

Support for water fluoridation

KEY POINTS

- Fluoridation is supported by the World Health Organisation, the Fédération Dentaire Internationale and the International Association for Dental Research as a safe and effective means of reducing tooth decay.
- Fluoridation is supported by the Faculty of Public Health of the Royal Colleges of Physicians, the British Medical Association, the British Dental Association, the US Public Health Service and many other medical, dental and scientific organisations in the UK and around the world.
- Independently conducted opinion surveys over the past 30 years have generally shown that a significant majority of people in the UK think fluoride should be added to water if it can reduce tooth decay. Many people interviewed in these surveys think their water has already been fluoridated and that they are therefore benefiting from it when, in reality, their water is not fluoridated.



1. Support from international health organisations

Water fluoridation to prevent tooth decay is supported by a number of leading international health organisations, including the WHO, the Fédération Dentaire Internationale (FDI) and the International Association for Dental Research (IADR).



Water fluoridation has been endorsed by more than 150 science and health organisations.

Water fluoridation is effective in preventing dental caries in both children and adults.

World Health Organisation endorsements of benefits and safety

At the highest international levels of health policy-making, the World Health Organisation supports water fluoridation where it would be practicable to introduce it. In 1978, the World Health Assembly passed a resolution requesting the Director-General to: “continue to provide technical advice and assistance to Member States in the prevention and control of dental caries by the adjustment of the fluoride content of public water supplies to the optimal level.” (1) This policy remains in force today.

In 1994, a report of a World Health Organisation Expert Committee on Oral Health Status and Fluoride Use commented that: “...water fluoridation has been endorsed by more than 150 science and health organisations, including the Fédération Dentaire Internationale (FDI), the International Association for Dental Research (IADR) and WHO”. (2)

One of the 1994 WHO report’s key conclusions was that “community water fluoridation is safe and cost-effective and should be introduced and maintained wherever socially acceptable and feasible”.

In 2000, the 53rd World Health Assembly endorsed a global strategy for oral disease prevention and committed itself again to promoting the benefits of water fluoridation: “Community water fluoridation is effective in preventing dental caries in both children and adults. Water fluoridation benefits all residents served by community water supplies regardless of their social or economic status.” (3)



Fluoridation of water supplies remains the most effective public health measure for the prevention of dental decay.

Water fluoridation is particularly appropriate for populations with moderate to high risk of dental decay.

Subsequently, in 2003 the WHO's World Oral Health Report affirmed that "there is clear evidence that long-term exposure to an optimal level of fluoride results in diminishing levels of caries in both child and adult populations". (4)

Fédération Dentaire Internationale (FDI): water fluoridation remains the most effective public health measure for preventing dental caries

The Fédération Dentaire Internationale (FDI) brings together national dental associations from around the world in a joint effort to secure optimal oral health for everyone. The FDI has consistently supported water fluoridation as a key element in the global strategy to combat dental caries.

In 2000, the FDI General Assembly reaffirmed its support in the following statement: "Fluoridation of water supplies, where possible, remains the most effective public health measure for the prevention of dental decay. This is attributable to the fact that water is a dietary component required and used by everyone and therefore benefits all sectors of the community. The only limitations to its use are a reliable and controllable water supply, which almost invariably means a centralised piped source of water." (5)

In 2008, at its meeting in Stockholm, the FDI General Assembly issued a further statement in support of water fluoridation. It said: "Over sixty years of research and recent systematic reviews have shown that water fluoridation is an effective and efficient public health measure for the prevention of dental decay. Water fluoridation is particularly appropriate for populations demonstrating moderate to high risk of dental decay." (6)



Over 50 years of research have clearly demonstrated its efficacy and safety.

