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Identification. Correspondence with Sir
Emmanuel Kaye.

NATIONAL HEALTH

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August 1979

Referred to	Date	Referred to	Date	Referred to	Date	Referred to	Date
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10 DOWNING STREET

THE PRIME MINISTER

27 March 1980

Thank you for your letter of 5 March, enclosing a letter from Mr. A.L. Wilson, of 34 Hillfield, Monkseaton, Whitley Bay, Northumberland NE25 2AJ, about fluoridation of water supplies.

Mr. Wilson may wish to know that fluoride is a natural constituent of almost all water supplies, and that observations in areas where it occurs at an optimum level of about one part of fluoride per million parts of water have shown that people who consume such water during the first fourteen years of life (the years of tooth formation) have better dental health than people who live in areas of similar character but with less fluoride in the water supply. The presence of fluoride at the optimum level is not regarded as affecting water undertakers' duty to provide a supply of wholesome water sufficient for domestic purposes. This view was taken some years ago by the Judicial Committee of the Privy Council on appeal from the New Zealand courts.

Fluoridation consists simply of adjusting to this optimum level the fluoride content of those water supplies deficient in it naturally. It was found by trials in North America over 30 years ago and in the United Kingdom over 20 years ago to provide similar dental benefits - and likewise without harmful side-effects - to those observed in the areas with a satisfactory level of fluoride naturally in the water supply.

Since 1962, on publication of a report on the first five years of the United Kingdom studies, Governments of both main parties have encouraged the bodies locally responsible for preventive health

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to seek the introduction of fluoridation. In debates in the House of Lords on 15 November 1979 and in the House of Commons on 6 March 1980 Ministers indicated that the Government proposed to continue the policy of its predecessors. I enclose a copy of George Young's speech in the debate on 6 March in case this would interest Mr. Wilson.

In the debate on 23 January 1980 on the report of the Royal Commission on the National Health Service, Patrick Jenkin confirmed that the Government had at the moment no proposals for legislation but preferred to proceed by persuasion and consent (Hansard, Vol. 977 No. 101, Col. 468).

Equally, the Government has no plans to restrict fluoridation by forbidding statutory water undertakers to adjust, where necessary, the natural fluoride content of water supplies to the optimum of one part per million. I can assure Mr. Wilson, however, that the Government would not entertain any proposal to add drugs to the water supply.

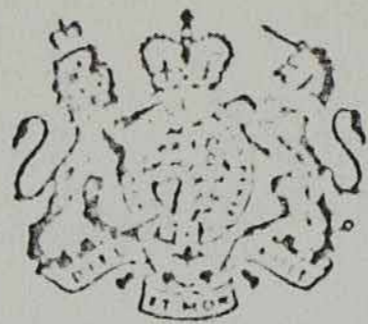
(SGD) MARGARET THATCHER

Robert Crofton Brown, Esq., M.P.



*With the Compliments of
the Private Secretary to
the Secretary of State*

DEPARTMENT OF HEALTH AND SOCIAL SECURITY
Alexander Fleming House
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Copies: Mr Phillip
 Mr Barnes
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cc J Robilliad

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Telephone 01-407 5522

From the Minister of State (Health)

Nat Health

Sir Emmanuel Kaye CBE
 Lansing Bagnall Ltd
 Kingsclere Road
 Basingstoke
 Hampshire
 RG21 2XJ

5th December 1979

Dear Sir

Thank you for your letter of 15 October. I am extremely sorry not to have replied before now but I have been looking very carefully into the situation over fluoridation in this country and also overseas. It has all taken much longer than I had expected. Had I realised this I would have written to you in a brief note to let you know what was happening - long before now.

The report in the Daily Express led a number of people to think we were setting up a special committee on fluoridation. This is not so. I don't think it would be particularly helpful just now, but I am always open to views.

When I saw Dr Burk earlier this year, and again with you, I recognised I needed to look again at what was going on generally and I am doing this - but as I say, not through a special committee.

I was particularly interested incidentally in what you said about Canada. Since then I understand the Australians have come out strongly in favour.

There is no doubt views in this country are divided - they are in the House of Commons - they are in the Conservative Party. In these circumstances it would be quite wrong not to recognise the feelings people express about mass medication. There is no question of legislation to enforce fluoridation at the moment. I have asked the Department to look into the alternatives to putting fluoride into the water which are currently being suggested.

Meanwhile you will no doubt have seen Lord Cullen's reply to a question in the House of Lords - I enclose a copy in case you need one.

I am looking forward to meeting you in January.

Gerard Vaughan

encl

DR GERARD VAUGHAN

7.39 p.m.

Lord WELLS-PESTELL: My Lords, in view of the length of time that this Unstarred Question has taken, I am sure it will be of interest and pleasure to your Lordships to know that as I have to catch a particular train I shall not be speaking in this debate. There are, however, just one or two comments that I want to make. First, I should like to congratulate the noble Earl, Lord Yarborough, on his maiden speech, and of course I hope that he will not wait the same number of years before he delivers his second speech. Speaking for myself, it was rather a joy to hear my noble friend Lord Lovell-Davis again, and the noble Lord, Lord Colwyn, and I hope that we shall hear them more often than we have heard them recently.

I remember that on 12th March 1975 the noble Lord, Lord Aberdare, raised a question on this matter in your Lordships' House. He drew attention to a survey which had been carried out in Anglesey. Fluoride had been introduced into the water and the survey showed conclusively that the dental health of children there was much better than the dental health of children in Bangor and Caernarvon. I mention that for one reason and one reason only.

When talking to my noble friend Lord Cledwyn of Penton today, he happened to remark that at that particular time the decision to introduce fluoride into the water was taken by the county council. There seems to have been a change, either in recent months or in recent years, for it is now done by the area health authority. I was not aware of this, and I am wondering whether this ought not to be done by the elected representatives.

I am also wondering whether the noble Lord could find time to write to me at a later stage and let me know whether this is done exclusively by the area health authorities in this country. Certainly it is not done by the health authority in Scotland because I understood the noble Lord, Lord Campbell of Croy, to say that it is done by the local councils. It seems to me that it is a decision which should be taken by them.

The only other matter I want to raise is this. The noble Earl, Lord Yarborough, made some reference to the Department of

Health and Social Security. I think he said that the health authority appears to have taken an entrenched position. I take "the health authority" to mean the Department of Health and Social Security. I spent some five years in the department and got to know it very well. I came away with the deepest and greatest respect for the ability and competence not only of the department generally but of the medical division in particular. If there are experts anywhere, they are to be found there. They would not have advised any Secretary of State or, for that matter, anybody else to take a particular course of action unless they were perfectly satisfied that what they were suggesting was based upon sound medical and, if I may say so, scientific evidence, because they also had on their staff a very distinguished scientist. I do not want to say anything more about that because it is terribly important that we should hear what the noble Lord the Minister is going to say by way of answer to this debate.

7.43 p.m.

Lord CULLEN of ASHBOURNE: My Lords, I am sorry that we are going to be denied hearing a little more from the noble Lord, Lord Wells-Pestell. However, it is getting late. I shall be as quick as I can, but I am afraid it will take me a little time. I am sure that the whole House is grateful to my noble friend Lord Campbell of Croy for introducing this debate and to those who have spoken from their knowledge of this subject, with its implications for dental health and hence the general health of the whole community. I am sure that attention will be paid outside this House to the remarks of noble Lords who have spoken in this debate, especially those with expert knowledge of the subject.

The score is 7:2 at the moment. I imagine that the noble Lord, Lord Wells-Pestell, is on the side of those who are in favour of fluoridation. Those seven in favour would like me to be able to say that the Government will wish to legislate during their term of office. The other two would like me to say that an inquiry will be held. I am afraid that I shall not satisfy any noble Lords. However, I can tell my noble friend that the announcement of an inquiry by the Minister of State is not accurate. Ministers are continuing to encourage fluoridation and their professional advisers will continue

[Lord Cullen of Ashbourne.]
to examine carefully any material about fluoridation which gives adequate information on data and methods. I noticed in the newspaper today a report which said that a plan for legislation on fluoridation had now been scrapped. In point of fact, there was no plan. So these Press reports have to be very carefully looked at.

I was asked by the noble Baroness, Lady Robsons of Kiddington whether the fund was still in existence, the fund of £½ million a year. The fund is still in existence and intact. I am afraid that I am bound to be rather repetitive, but I have quite a lot to say. Much of it will answer points which have been raised by noble Lords. As to my noble friend's Question, I understand that nearly all water supplies contain some fluoride, but that in Scotland—where he has served with distinction as Secretary of State—some 95 per cent. of public water supplies are derived from surface water with a low fluoride content. I am advised, therefore, that it is most unlikely that there are any areas of Scotland where the optimum proportion of fluoride is present.

Lord CAMPBELL of CROY: My Lords, if my noble friend will give way, I tried to make it clear that the areas were South of the Border. There are no areas in Scotland. I mentioned some of the areas: Essex, South Shields and Hartlepool. I want to make it clear that I was not raising it in a Scottish context because it does not apply in Scotland.

