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A special meeting of the Board of Representatives of the City of Stamford, Conn. was held on Monday, May 14, 1956, in the Auditorium of the Walter Dolan Jr. High School, Toms Road, Glenbrook, in response to a "Call" by the President, Mr. George V. Connors.

The President called the meeting to order at 8:15 P.M.

ROLL CALL was taken by the Clerk. There were 20 members present and 20 absent. The absent members were: William Brett, Irving Snyder, William Kaminski, Joseph Milanc, Vincent Vitti, Clifford Waterbury, Salvatore Giuliani, Charles Gilbert, Robert Lewis, Doris Zuckert, Robert Findlay, Eugene Barry, Stephen Kelly, Edward Czupka, Frank Longo, Charles Bradbury, Alanson Fredericks, Rutherford Huizinga, Jack McLaughlin, and Joseph Iacovo.

Pursuant to the provisions of Section 202 of the Charter, the President read the "Call", which was sent to all members of the Board:

BOARD OF REPRESENTATIVES
Stamford, Conn.

I, George V. Connors, President of the Board of Representatives of the City of Stamford, pursuant to Section 202 of the Charter, hereby call a SPECIAL MEETING of the members of the Board of Representatives, on

MONDAY, MAY 14, 1956

at 8:00 P.M.

in the DOLAN JR. HIGH SCHOOL AUDITORIUM,

TOMS ROAD, GLENBROOK

for the purpose of:

hearing the proponents on fluoridation of the City water supply.

I hereby order a copy of this Call to be mailed to all members of the Board of Representatives at least seventy-two hours before the time fixed for said meeting.

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George V. Connors,
President,
Board of Representatives

The President then announced he was turning the meeting over to Mr. Clement Raiteri, Chairman of the Legislative and Rules Committee.

Mr. Raiteri took the Chair. He announced as follows: "Our program this evening has been arranged in two halves. We have the speakers for the first half on the stage at the present time. After they are through we will have a recess, and after the recess we will have four more speakers. Our first speaker is Dr. Bartley Fahey. He is the President of the Stamford Dental Association."

Dr. Fahey spoke briefly, outlining the reason for the meeting, saying it was held in order to outline the why and wherefores of the timely subject of fluoridation of the water supply. He said: "We have many qualified speakers here this evening, who

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have graciously given their time to give these whys and wherefores in regard to the fluoridation program. In order to keep this meeting within the time limit that the Board has given us, and also to avoid as much repetition as possible, we, of the Stamford Dental Society, have limited our speakers to a few minutes each. Those of us who are practicing dentists in Stamford like to feel that you as patients have trust and faith in our judgment. If our judgment, based upon our scientific background and we and all the other citizens of Stamford, have faith and trust in you, the Board of Representatives, when you make your decisions based upon your analysis of the facts, whether they be of a scientific nature or not - otherwise - would we have elected you as our representatives?" He mentioned the vote taken at the Council of Parents meeting a few days ago in regard to fluoridation of the public water supply. He said the significant factor of that vote, to him, was the abstaining vote of 21 members, who, obviously did not feel sufficiently well qualified to take a stand on the matter. He said it was impossible to be well informed on all subjects in this day and age so that it was necessary to rely on the judgment of men who were specialists in these fields, this being the reason for bringing men to this meeting who were highly informed on the subject of fluoridation. He stated that fluoridation of the water supply was recommended by the U. S. Public Health Service, the American Dental Association, the American Medical Association and others, in order that the public could have protection against dental decay, which now affects 90% of the population. He said the members of the Stamford Dental Association have voted and gone on record in favor of fluoridating the public water supply of Stamford, as recommended by the United States Public Health Service.

Mr. Raiteri said at this point there were two things he had neglected to mention: 'The first eight speakers will not be open to questioning from the Board. The last four speakers will be open to questions, so I would ask you to jot down your questions and save them until after the recess. Also, I wish to point out the fact that this is not a public hearing and there will be no audience participation in the meeting. This is a special meeting of the Board of Representatives and they alone will speak and ask questions. Our second speaker is Dr. Warren Roulo, who, at the present time is a member of the Board of Education and is the Past President of the Western Fairfield Dental Association and a fellow member of the New York Academy of Dentists.

Dr. Roulo spoke briefly. He said: "I wish to refer you to a statement made by Dr. Simon A. Beisler. I am referring to page 1177, line 17 of the second paragraph of that page, quote: 'This being so, it is therefore a drug'. I will quote again: 'They recommend fluoridation of communal water supply one part per million, which is equivalent to one milligram of sodium fluoride in each quart of water. This is supposed to act upon the body of the consumer, altering their body function and thereby giving their teeth resistance to decay. This being so, it is therefore a drug.'

"The addition of a millionth part of sodium fluoride to the water supply is not a medication - it is nutritional, making available to the body one of the necessary building stones to form the complicated proteins and other organic tissues within the body. As you doubtless know, the human body is composed of the following elements in quantity: Carbon, hydrogen, nitrogen, oxygen, sulphur, sodium, potassium, iron, chlorine, magnesium, calcium and phosphorous. But minute quantities of iodine, cobalt, copper, manganese, zinc and fluorine are also necessary. None of the foods that you eat daily contain the proper amount of these elements, but all are necessary. The foods that you eat are not drugs, but the lack or over-supply can alter the bodily functions, and so can the lack of the element fluorine. I am asking you to keep in mind the catch phrase that has also been used all over this country, mass medication. The proper phrase is normal nutrition. Once again on page 1178 of this same report, Dr. Beisler said, and it is quoted directly in the third paragraph, 12th and 13th lines: 'It spells trouble for those who are

allergic, hyper sensitive, those with malnutrition, diabetics, etc.' I wish to mention malnutrition. In a country with a food surplus like we have and in a city like Stamford, we find thousands of people suffering from malnutrition, which can be corrected through the simple addition of minute amounts of fluoride to the water. The human teeth start to form 4 or 5 weeks after conception and continue for many years after eruption. This development is through a complicated exchange of materials from the elements held in suspension through suspension in the saliva. These salivary glands must have basic elements in constant supply. Professor David Weisberg, professor of Oral Medicine at Harvard University Dental School is my authority. Gentlemen, I urge the fluoridation of the Stamford Water Supply. (Applause)

Mr. Raiteri introduced the next speaker, Dr. Richard Lutz, President of the Western Fairfield Dental Society and a practicing dentist in Stamford.