International Association for Dental Research (IADR): full endorsement of water fluoridation for improving oral health

The International Association for Dental Research (IADR) has consistently supported water fluoridation as a means of reducing dental caries. At the 8th World Congress of Preventive Dentistry in 2005, which was co-sponsored by the IADR, delegates agreed the following resolution on fluoridation: “The International Association for Dental Research (IADR), considering that dental caries (tooth decay) ranks among the most prevalent chronic diseases worldwide; and recognising that the consequences of tooth decay include pain, suffering, infection, tooth loss, and the subsequent need for costly restorative treatment; and taking into account that over 50 years of research have clearly demonstrated its efficacy and safety; and noting that numerous national and international health-related organisations endorse fluoridation of water supplies; fully endorses and strongly recommends the practice of water fluoridation for improving the oral health of nations.” (7)



2. Support from national health organisations and professional bodies in the UK

Support for the use of water fluoridation in oral health promotion strategies has been expressed by national health organisations and professional bodies in the UK and elsewhere.

Within the UK, organisations that have previously either expressed their support or issued statements affirming the effectiveness and safety of fluoridation include:

Department of Health

The Royal College of Physicians

The Faculty of Public Health Medicine of the Royal Colleges of Physicians

The Royal College of Surgeons of England

The Royal College of Surgeons of Edinburgh

The Royal College of Paediatrics and Child Health

The Royal College of Nursing

The Royal College of General Practitioners

The Royal College of Physicians and Surgeons of Glasgow

The Royal Society for the Promotion of Health

UK Public Health Association

The British Medical Association

The British Dental Association

The British Association for Community Child Health

The British Society of Dentistry for Disability and Oral Health

The British Society of Gerodontology

Community Practitioners and Health Visitors Association

General Dental Council

Society of Community Medicine

The British Association for the Study of Community Dentistry

British Society for Allergy and Clinical Immunology



Fluoride in water added or naturally present at approximately 1 mg/litre over the years of tooth formation substantially reduces dental caries throughout life.



The addition of fluoride into water supplies in certain areas could dramatically reduce the levels of tooth decay and give children a decent start in life.

Royal College of Physicians report in 1976 endorsing the efficacy and safety of fluoridation for reducing dental caries

The Royal College of Physicians (RCP) was one of the first of the major bodies representing health professionals in the UK to endorse fluoridation. Its landmark report, published in 1976, recommended “fluoridation of water supplies in the United Kingdom where the fluoride is appreciably below 1mg per litre”. (8)

This followed an investigation by an expert working party, led by the then President of the Royal College of Physicians Sir Cyril Clarke and including distinguished clinicians and researchers such as Professor Sir Richard Doll, who concluded that “fluoride in water added or naturally present at a level of approximately 1 mg/litre over the years of tooth formation substantially reduces dental caries throughout life”.

Significantly, the RCP working party found no evidence that the consumption of water containing approximately 1mg/litre of fluoride in a temperate climate is associated with any harmful effect, irrespective of the hardness of the water.

British Dental Association statement in 2008 calling for targeted fluoridation in areas of high dental need

Since the Royal College of Physicians published its report in the mid-1970s, children’s oral health in the UK has generally improved. However, substantial variations remain between different parts of the country and between different social groups.

Most national surveys have pointed, broadly speaking, to a North-South divide, with the highest levels of tooth decay found in Scotland, Northern Ireland and Wales, where there are no fluoridation schemes in operation, and in non-fluoridated, socially deprived areas of the North West of England, Yorkshire and the Humber region, the Midlands and inner London.

Today, the many UK health organisations that support fluoridation tend to advocate targeted fluoridation in those areas with enduringly high average levels of tooth decay.

For example, this approach was reflected in a policy statement in 2008 by the British Dental Association which, in reaffirming its long-standing support for fluoridation, said: “A healthy, pain-free smile is something that most of us take for granted. For many, though, a lack of access to such basics as fluoride toothpaste and a toothbrush mean that they face a future of decay, disease, pain and, in some cases, having teeth extracted. Yet much of this could be prevented by one very simple measure. The addition of fluoride into water supplies in certain areas could dramatically reduce the levels of tooth decay and give children a decent start in life. That is why the British Dental Association, along with many other leading healthcare organisations, supports targeted water fluoridation.” (9)

In other words, whilst the average 5-year old child in some very affluent parts of the South East of England may now have relatively little experience of tooth decay, the problem of too many children having two, three, four or more decayed teeth persists on a large scale in places such as Manchester, Bradford, Oldham, Blackburn, Leicester and Liverpool.