Lord CULLEN of ASHBOURNE: My Lords, I am afraid that I shall be mentioning some of those, too. In England, which my noble friend has in mind, there are only a few water resources which contain naturally one part per million or more of fluoride. These are groundwater sources—as my noble friend says, occurring mainly in Buckinghamshire, Bedfordshire, Lincolnshire, Essex, Dorset, Derbyshire and Cleveland. With the exception of one major area, these sources are relatively minor and those which contain more than one part per million are either diluted with low fluoride water or are only used as emergency supplies. My right honourable friend the Secretary of State for the Environment is not aware of any sources of supply which naturally contain the optimum level of fluoride but which

are intentionally or unintentionally diluted to below the optimum before being put into supply or into distribution. It would, however, take a disproportionate effort to establish this for certain.

The major area with a natural fluoride level of rather more than one part per million of fluoride is Hartlepool in Cleveland, to which I shall refer later. The water is supplied by the Hartlepool Water Company to a population of about 100,000 and the fluoride level is 1.3 to 1.4 parts per million. Although there are relatively few water supplies naturally containing the optimum level of fluoride, the better dental health of communities in areas served by such sources directed the thoughts of medical and dental research workers some 40 years ago to the possibility of devising a means of reducing the prevalence of dental decay—one of the commonest diseases—not merely in individuals but in the whole community.

These workers found that the greatest dental benefit occurred when a community's drinking water naturally contained about one part of fluoride per million parts of water. In temperate climates this was therefore regarded as the optimum proportion mentioned by my noble friend. Since, as I have said, nearly all water supplies contain some fluoride, the research workers considered that similar beneficial dental effects would be obtained by adjusting to the optimum level the fluoride content of supplies deficient in it naturally. Such adjustment was termed "fluoridation". Studies which began in the United States and Canada in 1945 showed that fluoridated water in the study areas, by comparison with low-fluoride control areas, also produced the protective effect against dental decay which had been observed in the areas with a satisfactory natural level of fluoride. For the greatest protective effect, fluoridated water had to be consumed from birth during the years of tooth formation; that is, to 14 years of age.

These results stimulated interest in this country and, on the advice of the Medical Research Council, the then British Government sent to the United States and Canada a mission consisting of dental, medical and scientific experts to study fluoridation in operation and to advise whether fluoride should be added to those

water supplies in the United Kingdom which were deficient in it naturally. The mission reported in 1953 that fluoridation was a valuable public health measure through its effect in reducing dental decay, but that in this country fluoride should be added to the water supplies of some selected communities before its general adoption was considered.

Studies accordingly began in three areas of the United Kingdom in 1955-56, and reports published in 1962 and 1969 on the first five and 11 years showed substantial dental benefits in children who had consumed fluoridated water from birth, compared with children of the same ages in low-fluoride control areas. My noble friend will know that a study area in Scotland, Kilmarnock, decided to cease fluoridating its water supply in 1962. I am sorry to say that by 1968 experience of dental decay in five-year-old children, having previously improved, had in consequence increased to substantially the level of the unfluoridated control town. An expert Research Committee, set up to supervise the studies, concluded in the report on the first 11 years:

"The fluoridation of water supplies at the level of a part per million of fluoride is a highly effective way of reducing dental decay".

Later studies of children brought up in fluoridated areas have confirmed the substantial benefit to their dental health compared with children in unfluoridated areas.

The reports of the official studies and of others in the United Kingdom could examine the effects on dental health only of children, bearing in mind that fluoridation in the areas concerned had not been in progress long enough for older people to have consumed fluoridated water during their early years. Fortunately, however, the areas with about the right level of fluoride naturally in their water supply provided an opportunity to study the effect of the optimum level of fluoride in water consumed during childhood on dental health later in life.

Studies in Hartlepool, for example, have shown substantially better dental health in adults who have lived all their lives there compared with people of the same ages in low-fluoride York. In one such study it was found that in dentate persons aged 45 and above the

number of carious sites in teeth was 44 per cent lower in Hartlepool than it was in York. Such results disprove the suggestion that fluoridation merely delays the onset of dental decay. On the contrary, a satisfactory intake of fluoride in childhood confers protection against dental decay which persists during adult life. Experience has shown that other methods of providing an adequate intake of fluoride—for example, fluoride tablets or drops—are less effective than fluoridation, principally because it is difficult to ensure the necessary regular administration in all children over a period of years. However, other methods have a place in areas where the water is not yet fluoridated or where it is not feasible to do so.

My Lords, some of you will know that some years ago the Royal College of Physicians decided, as an independent body concerned with public health, to review the evidence on the fluoridation of water supplies. A committee of the college carried out a comprehensive review and reported in 1976 that fluoride in water, added or naturally present, over the years of tooth formation substantially reduced dental caries throughout life. There was, moreover, no sound evidence at all of harm to health. One chapter of the report dealt with an alleged link with cancer and concluded that there was no evidence that fluoride increased the incidence or mortality of cancer in any organ.

This and similar conclusions have attracted criticism notably from two United States biochemists, Drs. Burk and Yiamouyiannis, who have claimed that cancer mortality increased more in 10 American cities than it did in 10 unfluoridated cities in the same period. This claim was carefully examined by recognised cancer epidemiologists and medical statisticians in this country and North America, who have independently concluded that there is no difference in the changes in cancer mortality in the two groups of cities when appropriate corrections are made for different changes which have taken place in their age/sex/race compositions. Drs. Burk and Yiamouyiannis have since announced the results of further analyses, although without the necessary supporting evidence at certain critical points or in some cases at any point. Moreover, this material has not

[Lord Cullen of Ashbourne.]
appeared in the usual scientific Press, where it would have been open to assessment by other scientists.

Dr. Burk has also re-examined data published in a 1974 paper from Oxford University about differences in cancer incidence in various organs between certain fluoridated areas and certain similar control areas, and between sets of areas with varying levels of fluoride naturally in their water supplies. I understand that differences reported in the Oxford paper could have arisen by chance and, as the author himself concluded, do not indicate an association between cancer incidence and fluoride in drinking water, whether present naturally or added artificially. It is notoriously easy to mislead by the inappropriate use of statistics. I have been advised that the persistent attempts to persuade the public by the use of figures which take no account of the demographic composition of populations under study is without justification and bound to mislead. I know that this judgment would have the widest and most vigorous support from expert epidemiologists and medical statisticians.

Because of the allegations of Drs. Burk and Yiamouyiannis many other studies of this question have been undertaken by appropriately qualified persons and published in scientific journals of good repute. The results of none of these studies support the allegations. Furthermore, reviews by experts in this and other countries have concluded that animal and other laboratory tests do not support the view that fluoride is a carcinogen; no properly authenticated tests have supported the assertion that fluoride salts, as used in fluoridation, are a mutagenic hazard to man.

My Lords, reference is often made to a case brought by local residents before the Court of Common Pleas, Allegheny County, Pennsylvania, to require a water authority to stop fluoridation in part of Pittsburgh and some outlying districts. The judge, sitting alone, said he was "compellingly convinced" of the plaintiffs' evidence, based largely on claims by Drs. Burk and Yiamouyiannis of a link between fluoridation and cancer. He therefore issued a preliminary decree until the court held a final hearing or until the matter was dealt with by the Pennsylvania

Department of Environmental Resources. The court's jurisdiction is still the subject of an appeal, but meanwhile the Department of Environmental Resources, having considered the evidence given to the court, has directed that the water authority should continue to fluoridate. Fluoridation also continues in the rest of Pittsburgh, where it began in 1952. The case has therefore had little local effect, and the implications claimed for it are not convincing.

A commission appointed by the Governor of Minnesota also considered the claims of a link with cancer, including the evidence given in the Allegheny court. The commission issued a report last February concluding that claims of carcinogenic and other adverse health effects—

"were not supported by the preponderance of available scientific data".

More recently still, a working party of the Australian National Health and Medical Research Council has reviewed the evidence available up to mid-1979 on possible adverse effects of fluoridation. The working party summarised its conclusions as follows:

"The evidence suggesting various adverse effects, and in particular the recently published allegations that fluoridation leads to an increase in cancer mortality, does not stand up to scientific scrutiny".

It is perfectly apparent that there is an overwhelming weight of evidence and properly qualified scientific judgment that fluoridation is not a cause of cancer and is safe.

My Lords, on behalf of my noble and honourable friends the Health Ministers, I must emphasise that the Government's professional advisers will continue to examine in the normal way the question of fluoridation. However, I hope my remarks have shown that there is no good reason to disturb the conclusion of the Royal College of Physicians and others that there is no evidence that the measure is associated with any harmful effect.

Noble Lords may have heard that the Quebec Government has declared a moratorium on fluoridation. I understand that this consists of the suspension of the present Quebec Government of the Government's measure to require municipalities in the province to fluoridate their drinking water, as

from the Government. Government has divided some of the about 1 are co about 4 people. Canada.

We are present fluoride process. Europe stand the were u compar had to Supreme unfluor provide. This, of ticable. substant Austral

Final assure r Croy an their p for ma fluoride prevent stems fr control endorse worker organis We will careful claims v able fr am su speech The C sidering Royal many c

al position of encourage- tion by the Federal ally leaving the decision to municipalities. I gather that municipalities, representing ct. of the urban population. to fluoridate, and that nt., which is about 8 million total urban population of receives fluoridated water.

