDA) reported "The stated purpose of the federation is to promote 'freedom of choice' in health matters. The record shows that what this frequently means is freedom to promote medical nostrums and devices which violate the law. From its inception, the federation has been a front for promoters of unproved remedies, eccentric theories and quackery." FDA Report as quoted in "Fluoridation: The Cancer Scare," *Consumer Reports* 43 (July 1979): 394. Besides fluoridation, the NHF has opposed small pox vaccination, milk pasteurization and polio vaccination. Stephen Barrett, "The Unhealthy Alliance," in *The Tooth Robbers: A Profluoridation Handbook*, eds. Stephen Barrett and Sheldon Rovin (Phila.: G. F. Stickley, 1980) discusses in detail the leadership of the NHF and their checkered pasts.

⁷²David Rosenstein et al., "Fighting the Latest Challenge to Fluoridation in Oregon," *Public Health Reports* 93 (Jan/Feb. 1978): 69; Leukhart, 33.

through the Pennsylvania legislature, and the creation of a loophole in Minnesota's mandatory fluoridation law.⁷³ Another new tactic by antifluoridationists was, after losing a fluoridation referendum, to try to block appropriations for fluoridation.⁷⁴

Failing to stop fluoridation at the ballot box or in the legislatures, antifluoridationists tried repeatedly throughout the 1950s and 1960s to stop fluoridation through the courts. Anti-fluoridation court cases were based on three arguments: that governments did not have the authority to fluoridate, that fluoridation was the illegal practice of medicine, or broke pure food and drug control laws, or that fluoridation was unconstitutional. The state courts consistently rejected all these arguments; the Supreme Court affirmed these decisions on four separate occasions by refusing to review.⁷⁵

Opponents based their argument that government did not have the authority to fluoridate on a narrow interpretation of state and local statutes. They argued that, since fluoridation was not specifically mentioned in state or local statutes, municipalities did not have the authority to do it. In 1954, an Oklahoma court ruled that the same regulations that allowed for chlorination made fluoridation possible. Opponents also reasoned that fluoridation broke the implied contract between government and the consumer to provide wholesome, potable water, but an Ohio court rejected the notion that there was an implied contract, and ruled that even if there was, fluoridation was not a breach of that contract. A Missouri court in 1961 rejected the

⁷³Robert C. Faine, "An Agenda for the Eighties: Community and School Fluoridation," *Journal of Public Health Dentistry* 40 (Summer 1980): 259.

⁷⁴John M. Frankel and Myron Allukian, "Sixteen Referenda on Fluoridation In Massachusetts; An Analysis," *Journal of Public Health Dentistry* 33 (Spring 1973): 102.

⁷⁵H. William Butler, "Legal Aspects of Fluoridating Community Water Supplies," the Journal of the American Dental Association 65 (Nov. 1962): 654; Roemer, 1340.

⁷⁶Dowell vs. City of Tulsa (1954) 273 P. 2d 859, as cited in Butler, 654.

⁷⁷Krause vs. Cleveland (1955) 106 Ohio St. 599, as cited in Butler, 654.

antifluoridationist argument that since fluoridation was not preventing an infectious, contagious, communicable or dangerous disease, it was not a public health measure, and ruled that the power to make regulations for the good of the public health included fluoridation.⁷⁸

The second antifluoridation charge against fluoridation—that it was the illegal practice of medicine by the government and in violation of pure food and drug control laws—was based primarily on the belief that fluoridation was medicine. Repeatedly, various state courts refused to define fluoridation as medication. In 1953, a California court ruled that fluoridation was a health measure, not medication.⁷⁹ A Wisconsin court ruled in 1955 that regardless of whether fluoridation was a medicine or not, pure food and drug laws did not apply to municipalities.⁸⁰

Antifluoridationists claimed that in various ways, fluoridation was unconstitutional because it violated the First and Fourteenth Amendments. Opponents argued that it was class action and discriminatory, because fluoridation only affected children's developing teeth, but a Louisiana court ruled in 1954 that the well-being of children was a concern of every citizen.⁸¹ The same court also ruled that fluoridation was not an invasion of individual rights, since no one was compelled to drink fluoridated water.⁸²

Christian Scientist claims that fluoridation violated their freedom of religion were undermined by all of the above arguments. Rulings that fluoridation was not medication made it difficult for Christian Scientists to

⁷⁸ Readley vs St Louis County Water Co. (1961) Sup. Ct. of Mo., 352 S. W. 2d 622 as cited in Butler, 654-655 and Roemer, 1340.

⁷⁹De Aryan vs. Butler (1953) 119 Cal. App. 2d 674, 260 P. 2d 98 as cited in Butler, 654 and Roemer, 1340.

⁸⁰Froncek vs Milwaukee (1955) 269 Wis. 276, 69 N.W. 2d 242 as cited in Butler, 654-656.

⁸¹Chapman vs City of Shreveport (1954) 225 La. 859, --, 74 So. 2d 142 (1954), appeal dismissed, 348 U.S. 892 (1954) as cited in Butler, 654-655.

⁸²Butler, 656-657; Roemer, 1340.

argue that drinking fluoridated water was breaking their religious laws against medication.⁸³ A Missouri court noted that the local water already contained .5 ppm fluoride, yet the Christian Scientists had not objected to drinking it.⁸⁴ An Oregon court ruled that even if fluoridation violated Christian Scientist laws, the First Amendment did not bar fluoridation. In its ruling, the court distinguished between the freedom to believe, which was protected, and the freedom to practice those beliefs, which could be limited by the public interest, and ruled that fluoridation was in the public interest.⁸⁵

Despite these unfavorable court rulings, opposition literature and speakers continued to insist that fluoridation was unconstitutional. Because opponents failed to mention that the courts had ruled against them, average voters were often led to believe that the courts had rejected fluoridation. So too, the opposition's simplified arguments about why fluoridation was unconstitutional misled the average voter, who had little understanding of the complexities of constitutional law. Throughout the 1960s, 1970s and 1980s, when antifluoridationists lost referendums, they tried to prevent fluoridation through lawsuits, which were often based on legal technicalities. Most often they relied on the argument that because fluoride was a health hazard, fluoridation was arbitrary, unreasonable and unconstitutional. In 1980, the argument that fluoridation violated the rights of Christian Scientists was eliminated when an official letter from the Christian Science Church to an Illinois court "affirmed that the Church recognizes the greater public

⁸³De Aryan vs. Butler was an example of such a ruling.

⁸⁴Readley vs St Louis County Water Co. (1961) as cited in Butler, 654...

⁸⁵Baer vs. City of Bend (1955) 206 Oregon 221, 292 P. 2d 352 as cited in Butler, 657-658; Roemer, 1340.

⁸⁶C. M. Bowen, "Note on Minority Rejection of Incidental Restrain: A Case Study," *Social Forces* 38 (1959): 166.

interest fluoridation serves, and does not take a stand that would deprive others of health care that they feel desirable and necessary."87

Struggles over fluoridation in the country's legislatures and courts were only secondary to the primary front in the fight over fluoridation: individual communities. It was in thousands of communities across the country that profluoridationists and antifluoridationists focused all their energies. Using different tactics and strategies, each side attempted to win the fluoridation conflict community by community.

⁸⁷ Illinois Pure Water Committee Inc. v. Director of the Department of Public Health of the State of Illinois 68 E 128 (1980) as quoted in Harold Löe, "The Fluoridation Status of U.S. Public Water Supplies," Public Health Reports 101 (Mar/Apr. 1986): 160.

Chapter II

Antifluoridationists In Action

Although fluoridation was debated on a national level, it was ultimately a local issue. In part, this was because most public water supplies in the United States were controlled by local authorities. It was also the result of the antifluoridationists' failure to nationalize the issue. The Delaney report's recommendation against federal legislation and the death of H.R. 2341 (the Weir bill) are two examples of this. State legislative efforts and state referendums were two antifluoridationist strategies, but those strategies never had the record of success achieved by local referendum fights against fluoridation. Antifluoridationists were never able to convince a state to ban fluoridation, either through legislative action or referendums, only make it more difficult to adopt fluoridation. The antifluoridationists' failure to nationalize the issue was a success for profluoridationists, because their strategy from the start had been to fight for fluoridation as a community issue. They never recommended any national legislation mandating fluoridation, and their efforts to promote fluoridation at the state level were secondary to their main thrust in individual communities. Large regional fluoridation campaigns, in areas like Boston and San Francisco, were exceptions, in response to unique situations.

¹The most obvious exception, the District of Columbia, was fluoridated by an act of Congress in 1952.

But although fluoridation was a local struggle, fluoridation struggles across the country were remarkably similar. Fluoridation would be proposed to the local government, either by the local health department or dental society, or a few citizens who had heard about it. Early hearings about the proposal would rarely arouse much opposition, but when the final decision was to be made, opposition would spring up. The opposition would pressure the local government, be it a city council or a local board of supervisors, to reject fluoridation. If it appeared that the council or board was going to approve it anyway, the opposition would demand a referendum, and if necessary, quickly collect the necessary signatures to force its inclusion on the next ballot. The campaign that followed would be marked by sensationalism and hysterics.²

To say, though, that all fluoridation fights were the same would ignore the local elements in fluoridation fights. Local antifluoridation leaders often but not always fit into the four opposition categories. Many were Christian Scientists, or supporters of extreme political views, or followers of unconventional medical ideologies, but many fought fluoridation for private, or distinctly local reasons. In the Stevens Point, Wisconsin fight, for example, one of the opposition leaders objected to fluoridation as a waste of public funds. In some local fluoridation fights, newspaper publishers, water works officials, radio announcers, or marginal political leaders would lead the opposition. They used the national opposition's propaganda and arguments,

²Thomas Plaut, "Analysis of Voting Behavior on a Fluoridation Referendum," *Public Opinion Quarterly* 23 (1959): 215-216; John A. Hutchison, "Small-Town Fluoridation Fight," *Scientific Monthly* 77 (1953): 240-243; James M. Burns, "The Crazy Politics of Fluorine," *New Republic* 128 (July 13, 1953): 14-15; Bernard Mausner and Judith Mausner, "A Study of the Anti-Scientific Attitude," *Scientific American* 192 (Feb. 1955): 36-37; H. Christopher Medbery, "San Francisco's Fluoridation Story," *The American City* 67 (May 1952): 122-3; William A. Gamson, "How to Lose a Referendum: The Case of Fluoridation," *Trans-Action* 2 (Nov/Dec. 1964): 10-11.

but the crux of their disagreement was related to more local concerns, such as taxes. In rare instances, a local businessman owning a water-consuming industry, such as textiles, beer, or food-processing, fought against fluoridation; in St. Louis and Milwaukee, the beer industry was part of the opposition. This was unusual, though-- in most communities, with the exception of health food stores, local businesses remained neutral.³

Proponents in local fluoridation fights often underestimated their opposition, or they denied that there was any legitimate opposition. The opposition was described as having little or no standing in the community and having little political experience. Surveys of local fluoridation fights usually characterized the local opposition leaders as having lower job status than the proponents. Leaders among the proponents were usually physicians, dentists or public health officials, while opposition leaders most often were blue-collar workers or retired. Opposition leadership was less likely to have a college education compared with the proponents' leadership, even when proponents with medical degrees were excluded.

In many other ways, the opposition was at a disadvantage at the beginning of fluoridation fights. They rarely had support of local civic groups; if organizations, such as the Parent Teachers Association (PTA) or the Rotary Club, did not actively support fluoridation, they generally remained neutral. Proponents were supported in their efforts by local and state health departments. The local dental and medical societies contributed money and volunteers to the proponents' campaign. Opposition campaigns always originated as a defensive action, in response to fluoridation proposals, so that

³Crain, The Politics, (see ch.1, n. 21) 84-87, 97; McNeil, The Fight, (see ch.1, n. 2) 185.

initially they were weakly organized. To make up for these disadvantages, opponents had to campaign aggressively.⁴

Some of the similarities in local fluoridation struggles were the result of a common political process in America. Other similarities, such as in rhetoric, strategies and tactics, reflected the national elements in the struggle over fluoridation. Both sides had national organizations, with national leaders and spokesmen, which distributed literature to local forces and advised local groups on how to campaign. Local circumstances and personalities might color a fluoridation fight, but most of the arguments presented, the strategies and tactics used and the experts quoted were the same throughout America.

Antifluoridation efforts revolved around three strategies: lobbying for referendums, creating doubt among voters during a referendum campaign, and if fluoridation won, not letting the issue die. These strategies made use of the fact that fluoridation was usually defeated in referendums, and that if they were aggressive and vocal, opponents could influence public officials, even if they were a minority in the community.⁵

Another factor in the antifluoridationists' strategies was their ability to quickly mobilize once profluoridationists began a campaign for fluoridation. This was important because antifluoridationists rarely made the first move in a fluoridation conflict; normally the conflict began when the profluoridationists pressured local governments for fluoridation. Profluoridationists were warned to avoid any publicity when they first began

⁴Crain, The Politics, 80-83, 97, 98-99.

⁵ 1980 was a typical year; fluoridation lost almost 4 out of 5 referendums.

working toward fluoridation, especially fluoridation adopted through administrative action, because it might "tip off" the opposition.⁶ If the effort to fluoridate through administrative action became known, antifluoridationists usually demanded a referendum.

As soon as antifluoridationists were aware that fluoridation was being considered, they would begin lobbying those public officials involved, either the members of the local water utility board, or town council, through letters and phone calls, or if legally necessary, petitions.⁷ Their goal was to convince public officials that fluoridation was controversial, and that there was enough public interest and concern to warrant a referendum. If at the same time antifluoridationists could win public officials over to their side by convincing them that the profluoridationists were wrong, so much the better. Antifluoridationists would also encourage public officials to remain neutral during the upcoming fluoridation referendum campaign. This would further undermine fluoridation at the polls, since the neutrality of public leaders would strengthen doubts among many voters.⁸ One tactic used to convince or intimidate elected officials was to pack the audience of a public hearing or board meeting on fluoridation with antifluoridationists. In this way, they could give the impression that a large number of people were concerned about fluoridation.⁹ Profluoridationists complained that antifluoridationists at public hearings "tend[ed] to play by their own rules

⁶Eric M. Bishop, "Publicity During A Fluoridation," *The Journal of the American Dental Association* 65 (Nov. 1962): 663; Stephen Barrett and Sheldon Rovin, "Fluoridation Campaign Tips," in *The Tooth Robbers: A Profluoridation Handbook*, ed. Stephen Barrett and Sheldon Rovin (Phila.: G. F. Stickley, 1980): 67.