British Medical Association support re-affirmed in January, 2010

BMA support for water fluoridation was first established in 1977 and was re-affirmed in 1982, 1983, 1984 and 1998. In January 2010, the British Medical Association issued a further statement expressing its support for this public health measure: “The BMA remains committed to the fluoridation of mains water supplies, after appropriate public consultation, on the grounds of effectiveness, safety and equity. The BMA believes that local authorities should be more proactive in helping to reduce the dental inequalities that exist across social groups in the United Kingdom.” (10)



Committed on grounds of effectiveness, safety and equity.

3. Support from national health organisations and professional bodies around the world

Fluoridation continues to enjoy support from national health organisations and professional bodies in many different countries. In the United States and Canada, for example, it is endorsed as a public health measure by:

- US Public Health Service Centers for Disease Control and Prevention
- American Medical Association
- American Dental Association
- American Nurses Association
- American Academy of Family Physicians
- American Academy of Nurse Practitioners
- American Association for Health Education
- American Association for Public Health Dentistry
- American Public Health Association
- American Association for the Advancement of Science
- American Hospital Association
- Association of State and Territorial Health Officials
- Association for Academic Health Centres
- National Institute of Dental and Craniofacial Research
- Canadian Medical Association
- Canadian Dental Association
- Canadian Public Health Association
- Canadian Nurses Association



Fluoridation has played an important role in the reductions in tooth decay.

US Centers for Disease Control and Prevention: Fluoridation safely and inexpensively benefits both children and adults

A consistent advocate and champion of fluoridation over many years has been the US Centers for Disease Control and Prevention (CDC). In April 1999, when reviewing the ten greatest public health achievements of the 20th century in one of its weekly MMWR bulletins, the CDC said: “Fluoridation safely and inexpensively benefits both children and adults by effectively preventing tooth decay, regardless of socio-economic status or access to care. Fluoridation has played an important role in the reductions in tooth decay (40%-70% in children) and of tooth loss in adults (40%-60%).” (11)

US Surgeons General: Fluoridation strongly recommended as an effective method of preventing coronal and root caries

Successive US Surgeons General have also repeatedly affirmed their professional support. For example, a report of the US Surgeon General on Oral Health in America, published in 2000, stated that: “Epidemiological studies carried out during the last five decades provide strong evidence supporting the effectiveness of water fluoridation in preventing coronal and root caries in children and adults... community water fluoridation is recommended as a very effective and cost-effective method of preventing coronal and root caries in children and adults.” (12)

Individual statements by US Surgeons General over the past 15 years include:

Audrey F. Manley, Surgeon General (1995): “The health benefits of fluoridation include a reduction in the frequency and severity of dental decay, a decrease in the need for tooth extractions and fillings, a reduction in pain and suffering associated with tooth decay, and the obvious elevation of self-esteem that goes with improved functioning and appearance.” (13)



Water fluoridation has helped improve quality of life through reduced pain and suffering related to tooth decay, reduced time lost from school and work, and less money spent to restore, remove or replace decayed teeth.

David Satcher, Surgeon General (2001): “The US Centers for Disease Control and Prevention has recognised the fluoridation of drinking water as one of ten great public health achievements of the twentieth century. Water fluoridation has helped improve the quality of life in the United States through reduced pain and suffering related to tooth decay, reduced time lost from school and work, and less money spent to restore, remove, or replace decayed teeth. Fluoridation is the single most effective public health measure to prevent tooth decay and improve oral health over a lifetime, for both children and adults.... I join previous Surgeons General in acknowledging the continuing public health role for community water fluoridation in enhancing the oral health of all Americans.” (14)



Richard H. Carmona, Surgeon General (2004): “A significant advantage of water fluoridation is that all residents of a community can enjoy its protective benefit – at home, work, school, or play – simply by drinking fluoridated water or beverages and foods prepared with it.” (15)