Republic of Ireland are at only EEC countries with and the reasons why the were popular in Continental entirely clear. I under- arable studies to our own in the Netherlands with ts, but that fluoridation continued because of a ruling that a separate water supply should be se who wished to have it. was technically imprac- measure continues on a e in the United States, New Zealand.

Lords, I should like to friend Lord Campbell of that the Government, like rs of both main parties continue to support the water supplies as a valuable th measure. Our support results of our own properly es which have been ports from independent om medical and dental both here and abroad. erse, continue to consider properly supported contrary ay be made. My honour- Minister of Health will, I with great interest the by your Lordships today. ent will, however, be con- recommendations of the on on this, together with es.

OTTEN ANSWERS

IMMIGRATION: AGE ESTIMATES IN DACCA

Lord AVEBURY asked Her Majesty's Government:

Whether age estimates by the Civil Surgeon are required to be produced at the time of interview in respect of all children over 10 applying for entry clearance at the British High Commission in Dacca, Bangladesh, and whether such age estimates are based on X-ray examination.

The SECRETARY of STATE for FOREIGN and COMMONWEALTH AFFAIRS (Lord Carrington): Children over 10 applying for entry clearance at the British High Commission in Dacca are not required to produce Civil Surgeon age estimates at the time of interview. In cases of doubt where age is a crucial factor, applicants may be referred at interview to the High Commission medical adviser for an age estimate which may include an X-ray.

Lord AVEBURY asked Her Majesty's Government:

How many applications in respect of children over 10 were processed at the British High Commission in Dacca, Bangladesh, in the last 12 months and in how many such cases were X-rays for the purpose of age estimates carried out by the High Commission's medical adviser; or, if this information is not available for a 12-month period, whether they will give this information for any shorter period for which it can now be obtained.

Lord CARRINGTON: Entry clearance applications from 1,258 children were considered at the British High Commission in Dacca between 1st July and 31st August 1979. During this period 47 children were referred for age estimates which entailed the use of X-rays. These figures do not distinguish between children below and above the age of 10; but young children would not be referred for age estimates.

IMMIGRATION: INTERVIEW OF APPLICANTS IN DACCA

Lord AVEBURY asked Her Majesty's Government:

What was the average number of interviews of applicants for settlement

Lord Government
ILL 12

EW.

FLUORIDATION OF WATER SUPPLIES

NOTE OF MEETING BETWEEN MINISTER OF STATE AND OFFICIALS ON

THURSDAY 1 NOVEMBER 1979

TO DISCUSS CORRESPONDENCE WITH SIR EMMANUEL KAYE

Present:

The Minister of State for Health
Lord Cullen
Sir Patrick Nairne
Mr Benner
Chief Dental Officer
Dr Matthew
Mr Mayoh
Mr Collins
Mr Sargent

1. The Minister of State said that he was not responsible for the report in the Daily Express of 12 October, suggesting that the Department was setting up a committee of inquiry into fluoridation. His reply to Sir Emmanuel Kaye would have to refute this suggestion.
2. Officials said that, although Dr Dean Burk's allegations of a link between fluoridation and cancer must be suitably examined, independent investigations by properly qualified experts in the relevant fields of epidemiology and medical statistics had so far shown these allegations to be groundless. Nevertheless, in order to continue the examination the Department was obtaining further data from the Office of Population Censuses and Surveys and the Cancer Registry in Birmingham, with a view to its consideration by appropriate experts. Sir Emmanuel Kaye was not an expert, simply an interested citizen, and Dr Burk, while an eminent biochemist, was not a cancer epidemiologist or medical statistician.
3. The Minister said he favoured fluoride as a preventive health measure against dental decay, but the information sent to him and the lack of a consensus in Continental Western Europe had caused him to have doubts. He thought we should carry on with our own present encouragement of health and water authorities to implement fluoridation, but defer further steps until we had more Western European

reports, eg from the West German Federal Health Council and from the Swedish Royal Commission on fluoridation, which was expected to report in 1980.

4. The Minister suggested that there should be more consideration of alternative means of providing an adequate fluoride intake which did not involve libertarian questions of freedom of choice.

5. Lord Cullen thought that the House of Lords debate following Lord Campbell of Croy's Question on 15 November would be an important means of sounding opinion on fluoridation. He asked why water authorities were reluctant to implement requests for fluoridation from health authorities, nearly all of which wished to introduce it.

6. Officials commented as follows on these points:-

- a) There were various reasons, largely political or legal, for the position in various Continental Western European countries (upon which, in any case, the UK's stance did not primarily depend), but none had stopped fluoridation on health grounds (eg the Netherlands had to stop because of a Supreme Court decision which was technically impracticable to implement). While any reports would be examined, it was significant that there was no evidence of harm to health in lifetime residents of areas which for long had had similar natural levels of fluoride. (Fluoride compounds ionised almost completely at these dilutions and the fluoride ion was the same in all respects, whether derived from a compound present naturally or added artificially.)
- b) Several non-European countries, eg the United States, Canada, Australia and New Zealand, were fluoridating their water supplies on a substantial scale, and there were impressive reports from these countries on the value of fluoridation.
- c) The Department's professional advisers would try to ascertain (eg through WHO) what advice their counterparts had tendered to governments of European countries at present without fluoridation.
- d) In this country, the Royal College of Physicians had comprehensively reviewed the literature on fluoridation and concluded strongly in favour of its safety and efficacy.
- e) Other methods benefited the individual rather than the community, and in practice the necessary regularity of administration, eg of fluoride tablets, was rarely achieved. However, other methods had a place in areas where it might be impracticable, on technical or economic grounds, to introduce fluoridation.

- f) Water authorities, with one or two exceptions, were refusing to fluoridate because of doubts about their legal powers to do so. Although the judgments in two current legal actions should help to clarify powers, water authorities would still be free to decide whether or not to comply with requests for fluoridation.
- g) The Royal Commission on the National Health Service had strongly recommended that legislation should be introduced to oblige water authorities to comply, since the Commission saw general fluoridation as crucial to its views on the need for a strategy to prevent dental disease. Ministers still had to respond to this recommendation.

8. The Minister agreed, in the light of officials' comments, to write to Sir Emmanuel Kaye, broadly on the lines of the circulated draft, which would be expanded and strengthened to include the gist of the annexes and to emphasise the value of the Royal College of Physicians' report. He also agreed that officials should explore means of examining, within the existing advisory machinery, any properly documented new material on the safety or efficacy of fluoridation.

9. The Minister said that in due course he would like to see a discussion paper on other methods of providing fluoride.

Future action by Department

- 10.
- i) Redraft letter to Sir Emmanuel Kaye on agreed lines.
 - ii) Explore means of considering new material about fluoridation within existing advisory machinery.
 - iii) Prepare in due course a discussion paper on other methods of providing fluoride.
 - iv) Professional advisers to try to find out what advice had been given to governments of European countries at present without fluoridation.
 - v) Meanwhile maintain existing stance on fluoridation of water supplies.

cc Those present
Mr Brereton ✓
Mrs Fosh



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11 DEC 1979



Original in ~~Records~~ National Health

C.F.
To note



cc DHSS

10 DOWNING STREET

THE PRIME MINISTER

4 December 1979

Dear Mr Peyton

I am sorry that you have had to wait so long for a reply to your letter of 17 October enclosing one from Mrs J P Pitman of Priory Farm, Charlton Mackrell, Somerton about the fluoridation of water supplies. I was concerned to get the fullest information myself about a number of current issues affecting the question of fluoridation.

This is a difficult issue, and I am well aware of the divided views about it, and of the strength of view of those who feel that fluoridation is a form of compulsory medication and that, as such, it is wrong. I can assure Mrs Pitman that the Government has no intention at present of changing the law for the purpose of giving stronger powers to water authorities to fluoridate water supplies.

I am in no doubt about the value of fluoride as a protection against dental decay. Gerry Vaughan knows the importance I attach to looking at ways, other than fluoridation, of promoting preventive measures which will contribute to dental health. At the same time, I recognise that successive Governments have accepted that fluoridation of drinking water is a valuable preventive measure which many studies have shown to be both effective and safe. This view has been supported by the Royal College of Physicians after a comprehens

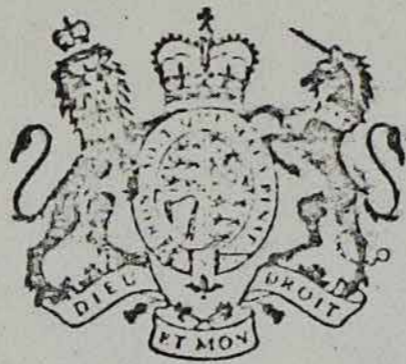
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review of the scientific publications on fluoridation. Contrary views continue to be expressed, and Mrs Pitman may be assured that all properly documented evidence will continue to be thoroughly examined and evaluated. A full statement about fluoridation policy was given by the Government Spokesman, Lord Cullen of Ashbourne, in his reply to the House of Lords debate on 15 November.

signed

MT

The Right Honourable John Peyton, M.P.