Dr. Lutz addressed the members of the Board on behalf of the Western Fairfield Dental Society. He said the members of this organization are licensed, practicing dentists from Stamford, Greenwich, Darien, Norwalk, New Canaan, Westport and Danbury. He said: "On two separate occasions, the members of this Society have voted unanimously to go on record as approving the fluoridation of water systems in the communities in which they live and practice. Admittedly, it is not practicable for each dentist to devote the time and study necessary to qualify as an authority on this subject. However, just as the citizens of these areas express confidence in their dentists in matters concerning the care of their mouths and teeth, so the dentist, in turn, have confidence in the published results of extensive research done on the subject of fluoridation by qualified experts in the U. S. Public Health Service, the American Medical Association and the American Dental Association." He said also that they, as dentists, have confidence in their members of the Board of Representatives as their duly elected representatives in the city government to provide that which is for the greatest good, health and welfare of the population, and in return, for this confidence, that they also accept the evidence which their well informed authorities will present to the members of the Board.

Mr. Raiteri introduced the next speaker, Dr. Bert Ballin, an Orthodontist and Past President of the Stamford Dental Association and Chairman of the Committee on Fluoridation of the Stamford Dental Society for the past 2 years.

Dr. Ballin said: "This month, the fluoridation of water will start in Chicago, the second largest city. Fluoridation was approved in June 1954 by the City Council, the Chicago equivalent of our Board of Representatives. I cannot imagine that the health authorities in Chicago are trying to poison its citizens. Their health authorities and consultants have assured them beyond any reasonable doubt as to the safety and efficacy of fluoridation. They have grasped the opportunity to make available important health benefits to the citizens of Chicago. Fluoridation has received more research than any other single public health measure of its kind. All this research determines the effectiveness in reducing decay and its safety for young and old alike. As of January 1956 over 22,000,000 people in the United States were receiving the benefits from fluoridated water in 1,127 communities. In New York City, the Board of Health submitted a 52 page report, giving their unqualified support of fluoridation." He mentioned several cities having fortified their water supply by the addition of fluoride, being Baltimore, Washington D. C., Milwaukee, Pittsburgh, Indianapolis, Rochester, Santiago, Richmond, Providence, St. Paul, San Francisco, to name but a few. He gave the following organizations as being in favor of fluoridation: American Medical Association, the Connecticut Medical Society, the Stamford Medical Society, American Dental Association, the Connecticut State Dental Association, the Stamford Dental Society, U. S. Public Health Service, American Academy of Pediatrics, American Public Health Association, American Water Works Association, American Society of Dentistry for Children, Connecticut Society of Dentistry for

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Children, National Research Council, the Commission on Chronic Illness, plus some lay groups such as the National Congress of Parents and Teachers, the U. S. Jr. Chamber of Commerce, the American Legion and also mentioned the Hitchcock report of Public Health in Stamford (1951) which encouraged the immediate fluoridation of the Stamford water supply. He stated that no recognized public health group is on record as being opposed to fluoridation or any national church group has publicly taken a stand as being opposed to fluoridation. He said: "If we can't trust our national, state and local health officials, who can we trust? I rely on them daily for information by which my knowledge of dentistry is increased. You depend on them daily too. Why not in this matter of fluoridation? Don't all of us rely on experts for many of our other decisions - for example, those regarding sewers, roads, waste disposal, and even traffic, which we all think we know a great deal about." He said there were 5,500 references relating to fluorine and its compounds and these would have to be studied carefully if the people of Stamford intend to make an independent study.

Mr. Raiteri introduced the next speaker, Mr. Ken Gillroy, Past President of the Connecticut State Dental Association and a practicing dentist in Stamford.

Dr. Gillroy stated that as Past President of the Conn. State Dental Association, he knew they had on many occasions endorsed the practice of fluoridating community water supply as a method of reducing tooth decay. He said "As a local dentist, with five children, I appeal to you on a personal basis also. For ages, dentists have been hard pressed to deal with the treatment of tooth decay. It is a serious battle which we have no hope of winning without preventative measures which will perhaps someday obliterate this universal affliction of our people. Many people do not have the economic means to procure adequate treatment. The free clinic approach is commendable, but is pathetic in its relative results. We need a public health measure like fluoridation, which has been proven beyond doubt, to cut decay in half. Federal or State financed treatment would be astronomical in cost to the population." He went on to cite examples of dental decay in the armed forces and its widespread affect and saving in taxpayers money if fluoridation would eliminate in a few years the necessity for the additional expenditures for this alone.

The next speaker to address the Board was Dr. Monroe Coleman, of Stamford, an allergist, practicing physician, associate editor of Allergy Abstracts of the Journal of Allergy.

Dr. Coleman said that part of his duties as an abstracter was to read many articles relating to a new or an old chemical or drug. He said in the course of his reading he had never come across an article which told of the harmful effects of fluoridation. He said they were constantly reviewing the entire medical literature of the United States and also of foreign literature and they had not come across one substantiated article citing any allergic reactions resulting from fluoridation. He said "To my knowledge this represents a great safety factor in the use of this chemical and this is all that I have to say on this subject."

The next speaker introduced was Dr. Robert P. Rogers, a member of the Pediatric Group of Greenwich.

Dr. Rogers said he came with a two-fold purpose. One, as a Pediatrician and two, as the former Chairman of the Greenwich Board of Health. He said he wanted to try to help the members of the Board of Representatives in making up their minds on the question before the Board. He said: "As a Pediatrician, first, there is no doubt whatsoever that fluoridation - the addition of one part per million of sodium fluoride or fluorosilicate, or whatever other type of fluoride is commercially acceptable, does prevent caries in 60% of the cases. Now, that is a tremendous benefit; something which every Pediatrician feels duty-bound to offer every community of which he is a member. Now, this protection goes on into old age, so that

the next generation of old people will have 60% better teeth, and think of what that will do for the older people. It will mean many less dentures, much less infection, and generally definitely better health for old people. Now, as a former Chairman of the Greenwich Board of Health, I want to say that we recommended this to Greenwich back in 1951 and two different boards unanimously recommended it to Greenwich, and twice the Greenwich Town Meeting passed it. They finally sent it on to referendum because of the fact that we had a reversal in the opinion of the Selectmen and being a private water company, it was felt by the company that the governing bodies all should support it, until finally it did come to a referendum. Now, in order to make up your minds on this problem, you should know that 95% of the dentists and doctors throughout the country favor it. Now, that in itself is a tremendous fact. He mentioned something that might happen if the Board "Passed the Duck" which he hoped they would not do. He said 'If you do that, then you should be prepared to have a citizens committee, a strong committee, built up to educate the public, in which Greenwich failed in this respect.' He said that many people do not read the local papers and many of them came to the polls and said they did not know enough about it, therefore voting against it, which was what defeated it. He said: "We only lost by 1,000, which wasn't too bad at all. I do think that had we had more time and money, there would have been no doubt at all about the results."