⁷Edith F. Elliot, "The Facts About Fluoridation," *The American Mercury* 83 (Dec. 1956): 126. ⁸Bernhardt, "The Poisonmongers," *The Tooth Robbers*, (see ch.1, n. 41) 3.

⁹Michael W. Easley, "The New Antifluoridationists: Who Are They and How do They Operate?" *Journal of Public Health Dentistry* 45 (Summer 1985): 136.

unless otherwise constrained" and take over hearings "by overwhelming the presiding official".¹⁰

Once a referendum was planned, the antifluoridationists' strategy was to create confusion, doubts and fears about fluoridation among voters. They did this through literature and advertisements meant to scare or confuse the reader and through misleading gimmicks and devices. They did not need to convert voters to their position; they needed only to create the impression that fluoridation was controversial in the medical and scientific professions, and that there was a strong possibility that fluoridation was dangerous. An uncertain voter would vote "no", not because the voter believed antifluoridation arguments, but because "no" was the safer choice, since it prevented change. If fluoridation later proved to be safe, a new referendum could then be held.¹¹

Antifluoridation literature and advertisements, an important part of antifluoridationist campaigns, used a number of tactics to achieve their goal. The two most common tactics were called "the Big Lie" and "the Laundry List" by profluoridationists. In "the Big Lie", unfounded charges were repeated so often in literature, advertisements and letters to the Editor in newspapers that people began to believe they might be true, even though no proof had been presented. In "the Laundry List", so many accusations against fluoridation were presented that it was impossible for profluoridationists to refute them all. This tactic was also extremely effective during debates, when both sides had only a limited time to speak.¹²

¹⁰Barrett, "Fluoridation," *The Tooth Robbers*, 78.

¹¹John E. Mueller, "The Politics of Fluoridation in Seven California Cities," Western Political Quarterly 19 (1966): 60.

¹²Bernhardt, "The Poisonmongers," *The Tooth Robbers*, 3-4.

Antifluoridation literature and advertisements were filled with emotionally charged scare words meant to frighten and impress readers. These words changed over the years to fit current social concerns. In the 1950s, antifluoridation literature took advantage of the Red Scare and McCarthyism by associating fluoridation with Communism and using words like "mind control" and "birth control". They invoked fears and anger associated with World War II by comparing the USPHS and ADA to the Nazis or the repressive Soviet government, and by equating the fluoridation experiments in Newburgh and Grand Rapids with the atrocities revealed at the Nürnberg trials. In the 1960s and 1970s, antifluoridationists peppered their literature with words, such as "toxic waste product", "chemical byproduct", "genetic damage" and "pollutants", to appeal to those concerned with environmental pollution and the ecology.

In the 1970s, conspiracy theories were again used to exploit the post-Watergate distrust of Government: antifluoridationists replaced the Communist conspiracy with "a great conspiracy among the U.S. government, the medical establishment and various corporate entities in the aluminum and phosphate fertilizer industries" to dispose of toxic chemical byproducts. 14 Changes in antifluoridation literature in the 1970s, and the resurgence of antifluoridation activities reflected an increased awareness of the political process and participatory democracy, the "assertion of individuality and freedom of choice as a social norm", increased concerns over food additives in general after the bans on saccharin and red dye #2, and the growing

¹³Exner, "Fallacies," *The American*, (see ch.1, n.43) 46.

¹⁴Easley, "The New," (see ch.1, n.9) 137.

movement toward simpler life styles and alternative methods of health care.¹⁵

Antifluoridation literature in the 1980s charged that fluoride caused premature aging by destroying collagen in the skin, and damaged ligaments, tendons and muscles. These charges played on society's concerns about health, beauty and aging, and appealed both to the growing elderly population and the fitness crowd. Antifluoridationists emphasized how fluoride was "artificial" and "chemical", to further increase their appeal to members of the health food movement. In the late 1980s, antifluoridationists claimed that fluoride attacked the immune system and used words such as "immunosuppression" to try to link it with AIDS. Apart from those words that changed as social conditions changed, words like "cancer", "Mongoloid births", "experiment" and "human guinea pigs" were staples in antifluoridation literature. 17

Another tactic in antifluoridation literature was the use of half-truths. Antifluoridation literature was correct when it identified fluoride as a poison, but it failed to explain that other trace elements consumed by humans, such as iron, zinc and vitamin D, were also toxic in large doses. Antifluoridation pamphlets which warned of fluoridation poisoning from drinking too many glasses of fluoridated water in one sitting failed to mention that after drinking that many hundreds of gallons of water, the person would die from too much water. Pictures of cattle suffering from fluoride poisoning served as visual

¹⁵Caswell A. Evans and Tomm Pickles, "Statewide Antifluoridation Initiatives: A New Challenge to Health Workers," *American Journal of Public Health* 68 (Jan. 1978): 60. ¹⁶Easley, "The New," 137.

¹⁷ "Red Scare For Mass Control: Some New Ideas on the Fluoridation Conspiracy," *The American Mercury* 89 (Nov. 1959): 134; Rorty, "The Truth," (see ch.1, n.58) 699; Bernhardt, "The Poisonmongers," *The Tooth Robbers*, 5.

¹⁸Michael Easley, "Foreword," in *Abuse of the Scientific Literature In An Antifluoridation Pamphlet*, eds. C. A. Wolf, et al. (Columbus, OH: Am. Oral Health Institute, 1985), xi.

half-truths; captions below them never mentioned that the cattle grazed on grass polluted by tons of fluoride emitted by factories.¹⁹

Antifluoridation literature also created the illusion of a scientific controversy by quoting bogus experts, misquoting profluoridation scientists, misquoting out-of-date or obscure articles, and using skewed statistics and flawed studies. The "experts" quoted were most often not experts on the subject, or if the "experts" were doctors or dentists, they had no special knowledge or training that would qualify them to criticize fluoridation. Antifluoridationists also misquoted scientific studies or drew erroneous conclusions from their data. When a scientist was misquoted or his work misrepresented, protests and explanations by that scientist failed to reach very many people. In the case of Dr. and Mr. Smith, long after they had changed their position from opposing fluoridation to cautiously accepting it, antifluoridation pamphlets continued to quote them as opposing it.²⁰ One group of profluoridationists published a book, Abuse of the Scientific Literature in An Antifluoridation Pamphlet, that required over 100 pages to refute more than 200 scientific references in a 20 page antifluoridation pamphlet. Many of the studies antifluoridationists used to prove the harmful effects of fluoride on humans had no connection with the fluoridation of drinking water consumed by humans; one such study tested the effect of fluoride gas on tomatoes.²¹

Antifluoridation studies cited in antifluoridation literature were also suspect. Those studies used poor statistical techniques to prove that fluoridated cities had higher instances of heart disease, cancer, brain lesions,

¹⁹"Six Ways," (see ch.1, n. 50) 480.

²⁰Bernhardt, "The Poisonmongers," *The Tooth Robbers*, 4.

²¹Easley, "Foreword," *Abuse*, xii.

or later AIDS. A common error in those studies was to ignore the fact that older people die more from cancer than young people, that men have a higher cancer rate than women, and that blacks are more likely to die from cancer than whites. Studies proving that fluoridated cities had more cases of AIDS did not take into account that those people most likely to be infected with AIDS were more likely to live in major cities, most of which were fluoridated. Laboratory studies proving fluoridation caused cancer were also fatally flawed. A Texas study repeatedly cited was worthless because both the test animals and the control animals accidentally received large uncontrolled amounts of fluoride. A fruit fly study proving fluoride caused tumors was useless because the tumors developed by fruit flies and human cancer tumors were not comparable.²²

Antifluoridation literature created confusion by quoting people who were not speaking against fluoridation, so that readers might infer that those quoted were speaking against it. In the Congressional hearings for H.R. 2341, antifluoridationists quoted Lincoln, Eisenhower and Pope Pius XII, even though neither Pope Pius XII nor Lincoln was referring to fluoridation, and Eisenhower had actually spoken publicly in favor of fluoridation.²³ Readers were confused when antifluoridationists quoted court cases that they had lost as if the court had ruled in their favor. Antifluoridationists cited an article in *Hastings Law Journal* which argued that fluoridation was illegal as if it were an expert opinion, even though it had only been written by a law student.²⁴

Antifluoridationists also exploited a presentation by Dr. Francis Bull at the Fourth Annual Conference of State Health Directors held in June 1951.

²²"Six Ways," 482.

²³Hearings ... on H.R. 2341, (see ch.1, n. 33) 55, 156, 162.

²⁴McNeil, *The Fight*, 191.

When the USPHS asked Dr. Francis Bull, Wisconsin's state dental health officer and an early profluoridationist, to give a presentation to other public dental officials on the "Do's" and "Don'ts" of a fluoridation campaign, he spoke bluntly about how difficult a campaign could be and about the tactics needed to win a fluoridation campaign. Among other suggestions, he recommended that profluoridationists avoid a referendum and not call fluoridation "artificial" or "experimental".

The transcripts of the conference were meant only for the participants, but Mrs. Aileen Robinson, an antifluoridationist from Seattle, obtained a copy through her Congressman. Very quickly, mimeographed copies of the presentation were circulated through the antifluoridation camp, and articles began to cite it as proof of a government plot to force fluoridation on the people. Taken out of context, Dr. Bull's comments, such as "that is rat poison", "Don't let the people vote on it" and "We have told the public it works, so we can't go back on that", were manipulated to support antifluoridation charges that fluoridation was a hoax, and that the government knew not only that it was ineffective, but also that it was dangerous. One of the most often quoted phrases-- "When they take us at our own word they make awful liars out of us."-- was actually a comment on the tactics that antifluoridationists used, not an admission that profluoridationists were lying. By carefully editing Dr. Bull's comments, antifluoridationists were able to create the illusion that the profluoridationists had sinister motives.²⁵

Innuendo and guilt-by-association were common antifluoridation tactics to mislead voters. The antifluoridationists would acknowledge that so

²⁵McNeil, *The Fight*, 163-4; *Hearings ...on H.R.* 2341, 102, 107, 180-1; McNeil, "Time," (see ch.1, n. 49) 333.

far, fluoridation seemed safe, but then would insist that the long-range effects were not yet known. This argument was especially effective after the unsettling bans on saccharin and red dye #2 in the 1970s. Antifluoridationists also played on health fears by comparing a glass of fluoridated water to a cigarette: one won't kill you, but a lifetime of them could.²⁶ Antifluoridation flyers, pamphlets and books also pointed to the many rejections of fluoridation in European countries and Canada in support of their position.²⁷ At the same time, foreign opponents of fluoridation, both in Europe and elsewhere, cited fluoridation defeats in America in support of their efforts.²⁸

One favorite tactic employed by antifluoridation groups was to adopt misleading or inflammatory names, such as "the Anti-Pollution Committee" or "the Pure Water Association". Names like "the Medical-Dental Ad Hoc Committee on the Evaluation of Fluoridation" were meant to give voters the mistaken impression that the medical and dental community was divided over fluoridation. Other names, such as "Fluoridation Educational Society" and "Health Freedom League", hid the true nature of the organization.²⁹

Antifluoridationists were very pleased with one successful gimmick they used, often called "the Award". A group of antifluoridationists would offer an award, usually \$1,000, to anyone presenting proof that fluoridation was safe. Although antifluoridationists insisted that no one came forward to claim the prize because no one had the proof necessary, more likely the prize went unclaimed because the conditions attached to the award made it nearly impossible to collect. In the case of an \$100,000 award, the individual attempting to collect the award had first to post a bond to cover expenses in

²⁶ Bernhardt, "The Poisonmongers," *The Tooth Robbers*, 4; Easley, "Foreword", *Abuse*, xii.

²⁷Rorty, "Introduction," *The American*, (see ch.1, n. 36) 11; *Hearings* ... on H.R. 2341, 158.

²⁸Leukhart, (see ch.1, n. 68) 34.

²⁹Rorty, "The Fluoridation," *The American*, (see ch.1, n. 59) 249.

the event that the proof was ruled insufficient. The evidence would then be considered by judges appointed by the antifluoridationists sponsoring the award. Any effort to file suit to collect against the antifluoridationists would require an excessive amount of money in legal fees, and even if won, might never yield the award money, since the sponsors were usually elderly and spread across the United States and Canada.³⁰

Debates also benefited the antifluoridationists' cause more than the profluoridationists' campaign. The very idea of a debate reenforced the antifluoridationists' contention that fluoridation was a controversy. Unless profluoridationists were cautious and firm in setting down the structure of the debate beforehand, the antifluoridationists would usually seize control of it, much as they did with public hearing on fluoridation.³¹ Antifluoridation letters to the editor of the local newspaper posed the same problem for profluoridationists: responding to them helped create the impression that fluoridation was controversial, yet if the profluoridationists did not respond, their cause was still hurt, because the antifluoridation charges gained credibility by being printed without comment in the newspaper. Nor did a flood of profluoridation letters solve the problem; they usually encouraged a tidal wave of antifluoridation responses.³²

The petition was also an important tool for the antifluoridationists. A petition could be used to pressure public officials and administrative boards to hold a referendum on fluoridation before adopting it, or to hold another referendum after fluoridation was approved by referendum.

Profluoridationists complained that antifluoridation petitions were often

 $^{^{30}}$ Bernhardt, "The Poisonmongers," *The Tooth Robbers*, 4.

³¹Barrett, "Fluoridation," The Tooth Robbers, 75.