209
Nat Health
DSS
cc: DHSS

10 DOWNING STREET

THE PRIME MINISTER

24 October, 1979.

Dear Emmanuel,

Thank you for your further letters of 8 and 19 October about fluoridation.

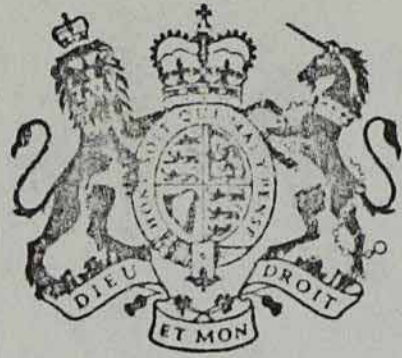
As you know, Gerard Vaughan is taking a close look at Dr. Burk's evidence. I understand that you have also been passing the material sent to me direct to Dr. Vaughan. He is making great efforts to assess it dispassionately.

Yours ever,

(SGD) MT

Sir Emmanuel Kaye, CBE.

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10 DOWNING STREET

From the Private Secretary

23 October 1979

I have mentioned to you on the phone two further letters from Sir Emmanuel Kaye to the Prime Minister about fluoridation. I now enclose copies.

The Prime Minister is writing to Sir Emmanuel acknowledging the letters, and commenting that she understands that he has been sending similar material both to you and to Sir Patrick Nairne.

The Prime Minister has asked whether Dr. Vaughan has had any people from the anti-fluoridation camp looking at the subject in preparation for decisions in the Department. I have told her that Dr. Vaughan has asked your experts to evaluate Dr. Burk's latest presentations, with a view to further discussion at Ministerial level. I would be grateful if you could let me have a brief summary of the outcome of this work, which I understand will be considered at a meeting on 1 November.

M. A. PATTISON

Miss Zoe Spencer,
Department of Health and Social Security.

PRIME MINISTER

I attach an acknowledgement to Sir Emmanuel Kaye's two most recent letters on fluoridation.

I understand that Dr. Vaughan was interested in Dr. Burk's presentation, and has arranged for this evidence to be further reviewed by DHSS experts, in preparation for a meeting of Ministers and senior officials on 1 November. DHSS experts have previously reviewed evidence from anti-fluoridationists, and have, on balance, rejected the anti case. But Dr. Vaughan wants to ensure that the most recent evidence from overseas is properly evaluated before any irrevocable decisions are taken.

Sir Emmanuel Kaye has been writing regularly both to Dr. Vaughan and to Sir Patrick Nairne.

On this basis, perhaps the attached acknowledgement to Sir Emmanuel Kaye may encourage him to keep in contact with Dr. Vaughan rather than you on this topic.



23 October 1979

PRIME MINISTER

Yet another letter from Sir Emmanuel Kaye on fluoridation.

On his earlier letter (attached below), I suggested that you might try to steer him off these regular approaches to you at last week's dinner. In the event, you did not reach this in the box until later in the week, but I see that the subject came up at dinner.

Following Sir Emmanuel's original approach to you on this subject, Gerard Vaughan arranged a meeting with Dr. Dean Burk. Dr. Vaughan is confident that his advisors have had every chance to examine the arguments of Dr. Burk and his supporters, but he (Dr. Vaughan) continues to believe that Dr. Burk's case is very much overstated.

If you simply acknowledge Sir Emmanuel's letters and pass them on to Dr. Vaughan for action, this would give the impression that you believe that Dr. Burk's case still requires further attention. Do you want to do this, or do you want to try to bring the correspondence to an end?

*Dr. Burk - has Dr. Vaughan
had any anti-fluoridation
papers bolding it?*

*Thank you for your
letter - Gerry Vaughan
is covering Dr. Burk's
evidence.*

22 October 1979

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Sir Emmanuel Kaye, C.B.E.
Chairman & Governing Director

Ref: EK/CM

19th October, 1979

The Rt. Hon. Mrs. Margaret Thatcher, M.P.,
Prime Minister,
10 Downing Street,
LONDON S.W.1.

My dear Prime Minister,

If I may take a few minutes of your time on the fluoridation question, you will see from the enclosed cutting from last Sunday's "Observer" that there are officials in the D.H.S.S. who are preparing legislation to force water authorities to add fluoride to drinking water.

Nothing could be more unjustified or unpopular, or more contrary to the Conservative philosophy of freedom of choice! In support of the unpopularity of such coercion I enclose also a copy of Peter Simple's article in the "Daily Telegraph" of 16th October: So I do hope there will be a denial from Dr. Gerard Vaughan that he has any such intention.

Reverting to my remarks at Monday's dinner party, I do very much hope that the Committee to be appointed by Dr. Vaughan will be fairly constituted on a 50/50 basis; i.e. 50 per cent of the members should represent the anti-fluoridation point of view. In the past all committees specifically set up to look into fluoridation have consisted of fluoridationists, which is why their reports have carried no conviction and have not been generally accepted. Hence the widespread opposition.

A Department of Health spokesman admitted last week that there has been an increase in cancer mortality, particularly from leukaemia, in Birmingham since fluoridation. In his B.B.C. Radio 4 interview, on 12th October, Dr. Dean Burk stated that for ten years prior to fluoridation in 1964 Birmingham had a very steady cancer death rate - 210 deaths per one hundred thousand population per year. Within five years it had gone up to about 235, and it is much above that now.

Congratulations on your splendid & statesmanlike speech at Luxembourg!

With every good wish,

Yours very sincerely,
Emmanuel.



Add fluoride—by order

THE Government is preparing legislation to force water authorities to add fluoride to drinking water, writes Geoffrey Lean.

Its action, which is sure to meet vigorous protest, comes at a particularly sensitive time—amid allegations that cancer deaths in Birmingham rose after fluoridation.

Eighty-four of Britain's 90 Area Health Authorities, which are responsible for making the decision on medical grounds, have said that they want fluoride added.

But only 23 have seen fluoridation wholly or partially implemented because water authorities, who actually add the chemical, have been slow to obey. About 4½ million people, mainly in Birmingham, the West Midlands and Newcastle, drink the treated water.

Health authorities can only request water authorities to add fluoride and the Government believes there must be a way to enforce decisions.

Fluoridation provokes stronger reactions than almost any other environ-

mental issue. Its supporters are convinced that it is safe and essential to fight tooth decay. Opponents, however, passionately argue that mass medication is wrong in principle and that fluoride can cause a host of diseases including cancer.

The opponents point to research by an American scientist, Dr Dean Burke, who concluded that cancer deaths have risen in Birmingham and 10 American cities since fluoride was added to the water there. Department of Health scientists disagree.

Urgent

FLUORIDATION is a notoriously boring subject; I accordingly write about it only once a year. The time has now come to write about it again, and much more urgently than ever before. For once again the Government is threatening to make water authorities add fluoride to public water supplies; and this time it looks as if it may actually try to force them to do so by law.

This is far from boring. It is a scandal and a menace.

There are two arguments against this measure. In the first place it amounts to compulsory mass medication, which is wrong in principle; in the second place, there is a great deal of evidence that although the addition of fluoride to public water supplies may temporarily benefit children's teeth, it may also have long-term adverse effects on the human body—notably cancer.

Because the medical "establishment" in this country has taken up an entrenched position on this subject—the reason why it should have done so is mysterious and even sinister—it has been able to dismiss objectors to fluoridation as a lot of cranks and reactionary fanatics, and to convince the public by incessant propaganda that there is only one side to the question.

This is not so. There are 40 MPs of all political parties who believe it is the *duty* of MPs to oppose fluoridation. They have formed an All-Party Committee, with Mr Ivan Lawrence, Conservative MP for Burton, as chairman. In a speech in the Commons last year he said that "the sheer irresponsibility in the dental and medical profession about this problem" was positively "frightening."

He also pointed out that most of the nations of Western Europe either had not allowed fluoridation in the first place or had rejected it after trial.

Yet 84 of the 90 Area Health Authorities in this country have now pronounced in favour of it. At present they can only *recommend* that water authorities follow their advice. So far only a few have done so: only about four and a half million people, mainly in the West Midlands and Tyneside, have been subjected to this more than dubious experiment.

Will the Government now try compulsion by law? If so, it must be resisted all the way. If ever there was a thin end

of an enormous wedge, it is here.

Peter Simple -
article -



10 DOWNING STREET

PRIME MINISTER

Yet another letter from Sir Emmanuel Kaye - this time returning to Fluoridation.

Are you likely to have an opportunity to suggest to Sir Emmanuel that he should approach the responsible Minister direct on some of the issues which interest him, and not approach you direct? Perhaps you could acknowledge this letter in person when you dine with him on Monday, thus avoiding a prolongation of the correspondence?

10 October 1979

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Sir Emmanuel Kaye, C.B.E.
Chairman & Governing Director

8th October, 1979

The Rt. Hon. Mrs. Margaret Thatcher, M.P
Prime Minister
10 Downing Street
LONDON S.W.1.

RPS

My dear Prime Minister,

I am most grateful to you for arranging for Dr. Gerard Vaughan to see Dr. Dean Burk and me about fluoridation. In fact, Lord Douglas of Barloch, Professor Dr. Hugh Sinclair and Mr. Ivan Lawrence M.P attended the meeting with us.