Australian Dental Association: The most effective, equitable and efficient measure for achieving a community-wide reduction in dental caries

The Australian Dental Association issued the following statement in 2007 on the community-wide benefits of water fluoridation: “Water fluoridation is the most effective, equitable and efficient measure for achieving reduction in dental caries incidence across a community. Fluoridation of community water supplies is preferred as a safe and effective means of reducing the prevalence of dental caries in all age groups and should be implemented and maintained in those communities where there is an insufficient natural fluoride content for this purpose.” (16)

Public Health Association of New Zealand: Effective throughout a person’s lifetime

In a policy statement issued in 2003, the Public Health Association of New Zealand said: “Recent information has shown that water fluoridation is effective throughout a person’s life time, preventing root caries in adults and older people, so that fluoride can be seen to be of benefit to anyone with their natural teeth, not just children.” (17)

Canadian Medical Association: Commitment reaffirmed

Having reviewed its policy on fluoridation, in 2004 the Canadian Medical Association reaffirmed its commitment to “encourage programmes to promote fluoridation of public water supplies”. (18)

Ontario Public Health Association: Safe, effective and economical public health measure for all age groups

In 2009, the Ontario Public Health Association confirmed its support for fluoridation of municipal drinking water, which it recommended as “a safe, effective and economical public health measure to prevent dental caries in all age groups”. (19)



4. Support in Parliament

Historically, fluoridation has benefited from cross-party support in Parliament. For example, since the mid-1980s Secretaries of State for Health from both the Conservative and Labour parties have introduced key legislation on fluoridation.

Comments by the Minister of Health and Opposition spokesmen in the debates leading up to the Water (Fluoridation) Act 1985



In 1985 Members of Parliament voted in favour of the Water (Fluoridation) Bill to give health authorities the legal power to improve dental health by water fluoridation.

Introducing the Bill, the then **Minister for Health Kenneth Clarke** (Conservative) stated that the evidence of effectiveness and safety had been followed for years in some areas and said: *“About 5 million people, including my own family, drink water where the fluoride content has been artificially increased to the optimum recommended level of 1 part per million.”*

Responding to the Minister, **Opposition Spokesman on Health Michael Meacher** (Labour) said: *“The great advantage of fluoridation is that it benefits most the poorest and the ill-informed – those who are not reached by other initiatives ... How can one justify not giving the child who lives in Wolverhampton or Salford the same protection against tooth decay as the child who lives in Birmingham or Watford already enjoys?”*

The **Liberal Spokesman on Health, Michael Meadowcroft**, also strongly supported the Bill, drawing on the evidence of Birmingham during the previous 20 years when he said: *“Dental decay has been reduced dramatically ... the number of children attending for relief of toothache dropped ... children supplied with false teeth 12 times lower.”*

Following much debate, on 5th March 1985 the Bill received its Third Reading. Members of Parliament voted 2 to 1 in favour of the Bill, which became law on 30th October 1985 in the form of the Water Fluoridation Act 1985.



The great advantage of fluoridation is that it benefits most the poorest and ill informed - those who are not reached by other initiatives.

Decision-making on the principle of whether or not fluoride should be added to water was vested in local health authorities (at district level). After conducting a full and proper public consultation, they were empowered to make a formal written request to the appropriate water undertaker(s) to fluoridate the supplies that had been consulted on.

Specifically, the 1985 Act stated in section 1.1 that: “Where a health authority have applied in writing to a statutory water undertaker for the water supplied within an area of water specified in the application to be fluoridated, that undertaker may, while the application remains in force, increase the fluoride content of the water supplied within that area.”

The All Party Parliamentary Primary Care and Public Health Group Inquiry into Water Fluoridation

In March 2003, the All Party Parliamentary Primary Care and Public Health Group published a report of its Inquiry into Water Fluoridation (20). The Group endorsed the effectiveness and safety of fluoridation whilst rejecting civil liberties arguments against it.



Specifically, the Group recommended that: Dental health policy should recognise targeted water fluoridation as a legitimate and effective means of tackling dental health inequalities.