³²Barrett, "Fluoridation," The Tooth Robbers, 73.

worded poorly so that the average citizen might misunderstand its purpose. A study of antifluoridation petitions found that 37 percent of those who signed it actually supported fluoridation. They had either signed because they thought the petition was in favor of fluoridation, because they wanted to help out the petitioner, or get rid of him, or because a spouse asked them to sign. Doubters were often frightened into signing by tactics used by the petitioners, such as showing them a bottle labeled poison or disturbing pictures of poisoned cows.³³

Another strategy of antifluoridationists—not admitting defeat when they did lose a fluoridation referendum—was more than an attempt to wear down profluoridationists. Continuing to publicize the dangers of fluoridation, even after it had begun, was an effective way to raise doubts in citizens and undo profluoridation propaganda efforts. Antifluoridationists would lobby for another referendum, use litigation to postpone fluoridation, persuade public officials to delay fluoridation, or convince future political candidates to stop fluoridation if they gained office.³⁴ Once fluoridation began, antifluoridationists would blame every goldfish death, water main break, or leaky pipe on fluoridation. They would flood water boards and Letter to the Editor pages with stories of how their house plants were dying, their birds had stopped singing and their water tasted funny or made them ill.³⁵

In the antifluoridation camp, many different reasons were given to explain why they occasionally lost referendums. James Rorty, an

³³Leonard F. Menczer, "The Petitionee Who 'Opposes' Fluoridation," the Journal of the American Dental Association 65 (Nov. 1962): 714.

³⁴Barrett, "Fluoridation," The Tooth Robbers, 81; Rorty, "The Fluoridation," The American, 219.

³⁵Barrett, "Fluoridation," The Tooth Robbers, 5.

antifluoridation writer, insisted that when antifluoridationists lost referendums, it was most often because their campaigns were poorly run. Either the opposition was divided "along sectarian lines", or the opposition failed to fully use all the negative scientific evidence against fluoridation. The only other reason fluoridation might win was if the community had only one newspaper, which denied antifluoridationists "the democratic right of free and fair public discussion of the issue." Other antifluoridationists acknowledged that fluoridation won in referendums only because voters were not adequately informed about the true nature of fluoridation, but blamed propaganda and funding from the USPHS and the ADA for those losses. They believed that the deciding factor in those campaigns was the USPHS "propagandizing . . . with millions of dollars."

These attitudes among antifluoridationists—that others were responsible for their defeats or that failure to follow typical antifluoridation strategies led to defeat—explain why antifluoridationists did not focus much attention on refining their tactics and strategies. In their eyes, their repeated successes justified their tactics and outweighed their failures, creating little incentive to refine or improve tactics. They may have tailored their arguments and objections to fit the times, but their campaigns stayed the same. In contrast, the profluoridationists analyzed and reconsidered their campaign strategies and tactics in response to their defeats.

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³⁶Rorty, "The Fluoridation," *The American*, 218.

³⁷Hearings ... on H.R. 2341, 155, 172.

³⁸Hearings ... on H.R. 2341, 172.

Chapter III

Profluoridationist Battle Plans

The widespread rejection of fluoridation took the profluoridationists by surprise in two ways: initially they were not prepared for the fierce resistance that arose, later they were surprised by its longevity and vigor. Convinced that any reasonable person when presented with all the facts would vote for fluoridation, profluoridationists then had to explain why fluoridation lost so often in referendums. Continuing resistence to fluoridation forced profluoridationists to repeatedly reconsider their campaigns.

During the forty years after fluoridation became a controversy, profluoridation interpretations of fluoridation campaigns evolved, from the belief that it was simply a public health consideration to the understanding that a fluoridation campaign was a political campaign. As this idea gained acceptance, fluoridation campaigns first tentatively used political methods, then wholeheartedly embraced sophisticated political tactics. Although these changes did not lead to absolute victories for fluoridation, with the view of fluoridation as a political campaign came the gradual acceptance of the difficulties involved in promoting fluoridation and a renewed belief that, with hard work, profluoridationists could win.

In the early 1950s, after fluoridation was endorsed, the strongest promoters of fluoridation were still the Wisconsin dentists. Endorsements from government and professional groups enabled them to present their opinions to a national audience. In contrast, despite their endorsements, national organizations were slow to promote fluoridation. The Wisconsin dentists were still in the forefront in promoting fluoridation. An example of this was the June 1951 conference of state dental health officers: the USPHS asked Dr. Bull to speak on the "Do's" and "Don'ts" in a fluoridation campaign. The USPHS's new policy, which endorsed fluoridation as a safe and effective public health measure, was limited to providing information when requested, and educating public health officials about this new innovation through conferences, like the state dental health officers conference. The initiation and implementation of fluoridation was left solely up to local communities.

In the beginning, the ADA also did not play a large part in promoting fluoridation; its policy from 1950 to 1952 was simply to ignore the wild charges of the growing opposition. Gradually the ADA took a more active role, first in 1952, by distributing information on fluoridation, then in 1953, by advising dental societies to supply professional and technical leadership in local fluoridation campaigns. This was still a limited role: the ADA recommended that the promotional work involved in a fluoridation campaign be left to civic organizations. The AMA showed even less interest in promoting fluoridation; their concern for this dental matter ended with their endorsement in 1951.³

¹McNeil, "Time," (see ch.1, n.49) 335.

²McNeil, "Time," 334. Later antifluoridationists would quote Dr. Bull's speech out of context, as an example of the federal campaign to force national fluoridation.

³McNeil, "Time," 335-6.

These policies were the result of a variety of attitudes in these organizations. Many in the medical and dental professions, even within the national organizations, were either uninformed or cautious about the innovation, or they wanted to wait until there was more public support for fluoridation. Most profluoridationists believed fluoridation was a local issue, to be settled by each community. They believed "the ridiculous charges would eventually prove self-defeating, that the public would soon awaken, and that the fluoridation issue would be settled, quietly and sanely, in the best traditions of . . . American democracy."⁴ Throughout the dental and public health professions, this conviction that fluoridation would sell itself fostered the attitude among professionals that their responsibility was to educate people about fluoridation and in a vague way "promote" fluoridation.⁵ What was meant by "promote" was ill-defined, but seemed limited to voicing support for fluoridation when asked. Within the ADA, there was also concern that if the ADA waged an active campaign to promote fluoridation nationally, antifluoridationists would also wage a national campaign.⁶

In the 1950s, the attitudes of profluoridationists across the country mirrored the attitudes of the ADA and the USPHS. They were surprised that there was any resistance to fluoridation, but believed that what opposition there was would fade away. One profluoridationist wrote, "It is shocking but true that many people, even after they listen to professional advice-- carefully, competently and intelligently given-- blithely ignore it in favour of what they have been told and frightened into by someone with no professional

⁴McNeil, "Time," 336.

⁵Robert A. Downs, "The Dentist's Responsibility in Community Water Fluoridation Programs," American Journal of Public Health 42 (1952): 575; Esther A. Schisa, "The Role of the Public Health Nurse In the Community Water Fluoridation Program," American Journal of Public Health 43 (June 1953): 710-11.

⁶McNeil, The Fight, (see ch.1, n.2) 174

background whatsoever."⁷ They took comfort in likening the opposition to fluoridation to the opponents of pasteurization, chlorination and vaccination, which eventually became insignificant. Articles on how to promote fluoridation reflected this belief in the eventual general acceptance of fluoridation: their primary suggestion for promoting fluoridation was education.⁸ One writer confidently stated that "If public education has been well done, one need not fear a referendum."⁹ Beyond this, those articles were short on practical advice; the only other suggestions were that profluoridationists get as many local groups as possible to endorse fluoridation, and enlist the help of many different people from throughout the community.

Within the dental community there was uncertainty about the role dentists were to play in promoting fluoridation. Although many profluoridation authors were calling for increased involvement by dentists in promoting fluoridation, others insisted that primary leadership should come from service and civic groups. Some commentators even suggested that public resentment of dentists, who were in high income brackets, was partly responsible for the defeat of fluoridation. In general, the prevailing attitude did not stress leadership; dentists were told simply to offer advice in fluoridation campaigns, and help with efforts to educate the public. 10

A few profluoridationist writers in the late 1950s did begin to suggest, ever so cautiously, that part of the problem was the manner in which

⁷Louis I. Dublin, "Water Fluoridation: Science Progresses Against Unreason," *The Health Education Journal* 15 (Nov. 1957): 250.

⁸Examples of this are Dublin; Downs; Schisa; George F. Lull, "Fluoridation of Water Supplies," *Today's Health* 33 (June 1955); Charles A. Metzner, "Referenda for Fluoridation," *The Health Education Journal* 15 (Sept. 1957).

⁹Metzner, 174.

¹⁰McNeil, *The Fight*, 179; Metzner, 170; Downs, 575.

fluoridation was presented to the voters. The blunt presentation of facts was not sufficient to convince people to vote for fluoridation; people needed to be convinced through more subtle methods of persuasion, through the selling of fluoridation politically. Charles Metzner's opinion, expressed in his article Referenda For Fluoridation, was typical of the attitude at the time. He suggested that an educational fluoridation campaign was better than a political campaign because "Political activity puts the proponents of fluoridation at a disadvantage."¹¹ That this aversion to politics was common in the profluoridation camp is made apparent by Metzner's next comment: "In trying to avoid a direct political fight, however, we should not avoid politics. We must get over our feeling that there is something unworthy about it . . . in any society politics is a necessity." 12 Metzner explained that this unwillingness to fight for fluoridation politically was a result of dentists' status as dignified professionals, and their inexperience: "Many of us do not speak easily in and to the public, cheap appeals do not come quickly to mind, we are not good at mudslinging, and do not know how to organize a door-bell campaign."13

Another profluoridation commentator, Donald McNeil, put more emphasis on the political nature of fluoridation in his 1957 book *The Fight for Fluoridation*, which heralded the change of opinion in the 1960s. He stated that the issue of fluoridation had "moved into the political realm", and bluntly called the antifluoridation movement "a political protest movement". Even more extreme was his view of how fluoridation had become a political issue: "They [profluoridationists] believed the public

¹¹Metzner, 171.

¹²Metzner, 171.

¹³Metzner, 171.

¹⁴McNeil, *The Fight*, 142, 198.

officials should accept the advice of the scientific experts Yet in asking public officials to adopt the measure, the advocates were engaging in political methods. Opponents merely carried the campaign one step further by appealing to the source of the officials' power-- the people."¹⁵

Acknowledgement of the political nature of a fluoridation campaign grew in the 1960s, but many still held onto the earlier views that opposition would soon fade away and that education was the principal focus of a campaign. The November 1962 issue of the Journal of the American Dental Association focusing on the promotion of fluoridation, began with an introduction proclaiming that fluoridation had entered "a period of orderly, productive growth". 16 The issue was completely devoted to the promotion of fluoridation, yet the focus was on fluoridation as a local issue. The titles of many of the articles reflected this slant: "Fluoridation: Analysis of a Successful Community Effort-- Challenge to State and Local Dental Societies", "Fluoridation: Organizing A Community In Support of Water Fluoridation", "How Citizens Can Help the Community Health Team Achieve Fluoridation" and "Fluoridation: Analysis of an Unsuccessful Community Effort". Despite the realization that fluoridation wouldn't be adopted without great effort, profluoridationists were only gradually beginning to accept the political nature of fluoridation conflicts: the articles in the November 1962 issue of the Journal of the American Dental Association speak only in the most tentative and vague terms of the political methods to be employed.

Most articles on promoting fluoridation, many printed in that issue of the Journal of the American Dental Association, stressed education of the

¹⁵McNeil, *The Fight*, 143.

¹⁶ "Dentistry: Foremost Champion of Fluoridation," The Journal of the American Dental Association 65 (Nov. 1962): 578.

public as an important part of fluoridation campaigns, but with a significant difference. Repeatedly these authors, some of whom were writing about their own experiences, spoke of the need for long-term education programs that continued even after fluoridation was begun in a community.¹⁷

Yet, with growing frequency, writers rejected the concept of the campaign as "a detached and objective presentation of facts". 18 Writers began to present evidence that an education campaign did not necessarily increase profluoridation votes in a referendum. One author acknowledged that even after a nine year education program in his community, antifluoridationists were still able to gain enough signatures on petitions to demand another referendum. 19 Other writers were able to support their assertion that a political campaign was more successful by citing their own experiences. 20 William Gamson insisted that education should be secondary, that "the task is a political one-- that of winning a referendum. The traditional arsenal of political techniques is appropriate and proponents, if they expect to win, should frankly accept that they are *propagandising*, not simply educating. "21 McNeil, in an article entitled "Political Aspects of Fluoridation" published in the November 1962 issue of the *Journal of the American Dental Association*, insisted that profluoridationists "must meet the antifluoridationists on their

¹⁷Some examples of this are Knutson (see ch.1, n. 26); Menczer, "The Petitionee," (see ch.2, n. 33); Carl L. Sebelius, "Fluoridation, the Health Department's Challenge: The Tennessee Story," *The Journal of the American Dental Association* 65 (Nov. 1962): 648-652; Thomas F. Plaut, "Community Organization and Community Education for Fluoridation in Newton, Massachusetts," *The Journal of the American Dental Association* 65 (Nov. 1962): 622-629. ¹⁸William A. Gamson, "Public Information In a Fluoridation Referendum," *The Health*

¹⁸William A. Gamson, "Public Information In a Fluoridation Referendum," *The Health Education Journal* 19 (Mar. 1961): 53.

¹⁹Menczer, "The Petitionee," (see ch.2, n.33) 711.

²⁰Plaut, "Community," 622-629.