Dr. Vaughan, who was accompanied by three of his advisers, received us with courtesy and charm. We gave him information which we believe was unknown in Britain - namely, that the Government of Quebec has declared a moratorium on fluoridation.

This is confirmed on page 12 of the Report which I enclose with a copy of a letter of 9th July, 1979 from Dr. Bundock to Justice Flaherty, which confirms that the Quebec Review Committee came to the same conclusion as Justice Flaherty as to the carcinogenic effects of fluorides. We asked Dr. Vaughan to seriously consider acting similarly in this country: i.e. declaring a moratorium on fluoridation.

We raised as a subsidiary point the question of expenditure: e.g. the West Midlands health budget is over-spent and officials have drawn up emergency plans to freeze building work, consultant appointments and medical developments, yet they still propose to spend some £130,000 to fluoridate Coventry at a time when the Government is rightly trying to cut expenditure. Strathclyde is likewise proposing to spend some £2,000,000 on fluoridation. Here is scope for economies!

Yours very sincerely,
Emmanuel.



SERVICES DE PROTECTION DE L'ENVIRONNEMENT
CABINET DU MINISTRE

July 9, 1979

The Hon. John P. Flaherty, Jr.
Alleghany County Common Pleas Court
Pittsburg, Pa. 15219

Dear Judge Flaherty:

This will acknowledge receipt with thanks of a copy of your opinion in the fluoridation case involving Mr. Paul W. Aitkenhead et al., Plaintiffs and the West View Water Authority. We were fortunate to obtain copy of that document through the courtesy of Mr. Jacques Dansereau, from Laval des Rapides, Laval, Quebec.

You will easily understand that as far as we are concerned in Quebec, your decision has a strategic significance for the following reasons.

In June 1975, the former government enacted bill "88" requesting all municipalities who operate water treatment plants to add fluorides to their water supplies to the level of 1.2 part per million to prevent dental caries.

On the basis of preliminary scientific evidence, this government which took office in November 1976, decided to postpone the implementation of that measure to make a thorough review of the whole problem.

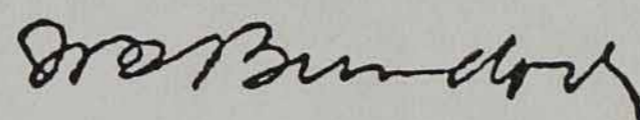
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This was done and in so far as the carcinogenic effects of fluorides are concerned our Review Committee reached the same conclusions as you did in your Opinion.

We, of course, would like very much to obtain a copy of the transcript of this case and its exhibits to make a detailed study of it if possible.

Please, rest assured that we deeply appreciate your cooperation.

Yours sincerely,



Dr J.-Benoît Bundock
Senior adviser to the Environment
Minister for Quebec.

cc: Mrs. P. Petit
Mr. Jacques Dansereau

ANNEXE A

ABSTRACT OF
THE DEPARTMENTAL
COMMITTEE REPORT ON
THE QUALITY OF THE
ENVIRONMENT AND THE
FLUORIDATION OF
DRINKING WATERS

Environment Protection Services
for Quebec

EFFECTS OF FLUORIDES ON AQUATIC LIFE

The information available concerning the effects of pollution caused by fluorides on aquatic life is so limited that it is difficult to draw a complete picture of the situation. Recent studies have shown that the exposure of living organisms to concentration of fluorides above certain limits in the water environment produces cumulative effects of fluorides. Biochemical and morphological changes may occur in these organisms. Directly or indirectly these changes may restrict the capacity of these organisms to maintain their ecological position within the overall natural ecosystem.

The accumulation of fluorides in aquatic plants and fauna is a very important phenomena because of its potential impact on all animals consuming these organisms. Recent studies suggest that the concentration of fluorides along the food chain is certainly not less than 10 to one.

Effects on plant life

The information available has shown, that at the level of 1.9 p.p.m., fluorides lower the rate of growth of the green algae "Chlorella" which is an important link in the food chain. It is also known that several aquatic plants can easily accumulate fluorides at levels which exceed by far the level reached by their environment.

Effects on animal life

According to authors consulted, a great many species have

shown abnormal reactions when exposed to fluorides. The reactions of fishes to fluorides may be influenced by several factors such as the species under consideration, the existing stress resulting from the study, the harshness and the temperature of the water, the size and the age of species being studied.

Fishes and other aquatic species tend to accumulate fluorides in their body mainly within the skeleton and the exoskeleton. These accumulations may be very important according to different species. Furthermore, in the case of certain organisms (for example the crab) this accumulation may be responsible for lowering the rate of growth with a corresponding loss of weight and reduction of size of the individual.

In other cases, such as the frog, the embryonic development of their eggs is delayed when they are submitted to a concentration of 1 p.p.m. of fluorides. Similar effects are observed when tadpoles (larva of the frog) are exposed.

For certain species of fish, we can observe the noxious effects of fluorides on the eggs exposed to levels of 1.5 p.p.m. of fluorides. More specifically, the eggs of trouts do not hatch when they are exposed to concentrations 1.5 p.p. million of fluorides.

Conclusion

Although there is a lack of information regarding the effects of accumulation of fluorides along the food chains, there is enough evidence to conclude that the actual presence of fluorides above certain levels in the aquatic environment is causing important biological damages to both plant and animal systems.

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2. MEDICAL ASPECTS OF WATER FLUORIDATION

The utilization of municipal waterworks to administer fluorides to entire populations continues to be a highly controversial measure, even to this day. This is largely due to the mediocrity of the literature demonstrating its efficiency in the prevention of dental caries, to publications showing that water fluoridation may be deleterious to health and finally to the loss of fundamental individual liberties inherent to this measure.

The efficiency of water fluoridation
for the prevention of dental caries

The application water fluoridation as a measure for prevention of dental caries dates back more than thirty years. It came about as a result of epidemiological studies carried out by Dean which showed that children afflicted with dental fluorosis appeared to have less dental decay than children with normal teeth. In his study, Dean examined selected populations from some 25 American states.

The epidemiological studies of Dean which correlated dental fluorosis to the level of fluorides in drinking water were later confirmed under controlled animal experimentation conditions. These laboratory experiments demonstrated that excess fluorides can produce an intoxication of the ameloblasts with resulting hypomineralization of teeth; a condition commonly referred to as dental fluorosis.

On the other hand, it is much more difficult to accept arguments to the effect that water fluoridation at the proposed 1.2 ppm level is highly efficient in the prevention of dental decay. This level of administration appears to be a compromise between "an acceptable level of dental fluorosis" and some possible reduction in dental decay. The probable level of ingestion of fluorides at this level of water fluoridation was estimated to be between 1 and 2 mg per day for a normal adult. It must be realized, however, that what appears a simple routine experiment is really a challenging problem which to this day has not been solved satisfactorily. It must be realized that the processes implicated in dental caries are estimated to be under the influence of a large number of variables. Amongst these, we find; the composition of one's diet, the hardness of the foods eaten, the presence in drinking water of minerals such as vanadium, strontium, calcium, magnesium, phosphorus salts, fluorides and copper salts; the type bacterial flora found in the mouth, the presence or absence of antibodies in saliva, dental hygiene, genetic factors, the use of mouth washes containing or not antiseptics, the use of tooth pastes containing or not fluorides and/or antiseptics, etc... All these factors have to be taken in consideration in the experiments if one is to elaborate an acceptable profile corresponding to a situation likely to occur in man.

The large number of variables which need to be considered prevents, for all intents and purposes, the

utilization of epidemiological studies as a measure of efficacy. Multivariate analyses cannot cope with more than three of four variables and still retain some credibility. On the other hand longitudinal studies lasting for some twenty five years are impossible to carry out. One must then turn to animal experimentation under controlled conditions. Here again, the experimenter is confronted with major difficulties. Fluorides being universally present in nature, it becomes difficult to find animal feed with a low content in fluorides. Under these circumstances getting dose/response curves is nearly impossible unless one compromises and administers highly artificial diets to the experimental animals. The results obtained under such conditions are, therefore, subject to great caution if not outright rejection by serious scientists. It is not surprising, then, to find many who insist that the experimental conditions are so far removed from a normal situation that any extrapolation to a human situation is unacceptable.

Under those conditions, it is not surprising to find that there is no consensus within the scientific community. For the time being, programs for the prevention of dental caries should be designed in such a way as to enable the experimenters to document more thoroughly the different aspects of the prevention of dental caries with the view of eventually defining an ideal profile of preventive measures. Time certainly has not come to impose anything upon anyone.

Pathology of fluorides

Water fluoridation should be closely reexamined at this time, however. Quite recently Mariier showed that during the past ten years fluorides have increased considerably in the environment. According to this author and many others, adult man absorbs today and quite involuntarily more than the one or two mg per day first suggested by the world health organization. Under these conditions and realizing that the margin of safety for fluorides is a narrow one, any additional amount would be both useless were fluorides to be shown desirable and hazardous to health. It was also Mariier who showed that water fluoridation has an enhancing effect on the content of all prepared foods. This unsuspected finding results in a much greater levels of fluoride absorption that was first estimated. It would seem therefore that our preoccupations for the present should center on fluoride intoxication rather than deficiency.