Legislation should be amended to allow the responsible health body, after public consultation has demonstrated strong local support, to require water companies to fluoridate as directed.

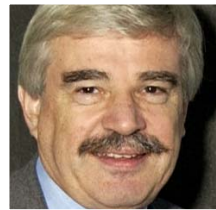
The latter point was extremely significant. Following the Water (Fluoridation) Act 1985, health authorities in the West Midlands, North West and North East of England had conducted public consultations in which majorities of the people and organisations responding to their fluoridation proposals had expressed support for them. However, water companies had subsequently declined to accede to the health authorities' requests for new fluoridation schemes, claiming that the wording of the Act did not place an obligation on them to do so.

Parliamentary support for new legislation on fluoridation in 2003

By 2003, it had become evident that the 1985 Act was flawed and that, if fluoridation was to remain a viable option to health authorities in their oral health promotion strategies, it would need to be changed to ensure that water companies were placed under a statutory obligation to accede to the requests of health authorities.

During that year, proposals for amended legislation on fluoridation were brought before Parliament as part of the new Water Bill. The House of Lords endorsed the proposals by 153 votes to 31, a majority of 5 to 1. In the House of Commons, MPs voted in favour by 284 votes to 181, a majority over 100.

Comments from Members of the House of Lords during the Parliamentary debates of 2003:



- **Lord Whitty, Parliamentary Under-Secretary of State for Environment, Food and Rural Affairs 2001-05 and a former General Secretary of the Labour Party:** “From a public health perspective, water fluoridation is the delivery method of choice to bring about population improvements in dental health and should be considered locally when it is desired to reduce inequalities in levels of dental decay.”

- **Baroness Cumberlege, Conservative Health Minister in the Lords 1992-97, former chair of the National Association of Health Authorities and current vice-president of the Royal College of Nursing:** “In the 1990s, Dudley’s water was fluoridated.... In Stourbridge (the most affluent area), whose water was not treated, the number of children free from tooth decay dropped, whereas in the centre of Dudley, where the water was fluoridated, the proportion rose. The turnaround was very dramatic. Children in the most deprived part of the borough now have better teeth than those in the least deprived part.”



- **Lord King of West Bromwich (Labour), Sandwell councillor and former teacher:** “The addition of fluoride into water supplies could dramatically reduce the level of tooth decay and give children a decent and painfree start in life..... Water fluoridation delivers greater reductions in decay than toothpaste and other techniques and reaches the whole population rather than only those who adhere to a regular cleaning regime using fluoride toothpaste.”

- **Lord Turnberg, President of the Royal College of Physicians 1992-97:** “There does not seem to be any doubt that areas of the country where fluoride has been introduced have, by and large, reduced the incidence of caries. Where fluoride has been withdrawn - as it has been in one or two places - the incidence has risen.”



Comments from Members of the House of Commons:

- **Sir Paul Beresford (Con), MP for Mole Valley, a former Minister at the Department of the Environment 1994-97, and a dentist by profession:** “A dentist in New Zealand told me that before fluoridation, filling teeth heroically was like trying to fill a bath with the plug out - it was hopeless. When fluoridation arrived, that changed.”



- **Andy Burnham (Lab), MP for Leigh, Secretary of State for Health 2009-10:** “Water fluoridation has been shown to improve the dental health of an entire population, cutting needless suffering and improving people’s quality of life.”

- **Robert Key (Con), MP for Salisbury, Shadow Minister for Environment and Transport and a former member of Medical Research Council:** “An NOP survey found that 67 per cent of people in Britain think that fluoride should be added to water if it can reduce tooth decay, with 22 per cent saying no. The same survey found that 42 per cent of people think that fluoride is added to water already, when the real figure is that about 10 per cent have fluoridated water.”

- **Dr Brian Iddon (Lab), MP for Bolton South East, a former Bolton councillor and university lecturer in chemistry:** “It is shameful that there are so many children in Britain with such poor dental health that some as young as two or three have to have teeth out.”