²¹Gamson, "Public," 53-4. Author's italics.

own ground-- on the political hustings, using political methods, and striving for a political victory."²²

Writers were no longer simply discussing how fluoridation was a political issue; in the 1960s they began to offer practical suggestions on how to fight politically. Recommendations included contacting public officials through their dentists before the opposition had been aroused, sending flyers to school children's parents, door-to-door canvassing, putting placards in professional offices, and enlisting the aid of local newspaper editors. Other ideas that illustrate an increase in political sophistication were the recommendations that a formal local committee to promote fluoridation be organized, that it have a positive name, such as "Citizens' Committee for Fluoridation" and that the organization should create a speakers' bureau to train speakers to speak on behalf of fluoridation before local groups.²³ The earlier argument over the dentists' role fell by the wayside in the 1960s. In article after article, authors stressed both the role of dentists and the local dental society in the campaign, and the need to cultivate broad support throughout the community, through a variety of civic, ethnic and racial groups and organizations.²⁴

These increased efforts at the community level led to a surge in the number of communities adopting fluoridation between 1965 and 1970. Several states passed laws mandating fluoridation, and New York City also initiated fluoridation.²⁵ In opinion polls, approval of fluoridation did grow,

²²Donald R. McNeil, "Political Aspects of Fluoridation," The Journal of the American Dental Association 65 (Nov. 1962): 660.

²³Leonard F. Menczer, "Fluoridation: Analysis of a Successful Community Effort-- Challenge to State and Local Dental Societies," *Journal of the American Dental Association* 65 (Nov. 1962); Bishop, (see ch.2, n.6); McNeil, "Political,"; Plaut, "Community,".

²⁴Menczer, "Fluoridation,"; McNeil, "Political,"; Sebelius; Plaut, "Community,".

²⁵Ernest Newbrun, "Achievements of the Seventies: Community and School Fluoridation," *Journal of Public Health Dentistry* 40 (Summer 1980): 236.

from 65 percent in 1959, to 77 percent in 1968, but fluoridation still lost more referendums than it won, and was even defeated in communities where only a few years earlier it had won. Gallup polls in 1952 and 1965 also showed that the majority of people who knew what fluoridation was favored it. The number of people who approved of it increased from 37 percent in 1952 to 63 percent in 1965. In reality, these polls were meaningless; after a community went through an emotionally-charged fluoridation campaign, people who had approved of fluoridation in the abstract were no longer certain that they wanted it in their own communities. Although public opinion surveys in the 1970s suggested that only 10 to 12 percent opposed fluoridation, the number of new communities adopting fluoridation slowed in the 1970s. This was partially because most populous urban areas were already fluoridated; the remaining unfluoridated water supply systems also tended to be smaller, harder-to-fluoridate systems.

In the 1960s, authors writing about their personal experiences reaffirmed the strategy of promoting fluoridation on the local level: "the best chance for success for fluoridation is at the local level and will be accomplished primarily through local organization and local effort." Profluoridationists writing about their personal experiences in the 1960s were also creating a method of pooling and exchanging information on how best to fight for fluoridation that would become increasingly important in the 1970s and 1980s. Leonard F. Menczer foresaw the importance of articles about their

²⁶Newbrun, 234.

 $^{^{27} \}textit{The Gallup Poll Public Opinion 1935-1971}, vols. 2 & 3 (NY: Random House, 1972), 1037, 1970.$

²⁸Leukhart, (see ch.1, n.68) 35. 50 to 70 percent favored fluoridation; the remainder were undecided.

²⁹Newbrun, 236.

³⁰Menczer, "Fluoridation," 675. Other examples are Sebelius, 648-652 and Plaut, "Community," 622-629.

experiences when he wrote in 1962: "All through our efforts . . . we borrowed from the experiences of other communities and developed a few original actions of our own. This then justifies the time and effort that goes into writing up experiences and, equally important, reading the written word and extracting therefrom that which is most suitable for one's own local use."³¹ Writers also began mentioning problems that later profluoridationists would discuss in detail: how organized public debates should be avoided, how local politicians avoided taking a stand on fluoridation, how endorsements from local organizations were not enough, and how a lack of concern for dental health among the general public hurt their campaigns.³²

Profluoridationists in the 1970s and 1980s drew heavily on past experiences, both from the large body of profluoridation articles and from local experiences. David Rosenstein, in his 1978 article "Fighting the Latest Challenge to Fluoridation in Oregon", cited fluoridation articles from the 1960s and the early 1970s-- Plaut, Gamson, Domoto among others-- as providing guidance for their successful campaign.³³ Profluoridationists in San Francisco were able to succeed in winning their referendum in 1974 in part by analyzing their defeats in 1960 and 1964, and making improvements in their campaign.³⁴

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³¹Menczer, "Fluoridation," 676. Sidney Weil, Jr., "Fluoridation: Analysis of an Unsuccessful Community Effort," *The Journal of the American Dental Association* 65 (Nov. 1962) is also an early example of profluoridationists learning from their experiences.

³²Weil, 680-5; Gamson, "How to," (see ch. 2, n.2) 9-11; Bishop, 663-667; McNeil, "Political," 659-663.

³³Rosenstein, (see ch.1, n.72) 69.

³⁴Boriskin, "Winning A Large Fluoridation Campaign Using Minimal Manpower and Budget," in *The Tooth Robbers*, eds. Stephen Barrett and Sheldon Rovin, (Phila.: G. F. Stickley, 1980): 89-91; Joel M. Boriskin and Jared I. Fine, "Fluoridation Election Victory: A Case Study For Dentistry In Effective Political Action," *The Journal of the American Dental Association* 102 (Apr. 1981).

By writing about their local fluoridation campaigns, profluoridationists were able to share tactics that worked; articles on these experiences formed a collective body of knowledge on how best to run a fluoridation campaign. Specific incidents in a community's campaign, such as the use of dental students in a successful door-to-door campaign in Seattle, and a Mother's Day run to promote fluoridation in San Francisco, were first described in personal accounts, then were cited as examples of good tactics by other authors.³⁵ Even articles on failed fluoridation campaigns had value; their authors candidly examined their failures and made recommendations.³⁶ In this way, through articles giving advice and personal accounts, profluoridationists were able to pool their experiences and influence each others' efforts.

Profluoridationists were not the only ones to examine and critique fluoridation campaigns; in the 1960s, fluoridation came under the scrutiny of numerous social scientists. They studied nearly every aspect of fluoridation campaigns, from analyses of voting patterns to the effects of the media on voters, to correlations between type of local government and referendum outcomes. All of these studies made no startling discoveries; many of their conclusions mirrored the conclusions drawn by profluoridationists writing from personal experience. Initial studies suggested that "no" voters were older, with middle or lower class occupations, low incomes, and no children under the age 12. Others found correlation between education: college educated voters were more likely to vote for fluoridation, but, curiously,

³⁵The two personal accounts of those incidents were Boriskin, "Winning," *The Tooth Robbers*, 100, and Peter K. Domoto, Robert C. Faine, and Sheldon Rovin, "Victory in Seattle," in *The Tooth Robbers*, eds. Stephen Barrett and Sheldon Rovin, (Phila.: G. F. Stickley, 1980): 83. ³⁶Among articles considering fluoridation defeats are Jack Scudder and Neil Spitzer, "San Antonio's Battle Over Fluoridation," *The Wilson Quarterly* 11 (Summer 1987): 162-71; Richard B. Dwore, "A Case Study of the 1976 Referendum in Utah on Fluoridation," *Public Health Reports* 93 (Jan/Feb. 1979): 73-78; and Weil, 680-5.

those with less than an 8th grade education also favored fluoridation. Efforts to associate fluoridation with specific political and social attitudes also failed to find distinctive attitudes held by either group. Many studies concluded what both profluoridationists already knew: the average voter who rejected fluoridation did so not because of a strong belief in the opposition's charges, but because of vague doubts raised during the campaign.³⁷

In 1969, sociologists Robert L. Crain, Elihu Katz and Donald B. Rosenthal put forth a theory reminiscent of McNeil's idea in the late 1950s that profluoridationists had made fluoridation a political issue. Crain and his colleagues suggested that fluoridation was a controversial issue because "overzealous proponents attempted to obtain adoption prematurely." In the early 1950s, before all the scientific studies were complete, scientific and medical opposition to fluoridation was reasonable. Proponents had pushed for fluoridation despite this, and had created a public controversy. Long after the scientific and medical opposition had faded in the face of evidence supporting fluoridation, the public controversy remained to hinder profluoridationists. Crain and his colleagues theorized that if

³⁷ Arnold Simmel and David B. Ast, "Some Correlates of Opinion on Fluoridation," American Journal of Public Health 52 (Aug. 1962): 1269-73; William A. Gamson and Peter H. Irons, "Community Characteristics and Fluoridation Outcomes," The Journal of Social Issues 17 (1961); Chester W. Douglass and Dennis C. Stacey, "Demographical Characteristics and Social Factors Related to Public Opinion on Fluoridation," Journal of Public Health Dentistry 32 (Spring 1972); C. J. Wallace et al., "The Influence of Mass Media on the Public's Attitude Toward Fluoridation of Drinking Water In New Orleans," Journal of Public Health Dentistry 35 (Winter 1975); John P. Kirscht, "Attitude Research on the Fluoridation Controversy," Health Education Monographs 10 (1961); Jean P. Frazier, "Fluoridation: A Review of Social Research," Journal of Public Health Dentistry 40 (Summer 1980); Donald B. Rosenthal and Robert L. Crain, "Executive Leadership And Community Innovation: The Fluoridation Experience," Urban Affairs Quarterly 1 (2966); William Kornhauser, "Power and Participation in the Local Community," in Perspectives on the American Community: A Book of Readings, ed. Roland L. Warren (Chicago: Rand McNally 1966), 489-493.

38Crain, The Politics, (see ch.1, n. 29) 145.

profluoridationists had waited until the scientific and medical opposition had died out, little or no public opposition would have arisen.³⁹

Sociologists, after studying fluoridation campaigns, came up with numerous other explanations for the angry reaction to fluoridation. Early researchers proposed that opposition to fluoridation stemmed from antiscientific attitudes, but most later researchers rejected this as too simplistic. So too, the suggestion that opposition to fluoridation sprung from a particular mind set, called the Naturalist Syndrome, was refuted by later studies.⁴⁰

One group of researchers believed that opposition to fluoridation reflected feelings of alienation in society. By taking the stance that they were fighting authority, the antifluoridationists appealed to socially and politically alienated and deprived individuals.⁴¹ Supporters of this theory pointed to the low status and political inexperience of local opposition leaders, and to the themes of the "little people vs. larger sinister forces" in opposition arguments. Their conclusions came into question though, when other studies presented evidence conflicting with this view.⁴²

Other researchers found little evidence to support the alienation theory, rather they compiled evidence that the fiery referendum campaigns were important in explaining voter rejection of fluoridation. They pointed out that fluoridation was a complex, highly technical question, made more difficult to judge by the conflicting evidence given by each side during the

³⁹Crain, *The Politics*, 145. In the book, immediately after proposing this theory, the authors insisted that they were not 'blaming' anyone, but merely speculating on the past.

⁴⁰Mausner, (see ch.2, n.2) 35-39; Morris Davis, "Community Attitudes Toward Fluoridation," *Public Opinion Quarterly* 23 (1959).

⁴¹John E. Mueller, "Fluoridation Attitude Change," *American Journal of Public Health* 56 (1968): 1876.

⁴²Kornhauser, 491-493; William A. Gamson, "The Fluoridation Dialogue: Is It an Ideological Conflict?" *Public Opinion Quarterly* 25 (1961): 536.

noisy and emotional campaign. To the charges that fluoridation was unsafe, proponents could only point to past studies, but they could not guarantee that evidence might not some day come to light refuting those studies. So too, for the average voter, an endorsement by an organization meant less than the word of an "expert" that fluoridation wasn't safe.⁴³

To profluoridationists in the 1960s, these explanations were important: writers often considered the explanations when they talked about waging a fluoridation campaign. To later profluoridationists, these explanations would be less important, perhaps because none of the explanations satisfactorily explained their wide range of experiences with fluoridation campaigns.

In the 1970s and 1980s, suggestions in profluoridation articles continued to increase in political sophistication. The recommendation that a formal committee be formed had expanded to a detailed description of a committee structure, with numerous subcommittees having specific tasks and goals. Authors recommended steering volunteers to subcommittees where their talents would be most useful, or seeking out needed help, such as asking lawyers to volunteer for the legal subcommittee.⁴⁴

Some of the advice could be labeled "preemptive". Before any opposition materialized, the local elected officials, non-elected administrators, newspaper editors, television and radio station managers, and various community leaders were to be approached and educated about fluoridation. If possible, their direct support was to be enlisted, but if not, profluoridationists were instructed to warn these individuals about antifluoridationists and their

⁴³Mueller, "The Politics," (see ch. 2, n.11) 59-60.

⁴⁴Examples of these descriptions can be found in Barrett, "Fluoridation," *The Tooth Robbers* (see ch. 2, n. 6); Domoto, "Victory," *The Tooth Robbers*; Boriskin, "Fluoridation,".

tactics.⁴⁵ Other advice built on earlier recommendations. To the advice given in the 1960s that the profluoridation committee have a positive name was added the suggestion that the name avoid the use of "Pro", "Ad Hoc" and "Temporary" -- all of which might give wrong impressions to voters. Education was the long-term goal, continuing even after victory was achieved, but immediate emphasis was on politics, on destroying doubts raised by antifluoridationists and on encouraging profluoridation voters to vote.⁴⁶

The suggestions for how to handle public hearings, media coverage, and door-to-door and telephone campaigns were more numerous and more specific. No longer were profluoridationists told simply to have good relations with the media. Instead they were instructed to encourage the science or health reporter of the local newspaper to write a favorable article about fluoridation before it became controversial, so that the opposition would be less likely to demand an opposing article. They were instructed to plan events or issue press releases on "slow" news days in order to get the best coverage.⁴⁷

The suggestions also showed an increased political prowess. Elected officials and newspaper editors were to be kept in line through favorable pressure from fluoridation supporters throughout the community; during public hearings, a profluoridationist was to watch over each media

⁴⁵Barrett, "Fluoridation," *The Tooth Robbers*, 67-82; Robert Isman, "Fluoridation: Strategies for Success," *American Journal of Public Health* 71 (July 1981): 717-721.