Fluorides are highly toxic for humans and a narrow margin separates an "acceptable level" from a toxic level. According to Dean, at a 0.9 ppm level in drinking water approximately 12% of the children examined during the course of his investigations showed signs of dental fluorosis. At a 1.2 ppm level, 20 to 30% of the children showed signs of intoxication. It is not surprising therefore, to find a recent study published in the american medical association journal which showed that nearly 70% of the children living within a fluoridated

area and receiving vitamins containing fluoride had dental fluorosis.

Dental fluorosis seems to be the first indication of chronic toxicity of fluorides. The seriousness of the diseases caused by fluorides appears to progress with the level of ingestion. We may, therefore, speak of a dose/response curve for fluorides with very mild dental fluorosis as first evidence of disease. In people who drink greater than normal amounts of fluoridated water such as people with renal insufficiency, those suffering from polydipsia and people on dialysis machines, a number of cases of osteomalacia and/or osteosclerosis have been reported. In areas where fluorosis is an endemic disease, Singh has reported calcification of tendons, of joints, fusion of the spinal cord and various skeletal abnormalities. Even children may be afflicted by serious malformations of their knees. The cases published by Singh should be considered perhaps as extreme cases, they do, however, shed some light on the long term effects of chronic fluoride intoxication. Finally, patients suffering from a non skeletal form of fluorosis may suffer from hyperparathyroidism and also show from mild to severe neurological symptoms. The possibility that water containing fluorides may be directly implicated in a disease condition called "nephrogenic diabetes insipidus" also has to be taken seriously to day.

Two reports taken from the abundant literature on fluoride toxicity merit particular attention. The first one

is a group of studies carried out by Rapaport which showed a dose/response effect between drinking water fluoride level and the number of mongoloids in the population. All are aware of the genetic factors which have an influence on this disease. It is also known that mongolism tends to concentrate within populations. Because of the inherent limitations of such a study it would not have received a great deal of importance in the context of fluoride toxicity had it not been confirmed indirectly by studies carried out on other living systems. These other studies have now shown quite convincingly that fluorides, by some still unknown mechanism, seem to produce chromosome breaks and/or aberrations. These reports of unsuspected cellular damage are highly disturbing and merit all the attention of the scientific community. The second disturbing study is that of Yamouyannis and Burke which showed a higher cancer death rate in fluoridated cities than in comparable non fluoridated ones. When first published, this study was ridiculed by Public Health Officials. More recently, however, it has been recredited before a court of law as a scientific study done according to the state of the art. It is rather amusing to find that courts of law are doing the work that Public Health Officials should have been concerned with. The Yamouyannis study is not altogether surprising, however, and many scientists have suspected their conclusions for some time.

What is implicit in this study is that fluoredated organic compounds and the fluoride ion may be as potent

carcinogens as chlorinated organic compounds. Although the literature on the subject is still rather lean, we do know of a least two fluorinated organic compounds which are potent carcinogens namely: 2-acetylaminofluoride and 2-fluorenyl-acetamide. The possibility of formation of fluoridated organic compounds either during the water treatment process in public waterworks or during later use by industry takes on a new dimension and should be of utmost concern to all who are interested in Public Health.

The Decision of the Quebec Government

The special committee formed at the request of the Minister of Environment for the Province of Quebec taking all these considerations under appraisal recommended to the Quebec government that:

1. An indefinite moratorium on water fluoridation be imposed in the province.
2. Basic and applied research in the area of fluoride intoxication be encouraged by whatever means judged adequate.
3. Fluoride levels in the environment be monitored as for other environmental pollutants.
4. Fluoride levels in food be monitored to determine the exact level ingested by humans.

As a result of the recommendations of the committee:

1. The Quebec Government declared a moratorium on compulsory water fluoridation starting August 1977. It is still enforced to day. This had for effect to suspend the application of Bill 88 of the Quebec legislature.

2. Fluoride is monitored by the Environmental Protection Services of the Quebec Government.
3. Food fluoride levels were determined and should continue to be for sometime.

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3. TECHNICAL PROBLEMS RELATING TO THE MAINTENANCE OF OPTIMUM LEVELS OF FLUORIDES.

Under the terms of Bill 88 municipalities who operate water treatment plants were asked to add fluorides to their water supplies to the level of 1.2 part per million to prevent dental caries.

The type of equipment used for the determination of fluorides is the same as for other chemical substances and its operating precision is of the order of 10% provided it is maintained properly adjusted.

Once fluorides are introduced in the drinking water system it is necessary to maintain the concentrations at 1.2 p.p.m. on a continuing basis. All interferences which might cause significant variations must be avoided. On the other hand, the concentrations must be maintained throughout the whole drinking water system.

Distribution systems made of cement and asbestos or those made of cast iron coated with concrete linings tend to precipitate fluorides with a corresponding decrease in the level of fluorides when the water reaches the tap.

The great variety of the systems in existence are responsible for many problems experienced in attempting to maintain a proper and efficient system of concentration of fluorides in the drinking water.

By way of exemple, an american study based on 620 local fluoridation systems distributed throughout 12 southern

states has shown that 290 of these systems or 46.1% were distributing fluoridated waters whose concentrations were outside the prescribed limits, i.e. from 0.7 to 1.2 p.p.m.

ANNEX B

Departmental committee on fluoridation

- Mr. Michel Lamontagne, Master of science in hydrology and Chairman on Public Hearing Board, on environmental impact studies;
- Mrs. Pierrette Petit, Bachelor Degree in sociology, Assistant Director Minister of Environment office;
- Mr. Clément Audet, Master of Sciences in Civil engineering (Public Health), Staff member of drinking water division Environment Protection Services;
- Mr. Léopold Gaudreau, Bachelor degree in Biology and Master in Forestry Sciences; Scientific Advisor, Advisory Council on the environment for Quebec;
- Dr Pierre Morin B.A. biochemistry, Master and Doctor in Experimental Medecine, Director of the Research Center, Laval Hospital, Ste-Foy, Que.
- Mr. Gilles Gagné, Engineer, Environment Protection Services;
- Mr. Laval Lapointe Master of Science in Public Health Engineering and Chief of Air pollution control division, Environment Protection Services;
- Miss Sylvie Fortin Lawyer, and legal advisor for the Environment protection services for Quebec;
- Miss Micheline Vallée technican in water sanitation, Environment Protection Services;
- Dr J.B. Bundock Doctor in medecine and Senior Advisor to the Minister of the Environment for Quebec

PERSONAL DATA

FICHE DE RENSEIGNEMENTS

MORIN, Pierre J.

05-08-31

Name/Nom

Date of Birth/Date de naissance

University or Institution and location <i>Université ou Établissement et localité</i>	Degrees <i>Diplômes</i>	Year <i>Année</i>	Scientific field <i>Domaine scientifique</i>
Sir George Williams University	baccalauréat	1964	Biochimie
Université Laval	Maîtrise	1970	médecine expérimentale
Université Laval	Doctorat	1972	médecine expérimentale

RESEARCH AND/OR PROFESSIONAL EXPERIENCE

EXPÉRIENCE PROFESSIONNELLE OU EN RECHERCHE

Starting with present position, list in chronological order training and experience relevant to area of project.

À partir de votre poste actuel, donnez la liste en ordre chronologique de votre formation supérieure et des postes occupés relativement au domaine de votre projet de recherche.

- 1975 : Directeur, Centre de recherches, Hôpital Laval
Professeur adjoint
- 1973 : Chargé de cours et Directeur de thèse, département de Médecine Université Laval.
- 1967-73: Etudiant gradué, Médecine expérimentale, U. Laval; Coordonnateur de la recherche, Institut de Cardiologie de Québec.
- 1957-67: Associé à la recherche, département de Chirurgie expérimentale, U. McGill.

PUBLICATIONS

Total Number (excluding abstracts) _____
List papers published during the past five years. Include papers accepted for publication. Abstracts should be identified as such.

PUBLICATIONS

Indiquez le nombre total (sauf les résumés) 37
Inscrivez ci-dessous les articles publiés au cours des cinq dernières années. On peut y inclure les articles acceptés pour publication. Les résumés doivent être identifiés comme tels.

see addendum

Additional material may be provided as an appendix to this page)

(On peut annexer des renseignements supplémentaires à cette page)

Place & Date/lieu et date

Pierre J. Morin
Signature

PUBLICATIONS

1. MORIN, P.J., BEAULIEU, M., MARCEAU, P.J. and ROY, P.-E. A vertical membrane lung. Preliminary report. J. Thoracic Cardiovasc. Surg. 58:411-415, 1969.
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29th August, 1979

Dr. G. F. Vaughan,
Minister of State
Department of Health & Social Security
Alexander Fleming House
Elephant and Castle
LONDON SE1 6BY.

Dear Dr. Vaughan,

The Prime Minister has kindly advised Sir Emmanuel Kaye that you will be arranging a meeting with Dr. Dean Burk during September and I know that Sir Emmanuel - who is currently abroad - will be very pleased about this.

It might be helpful for you to have the two telephone numbers through which Dr. Burk can be contacted, since he has trips planned to Scandinavia, (2nd - 7th Sept.), Scotland (25th - 28th September) and South Africa, (29th September), as well as attending a Conference at Magdalen College, Oxford. These are: -

01.435 5539


(Mrs. Edith Bruehl)

01.435.7766

(Miss Doreen Chaundy)

These ladies are sisters-in-law
of Dr. Burk.