The next speaker to address the Board was Dr. Milton Neufeld, Vice Chairman of the Stamford Community Council.

Dr. Neufeld stated that he was an optometrist and not a dentist and was not speaking in a professional capacity, but as Vice Chairman of the Stamford Community Council. He said in 1951 the City of Stamford invited Dr. Ira B. Hitchcock, head of the Department of Public Health of Yale University to survey the health problems in Stamford. 'Dr. Hitchcock and his staff were assisted by a local advisory committee, chaired by the late Mrs. Malcolm G. Egerton. As Chairman of the Health Division of the Stamford Community Council, I had the honor of serving on that advisory committee. At the completion of his survey, Dr. Hitchcock, presented a report to the city, recommending 39 proposals which dealt with improved health standards. Proposal No. 6 in this report stated 'that arrangements be made for the fluoridation of the public water supply in accordance with the recommendations of the Community Council, the Conn. State Dept. of Health, the local, State and national dental, medical, public health and other scientific bodies'. Soon after this report was released, the health division of the Stamford Community Council recommended that an extensive education program be instituted to enlighten the citizens of our community on the subject of fluoridation. We formed a speakers bureau and made available to them a virtual library of literature from every recognized national and state organization which had conducted a thorough and orderly study on the subject. Subject matter was taken only from the sources, since it was felt that up to now our nation had achieved a standard of health second to none in the history of mankind, through the efforts of these organizations. And, there was no earthly reason why they should not press through their conclusions on this subject of fluoridation. Our speakers addressed every organization interested in learning the facts and conclusions based on this research, rather than on personal observation. Since 1953 the Council has been continuing to add current literature on this subject to its files. Dr. Russell S. Colburn, a practicing pediatrician in Stamford, and at present Chairman of the Health Division of the Council, recently reviewed this material and his conclusion was that the facts today substantiate the endorsement of fluoridation, more so today than ever before." Dr. Neufeld went on to talk at some length on the subject of fluoridation, endorsing its adoption.

Mr. Raiteri announced that a 15 minute recess would now be taken, at 9:15 P.M.

The meeting again was called to order at 9:35 P.M.

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The Clerk read two letters, as follows: One from the State Department of Health, addressed to the Board of Representatives, dated May 7, 1956, signed by the Commissioner of Health, Stanley Osborne, the other dated May 11, 1956 from the Community Council of Darien and signed by Mrs. Milton C. Mumford, Chairman of the Health Committee, both endorsing the adoption of fluoridation of the public water supply. However, it was pointed out that the last endorsement was only from the Health Committee of the Darien Community Council, and did not as yet have the endorsement of the entire organization.

Mr. Reiteri announced the next speaker, Dr. Harry Siemon, Chairman of the Committee on Fluoridation of the Connecticut State Dental Association and a practicing dentist in New Canaan.

Dr. Siemon presented a chart which he exhibited, showing fluoridated communities, some 1200, of over 4,000,000 population. He spoke of DeWitt Smith County and the Town of..... He said: "This whole idea of fluoridation is supposed to have emanated from one source and one section of Texas. As you will see on the chart, the presence of fluorides throughout just the United States is a very common thing. You will also notice up in the New England area that we are very devoid of any natural concentrations and that if the only point I want to make, is that fluoride in the water supply is nothing new to us, over many many years. The fluoride experience is not new to human organism. People have, for many generations, been consuming it in various amounts in water and in foods. There have been recorded some 130 foods showing small amounts of fluoride. Sea food, and tea, being particularly rich in content. It has been stated that you cannot have a balanced diet without including fluoride from some source. The fluorides are found in nature as salts. There is Sodium Fluoride, Sodium Silico Fluoride, Calcium Fluoride, commonly known as Fluorapatite or Fluoride, Calcium Silico Fluoride, Calcium Phospho Fluoride, commonly called Fluorapatite and many others. To state that when found only in nature that it is safe is an untruth. Fluorides reached out of rock beds would be much more variable than in controlled, accurate amounts. The fact that when found in that bed, underivable mottling results belie statements of opposition forces that only where found naturally is it safe, and the fact attested to by reputable chemists, as well as to the Kettering Laboratories of the University of Cincinnati, is that we are interested in the availability of the Fluoride Ions and not this particular combination. The Kettering Laboratories are probably the world's greatest authority on fluoride toxicology. In industry, and in agriculture and in medicine. It is NOT a waste product of the aluminum manufacturers. It has been stated that it is only good for children up to 8 or 12 years. I would like to read briefly from a book edited by Shaw of Harvard University Medical School, and also from comments from a New Jersey State Dental Association Journal. The edition of Shaw, which I shall quote briefly here says:

'Not only are the deciduous and permanent teeth of children benefited by the occurrence of natural fluorides in the drinking water during tooth formation, but the teeth of adults also have an appreciably lower incidence of dental caries, by reason of prolonged periods of residence in communities where fluorides occur naturally in communal water supply. One demonstration of this fact is presented in Table 3. The average number of decayed, missing and filled permanent teeth was about 47% lower in Colorado Springs (and, incidentally, Colorado Springs has a 2.5 figure of fluoride) than in Boulder for each age group to the age of 44 years). Boulder natives had lost three to four times as many teeth from dental caries as natives of Colorado Springs, indicating there that the benefits are carried on.'

Now I think I have from the Journal of the Journal of the New Jersey State Dental

Society. I am sorry I can't find it, so I will not hold you up, but anyway, from this Journal there was an article that indicates the same results -- that there is a continued action through life if you are living in the areas that contain the optimum amounts of fluorides.

'Although dental caries in itself is not a contagious disease, it nevertheless is a disease, and the rejects of draftees in World War II was the greatest in this category than any other, and simple dental caries is an invasion of germ life and the mouth harbors many contagious disease germs, including the virus of polio. Damaged heart, kidneys and other organs caused from dental infections, often occur, as well as disfigurement and death. Referendums are very misleading. In the case of Waterbury, with over 45,000 people voting, only 10,000 voted on the question of fluoridation. You have had an example here recently in the PTA Council, where 21 people abstained from voting. Why? Probably these people are conscientious enough not to feel qualified to judge. I believe if these people looked upon the question as a vote of confidence in the integrity of the man of science against those of discredited people, they would be taking a much healthier attitude.