⁴⁶Domoto, "Victory," *The Tooth Robbers*, 83-87; Boriskin, "Fluoridation," 486-491; Boriskin, "Winning," *The Tooth Robbers*, 89-101.

⁴⁷Barrett, "Fluoridation," *The Tooth Robbers*, 67-82; Isman, "Fluoridation," 717-721; Domoto, "Victory," *The Tooth Robbers*, 83-87; Boriskin, "Fluoridation," 486-491; Boriskin, "Winning," *The Tooth Robbers*, 89-101; Robert C. Faine, et al., "The 1980 Fluoridation Campaigns: A Discussion of Results," *Journal of Public Health Dentistry* 41 (Summer 1981): 138-141.

representative, to prevent antifluoridationists from giving them false information and propaganda. Profluoridationists were given recommendations on how to take advantage of community organizations that supported their cause, such as requesting dentists, doctors, insurance companies, political parties and hospitals to insert profluoridation flyers into their mail to customers and members. The speakers bureau became an important tool for both educating and seeking volunteers; many profluoridation writers recommended it become a permanent feature, offering presentations on proper dental care, during which fluoridation would be discussed. Profluoridation writers stressed the importance of a positively worded, clearly phrased ballot, which avoided value-laden words like "mandatory"-- one in which the voter choose "yes" for fluoridation-- and timing the ballot for a general election or presidential election, when voter turnout would be greatest.⁴⁸

One issue that profluoridationists grappled with in the 1970s and 1980s was whether or not to confront antifluoridationists in organized public debates. All profluoridation writers acknowledged that for profluoridationists, nothing could be gained from debating the opposition publicly. The very act of debating lent credence to antifluoridation claims of a controversy, and debates gave free publicity to antifluoridationists. Because of this, a few writers adopted the stand that debates should be avoided at all costs. ⁴⁹ Others acknowledged that sometimes media and antifluoridationist pressures forced profluoridationists into a debate; either the antifluoridationists were using the refusal to debate to support their charges

⁴⁸Barrett, "Fluoridation," *The Tooth Robbers*, 67-82; Isman, "Fluoridation," 717-721; Domoto, "Victory," *The Tooth Robbers*, 83-87; Boriskin, "Fluoridation," 486-491; Boriskin, "Winning," *The Tooth Robbers*, 89-101; Faine, "1980 Fluoridation," 138-142.

⁴⁹Easley, "The New," (see ch. 3, n. 49) 138.

of a fluoridation conspiracy, or a television or radio station was going to have a show on fluoridation, and if no profluoridationists showed up to debate, then the antifluoridationists would dominate the show. In those instances, these writers thought it was better to debate, but they gave specific guidelines to minimize the damage. Some of those guidelines reflected the fear that antifluoridationists would not "play fair". Profluoridationists were warned to insist on equal time for both sides, to not tolerate antifluoridation interruptions and theatrics, and to select only their best, most experienced speakers. Other good tactics included focusing on the campaign's message, not the oppositions' accusations, and instructing the audience to speak with their dentist or doctor if they had any further doubts or questions.⁵⁰

Nationally, fluoridation efforts in the 1970s were hindered by a lack of continuity in the programs of national organizations. Although President Carter had affirmed his Administration's support for fluoridation, responsibility for fluoridation shifted from department to department, from the Division of Dentistry, USPHS, to the Center for Disease Control. In 1974, the USPHS stopped publishing its regular publication, *Fluoridation News*. Within the ADA, personnel changes also weakened their fluoridation program; when, after a four year vacancy, a Director of Fluoridation Activities was appointed, it was only a part-time position. The ADA also stopped publishing its bulletin on fluoridation, *Fluoridation Reporter*, in 1975. In 1978, the ADA tried to reverse this trend, by establishing a National Advisory Committee on Fluoridation.⁵¹

While the ADA and USPHS in the 1970s were taking a less active role in promoting fluoridation, the NHF, an opponent of fluoridation since the

⁵⁰Barrett, "Fluoridation," The Tooth Robbers, 75-6.

⁵¹Newbrun, 240-1.

early 1960s, announced a new offensive against fluoridation.⁵² On June 1, 1974, it announced that it had hired a full-time Science Director, Dr. John Yiamouyiannis, a biochemist with degrees from the University of Chicago and the University of Rhode Island, to "break the back" of fluoridation in America.⁵³ With the support of the NHF, Yiamouyiannis wrote antifluoridation pamphlets, released "studies" proving fluoridation caused cancer, spoke across the country against fluoridation, and gave *amicus curiae* briefs and expert testimony in courts. The NHF also ran several letter writing campaigns to Congress, especially whenever the USPHS budget was being considered.

In its fight against fluoridation, NHF did suffer one setback which profluoridationists were able to crow over. In January 1972, NHF had proudly announced that it had given a grant of \$16,000 to the Center for Science In the Public Interest (CSPI), an organization led by former associates of Ralph Nader, to fund a comprehensive and unbiased study of fluoridation that would at last prove that fluoridation was a hoax and a health hazard. Unfortunately, CSPI's final report concluded that fluoridation was both safe and effective. NHF refused to comment publicly on the final report, or mention the results to its members, but privately they claimed that CSPI had been "bought off" or unfairly influenced by profluoridationists.⁵⁴ Gradually, NHF scaled back its antifluoridation efforts to concentrate on promoting the unproven cancer drug Laetrile.⁵⁵ In 1978, Yiamouyiannis left NHF to form his own organizations devoted solely to fighting fluoridation: the National

⁵²For description of NHF, see ch. 1, n. 71.

⁵³Newbrun, 240-1.

⁵⁴Barrett, "The Unhealthy," *The Tooth Robbers*, (see ch. 1, n. 71) 15-16.

⁵⁵Easley, "The New," 134.

Health Action Committee, the Safe Water Foundation, and later, the Center for Health Action.⁵⁶

In the late 1970s, antifluoridationists did achieve a minor victory through the Federal Communications Commission (FCC). The FCC's "fairness doctrine" had required television and radio stations to give opposing groups reasonable opportunities to present their opinions, but the FCC put forth an interpretation of this doctrine, called the "Cullman" doctrine", which barred television and radio stations from showing a group's presentation but rejecting opposing presentations because it did not have paid sponsorship. The significance of this doctrine became clear during the Portland, Oregon fluoridation fight. A profluoridation group spent around \$25,000 on television spots; antifluoridationists, invoking the Cullman doctrine, were able to convince a station to produce television spots for their campaign and run them for free. Antifluoridationists then approached other stations that had shown profluoridation spots and demanded that theirs be shown as well.⁵⁷ Very quickly, profluoridationists began recommending profluoridationist groups either use caution when using paid television and radio spots, or avoid them all together.⁵⁸

Profluoridationists in the 1970s and 1980s repeatedly stressed how long and difficult a fluoridation campaign could be. One profluoridationist warned that "the closer you get to success, the harder the antifluoridationists will work to defeat you." Profluoridation commentators emphasized that

⁵⁶Bernhardt, "The Poisonmongers," *The Tooth Robbers*, (see ch. 1, n. 41) 6; Easley, "The New," 135.

⁵⁷Robert Isman, "The FCC, F, and Fairness," *American Journal of Public Health Dentistry* 40 (Summer 1980): 247.

⁵⁸Isman, "The FCC," 247; Barrett, "Fluoridation," *The Tooth Robbers;* Isman, "Fluoridation," 721; Boriskin, "Fluoridation," 489

⁵⁹Barrett, "Fluoridation," The Tooth Robbers, 77.

antifluoridationists were as strong or stronger than ever, and that local profluoridation committees needed to be vigilant against antifluoridation efforts and continue community education long after winning their victory.⁶⁰ Their message, that fluoridation campaigns were hard, was not defeatist; the prevailing attitude was that it was hard to win a fluoridation referendum, but not impossibly hard.

Although profluoridationists were concerned by opposition efforts to defeat fluoridation in state-wide contests, some profluoridationists in the 1980s worked to implement fluoridation state-wide. In 1987, profluoridationists in the Hawaii state Department of Health made an unsuccessful bid to fluoridate the entire state, while from 1988 to 1990, the Partners for Better Oral Health, a coalition of civic, labor, health, professional and business groups in Pennsylvania, lobbied the state legislature for state-wide fluoridation.⁶¹ These ambitious campaigns were the direct result of a growing political astuteness among profluoridationists.

During the 1970s and 1980s two alternatives to the profluoridation strategy of fighting for fluoridation at the community level were used on a limited basis: regional campaigns for fluoridation and the promotion of school-based fluoridation programs. These alternatives sprung from the growing awareness among profluoridationists that some communities and areas had special hurdles to be overcome before fluoridation could be implemented. In large urban areas, such as Boston, and in areas where many communities formed one municipal water district, such as the San Francisco bay area of California, the profluoridationists discovered that fluoridation

⁶⁰Rosenstein, 69, 72; Faine, (see ch.1, n. 73) 259; Barrett, "Fluoridation," *The Tooth Robbers*, 81.

⁶¹Michael W. Easley, "The Status of Community Water Fluoridation in the United States," *Public Health Reports* 105 (July/Aug. 1990): 351.

could best be achieved through either concerted lobbying efforts before regional water utility boards or through carefully planned aggressive political campaigns.⁶²

Profluoridationists also became aware that for some communities even a sophisticated political fluoridation campaign would not be successful because of unique economic, political or social conditions there.⁶³ Studies of some of the smaller communities that had not adopted fluoridation found that many of these communities were hindered by a small tax base, a decentralized or antiquated water system, or an awkward local political system.⁶⁴ For these communities, many profluoridationists advocated financial assistance from state and federal governments, or state legislation to force fluoridation, or school-based fluoride mouth rinse programs, which were proven effective by Swedish studies in the 1960s. Recognition of the procedure by the Food and Drug Administration in 1974 encouraged profluoridationists to promote mouth rinse programs as an option when community fluoridation seemed unobtainable.⁶⁵

Community fluoridation was still "the blue-chip method of reducing" dental caries, but a small shift in attitude by profluoridationists in the dental and public health professions had occurred.⁶⁶ In the 1950s, only antifluoridationists had dared to suggest school-based programs as an alternative to community fluoridation, but once profluoridationists had

⁶²Leukhart, (see ch.1, n. 68) 34; Allukian, (see ch.1, n. 67) 491; Boriskin, "Fluoridation," 486.

⁶³Joseph Lantos, Lois A. Marsh and Ronald P. Schultz, "Small Communities And Fluoridation; Three Case-Studies," *Journal of Public Health Dentistry* 33 (Summer 1973): 159. ⁶⁴Lantos, 149-159.

⁶⁵Jacob B. Silversin, Jeanne A. Coombs and Margaret E. Drolette, "Achievements of the Seventies: Self-Applied Fluorides," *Journal of Public Health Dentistry* 40 (Summer 1980): 248-9.

⁶⁶Alice M. Horowitz, "An Agenda For the Eighties: Self-Applied Fluorides," *Journal of Public Health Dentistry* 40 (Summer 1980): 268.

acknowledged that some communities might never get fluoridation, school-based programs became an acceptable alternative. Advocates of the school-based programs assured their fellow profluoridationists that school-based programs did not threaten efforts to win community fluoridation, and occasionally preceded the adoption of fluoridation in a community. As late as 1980, profluoridationists took comfort from the fact that, with only a few exceptions, antifluoridationists did not object to school-based programs, because they were voluntary and required individual consent.⁶⁷ By 1985 this had changed, and antifluoridationists were aggressively attacking school-based programs across the country with the same scare tactics they had used on community fluoridation.⁶⁸

Just as the profluoridationists objected to many of the antifluoridation tactics, antifluoridationists claimed that profluoridationists used unfair tactics. Their complaints ranged from unfairly using federal funds, to censorship, to name calling and character assassination.

Antifluoridationists were particularly irritated at the USPHS's funding used to promote fluoridation. They believed fluoridation would never have spread throughout the country if it had not been for the USPHS promotional efforts. One antifluoridationist called the USPHS "the sparkplug that generates the desire for fluoridation in communities throughout the country and as far away as Alaska." According to antifluoridationists, "squadrons of bright young chemists . . . have gone from city to city, meeting with chambers of commerce, boards of education, parent-teachers associations, medical and dental scientists, to tell them the bright side of fluoridation." During the

⁶⁷Horowitz, 271.

⁶⁸Easley, "The New," 136.

⁶⁹Hearings ... on H.R. 2341, (see ch.1, n. 33) 16.

⁷⁰Hearings ... on H.R. 2341, 18.

Congressional hearings for H.R. 2341 in 1954, antifluoridationists responded to the charge that the bill infringed on states' rights by insisting that the federal government was already doing so when it used its money to propagandize for fluoridation.⁷¹

Because of the USPHS's promotion of fluoridation, antifluoridationists were critical of the profluoridationist strategy to work for fluoridation at the local level. To the antifluoridationists, profluoridationists' insistence that fluoridation be decided at the local level was a ruse: profluoridationists had access to the money, prestige and influence of the federal government, without having to get national approval for the program.

Antifluoridationists were convinced that the strategy was a deliberate attempt to avoid Congressional approval and control: "Since the U.S. Public Health Service had not attempted to introduce fluoridation nationally, the program could scarcely be stopped by the direct intervention of Congress." One of the reasons both for antifluoridationists' efforts to enact national fluoridation legislation, and for their constant lobbying of Congress, was their contention that if Congress saw the USPHS program for what it really was—an effort to expand federal power—, it would put an end to it. 73

Antifluoridationists contended that federal influence went beyond simply dispersing propaganda. The USPHS used federal funds and grants to pressure both individual scientists and large institutions.

Antifluoridationists claimed that scientists who had produced research unfavorable to fluoridation were denied funding by the USPHS and later by

⁷¹Hearings ... on H.R. 2341, 23. One antifluoridationist came up with a novel solution to the problem: "If the Federal Government is providing one of its agencies with money to propagandize fluoridation, right or wrong, let the Federal Government provide an equal sum of money to give the opposition information." Hearings ... on H.R. 2341, 19.

⁷²Rorty, "The Fluoridation," *The American*, (see ch.1, n. 59) 223.