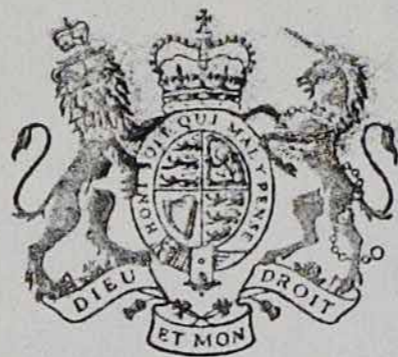
Yours sincerely,



P. J. Brewer (Miss)
Private Secretary to Sir Emmanuel Kaye.

c.c. Ms. Caroline Stephens
Prime Minister's Office.

Ja: 30/8



JFA
cc DASS
effseen

10 DOWNING STREET

THE PRIME MINISTER

28 August 1979

Dear Emmanuel,

Thank you for sending me (your letter of 9 August) comments on fluoridation as promised when we met recently at lunch.

I have been in touch with Gerry Vaughan about this, as he handles health matters at the Department of Health and Social Security. I was interested to learn of your earlier correspondence on these topics and of the meeting which you and Dr. Dean Burk had recently with two of their senior medical advisers. I understand that the facts and factors underlying the policy of successive British Governments towards fluoridation have been clearly set out.

Gerry has asked his office to arrange a meeting for him with Dr. Burk after he returns from holiday next month.

Yours ever

Raymond

Sir Emmanuel Kaye, CBE.

h



10 DOWNING STREET

PRIME MINISTER

You asked for comments on Sir Emmanuel Kaye's letter about fluoridation (Flag A) from Dr. Vaughan. The letter (Flag B) shows that his Department have been well aware of the case made by Sir Emmanuel for a long period of time and they are clearly highly sceptical. Dr. Vaughan has, nevertheless, asked for arrangements to be made for him to meet the expert mentioned by Sir Emmanuel.

Would you like to write as in the attached draft?

24 August 1979



DEPARTMENT OF HEALTH & SOCIAL SECURITY

Alexander Fleming House, Elephant & Castle, London SE1 6BY

Telephone 01-407 5522

From the Secretary of State for Social Services

Mike Pattison Esq
Private Secretary
10 Downing Street
LONDON SW1

21 August 1979

Dear Mike

You wrote to me on 13 August enclosing a copy of Sir Emmanuel Kaye's letter of 9 August on fluoridation of water supplies, asking for Dr Vaughan's comments on it and for a meeting to be arranged between Dr Vaughan and Dr Dean Burk. Dr Vaughan saw this correspondence before he went on leave and although he was unable to comment he has made arrangements to meet Dr Burk.

Sir Emmanuel Kaye has previously raised all his present criticisms and allegations in correspondence with former Health Ministers and in correspondence and meetings with Sir Patrick Nairne, but as his letter to the Prime Minister indicates he has been unable or unwilling to accept the important points which have been made in response to his case. As recently as 8 August he and Dr Burk discussed these issues with two of the Department's senior medical advisers. Sir Emmanuel is quite mistaken for example in thinking that because there is no fluoridation in Belgium, Denmark, France etc. scientific opinion in those countries is united against fluoridation. Instead there are various political and legal problems operating, rather as in the UK, to obstruct the extension of fluoridation which is recommended by most recognised scientific opinion to be a safe and beneficial public health measure. He neglects to mention the widespread use of fluoridation in eg Canada, New Zealand, Ireland and, except for a reference to the controversial Pittsburgh case, in the USA.

As to the two individuals in this country whose professional reputations are said to be at stake, the safety and benefit of fluoridation is supported amongst many others by the World Health Organisation, the British Medical and Dental Associations, the Royal Society of Health, and the Royal College of Physicians.

The allegations of a link between cancer and fluoridation naturally called for thorough investigation. This claim has been examined independently by several authorities, including the National Cancer Institute (a branch of the US Public Health Service), the Canadian Department of Health and Welfare,

E.R. '

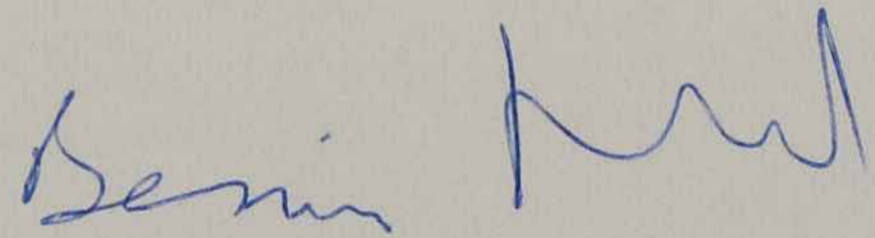
Professor Sir Richard Doll, Regius Professor of Medicine at Oxford and one of the world's foremost cancer epidemiologists, and Dr Oldham and Professor Newell, two well-known medical statisticians commissioned by the Royal Statistical Society. All of these indicated that the work of Dr Burk and his colleague, Dr Yiamouyiannis, had neglected important factors in the complex matter of cancer causation and that no link with fluoridation had been demonstrated.

(Incidentally, Dr Burk and Dr Yiamouyiannis are biochemists rather than cancer epidemiologists).

In the "Pittsburgh case" mentioned by Sir Emmanuel, the Burk/Yiamouyiannis study was an issue before a Pennsylvania court in considering whether fluoridation should continue in a part of Pittsburgh and some outlying districts. The court's jurisdiction is the subject of an appeal to a higher court, but meanwhile the Pennsylvania Department of Environmental Resources has reviewed the evidence and directed that fluoridation should continue in the area concerned. Fluoridation in the rest of Pittsburgh, where it began in 1952, is unaffected by these proceedings. Fluoridation is practised widely in the United States, and the Surgeon General of the Public Health Service has published a statement urging its extension.

There are of course other anti-tooth decay measures, as Sir Emmanuel mentions, but they benefit only the individuals who use them. Fluoridation benefits whole communities safely and simply by raising the naturally-occurring concentrations of fluoride in public water supplies to the observed optimum level. The most recent notable recognition of the benefits of fluoridation is the recommendation of the Royal Commission on the NHS in favour of legislation to compel water authorities to fluoridate at the request of health authorities.

I attach a draft reply from the Prime Minister to Sir Emmanuel on the lines suggested in your third paragraph.



B C MERKEL
Private Secretary

ENCS

DRAFT LETTER FROM PRIME MINISTER TO SIR EMMANUEL KAYE

Thank you for sending me (your letter of 9 August) comments on fluoridation as promised when we met recently at lunch.

I have been in touch ^{about this} with Gerry Vaughan, ^{about this, as he} ~~who~~ handles ^{health matters at}
~~I have also made enquiries of the Department of Health and Social Security and was interested to learn of your earlier correspondence on these topics and of the meeting which ^{you and Dr Dean Burk had recently with} recently took place between two of their senior medical advisers, Dr Dean Burk, and yourself. I understand that the facts and factors underlying the policy of successive British Governments towards fluoridation have been ~~made clear~~ *clearly set out*~~

Gerry has asked

~~You will be glad to know that Dr Gerard Vaughan, the Minister for Health, saw your letter before going on holiday, and has asked his office to arrange a meeting ^{to him with} on his return in mid-September between him and Dr Burk ^{after he} ~~after he~~ *return from holiday next month.*~~



file MFJ.
Sir E. KAYE

10 DOWNING STREET

From the Private Secretary

13 August 1979

Sir Emmanuel Kaye, Chairman of Lansing Bagnall Ltd., has written to the Prime Minister about fluoridation, following a discussion he had with her at a private lunch party. I enclose a copy of his letter.

In the absence of your Secretary of State, the Prime Minister would be interested to see Dr. Vaughan's comments on the points raised by Sir Emmanuel. She would also be grateful if Dr. Vaughan could see Dr. Dean Burk (see paragraph 4 of the letter) to take advantage of his expertise on this subject.

I would be grateful if you could let me have a draft reply for the Prime Minister to send to Sir Emmanuel Kaye. This need not go into great detail on the matter, but should at least record that arrangements have been made for Dr. Vaughan to see Dr. Burk. It would be helpful if this could reach me by 22 August.

M. A. PATTISON

B.C. Merkel Esq
Department of Health and Social Security

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LANSING*BAGNALL*LTD



PRIME MINISTER.
Do you want Dr Vaughn's
comments, in Mr Jenkins's absence

Kingsclere Road
Basingstoke
Hampshire
RG21 2XJ

Telephone: Basingstoke (0256) 3131
Telex: 858120 Bagnallic Bstke

MAP 10/VII

Sir Emmanuel Kaye, C.B.E.
Chairman & Governing Director

Mr Kaye -
see points
underlined
at end

9th August, 1979

The Rt. Hon. Mrs. Margaret Thatcher, M.P
Prime Minister
10 Downing Street
LONDON S.W.1.