'My personal feeling regarding this matter is that of the governor of Illinois, who vetoed a Bill requiring all towns to hold referenda in that State, saying that in matters of public health, referenda were not right and proper. Certainly, it is not binding legally, to a private corporation, in a town with a public opinion poll. We, in Connecticut, are way behind in the many installations throughout the nation. At present, as of March 1st, we had 1150 installations, serving 22,869,000 plus people. In New England, the State of Rhode Island leads the way with over 70% of its people receiving the benefits. Half of the installations are privately owned, and half municipally owned. They have experienced no problems. In addition to that 22,000,000 as was pointed out earlier, Chicago is in the process of fluoridating and in its suburbs there will be some 4,000,000 more people receiving the benefits.

'The term 'poison' has been used very loosely in regard to fluoridation. Everything and anything is poison when used in excess.....from table salt to vitamin A. Hydrochloric acid is known to be a caustic poison, yet your own body manufactures this for the benefit of your digestion, and from the amount of Tums, Rolaids and other antacids being sold, it is unquestionably more of a threat than fluoride. The sole cure of dental caries does not lie in the fluorides. There are dietary factors, digestive factors, glandular factors, hereditary factors and many others. However, the ingestion of adequate amounts of fluorides have shown to reduce the incidence 60%. It has been proven not only in nature, but in the Newburgh studies and those in our own Southbury Training School.'

Dr. Siemon talked further at some length, and at the close of his talk, he was questioned by several members of the Board.

One of the members asked as to fluorides being incorporated in toothpastes. (Did not register clear enough on record to transcribe)

Question: Mr. Kolich asked about children under 6 not being allowed to use toothpastes containing fluorides. "If you live in a community where the water supply is fluoridated, what can you do if the child is under 6 years of age?"

Dr. Siemon: "I think that is a little misleading to you. There is a legal requirement that requires that, whether it's Crest or Ammident, Super-Ammident with fluorides, that this be placed on the carton for the protection of people where fluorides are in excess - it would not apply to here in Stamford, even if you had fluoridated water, and the concern is that if it tastes enough like bubble gum, the children will eat it, and if they are getting excessive amounts to begin with, the additional excess might produce an undesirable mottling. That's the only reason for it. Is

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that clear? I mean, be sure it's clear. In a case where there is excess."

Mr. Macrides: "It's my understanding that an ingestion of 1 part per million of fluoride in the water supply is the optimum amount that would be suited for us, is that correct?"

Dr. Siemon: "Yes, that is more or less the agreed amount. It varies from 1 to 1.5 that is being recommended. I think, to be honest, that they are sure of what the excessive amounts would be in harm, but they are trying to bring that up to a maximum to produce the greatest reduction in dental caries without producing an undesirable mottling, and the question of mottling is a confused picture, too, to most people, because we have six different categories, anywhere from...can't even be observed by a trained observer, or, the average professional man being the trained observer, and the first three categories are really a desirable thing, because they are not disfiguring, but the last three categories are very undesirable, and I think it's safe to say that 1.2 up to 1.5 would be protective and adequate without undue mottling."

Mr. Macrides: "At what point would you say that an excess begins?"

Dr. Siemon: "Definitely, well, now here you take Colorado Springs with 2.5. They have a percentage of mottling which you might consider to be adverse, but I have had personal communication with Dr. McCay, who is one of the originators and observers on the excessive amounts, and they are very happy with their 2.5 in Colorado Springs. Certainly, anywhere from 3 points on you would have to beware."

Mr. Macrides: "When you speak of being wary, is that in terms of mottling alone, or"

Dr. Siemon: "Mottling alone. Toxicity has been shown in the Bartlet-Cameron study over a period of ten years, and Bartlet's is 8 parts per million, compared to Cameron's which is, I think, about half of one part per million, and the Public Health people have been down there for a period of ten years, making blood studies, x-rays, the whole gamut, I mean, just to read the whole report would take an entire evening. They haven't missed anything. The only comparative statistical reference has been that the people in Bartlet had terrifically mottled teeth, but otherwise, there was no significant difference in their general well being."

Mr. Macrides: "In terms, then, of mottling alone, what sort of guarantee would there be that an even distribution would be made in the water system?"

Dr. Siemon: "You mean the dispensing of it accurately?"

Mr. Macrides: "Yes, the dispensing of it accurately within the body of water and then as it came through the pipes, the possible tendency for some of it to cling to the sides of the pipe and then be dislodged."

Dr. Siemon: "That's right. We have Mr. Almquist with us tonight, who is an engineer in the State Department of Health, and I think he is far better qualified to answer than I, if you will reserve that question, I am sure he can give you an adequate answer."

Mr. Nolan: "Is it adequate to rely on the Public Health Service to do the research in a matter of this sort? Would you, as a dentist or a doctor, be called upon to do the primary research?"

Dr. Siemon: "No, those are specialties in themselves and basically, if you need legal advice you get lawyers. If you have investment problems, or insurance problems.....

you naturally have a faith in those people and you seek them and from their expert, well, you take their word....in other words your primary requirements...these people are the people doing this type of work. Now, you take the Kettering Laboratories, Vargas has done terrific work. By golly, he has taken stuff, pretty near sub-lethal doses to measure how it is excreted through the urine, the feces, the sweat. Isotopes, counts on the thyroid gland, the submaxillary, the sublingual, where it tends to pool, how rapidly it is eliminated. I mean, there hasn't been anything that hasn't been covered by these men. I can't be expected to do things of that nature, but I can, as was pointed out here, for over ten years. I have been so convinced of this in my own mind through reading, that I have prescribed drops, tablets, and they do do good, IF the mothers give it to the children. But, the human element of getting that bottle out of their refrigerator to give it to them, it just doesn't work. If Mom is ironing and two or three kids come in and go over to the faucet to get a drink....."

Mr. Nolan: "There was a point brought out before, that if the doctors, the dentists had not done research themselves, therefore they were not qualified to judge - that is the point I was trying to bring out."

Mr. Siemon: "Well.....I think that is extending things a little too far."

Mr. Rybnick asked a question. "Have the medical men made a study of the toxicity of fluoride?"