⁷³Rorty, "The Fluoridation," *The American*, 216.

the Department of Health, Education and Welfare.⁷⁴ Because of federal control of funding, antifluoridationists claimed at the Congressional hearings for H.R. 2341, "scientific witnesses who appeared before the Delaney Committee . . . and were bitter in their denunciation of fluoridation are now unwilling to testify before this group, or now find it inconvenient."⁷⁵ The USPHS also supposedly used its control of grants and funding to force research institutions to do only research that was favorable to fluoridation, and to encourage dental schools to promote fluoridation.⁷⁶ According to antifluoridationists, funding was also used to encourage local health departments to work for fluoridation: "Health officers were offered such money and power as they had never dreamed possible. All they had to do was follow 'suggestions' and it was theirs."⁷⁷

Antifluoridationists also accused profluoridationists, both in the USPHS and outside it, of using "back room" influence to garner support for fluoridation. Profluoridationists, they claimed, used "customary political buttonholing in a hotel or in club rooms prior to meetings in which important decisions are made" or "they invite members of the city councils to dinner or cocktail parties. Before the dessert is served, the decision to fluoridate their town has been made."⁷⁸

Antifluoridationists complained of censorship both in the scientific journals and general media. USPHS and ADA officials, serving on numerous editorial boards for scientific, medical and dental journals, were able to effectively block the publication of any antifluoridation articles or

⁷⁴Waldbott, A Struggle, (see ch.1, n. 51) 223-4, 249.

⁷⁵Hearings ... on H.R. 2341, 18.

⁷⁶Waldbott, A Struggle, 235.

⁷⁷Exner, "Fallacies," The American, (see ch.1, n. 43) 141.

⁷⁸Waldbott, "Fluoride," *The American*, (see ch.1, n. 51) 178, 192.

editorials.⁷⁹ Antifluoridationists blamed the lack of favorable support in the general media on a fear of losing corporate advertisers, like ALCOA, the sugar industry, the candy and soda industries.

Antifluoridationists objected to the profluoridationists' use of endorsements. The antifluoridationists saw endorsements as a major tool for profluoridationists. Endorsements, they complained, were used "to impress opponents with the unimportance of their own opinions By making it appear that 'everybody who is anybody' supports fluoridation, the promoters gather the uninformed and the half-citizens (those who follow the crowd) into the fold without much effort."80 They insisted that those endorsements did not represent the opinion of the rank-and-file members, and were most often obtained through dubious methods.⁸¹ Many charged that "Dr. Dean [of the USPHS], through his membership on numerous boards and committees of scientific organizations, national and international, obtained single-handed at least a dozen endorsements."⁸² Of the profluoridationists and their endorsements, the antifluoridationists were convinced that "it is largely due to their personal influence rather than their careful evaluation of scientific data that fluoridation has been endorsed by scientific societies."⁸³

The antifluoridationists accused their opponents of name calling and character assassinations. One antifluoridationist stated: "Whatever else the friends of fluoridation . . . may lack, it is certainly not an imaginative vocabulary of epithets." According to antifluoridationists, name calling was

⁷⁹Waldbott, "Fluoride," *The American*, 176. Dr. Waldbott, an antifluoridationist researcher, claimed this was why he was able to publish his antifluoridation articles only in foreign scientific journals. Waldbott, *A Struggle*, 268.

⁸⁰Elliot, (see ch. 2, n.7) 124.

 $^{^{81}}$ Exner, "Fallacies," *The American*, (see ch.1, n. 43) 150.

⁸²Waldbott, A Struggle, 136.

⁸³Waldbott, "Fluoride," The American, 176.

⁸⁴Elliot, 123.

an attempt by profluoridationists to scare people away from their cause. They insisted that in reality "Thousands of them, small businessmen, salesmen, barbers, musicians, teachers, ministers, priests, housewives, society matrons, office workers—in brief a solid cross-section of America's best citizens" were fighting fluoridation.⁸⁵ Antifluoridationists charged that "Sociologists in schools of social science have been given grants to write treatises in order to convince the public that opponents are unsavory people with a 'sense of deprivation' and 'alienation from society'."⁸⁶

Prominent antifluoridationists also claimed that the ADA and USPHS distributed damaging information about them to groups both in the United States and abroad in an attempt to discredit them. This information consisted mostly of untrue rumors, out-of-context quotes, and stories of embarrassing situations that had been staged by profluoridationists. Antifluoridationists complained that whenever their leaders appeared to speak before a city council or water board, invariably a local profluoridationist would mention one of the rumors or situations.⁸⁷

Antifluoridationists accused profluoridationists of having a special tactic for discrediting antifluoridationists in newly fluoridated communities. "The public was deliberately deceived by a false announcement that the program had been initiated, thus giving some of the human test animals a chance to register fear of fluoride poisoning and even psychosomatic complaints." Officials would then reveal that fluoridation had not begun and use these complaints to discredit the antifluoridationists. It was even suggested that "some of these complaints were 'planted' by proponents of

⁸⁵Elliot, 126.

⁸⁶Waldbott, A Struggle, 141.

⁸⁷Waldbott, A Struggle, 66, 165; Rorty, "Introduction," The American, (see ch. 1, n. 36) 2.

⁸⁸Rorty, "The Fluoridation," *The American*, 217.

fluoridation."⁸⁹ Antifluoridationists also protested that the profluoridationists did not play fair during debates. Profluoridationists were accused of ganging up on opposition debaters-- using two proponents against only one opponent, of asking loaded questions or rigging the entire debate to discredit the antifluoridationists.⁹⁰

Across the country, profluoridationists and antifluoridationists squared off, using similar techniques and strategies. National organizations supplied literature, technical assistance and information on what was effective and what was not. But profluoridationists and antifluoridationists, despite their diverse ideologies, shared much more with their fellow campaigners throughout America. Each side had a common view of themselves, what they were doing, and their opposition, shared by most of their members. Most importantly, they shared a common view of the campaign itself, distinctive from the opposing sides' view, which ensured that neither side would admit defeat.

⁸⁹Rorty, "The Fluoridation," *The American*, 217.

⁹⁰Waldbott, A Struggle, 174-7.

Chapter IV

The View From Each Camp

One of the reasons why fluoridation campaigns created so much conflict was the striking differences in views between the two sides. The issue of fluoridation set the tone for this itself: there was no room for compromise over community fluoridation. In the same way, there was no common ground between the two sides, no room for agreement. Each side had a distinct way of viewing themselves, their purpose, and their opposition. Both sides could not even agree on how fluoridation was discovered or first proposed. So too, their views of democracy and the American system of government conflicted, making any settlement of the issue inevitably impossible.

The antifluoridationists viewed themselves as a people's movement, "the cream of this nation's citizenry". One antifluoridationist described their movement as an iceberg: the exposed one-third was composed of experts and organizations against fluoridation, the underlying two-thirds was made of general opposition. This general opposition, they insisted, was "from every walk of life, of every creed, color, economic and intellectual status.

Outstanding Catholics, Jews, Negroes, Italians, Poles are among the leaders

¹Waldbott, *The Struggle*, (see ch. 1, n. 51) 142.

²Elliot, (see ch.2, n.7) 124.

opposed to fluoridation."³ Antifluoridationists sometimes held up individuals in the movement as examples of the typical antifluoridationist: a young mother with four children, an elderly man using his pension to fight fluoridation, a parish priest.⁴ They described themselves as "self-sacrificing, intelligent, independent in their thinking, able to distinguish truth from fiction, willing to stand up and be counted . . . vitally interested in the prevention of tooth decay and in the health of their fellow citizens."⁵ The noticeable defensive tone in their descriptions was a response to the very vocal charges put forth by profluoridationists about the character of the opposition.

Antifluoridationists also painted themselves as underdogs: "[antifluoridationists] are usually without guidance by scientists, and without funds. They lack political know-how. They are not familiar with current promotional methods nor with the art of public relations." One antifluoridationist described their membership as consisting of "individuals who stand almost alone in their communities, risking scorn, contempt and even physical abuse by urging other citizens to inform themselves on the facts of fluoridation." During the Congressional hearings for H.R. 2341, antifluoridationists represented themselves as "the little guy" fighting a superior foe: "At a great, tremendous cost in time and money spent away from their own little families, hundreds of citizens have battled or organized together to wrest themselves from the control of [the USPHS]."8

³Waldbott, The Struggle, 144.

⁴Waldbott, The Struggle, 142-3; Elliot, 126.

⁵Waldbott, The Struggle, 142.

⁶Waldbott, The Struggle, 144.

⁷Elliot, 126.

 $^{^8} Hearings\dots$ on H.R.2341 , (see ch.1, n. 33) 184.

The antifluoridationists saw themselves as on a life-and-death mission to save their fellow citizens from the perceived dangers of fluoridation. One antifluoridationist was quoted as saying: "I am on dangerous grounds, not because I may be wrong, but rather because I am right, and too many important people are wrong False friends will now desert me, but as a priest and an intelligent man, I am compelled to speak. For the sake of money or social position, I refuse to betray my helpless parish and friends . . . I could not face their scorn on Judgement Day when they learn that I knew what sodium fluoride was, and did not tell them." They were bearers of the truth, which when "the truth is known to but a few it spreads rapidly and widely and generally the truth prevails."

It did not matter whether antifluoridationists believed they were fighting a Communist plot, or the reckless expansion of government power, or simply a group of evil or foolish men seeking to take away basic human rights; they all shared this sense of mission. During the Congressional hearings for H.R. 2341, one witness, after testifying in support of the bill to prohibit fluoridation, told the committee: "To you, gentlemen, I throw the torch-- the torch of divine justice, individual dignity and liberty under law-our light to the rest of the world, the hope of all mankind. Be yours and hold it high and you will help usher in the dawn of the new age-- peace on earth, good will to men." At times, that mission was a religious mission, as attested to by the numerous references to 'God', 'our Creator' and 'God-given right'. 12

⁹Elliot, 126.

¹⁰Letter to the Editor, the American Mercury, 83 (May 1957): 158-9.

¹¹Hearings... on H.R.2341, 107.

¹²Some examples include *Hearings... on H.R.*2341, 106, 152, 177 and Elliot, 126.

Often this sense of religious mission was coupled with super patriotism, possibly because of the involvement of extreme right political groups in the movement. Antifluoridationists evoked America's past as setting a precedent for the rejection of fluoridation:

At the risk of their lives, their fortunes, and their sacred honor, our fathers fought and died to establish in this country-- not a so-called democracy that would allow any majority vote to tyrannize a helpless minority-- but a Republic, with a Constitution.

These Founders worked closely and prayerfully with God and they based the whole foundation of our law upon the 10 Commandments. They considered the individual rights of man as so significant that they also included certain amendments called the Bill of Rights . . . ¹³

Antifluoridationists often compared themselves to the early Americans: "An opposition speaker said that her ancestors had fought for their lives . . against the Indians and that the time had come to fight with equal vigor against fluoridation." The common citizen had risen up to fight during the American revolution; antifluoridationists saw themselves as following in their footsteps. Because many antifluoridationists argued that fluoridation was unconstitutional, they referred to the Constitution with special respect and sentiment: "The Constitution—the document itself—as written and preserved in our national archives with an almost sacred care, . . . is the architectural foundation and skeleton of a living, human edifice planned by the pioneers of liberty in a new country, whose first timid gropings toward self-government under freedom were inspired by an inborn spiritual instinct

¹³Hearings... on H.R.2341, 177

¹⁴Hutchison, (see ch. 2, n. 2) 241-242.

¹⁵Burns, (see ch. 2, n. 2) 14.

which is the heritage of every man, and a faint prophecy of the 'glorious liberty of the children of God' referred to in the Scriptures (Romans 8:21)."¹⁶

Profluoridationists also naturally viewed themselves as the good guys in the struggle over fluoridation, but they were at the same time self-critical. They saw themselves as leaders, who were sometimes afraid to wage an aggressive campaign for fear of sacrificing "their integrity, self-respect, independence of mind, and sense of fairness."17 As part of their efforts to understand why they were defeated, they were acutely aware of their faults. They criticized those profluoridationists who tried to introduce fluoridation by "arbitrary methods", "without adequate public explanation, public hearings and public education" or those who ran only defensive campaigns. They bemoaned the fact that antifluoridationists were often more committed than profluoridationists.¹⁹ William Gamson, in his 1961 article "How to Lose a Referendum: The Case of Fluoridation", created a fictitious profluoridationist to illustrate the good and bad features of some fellow profluoridationists. His character was conscientious, intelligent and diligent in running an educational fluoridation campaign, but failed to win because he discounted the opposition as stupid, and was arrogant, irritated that anyone would question his recommendation to fluoridate, and insensitive to citizens' concerns and fears.²⁰

Like antifluoridationists, profluoridationists believed they had a mission. They believed they had a "moral obligation to the community" to support a measure that would end "unnecessary suffering", disfigurement

¹⁶Hearings... on H.R.2341, 152.

¹⁷McNeil, "Political," (see ch. 3, n. 22) 659.

¹⁸Lull, (see ch. 3, n. 8) 63; Menczer, "Fluoridation," (see ch. 3, n. 23) 675.

¹⁹Boriskin, "Winning," *The Tooth Robbers*, (see ch. 3, n. 34) 101.

²⁰Gamson, "How to," (see ch. 2, n. 2) 9-11.

and expense caused by dental decay, a measure that was one more step on the road to improved health for everyone.²¹ Profluoridationists also stressed the importance of fluoridation campaigns to the dental and medical professions. They saw the antifluoridationists' efforts as an attack on their professions, which had to be countered. McNeil explained in a speech at the Twelfth National Dental Health Conference that "the wild antifluoridation charges against the dental, medical, and public health professions, have impact in areas far beyond the limited one of adding fluorides to water supplies By posing as guardians of the public health in this matter of fluoridation, opponents use it to arrogate to themselves the mantle of righteous protector in other fields, including medical treatment, theory, diet control and political behavior."²² To others, fluoridation presented the opportunity for the dental profession to gain more respect by promoting a preventive measure. They hoped that the idea of preventive dentistry would help end the public perception that dentists were merely repairmen for the teeth.²³ Other profluoridationists saw their mission as even broader than that; they were defending science and reason against the attitudes and beliefs embodied in antifluoridationists: "We, in the health professions, are in the front lines, defending scientific thought against hysteria, confusion and unreason. We must not fail."24

It was completely natural for the antifluoridationists to view the profluoridationists as either stupid or evil. If antifluoridationist claims were

²¹Menczer, "Fluoridation," (see ch.3, n. 23) 673-4, 676.