10/8

My dear Prime Minister,

At that delightful Chequers lunch, you asked me to send you information on fluoridation:

1. None of our Continental Common Market partners has fluoridated water. Thus, there is no fluoridation in:-

Belgium
Denmark
France
Germany
Holland
Italy, or
Luxembourg

There is also no fluoridation in:-

Austria
Greece
Norway
Spain or
Sweden

Of the above countries, Belgium, Holland, Germany and Sweden have all had some fluoridation and have stopped it.

I am sure you will agree that the authorities of the twelve countries above who have no fluoridation cannot all be fools - and it shows that we are totally isolated from scientific opinion amongst those countries on the Continent. Hence my question: What makes us so readily accept the opinion of the two individuals at the Royal College of Physicians who are regarded as the authority in this country? They have staked their professional reputations on fluoridation and must understandably feel

/2.....



that they cannot now back down. That is no reason for the Department of Health and Social Security and the rest of us to follow them.

2. Germany

Last year, the Federal German Health Council reviewed the matter again and "came to the conclusion that under the prevailing circumstances the fluoridation of drinking water cannot be recommended". The FRANKFURTER ALLGEMINE ZEITUNG report on this decision stated: "The decisive factors for the rejection of fluoridation were chiefly the toxicological side effects....".

3. On the toxicological side effects, it is interesting to note that the German Federal Health Council came to its conclusion before the Court verdict in the Pittsburgh case on 16th November 1978. There, after an extensive hearing spread over 2,000 pages of testimony, the Court declared that it was "compellingly convinced" that based upon the researches of Dr. Burk and Dr. Yiamouyiannis, the fluoridation-cancer link has been established.

4. Dr. Dean Burk, who is one of the world's highly decorated cancer research scientists and, in fact, received the first Domagh Prize in 1965 for cancer research, was for some 30 years head of the Cytochemistry section of the U.S. National Cancer Institute. He is in this country until 25th September, and if you could spare him 10 minutes I should be very happy to arrange a meeting. He is one of the most knowledgeable men in the world on cancer and fluoridation so, if you can meet him, why accept information second-hand? This is quite apart from the fact that you would then be better able to make your own assessment, as well as having the advantage of being able to quote him direct!

5. I enclose a copy of a letter dated 26th December, 1978 from the Presiding Judge of the Pittsburgh Court to Lord Douglas of Barloch, in which he encloses a very telling letter from the Chancellor of the Fairleigh Dickinson University - which I highly recommend your reading.

Also enclosed is a report on a speech by Ivan Lawrence, which you may not have seen.

There are other anti-tooth decay measures that are both effective and ethical and which do not merely delay decay as with fluoridation, but prevent it altogether. I will not deal with them, however - as this

Would Dr
Vaughan see
him?

/3.....

letter is already far too long - unless you would specifically like me to let you have that information, in which case I shall be very happy to do so.

With kindest regards,

Yours very sincerely,

Emmanuel.



JUDGE'S CHAMBERS
COURT OF COMMON PLEAS
PITTSBURGH, PA. 15219

JOHN P. FLAHERTY, JR.
JUDGE

December 26, 1978

Lord Douglas of Barloch
8 Cambridge Road
London SW11 4KS
England

Dear Lord Douglas:

Copies of correspondence between you and Sir Emmanuel Kaye, along with a copy of your statement to "The Daily Telegraph", have come to my attention.

Your reference to a portion of the transcript implies to me that you have had occasion to read the transcript, thus, you are aware that the defense was unable to contravert the Burk-Yiamouyiannis study, and, not covered in my Opinion, there was uncontraverted evidence which further shows the link between fluoridation of the water supply at one part per million and cancer. Interestingly, although the news media has generally attacked my decision editorially, the letters which I have been receiving are unanimously positive. As an example, I enclose herewith a letter which I received from the Chancellor of Fairleigh Dickinson University.

It is quite unfortunate that those who advocate the fluoridation of water appear to avoid the scientific issues and attempt to characterize all those who oppose fluoridation as involved in some type of fraud.

Be that as it may, prior to this case I gave fluoridation of the water supply little or no thought. My decision is based upon the evidence, and, in my conscience, I will stand by it.

I am flattered and encouraged that one of your stature would take an interest in this matter.

Sincerely,

JOHN P. FLAHERTY, JR.
Presiding Judge - Civil Division

JPF/kbj
Enclosure

Fairleigh Dickinson University
Chancellor's Office
140 Ridge Road
Rutherford, New Jersey 07070

201 - 438-6134
201 - 438-1970

PETER SAMMARTINO
CHANCELLOR

December 19, 1978

The Hon. John P. Flaherty, Jr.
Allegheny County Common Pleas Court
Pittsburgh, Pa. 15219

Dear Judge Flaherty:

Every once in a while a judge makes a watershed decision of great moral impact. You have made one in regard to fluoridation. It will take about five years for the turn of events to catch up with the seriousness of your decision.

Having founded a school of dentistry I accepted fluoridation like everyone else and had faith in my faculty, in the A.D.A., in the Public Health Service which made sizable grants to our school.

Then one day I read somewhere that water for kidney machines had to be defluoridated. Since I am prone to kidney stones, the statement aroused my interest. I found that the fluorides combine with the calcium in the body and could cause serious illness or even death.

I began to ask my dentists all of whom are specialists in the field and for whom I have great regard. In a pleasant way they said, "Look Peter, this is not your field. Fluoridation is good and it decreases cavities by 60%."

But I began to read and the more I read the more I became convinced that fluoridation was evil. I began to prod the A.D.A. Again, the cavalier response: "Why everyone knows fluoridation is good. Do you think the Public Health Service would be for it if it wasn't good?"

So I began to poke around in Washington. I ran into a wall of gobbledegook. They pointed majestically to the Kingston-Newburgh experiment. Well, I read the report of that experiment six times. That was the most unscientific and souped-up experiment ever foisted as a breakthrough.

The strange part of it all is that the Department of Agriculture tells farmers not to use fluoridated water, and of course, the F.D.A. forbade the manufacture of pre-natal fluoride tablets.

But even if the case for the 60% decrease had been established (which it hasn't) the fact remains that in the United States and in a number of other countries, it is becoming abundantly clear

that the medical side-effects are most serious.

And then, even if fluoridation were effective and even if there were no side effects, the forced medication is totally repugnant to basic principles.

Now, it is becoming evident that the fluoridated communities have eventually a higher rate of tooth defects than non-fluoridated communities.

I am 74 and it doesn't make too much difference to me, but when I think how every day, in fluoridated communities, we are adding a little poison to bodies knowing full well that some of it (probably about 40%) is cumulative, I cringe at our stupidity.

You probably will find that the greatest decision of your professional career will be that on fluoridation and that should give you the greatest moral satisfaction.

I should like to meet you sometime. Do you ever come to New York? Perhaps we could have lunch or dinner at the University Club.

A Merry Christmas to you.

Sincerely,

Peter Sammartino
Peter Sammartino
Chancellor

12 JUL 1979

FLUORIDE: COULD IT BE A KILLER?

An outspoken demand for an end to the fluoridation of water has been made by Burton MP Mr. Ivan Lawrence.

In a speech to the annual meeting of the National Anti-Fluoridation Campaign in London, Mr. Lawrence, Chairman of the All Party Anti-Fluoridation Committee...

QUESTIONED the legal right of authorities to add fluoride to water...

SLAMMED the "irresponsibility" of the medical profession's pro-fluoridation lobby...

CLAIMED there was evidence that fluoridation was killing people in the United States.

Now Mr. Lawrence is following up his campaign by tabling an anti-fluoridation motion in the House of Commons.

Mr. Lawrence said it was preposterous enough that non-democratically elected bureaucratic bodies, such as regional water authorities and regional health authorities, should be free to decide whether to mass medicate drinking water.

"To do so is one of the most blatant and least justifiable interferences with the liberty of the individual one can think of," he said.

Mr. Lawrence believed it was doubtful whether there was any legal right to fluoridate water.

But the irresponsibility of the medical professions' pro-fluoridation lobby was even more preposterous, he said. The marginal benefit which some argued could be derived from fluoridation had to be set against substantial and alarming evidence that fluoridation was dangerous to health.

"The medical and dental professions, hiding behind the assurances of a handful of fluoridation fanatics, are refusing even to consider the evidence from the United States that fluoridation may be killing 10,000 more people a year than would otherwise die of cancer — evidence so convincing that it has recently been upheld by a court of law," he said.

Mr. Lawrence said people who



Mr. Lawrence

had no time to consider the matter naturally put their trust in the dental and medical authorities and that trust was now unhappily being betrayed.

He called upon responsible dentists and doctors to take up the matter with their professional associations and to ask why, if fluoridation was such a good thing, Austria, Belgium, Denmark, Italy, Luxembourg, Norway and Yugoslavia had not introduced it and Holland, Germany, and Sweden who had formerly had it had now banned it.

Mr. Lawrence called for a stop to all water fluoridation. He said that while he did not under-rate the difficulty of defeating the long-entrenched forces of the medical civil servants in the Department of Health and Social Security establishment, he was hopeful that the new Government could be made to think again about the matter.

A significant proportion of new MPs had told him they were against fluoridation and to test the extent of Parliamentary opposition he was tabling a motion with all party support that "This House is opposed to the artificial fluoridation of the public water supply."