Dr. Siemon: "I think the Public Health Service has been doing most of that. As I pointed out before, as far as the knowledge of fluoride toxicosis, in all fields in agriculture industry, which is the breathing of dust and all the various things that ...components that might arise where fluorides are used, I mean, fluorides, I mean your freon here in your refrigerator - that's a fluoride combination. It is used in ceramics, it is used in the steel industry, it's used in a multiple of ways. In the fabrication of certain things, people are subject to breathing much of this, and that is the mainstay of the Kettering Laboratories in determining not only what you ingest by water, but what in a given position that you might have, in effect, where you may be breathing excessive amount of fluoride, and certainly, I don't think, there again your basic research is done by them, by the U. S. Public Health Service, it is in itself enough for your AMA to endorse this. And, on top of that, the St. Louis Medical Society has done a major piece of work, with a brochure. Why we could spend several hours just discussing that. There is no question and I think that you've got to have a little faith in the people who have projected these things and made us, you and I, here today, probably more conscious of health, more conscious of the benefits of better living than at any other time in our history."

Dr. Siemon went on at considerable length.

The next speaker was introduced by Mr. Raiteri, Dr. Franklin Erlenbach, Chief, Division of Dental Hygiene, State Department of Health.

Dr. Erlenbach said he was very much interested in hearing the questions asked of the previous speaker. He said he had brought data with him which touched on many of the questions asked the previous speaker. He said: "First, I would like to impress upon you the fact that it is now 48 years since we first started the investigations of fluorides in our drinking water....48 years ago, in 1908, the phenomenon known today as fluorosis was seen and identified in Colorado Springs, Colorado." He said since that time there have been many studies made by the Public Health Service, both the medical and dental staffs, of the causes of fluorosis, and they have not confined themselves to just the dental findings, but also the medical findings, because one goes with the other. He said this had been given ample consideration over the years up to 1945 when it was presented to the public in the form of pilot studies. At

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that time it was decided to introduce sodium fluoride into the drinking water supply of the City of Grand Rapids for a ten year study to determine whether or not the phenomena seen in the United States where fluorides were naturally present in the drinking water supply could be reproduced. He said: "Now at this point I would like to emphasize emphatically that it was not a question of is this a safe procedure. We knew that it was a safe procedure. How did we know this? Because we had a laboratory of over 4,000,000 people who had been drinking water containing fluorides for generations, and we had included those people in our medical and dental studies, so it was not a question of safety. It was a question of were we able to reproduce the dental phenomena, that is the 65% reduction in tooth decay in the City of Grand Rapids during a ten year period that had been observed in areas where fluorides were naturally present. I can assure you, and I can document what I say, that we have ample statistical evidence that we have achieved our direction, as far as Grand Rapids, Newburgh and we are achieving it as far as New Britain, Conn. right at this time, insofar as the reduction in tooth decay is concerned.

'Now, there was a question raised as to the endorsement by the different National organizations and whether or not these organizations had for themselves done original research. Now, our previous speakers mentioned that it was virtually an impossibility for every organization to set up a research center. But, I can assure you that the endorsement by any one or all of these health organizations, and we include all of them, was not given by simply saying 'Is this a good thing, let's endorse it', but that it was given after deep and individual consideration. These organizations are every one used to reading and evaluating scientific literature. In the case of the American Medical Association they appointed a committee from the National Research Council, which is advisory to the U. S. Congress, that is one of the groups that the American Medical Association used to support their endorsement. The Council on Foods and Nutrition was another. It was only after investigation by these two bodies, independently, that the American Medical Association give their endorsement of fluoridation.

"Now, the question has also been asked 'how do we know that fluoride in drinking water will not affect the aged or those with chronic diseases?' We know by this simple procedure: The Commission on Chronic Illness appointed their own committee of specialists - headed by Dr. Maxie of the Johns Hopkins University Medical School, and he and his committee made an exhaustive search of the literature and made personal observations to find out whether there were any untoward events upon people with such diseases as nephritis, which is a chronic irritation of the kidneys; on people who had arthritis, which is, as you know, a chronic disease of the aged; of people with rheumatism, and then determined for themselves for the commission and recommended to the commission that there was no evidence in the literature that they could find whereby fluorides were shown to have caused or irritated any chronic disease that you could mention. Now, that is the type of endorsement, gentlemen, ladies, that is carried on before any endorsement is given, and I could review a list a yard long of the national organizations and the state and the local ones that have endorsed fluoridation.

"This matter of mottled teeth has been mentioned. I have here a series of pictures that will show you the different stages of fluorosis, from the very mild to the very severe and since I can't pass it around generally, I am going to pass it up and down this table so the captions can be read and the pictures seen of the degrees of mottling that can occur when there are excessive fluorides. The question has also been asked as to what is known as excessive fluorides? In this State, anything beyond 1.5 is called excessive fluorides. May I state that I have done a small amount of original research at the Southbury Training School. It was in 1945, after reading the literature. I began collecting my library in 1938, and I followed the literature closely. In 1945 we were so impressed with what we were reading in the literature that we wanted to determine for ourselves right here in Connecticut,

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whether or not fluorides added to the drinking water supply could produce decay reduction. We selected the Southbury Training School. We appealed to the Board of Trustees and laid the evidence before them, and they gave their consent to the addition of fluorides to the Southbury Training School drinking water. That has been in continuous operation, now, for over ten years. That institution carries approximately 1,400 inmates and approximately 300 employees that live on the grounds and who drink the water and who have been doing so for a period of over ten years. I have a letter which I can submit and leave with your group, from the Medical Director of that institution who is quite happy with the mental and dental health of his three children, as well as himself as well as his wife, and they have been drinking fluoridated water for over ten years. That is a thoroughly documented statement."

Dr. Erlensbach passed the pictures among the members of the Board, of the various stages of mottling of teeth caused by overdosage of fluorine.

He then read the figures obtained from Newburgh, New York on the results of their tests and also of Kingston, and quoted the following:

"Among the 7 to 14 year old children in Newburgh, the marmal opacities, they had no evidence of what we know as mottled enamel, even the mild mottling. Newburgh had 46 so-called questionable fluorosis - cases in which it was hard to determine whether it was to be opacities or whether it was to be labeled as fluorosis. They had 26 children (and mind you, this is a city of over 30,000) that had what is termed as very mild fluorosis (and those of you who are looking at these pictures can identify what we mean by the very mild cases) and they had six children who showed some evidence of what is known as a mild fluorosis."