²²McNeil, "Time," (see ch.1, n. 49) 339-40.

²³McNeil, *The Fight*, (see ch.1, n. 2) 178.

²⁴Dublin, (see ch. 3, n. 7) 250.

true-- that there was evidence that fluoridation was ineffective and possibly dangerous-- then those who were promoting fluoridation, even in the face of this evidence, must be reckless, arrogant, obstinate or unscrupulous.²⁵ James Rorty, in the introduction to *The American Fluoridation Experiment*, speculated on the profluoridationists' continued support for fluoridation: "Are they waiting for a face-saving alternative that will permit the gradual abandonment of water fluoridation, while diverting attention from their own criminal responsibility for endangering the health of millions? Or are they so enslaved and paralyzed by past ideological and personal commitments that they will do nothing to rescue themselves and the nation from the trap into which their arrogant folly has precipitated us?"²⁶

Most antifluoridationists believed that the local profluoridationists were merely fools who had either been misled through propaganda or bribery; the men who controlled the promotion of fluoridation and must know that it was wrong were in Washington D.C. These men in Washington were usually depicted as unfeeling, uncaring, and power-hungry: an antifluoridationist testified that these men were "a group of men who believe that 'physical fitness is a duty owed the Nation', that they are under no obligation to tell the truth but should rather tell people whatever will lead them to do as they 'ought'... men who think fuzzily in term of 'average people', and are willing to sacrifice up to twenty percent of individuals to improve something they call 'the public health' and can't define."²⁷ As an example of profluoridation callousness, the antifluoridationists often

²⁵Rorty, "Introduction," *The American*, (see ch.1, n. 36) 12.

²⁶Rorty, "Introduction," The American, 27.

²⁷Hearings... on H.R.2341, 83. The comment referring to 20 percent echoed a common antifluoridation charge that the USPHS has admitted that up to 20 percent of individuals may develop mildly mottled teeth from drinking fluoridated water, which antifluoridationists contended was a sign of fluoride poisoning.

repeated the story of the profluoridationist at the Delaney hearings who recommended that if people with kidney problems who were afraid to drink fluoridated water, "let 'em drink bottled water".²⁸

Despite antifluoridation contentions, the profluoridationists always envisioned the antifluoridationists as a small minority, "never large in active members, ...[but] shrewd, vigorous, often ruthless, and well financed."29 Profluoridationists claimed that "in hearing and in referendum arguments we find the same people over and over again.... Their intensity and omnipresence makes them appear like a multitude."30 The antifluoridationists had to be either crackpots and cranks, or people financially motivated to oppose fluoridation; why else would they oppose an innovation that had been proven safe and effective? So too, it was important for profluoridationists to believe that antifluoridationists were a minority, otherwise they would have little hope for winning a referendum. Profluoridationists saw the antifluoridationists as divided into two groups: those local antifluoridationists, who had been stirred up and guided by national antifluoridationists; and the national antifluoridationists, "a small cadre of professional propagandists... the driving force, with most or all of their livelihood often depending upon consultation or testimony for the local" antifluoridationists.³¹

Profluoridationists sneered at the local antifluoridationists, at the "motley" character of that opposition, and their varying, sometimes

²⁸Rorty, "The Fluoridation," *The American*, (see ch.1, n. 59) 223.

²⁹McClure, (see ch.1, n. 1) 263.

³⁰Metzner, (see ch. 3, n. 8) 170.

³¹Easley, "The New," (see ch. 1, n. 9) 134.

conflicting views.³² They made light of the fact that antifluoridationists often opposed other things, such as pasteurization, income tax, white bread and refined sugar. Much of this derisive view was colored by the many sociological studies of fluoridation campaigns. It was easy for profluoridationists to dismiss local antifluoridationists when sociologists and psychiatrists suggested that some antifluoridationists were "'fear-directed' people who need something like fluoridation to give substance to their inner anxieties" or people who felt threatened or out of control in a changing world.³³ In contrast to local antifluoridationists, national antifluoridationists were viewed with anger by profluoridationists, because profluoridationists saw them as exploiting peoples' fears for profit. To profluoridationists, national antifluoridationists were charlatans and snake oil salesmen, and when talking about them, profluoridationists stressed their connection with bogus health organizations, and their criminal records for breaking federal drug laws.³⁴

One of the more interesting differences between the profluoridationists and the antifluoridationists was their different versions of the history of the discovery of fluoridation. Profluoridationists were less interested in discussing the history of fluoridation, while antifluoridationists often found

³²Attwood, (see ch.1, n. 46) 21. Profluoridationists pointed out that some opponents supported the use of fluoride tablets in place of treated water, while others insisted that a single dose of fluoride would affect an individual's health.

³³Attwood, 22; Judd Marmor; Viola W. Bernard and Perry Ottenberg, "Psychodynamics of Group Opposition to Health Programs," *American Journal of Orthopsychiatry* 30 (Apr. 1960): 332; Arnold Green, "The Ideology of Antifluoridation Leaders," *The Journal of Social Issues* 17 (1961): 25.

³⁴Easley, "The New," 133-141; Michael W. Easley and C. A. Wulf, "Nutritional Quackery, the Health Food Industry, and the Antifluoridation Movement," *Ohio Dental Journal* 57 (May/June 1983): 19-26; Barrett, "The Unhealthy," *The Tooth Robbers*, (see ch. 1, n. 71) 9-16.

it important to their arguments against fluoridation. Even within the antifluoridation camp, there were various versions of how fluoridation was discovered, although those different versions rarely led to any conflict among them.³⁵

Profluoridationist versions of the discovery were most often watered down versions of the history presented here. Profluoridationists were not particularly interested in the origins of fluoridation, in part because it was not important to their campaigns, but other reasons may also have discouraged profluoridationists from discussing the origins of fluoridation. Certainly antifluoridation charges and abuse of the history may have detered profluoridationists.

Most versions refrained from mentioning McKay and his work on mottling, possibly because those facts might be interpreted as supporting antifluoridation arguments that fluoride was undesirable. The struggle within the dental and public health communities over fluoridation, between the Wisconsin Idea and more cautious organizations, was also not mentioned, for the similar reason that it might give readers the idea that fluoridation was controversial. So too, profluoridationists made almost no mention of Churchill and Cox to avoid lending support to antifluoridation conspiracy charges against ALCOA and the aluminum industry. Mention of the Smiths was also taboo, because in the 1950s, the Smiths had publicly opposed fluoridation. Profluoridation histories in general stressed the careful and conclusive research of Dean and the USPHS, the tests at Grand Rapids

³⁵I am aware of only one instance where different interpretations led to a public conflict between antifluoridationists. At the Congressional hearings for H.R. 2341, it appears that some antifluoridationists attempted to prevent one antifluoridationist from testifying about a Communist-Rotary Club conspiracy to destroy America which was begun in 1909. *Hearings... on H.R.2341*, 164-173.

and Newburgh, and the acceptance of fluoridation by cities and towns across the country.³⁶

Antifluoridation histories ranged from those which varied in slant, interpretation or details from profluoridation histories, to those which were completely different from most other pro- and antifluoridation histories. Histories were extremely useful to antifluoridationists: they provided antifluoridationists with numerous examples to support their charges against profluoridationists, and in some instances, justified the antifluoridation campaigns themselves.³⁷

Those histories which accepted McKay's role in the discovery either stressed that McKay had been studying mottling or insisted that McKay exaggerated his role in the discovery. They also downplayed the years of extensive research done by Dean. When they mentioned Dean's work, they emphasized that his original assignment was to determine what was a safe level of fluoride and how many water supplies contained unsafe levels. Other histories made no mention of McKay, but credited the discovery to the Smiths. This was because the Smiths had spoken against fluoridation at the Delaney hearings; even after they recanted and cautiously accepted

³⁶Some examples of profluoridation histories can be seen in Dublin, (see ch. 3, n. 7) 246; Benjamin D. Paul, "Fluoridation and the Social Scientist: A Review," *The Journal of Social Issues* 17 (1961): 1; Clayton T. Shaw, "Characteristics of Supporters and Rejectors of a Fluoridation Referendum and a Guide For Other Community Programs," *the Journal of the American Dental Association* 78 (Feb. 1969): 339; Easley, "The Status," (see ch. 3, n. 61) 348; Knutson, (see ch.1, n. 26) 197; Mausner, (see ch. 2, n. 2) 35; Bernhardt, "The Poisonmongers," *The Tooth Robbers*, (see ch.1, n. 41) 2; Franz J. Maier, *Manual of Water Fluoridation Practice* (NY: McGraw-Hill, 1963).

³⁷Some examples of antifluoridation histories are "Red Scheme," (see ch. 2, n. 17) 134-135; Waldbott, A Struggle; Rorty, "The Fluoridation," The American; Leo Spira The Drama of Fluorine, Arch Enemy of Mankind (Milwaukee, 1954); Exner, "Fallacies," The American, (see ch.1, n. 43); John Lear, "The Real Danger In Fluoridated Water," Saturday Review 46 (Dec. 7, 1963): 77-78. One article which mentions the history of fluoridation, that cannot be classed as either profluoridation or antifluoridation (the author is equally critical of both sides) is Ellen Ruppel Shell, "An Endless Debate," Atlantic 258 (Jan. 1986): 26-31.

fluoridation in 1956, antifluoridationists still cited their earlier comments.³⁸ These histories also stressed that artificial fluoridation was first suggested by Cox, a researcher at the Mellon Institute, which was supported by money from ALCOA. If they mentioned Churchill, they emphasized his connection with ALCOA. They used these facts to support numerous conspiracy theories about the role of Big Business in fluoridation promotion, and suggestions that fluoridation was first proposed as a way to dispose of industrial waste.³⁹

Antifluoridation histories also gave significance to a story that profluoridationists never mentioned. Antifluoridationists told the story of Dr. George W. Heard, a dentist in Hereford, Texas, who reported around 1920 that almost no one in his county had tooth decay because of something in the water. At first the dentist claimed it was because of fluoride, but later he believed it was calcium in the water or iron in the food. Antifluoridationists stated that later studies found that people in the area did suffer from tooth decay, but that by then the USPHS had already latched onto the idea of fluoridation. The incident was cited as evidence that the USPHS was mistaken from the start and basing its recommendations on inaccurate information.⁴⁰

For other antifluoridationists, it was Dr. Heard's report alone, not the work of the Smiths or McKay or Dean, that initiated the fluoridation movement. Aluminum companies, desperate to dispose of their toxic waste

³⁸Rorty, "Introduction," *The American*, **4**. The Smith recant was not widely publicized, although it was mentioned in "News of Dentistry," *The Journal of the American Dental Association* 52 (Jan. 1956): 97.

³⁹John Lear, "Fluoride's Checkered Past," *Saturday Review* 47 (Jan 4, 1964): 90-91; Rorty, "Introduction," *The American*, 5; Waldbott, *A Struggle*, 11-13, 118-125; Exner, "Fallacies," *The American*, 82-86, 121-123. Dr. Exner described McKay's chief contribution to the study of mottling as "exploiting the then new facilities for medical illustration." Exner, "Fallacies," *The American*, 86.

⁴⁰Rorty, "Introduction," *The American*, 5; *Hearings... on H.R.2341*, 50, 125-6. I have been unable to confirm or disprove this story.

product, latched onto the erroneous reports about fluoride in Hereford protecting people's teeth. At first, the aluminum companies, led by ALCOA, tried to promote fluoridation in magazine ads suggesting that cities should fluoridate, but when that did not produce results, ALCOA hired an attorney named Oscar Ewing. Shortly thereafter, Ewing became Federal Security Administrator, which enabled him to start the Grand Rapids studies, and to begin a campaign to promote fluoridation nationally.⁴¹

Still other antifluoridationists claimed that fluoridation had not originated in America at all. Some insisted that fluoridation was discovered by the Russians, who used it during World War II to control inmates in prisons and slave labor camps, and after the war to seize control of Rumania, Czechoslovakia and Poland. The idea of fluoridation had been brought to America by Russian agents, possibly by "the group brought over here from Europe by Frances Perkins to set up the so-called social security..." or by a group coming to America after World War II.⁴² A few of these suggested that the Russians had an even more sinister motive than merely worlddomination. They were convinced that the Russians were planning to create a new type of human being, after they had eliminated the old through fluoridation.⁴³ Others credited the Nazis with the discovery of fluoridation in the 1930s to "reduce population by water medication that would produce sterility in the women" and "to reduce the resistance of the masses to domination and control and loss of liberty", which they used with great success in the Polish blitzkrieg. The Russians either learned the secret during

⁴¹Hearings... on H.R.2341, 50-2.

⁴²Hearings... on H.R.2341, 165-9.

⁴³Hearings ... on H.R. 2341, 168.

an exchange of information with the German General Staff, or later when they overran eastern Germany.⁴⁴

Profluoridationists and antifluoridationists also had conflicting views on the political system within which they campaigned. Referendums were necessary evils for profluoridationists; although referendums often meant defeat, profluoridationists accepted them as a necessary part of the American political system. The antifluoridationists saw referendums as merely tools toward achieving their goal. They actually rejected the notion that fluoridation could and should be decided by popular vote. Regardless of their ideological difference, of their varied beliefs over the origin of fluoridation or why it should be rejected, antifluoridationists believed ultimately that individual rights were more important than the majority will.