"Now, let's look at Kingston, the city that during the ten year study had no fluorides, who was drinking a fluoride-free water supply. In this city, they counted 115 children that showed non-fluoride enameled opacities, compared to 36 in Newburgh. Therefore you can see how difficult it is and how trained you must be, to recognize such a thing as opacity from fluorosis. It is most difficult to do, I can assure you.

"The question has been hinted at here, and I would like to answer it now. If fluoride is added to water supplies, does it have any effect on adult population? There has been a special study made of the City of Colorado Springs which we will call a 2.5 parts per million of fluoride naturally in their water supply and has had it for generations. The City of Boulder, which is a university city, has an essentially fluoride-free fluoride water supply. In the study there the group studied was from 22 to 44 years of age in both of the cities. The teeth which were affected by decay in Colorado Springs were 60% lower than those of individuals of the same age group in the city of Boulder - the fluoride-free group. The Boulder natives had lost 3 to 4 times as many permanent teeth as the adults in the same grouping had in Colorado Springs. Therefore, there is a carry over of the benefits of fluoride to the adult groups when that ingestion is begun at birth and carried on through life.

"Now here is an interesting question that was asked some time ago. 'Is there a chance that if a person, let's say, and we won't mention Death Smith County, let's use it as an example, they have excessive fluorides in most part of Death Smith County. But you have teeth that are beautifully full of fluorosis in Death Smith County. Well, we had a physician that had grown up in Death Smith County who was on our staff, who had a very nicely mottled set of teeth. He had been away from Texas in our department for some 15 years and just before he left us to go to Michigan, he come to me and he observed that he had in all that time

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developed a tooth with filling in it. Therefore, it does indicate to me that if the fluoride is ingested continuously, the protection does hold, but if you are away from a fluoride area for a long enough period of time, you can develop caries."

Dr. Erlenbach talked for some time, after which there were questions asked.

Mr. Topping: "Dr., you mentioned a case where the man was 37 years old who had been absorbing fluoride during most of his life. Those were calcium fluorides, weren't they, and not sodium fluorides?"

Dr. Erlenbach: "No, they were not calcium fluorides. Calcium fluoride is practically insoluble - they were sodium fluoride."

Mr. Topping: "What kind of a fluoride were they?"

Dr. Erlenbach: "What town was that you were....."

Mr. Topping: "you just mentioned it - where the man had been absorbing fluorides for 37 years."

Dr. Erlenbach: "Bartlet, Texas? In Bartlet, Texas, it was sodium fluoride and it occurred naturally. That's right. There are two compounds that are in general use here in Connecticut. Sodium fluoride, sodium silico fluoride. We are using both of these in Connecticut in different communities."

Mr. Russell: "One of the questions brought forth about the fear of fluoridation was the fact there might be a miscalculation or accidental dumping of a large volume of sodium fluoride into the water supply - now, what would that volume be, roughly in a city of this size, that could be a miscalculation, say change it from 1 to 1.5 per million? I mean, are we talking about a quarter of a ton of sodium fluoride, or four tons, or what" (indistinguishable)

Dr. Erlenbach: "Per millions gallons of water. Now, that one part per million..... 8 1/3 lbs. per million.....now, there isn't, to my knowledge, a hopper, or there isn't a storage place that could be large enough to accommodate enough chemical so that enough of it could be dropped in at one time, if that were possible...to raise your fluoride content to limits that would anywhere near approximate lethal limits. I might say that we have had no difficulty over a ten year period of holding our fluoride concentration with the equipment that is now used by water officials for addition of other chemicals to water supplies, within .1 part per million of the limits - in other words, we have held Southbury Training School at 1.0 parts per million for almost ten years, with actually no fluctuation."

Mr. Russell: "May I just ask this - roughly, just how that process is done. Is it a question of where the sodium fluoride powder is put into a mixing vat and then it's added as a liquid to be distributed into the system?"

Dr. Erlenbach: "At Southbury Training School it is made into a solution.."

Mr. Russell: "...and directly distributed into the system?"

Dr. Erlenbach: "There is all kinds of ways. At Southbury Training School it is made into a solution first and the solution is fed by an automatic pump, which is synchronized to the pump that drives the water to the reservoir and then by gravity to the tap and it is proportioned in a solution. In New Britain, it is a dry feed machine, in which the dry sodium fluoride that is added to the machine and then the machine proportions the sodium fluoride in the right proportions to make one part per million."

Mr. Russell: "Well, the reason I asked that question is because that makes it sound like there would be two mistakes that would have to be made.....in other words, if you were to dump the powder, let's say a large volume, you could say the hopper could be big enough to dump the powder into a mixing vat, it really should be noted that at that time whether it's possible to go from the mixing vat which passes a certain volume into the water supply -- in other words, when you make your solution from the powder to your concentrated solution." (Background conversation)

Dr. Erlenbach: "I don't know as I do quite follow you."

Mr. Russell: "Well, what I was getting at - it was maybe a misunderstanding that the sodium fluoride is put directly into the water."

Dr. Erlenbach: "No...no."

Mr. Russell: "It's not - it is put in indirectly?"

Dr. Erlenbach: "It's proportioned - that's right. In all events, by machinery which is used right here in Stamford to add the chemicals that they do add...for instance, chloride or calgon, or any of the others...a...chemicals that are used, The same types of machines are used to proportion fluoride as they do for chloride, for instance."

Mr. Norton: "What form of chloride would be added?"

Mr. Russell: "Chlorine - in the form of a gas. It wouldn't be quite the same then, would it? Because, when you are putting a gas into the water....this way you have to stop and put a salt into the water."

Dr. Erlenbach: "You can use either a powder or a water."

Mrs. Bankowski asked to be excused at 10:30 P.M.

Mr. Raiteri announced the next speaker: "Mr. Almquist, who represents the State Bureau of Sanitary Engineers."

Mr. Almquist: "Just how much of this can you people take tonight? There are two of us on the State level - Dr. Erlenbach and myself - Dr. Erlenbach is here to represent the division of Dental Hygiene and I'm here to represent the Bureau of Sanitary Engineering, and I think the reason I'm here is to assure you that we have had the necessary equipment to apply fluoride compounds scientifically to a water supply.

"Our first installation, as has been mentioned, was in 1945. Our second one in the Mansfield State Training School in 1950. The third one in New Britain in December 1950. The fourth one, Cromwell Fire District in June 1951 and the fifth one - the Mystic Valley Water Company, serving portions of the Town of Groton and Stonington. And, in that time, as Dr. Erlenbach has mentioned, we have had no difficulty in the application of the fluoride compound.