Of the two sides, the profluoridationists fared worse with referendums— their efforts to avoid them reflected this— but surprisingly, that did not sour them toward democracy. Rather, they took strength from the fact that theirs was a democratic society, where the people had a say in government policy. Profluoridationist Charles Metzner voiced a common view: "Let us... remember that this is as it should be; this is what we mean by democracy. I hope we cannot sneak much past our electorate." McNeil also reaffirmed the public's right to decide the issue, as part of a system which "guarantees the right of every person to win the public to his persuasion."

⁴⁴ "Red Scheme," 134-135.

⁴⁵Metzner, 169.

⁴⁶McNeil, "Political," 659.

Some profluoridationists and sociologists who studied fluoridation did express some frustration over democracy, but even they acknowledged that "widespread citizen participation in local politics" was in the long run desirable.⁴⁷ Other sociologists questioned the wisdom of presenting technically complex questions, like fluoridation, to the electorate. They postulated that representative democracy, rather than participatory democracy, was more suited to deciding complex questions in the modern world.⁴⁸ Some profluoridationists merely bemoaned the expense to taxpayers that repeated fluoridation referendums represented, or the fact that those who most benefited from it-- children-- could not vote.⁴⁹ Still others believed that the fault lay not with the democratic process, but with the failure of profluoridationists to convince enough voters.

Some of the support for democracy no doubt came from the understanding that democracy cut both ways, allowing for both the rejection and the acceptance of fluoridation. Profluoridationists were not unaware that democratically adopted fluoridation meant that a minority would be forced to drink fluoridated water against their will, but they accepted that as a part of the democratic process. George F. Lull, secretary of the AMA expressed a typical profluoridation view: "With all due allowance for the democratic process, it must be held that the resistance to fluoridation of water supplies is a minority opinion and that the majority must rule, despite the possibility sincere opinion of the opposition."51

⁴⁷Crain, The Politics, (see ch.1, n. 29) 228.

⁴⁸Paul, 6; Harvey M. Sapolsky, "Science, Voters and the Fluoridation Controversy," *Science* 162 (Oct. 1968): 432-3.

⁴⁹Bernhardt, "The Poisonmongers," *The Tooth Robbers*, 5-6.

⁵⁰Letter to the Science Editor, Saturday Review 47 (Feb. 1, 1964): 53.

⁵¹Lull, 13.

In response to the issue of individual rights, profluoridationists insisted that dental caries were serious enough to justify public intrusion on individual rights. In a letter responding to an antifluoridation article, one profluoridationist asked: "Even conceding that the right to drink non-fluoridated water is a freedom, should not adults be willing to relinquish this small freedom so that our children may have a larger one, namely, freedom to enjoy better dental health?" 52

In contrast to the profluoridationists' acceptance with democracy, the antifluoridationists rejected the notion that fluoridation could be settled through democratic means. Despite their demands for referendums, antifluoridationists believed that ultimately "even a majority popular vote for fluoridation would not invalidate the constitutional right of a minority not to be subjected to medication against its will."53 They insisted that America was "not a so-called democracy that would allow any majority vote to tyrannize a helpless minority-- but a Republic, with a Constitution."54 It made no difference to antifluoridationists if fluoridation was adopted by referendum or administrative adoption: no man had "any right, or police power, to force [his] neighbor to take [fluoridation], either by persuasion, by a voting machine, or by force."55 One antifluoridationist stated: "It is perhaps an old-fashioned notion that people, even if they are in a minority, have a right to be let alone. The adherents of this school of thought hold the view that our democratic tradition demands a respect for the privacy of the individual-- a respect for the desire of the individual to be let alone even if he

⁵²Letter to the Science Editor, Saturday Review 47 (Feb. 15, 1964): 25.

⁵³Rorty, "Introduction," The American, 23.

 $^{^{54}}$ Hearings... on H.R.2341 , 177.

⁵⁵Hearings... on H.R.2341 , 154.

is in a minority and notwithstanding that most people may think he is wrong."56

Even to those antifluoridationists who opposed fluoridation for medical reasons, underlying individual rights were important. A survey of antifluoridation leaders who opposed fluoridation because they believed it was poisonous found that most still would oppose fluoridation, even if it was found safe, because they perceived it to be an infringement of their rights.⁵⁷ One antifluoridationist wrote in response to a profluoridation article: "No matter how glowing or reassuring your reports on fluoridation, fluoridation is still compulsory mass medication. The very principle [of fluoridation] is anathema to those who believe in freedom of choice. I am not a crazy, a crank, a coward, or a doomsayer. If I want to take fluoride-- or any other medication-- I shall do so. But I want that judgement to be my own. Is that too much to ask?"⁵⁸

Nor would antifluoridationists accept the profluoridation recommendation that if they did not want to drink fluoridated water, they should buy bottled water. Antifluoridationists not only saw it as their mission to protect others from fluoridation whether those others appreciated that protection or not, but they insisted that drinking public water without fluoridation was their right: "Natural water is a right the individual can expect from his municipality. In the use of that right no individual should be obliged to take a preventive medicine, especially when that medicine is a rat poison for which there is no known antidote."⁵⁹

⁵⁶Hearings... on H.R.2341 , 44. The witness acknowledged that some situations required individual rights to be put aside in favor of the public good, but denied that fluoridation was a comparable situation.

⁵⁷Green, 13-25.

⁵⁸Letter to the Editor, Consumer Reports 44 (Jan. 1979): 56.

⁵⁹Hearings... on H.R.2341, 47.

Conclusion

On August 4, 1992, over forty years after the introduction of fluoridation, the citizens of Brunswick, Maryland rejected fluoridation 496 to 208, with two-thirds of the voters not voting. This referendum, like many fluoridation referendums, was called when the local town council decided that the issue was too controversial for them to decide. Most of the debate, waged in the local newspaper's letter page, was carried on primarily by outsiders because of general disinterest among residents. Even with the promise of a state grant to cover the initial cost of fluoridation, the loss was predictable. Special referendums on fluoridation typically have a low voter turn-out, giving the antifluoridationists an advantage. So too, the lack of interest among residents guaranteed its defeat. One dentist complained "If I bring it up, it's 'What do you think?' I say I'm for it. Okay, next topic. Nobody gives a damn."

The endurance of the fluoridation controversy cannot be blamed simply on die-hard opposition, voter apathy or gullibility, or antifluoridation arguments that take advantage of social trends. Other controversies with similar characteristics have not had the same longevity. Opposition still exists among right-wing extremists, food faddists and certain religious groups toward vaccinations, pasteurization and blood transfusions, but for the

¹"Fluoridation Vote Barely Stirs Political Waters of Md. Town," Washington Post, 2 August 1992; "Md. Town Votes Against Fluoridation," Washington Post, 5 August 1992.

general public those issues are no longer controversial. These groups may hold firmly to their convictions, but their arguments do not necessarily generate public support for their cause and create controversy. One very effective antifluoridation argument—that it violates the individual's right of choice—does not evoke the same public reaction when applied to vaccinations.

Nor does the composition of the opposition explain why fluoridation remains controversial. The support of right-wing extremists has not been a significant factor in the longevity of the fluoridation campaign, because this group's participation in the antifluoridation movement has steadily declined since the 1950s. Food faddists have been more successful in keeping fluoridation controversial than with other issues with which they are concerned, such as aluminum cookware. Certain extreme religious groups have been no more successful in opposing fluoridation than in opposing other health innovations they find objectionable. The shifting nature of arguments against fluoridation also is not an important factor in fluoridation's longevity. While antifluoridationists have used arguments that appeal to the New Age and health food movements in order to attract new support, other food faddist issues have had far less success in exploiting those movements.

The effect of anti-scientific attitudes on the fluoridation controversy has also been exaggerated by the profluoridationists. Surveys by the scientific community have shown only a slight decline in public approval of science since the 1950s.² Since that time, the red dye #2 scare, saccharin warning and

² Science Indicators 1980, National Science Board, as cited in John Walsh, "Public Attitude Toward Science Is Yes, But--," *Science*, 215 (Jan. 15, 1982): 270-71. A public survey in 1980 by the National Science Board indicated that sixty-six percent of those surveyed approved of science in general, down from eighty-seven percent in 1957.

conflicting pronouncements on oatbran and iron may have undermined the public's faith in scientific advice in general, but those incidents have not had a direct effect on the fluoridation controversy. Defeats and victories for fluoridation stabilized and remained fairly constant through the 1970s and 1980s; the red dye #2 scare or other scientific reversals were not a notable factor in any fluoridation campaign during that period.

Profluoridationists sometimes blamed the endurance of the fluoridation controversy on the failure of profluoridationists to run effective campaigns. This explanation has some validity, although it does not completely explain why the fluoridation controversy has endured. When profluoridationists lost a referendum, antifluoridationists did gain some legitimacy, and the controversial image of fluoridation was strengthened. A failed campaign also meant the profluoridationists would have to try again with another campaign. Even so, there is no evidence to suggest that if the antifluoridationists had lost more often, they would have given up. In communities where antifluoridationists were repeatedly defeated, they still continued to fight against fluoridation. The numerous profluoridation victories only indirectly influenced other communities and local governments. It also is not clear that legitimacy had any significant influence on local fluoridation campaigns: in some fluoridation campaigns, when profluoridationists discredited antifluoridationists, the profluoridationists still lost.

These possible explanations of the fluoridation controversy are too superficial. Explaining why fluoridation remains controversial requires an understanding of controversies in general. A controversy occurs when groups within society come into conflict over their differing views on a specific issue. Controversial issues need not be national issues; the

construction of a local prison, highway or the ratification of a new local law can become controversial issues within one community. A controversy does not have to involve the entire society; it can exist in the confines of a single community. This is how fluoridation survives as a controversy. At any given time, somewhere in the United States, fluoridation is a controversial issue.

Controversies are settled or ended in a number of ways. They may be resolved through a single event, such as an election or legislative action, although discussion of the issue may continue for a period of time after it. Congressional approval of the declarations of war in 1917 and 1941 put an end to the controversies over whether the United States should have entered the World Wars. Even though individuals still may have voiced opinions opposing the United States' entry into those wars, for all intents and purposes, the question was settled.

Other controversies are resolved by the passage of time. Important issues in the nineteenth century, such as the Silver Question and the Homestead laws, are no longer controversial in part because the public no longer considers them to be important issues. Sometimes, as time passes, evidence accumulates which favors one side, or one opinion finds general public acceptance. Vaccination and blood transfusions are examples of this. As evidence grew that vaccines and blood transfusions were both safe and effective, opposition to them dwindled to a small group of extremists. The general population adopted the opinion that these health innovations were safe, ending the controversy surrounding them. Milk pasteurization has also gained widespread acceptance as its benefits have become apparent. Today only a small minority objects to it, while most consumers take pasteurization for granted.

The controversy surrounding a report on milk published in mid-1992 illustrates the life of a typical controversy. A group of scientists published a report claiming that milk was far less healthy than people believed and recommending that most people, especially babies, should drink less milk. Immediately a heated debate broke out over whether the report was correct or not. Some prominent doctors endorsed the report; some organizations publicly rejected the conclusions. Newspapers and news programs across the country discussed the issue and presented the opinions of various doctors and nutritionists for or against the recommendations. Critics of the report pointed out that the study was funded by a pro-vegetarian group; supporters elaborated on the negative qualities of milk. The controversy had run its course in a matter of weeks. Less attention was given to it as other issues gained prominence. There were no further actions, such as the publication of conflicting studies or efforts to act on the report, to fuel the debate. The debating and discussion dwindled until the controversy faded away for all but the extremists on either side.

The ways in which the fluoridation controversy is different from the milk controversy and other controversies that have faded away is what keeps the fluoridation controversy alive. The fluoridation controversy cannot simply run its course and fade, like the milk controversy, because referendums continue to occur, keeping the issue alive. No single event has occurred to mark the end of the controversy; even within one community, a referendum does not usually kill the debate. Despite the apathy of the general public, both sides of the controversy, by their continuing actions, do not allow the issue to die.

The nature of fluoridation also hinders the resolution of the controversy. The absolute safety and benefits of fluoridation are impossible to

prove. Lab testing of fluoridation is inadequate for documenting its effect on humans, while the statistical variables involved in a population study focused on drinking water make conclusive proof impossible to obtain. The benefits of fluoridation are also difficult to document. Researchers measuring the benefits of fluoridation would be required to calculate a nonexistent product—the number of cavities children did not develop. The task of measuring both benefits and safety is further complicated by the prevalence of fluoride in commonly consumed foods, such as tea, toothpastes and mouthwashes, which are all used in varying amounts by individuals. Conclusive proof may never be available to give either side an advantage in the controversy.

General public acceptance of fluoridation is also hindered by the fact that fluoridation is invisible. Consumers cannot taste it; the public suffers no obvious pain connected with its absence. Although the public is not forced to think about vaccinations every day, the results of the failure to vaccinate-outbreaks of disease with the possibility of death-- strengthen public acceptance of vaccination as a necessity. Fluoridation never results in this: someone with a cavity does not regret the fact that they didn't drink fluoridated water. And unlike vaccinations, which almost always prevent illness, fluoridation does not guarantee cavity-free teeth. Nor is the prevalence of fluoridated consumer goods necessarily a boost for fluoridated water. Although it increases public awareness of fluoride as a weapon against tooth decay, it may also encourage apathy towards fluoridation, since many voters may reason they don't need fluoridated water if they use fluoridated toothpaste.

Thus, the peculiar qualities of fluoridation hamper the resolution of the controversy and lead to the great emphasis that is placed on the character of the proponents and opponents. Their willingness to go on fighting over fluoridation is the obvious reason for the continuing controversy, but the continuing controversy is rooted in the nature of fluoridation. Eventually the struggle may end. It would help if referendums were to become rarer and there were fewer opportunities for public debate. Profluoridationists would regret the lack of fluoridation in private, but they would not be moved to take public action. Antifluoridationists would curse the fluoridation in the local public water, but they would buy bottled water rather than publicly protest. Like other controversies in the past, the fluoridation controversy will come to an end when fluoridation is no longer a public issue, decided over and over again at emotionally-charged community hearings and in hotly contested referendums.

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