"The supervision over the purity of the public water supply is in the hands of the State Department of Health. Any changes, any alterations or any additions, either to the physical plant or the chemicals, must be approved by the State Department of Health. And, any plan for the addition of sodium fluoride or any fluoride compound would have to be presented -- the plans would have to be presented to the State Department of Health, and the Bureau of Sanitary Engineers for approval. We have set up a procedure for the addition of this chemical and I'll give it to you, but first, I wonder how many of you realize just what one part per million is? I've used as an illustration a number of times the following: A nickel weighs 5 grams. At least, I

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have never weighed a nickel, but I have been given to understand that it does weight 5 grams. You'll have to take my word for it, as I had to take somebody else's word. If you'll divide a nickel into 5 parts and take a fifth of a part - that is a fifth of a nickel - divide that into a thousand parts and take one of those 1,000th of a fifth of a part of a nickel and put it in a quart of water, you have got one part per million. So, you see we are dealing with a very small amount of chemical.

These procedures that we have set up require, as I have said, the approval of the equipment for adding the fluoride and the installation arrangements and an application has to be made to the Bureau of Sanitary Engineering. We review those and if they are satisfactory, we approve the plan. Then, arrangements must be made for us to be there when the equipment is started. A testing equipment must be purchased by the utilities and, I should add, that we work in close cooperation with the representatives of the water utilities in the state and have had very good co-operation from them. In addition, the local utility must, and it is not a very difficult job --- must make a daily test, at least, of the amount of the fluoride present in the water. That's a relatively simple test. We ask that four times a week, containers be sent to our laboratory in Hartford, that we might check those analyses. That has to be done for the first month. Then, for the next two months, we ask that a sample of water be sent to our laboratory every week. and then, after that we ask that samples be sent to our laboratory once a month. On the installations that we have in operation now, we are getting at least monthly tests in our laboratory -- monthly samples that are tested in our laboratory, and the local utility makes their daily tests. We visit the installation at least once every three months to make sure that the installation is operating satisfactorily. Now, a question has been asked as to whether or not a large amount of fluoride compound could be dumped into the water supply at one time. These machines are so set up that it would be impossible to obtain such a large amount of fluoride that there could be any illness as a result of it. On the larger machines, the gravimetric, the crystal is used instead of the solution. The crystals drop down into a mixing tank and then either flows by gravity or is pumped into the supply. These machines have all sorts of safeguards. If the electricity should be interrupted, a bell rings; if there is a larger amount of chemical fed than is predetermined by a setting on the machine, there is an alarm, so that there is no danger of any large amount of fluoride being dumped into the water at one time."

There followed a question period.

Dr. Lilliendahl: "I have a question that was asked by someone else before. That calcium fluoride is practically insoluble in water. Now, calcium fluoride is soluble up to 15 parts per million which is much more fluoride than is necessary, and I wonder if it is also recommended in the book for fluoridation as a public health measure. Now, I wonder if any serious consideration has been given to using calcium fluoride instead of sodium fluoride for fluoridation of public water supplies in an area, particularly like New England, where we in many places, in this area particularly, are very low in calcium fluoride content in the water. Now, the reason I am interested in this is because you could dump whole truckloads into the water, but you could only dissolve up to 15 parts per million which is not lethal. In any event, wouldn't that be an additional safety factor? And, I wonder if there is some particular objection on the part of chemists or engineers to the use of calcium fluoride."

Mr. Almquist: "I think probably that calcium fluoride could be used, but since it does dissolve so slowly, it would be difficult to use it. Therefore, sodium fluoride is much more convenient to use and I don't know how long it would take to dissolve a calcium fluoride. As far as the fluoride ions are concerned, it makes no difference whether it is calcium, sodium or what it is, whether it is natural or

whether it is manufactured. Fluoride ions are fluoride ions and a chemist can't tell...according to our own chemists in our laboratory...a chemist can't tell one fluoride ion from another."

Dr. Lillicand: "I just want to follow that up again once more if I may. I'm not worried about what the fluoride ion is, but about the criticism of having calcium in solution with your fluoride ion, is a protection...that's the argument behind the fluoridation of milk...the ones who wish to fluoridate milk, and it is also the criticism of people in applying fluorides to this area. You see, wherever fluoride is natural, they say that --- I would like to comment on this -- they say that the calcium that is in solution with the fluoride ion is the protector...in other words, it is something that we could not possibly get here."

Mr. Almquist: "I am afraid I can't answer that. If you want any calcium, in your water and usually then there is a lime or something like that for corrosion control, in most water supplies they don't want calcium because it introduces a hardness to the water and is injurious as far as boiler feed is concerned, and I don't think that calcium would be a desirable thing to add."

Mr. Topping: "I would like to ask this gentleman a few questions. One, what is the cost of applying this material to our water supply? We have not as yet been able to nail anyone down as to the cost of applying this chemical to our water supply, and also, can you tell me the technique of handling this material, and also, does it require 24 hour supervision?"

Mr. Almquist: "Dr. Lobo, from New Britain is to speak, I believe, and he will tell you the experiences, I think, in New Britain, and possibly the cost. I think I have the cost in New Britain - the cost of sodium fluoride is 14.3 cents per lb. In New Britain, that figures 12½¢ per person per year. That's for the chemical and it does not include the operation."

Mr. Topping: "That's what I would like to get - the cost of operation - the original cost of the installing of the machine."

Mr. Almquist: "Well, the cost of operation varies, depending on the personnel. In all our surface water supplies in this state we add chlorine. We have a chlorinator operator that attends that chlorinator once a day. There isn't any reason why he couldn't spend a little more time attending a fluoride plant. Now, the cost might be an hour or an hour and a half more in time. Now, another cost would be the housing of the equipment. In many of our utilities the housing is now sufficiently large. Some would have to provide housing for the equipment. You probably know the cost of housing as well as I do. For a place like Stamford - well I should think a building 20' x 30' would be large enough. I don't know - Alan, how big a building do you have on your mind - have you made any estimates? I should think a building 20' x 30'I don't know what that would cost you - \$10,000 would it?"

Mr. Ketcham: "We have to also take into consideration the storage problem."

Mr. Almquist: "The storage that would give you the....."

Mr. Ketcham: "We have lost sight of the machinery itself....."

Mr. Almquist: "20' x 30' would give you room for storage as well as the equipment, I am sure. That's just a guess. Now, the Cromwell Fire District, a population of 2,500, the cost is 23.2¢ per person per year. That includes power, amortization, labor and the tests, I believe. In Mansfield, the cost is 12.8¢ per person per year, and that includes amortization and the testing and the chemicals. The Cromwell one was for labor and chemicals. In Southbury, the cost is 12.8¢ per person

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per year. That includes chemicals and amortization of the original cost."

Mr. Topping: "Do you know the original cost of the machinery for application?"

Mr. Almquist: "No, I don't know."

Mr. Topping: "New Britain if of comparative size - there were two installations at \$5,000."

Mr. Almquist: "No housing - the housing was extra."

Voice: "Was extra housing required?"

Mr. Almquist: "It was put in the present plant."

Mr. Topping: "And, that \$5,000 is amortized over a matter of about 30 years?"

Mr. Macrides: "I have a couple of questions. One of them - does this fluoride actually stay in perfect solution, or is there a possibility of it congregating in separate spots?"

Mr. Almquist: "Sodium fluoride's saturation point is about 4%, which is about 40,000 parts per million. We are only adding one part per million, so I can't conceive--- before you have precipitation of a deposit you must have saturation, and I can't conceive of one part per million being anywhere near that point, even with calcium fluoride, so that I don't see how you could possibly get a deposit on the inside of the pipes."

Mr. Raiteri introduced the next speaker: "Our next speaker is Dr. J. Lobo, who will outline New Britain's experience and give us statements from the officials of that city for the benefit of the members of the Board."

Dr. Lobo: "I am present here tonight to tell you something about fluoridation in New Britain. The New Britain Dental Society in 1948 began to consider the possibility of fluoridation because of the high incidence of tooth decay in youngsters. Proper supervision and tooth brushing, restriction in the consumption of refined sugars and adequate diet did not produce any appreciative reduction in cavities. In various cities, studies of the controlled addition of fluoride to water supplies begun in 1945, and were demonstrating a reduction in the rate of tooth decay. When in 1949 a dental survey of New Britain's schools revealed that 89% of the children had cavities, the Dental Society decided to do something about it. An educational program presented the facts to the Parent-Teachers groups and civic organizations and any interested group. Finally, the Mayor, the Common Council and the Board of Finance and Taxation, the Director of Health, representatives of the Parent-Teachers associations and other interested citizens were invited to a demonstration. At this demonstration it was pointed out the need for fluoridation by actually having the guests look into the mouths of children and viewing dental conditions for themselves. Soon after the demonstration, the local Board of Health approved the addition of fluorides to the city water supply. Both the Board of Health and the Board of Education included sums in their budgets to carry the program. In March 1950, the Mayor and his Council approved the project, and in due course the Board of Finance and Taxation appropriated the sum of \$5,000. A dual program is in operation in New Britain since December 1950. First, it places the fluorides in the water supply, and second, a school program to examine, clean and give topical applications of 2% solutions of sodium fluoride to teeth; in addition, a complete dental educational program was conducted for children, school teachers, and parents to keep the teeth in good condition by the use of literature and lectures. A re-survey was conducted in the spring of 1954 to measure the results of three years of the program. The facts were indeed encourag-

ing. Dental decay among children from 6 to 15 showed an overall reduction of 14.6%. Highest reductions were noted in the 6 year group - a 52% reduction. These 6 year olds were 3 years of age when the program began. It has been established that the greatest benefits accrued to children having the longest exposure to fluoride, and this has been re-affirmed emphatically in New Britain. All this has been accomplished at an average annual cost of 11¢ per person per year. Many unproved statements have been made relative to increases in disease and mortality in New Britain. The Bureau of Vital Statistics of the State Board of Health have figures to disprove such statements. The Medical Society and the Board of Health of New Britain have stated that there has not been the slightest indication or suspicion of any bad effects on the community since the program originated. Living and practicing in New Britain and having three children of my own, I am proud of the foresight and of the progressiveness of my community in adding fluoride to the water supply. With all the facts at hand, I cannot understand why any community desires to further delay in starting such a program. I have statements with me tonight from individual radiologists, the x-ray department of the New Britain General Hospital, Pediatricians, Obstetricians, Urologists, Roentgenologists, the Mayor of New Britain, the Board of Health Director; all of these individuals mention the fact that there is nothing here - they have not found anything - that would give the slightest suspicion since the program began back in 1950 that fluoridizing the water supply has been in any way harmful.

Mr. Raiteri asked if there were any questions. He explained that the procedure at this time would be of voting on the resolution and if it was defeated, the question would probably be brought to referendum. Mr. Raiteri asked a question: "Your procedure at that time was the action by the Board of Health and the Board of Education and then the endorsement by the Mayor. Do you have a Council form of government there?"

Dr. Lobo: "Yes."

Mr. Raiteri: "And, what was their reaction on this thing?"

Dr. Lobo: "In March 1950, as I mentioned in my talk, the Mayor and his Council approved the project. The Director of the Board of Health appeared before the Common Council, stressing that he approved such a project. In my speech I mentioned the fact that important members of the City were present at a demonstration that we gave them. After they had seen that demonstration, there was practically no doubt in their minds that a program of this particular type was necessary."

Mr. Raiteri: "Then there was positive action taken by the Council on it in the form of a resolution?"

Dr. Lobo: "Yes sir."

Mr. Murphy asked a question. (Not audible on record)

Dr. Lobo: "One of the reasons that I have mentioned the fact that many and proven statements have been published relative to New Britain is because such statements were made and repudiated by the Bureau of Vital Statistics of the Connecticut State Board of Health. A statement had been made that there had been an increase in the death rate and an increase in kidney, cancer, etc. and so on and the State Board of Health and the Bureau of Vital Statistics repudiated the statements. It is quite detailed and would take a long time to go through it, but in regards to comparative figures, no, I have not seen it. Have you, Dr. Erlenbach?"

Dr. Erlenbach: "No, I have not. I would hesitate to give you an off the cuff statement that New Britain and Stamford's populations were comparable in regard to

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density, etc. However, I can check on that for you if you wish.

Mr. Topping: "You could furnish us with those statistics, could you not?"

Dr. Erlenbach: "Yes, I could."

Mr. Raiteri: "Are there any other questions?" "There being no further questions, Mr. Raiteri said this would conclude the portion of the program being conducted by the Legislative and Rules Committee and turned the meeting back to the President of the Board.

Mr. Connors: "Is there any further business?"

Upon MOTION of Mr. Rhoades, duly seconded, the meeting adjourned at 11:00 P.M.

JOHN C. MACRIDES
Clerk
Board of Representatives

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