5. Support from local councils

Over half of the 5.5 million people drinking fluoridated water in the UK today are benefiting from this public health measure thanks to decisions made by local authorities in the 1960s and early 1970s. Among them was Birmingham City Council, which introduced fluoridation in 1964, followed by Newcastle upon Tyne in 1968. Other local authorities among these early pioneers included Warwickshire County Council and Worcestershire County Council, which both entered into fluoridation agreements with water suppliers in the mid to late-1960s. In the early 1970s, both Derbyshire and Nottinghamshire County Councils also approved the introduction of fluoridation schemes.

Although, in 1974, public health responsibilities were transferred from local government to the NHS, many local authorities have continued to express their active support for fluoridation. For example, in the late 1980s, Manchester, Salford, Oldham, Rochdale and Stockport councils all backed their respective health authorities' proposals to add fluoride to local water supplies. And in a consultation that took place in Dudley and parts of Worcestershire in 1995, every local authority in the areas potentially affected voted to endorse the extension of fluoridation to people living within their boundaries that was being proposed by their health authority.

6. Support from organisations representing patients, consumers and children

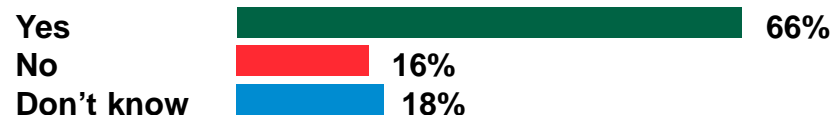
The following organisations are on record as having expressed their support for adding fluoride to water to reduce tooth decay:

- Help the Aged
- The Patients Association
- MENCAP
- The National Autistic Society
- National Children's Bureau

7. Support from the public in national opinion surveys

Before the early 1980s little systematic public opinion research had been conducted in the UK on the subject of fluoridation. It was therefore difficult to know whether the public generally supported it or not.

All that changed, however, in 1980 when the West Midlands Regional Health Authority commissioned a leading independent research company - NOP - to undertake a nationwide survey. NOP asked a demographically representative sample of people in over 170 parliamentary constituencies whether they thought fluoride should be added to water if it can reduce tooth decay. The results were as follows:



Support across all parts of the country and all social groups

For the first time, health authorities had incontrovertible evidence that two thirds of the population wanted fluoride added to their water supplies to prevent tooth decay. Not only that - the NOP survey showed clearly that there was a large majority in favour of fluoridation in all regions of England and in Scotland and Wales, as well as clear majorities among men, women and all social groups in the population.

Some opponents of fluoridation attacked the wording of the question, claiming that it was biased because it asked people to say whether they would support fluoridation *if it reduced tooth decay*. The reduction of tooth decay should not have been mentioned, they claimed. However, those who framed the survey argued strongly that it would have been justifiable to use the phrase *because it reduces tooth decay*, and not simply *if it reduces tooth decay* – on the grounds that it is an established scientific fact that fluoridation **does** reduce tooth decay.

The NOP survey showed clearly that there was a large majority in favour of fluoridation in all regions of England and in Scotland and Wales, as well as clear majorities among men, women and all social groups in the population.

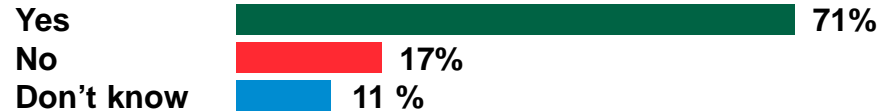
Moreover, they stressed that the issue of tooth decay had to be incorporated within the question because that is what fluoridation is for. How could someone say whether or not he or she supported a health policy without being told the purpose of it? Common sense dictated that if respondents to the survey objected to the idea of fluoridation (either on ideological grounds or because they mistakenly believed it would cause harm to other organs of the body), they would say that they opposed it, whether or not it reduced tooth decay.

Support sustained over a period of 30 years

Since the first nationwide public opinion survey on fluoridation in 1980, more surveys have been carried out. In 1985 and 1987 the National Association of Health Authorities commissioned Gallup to find out how public opinion was changing in the light of increased publicity on the issue. Both surveys revealed continued high levels of support for fluoridation across the country:

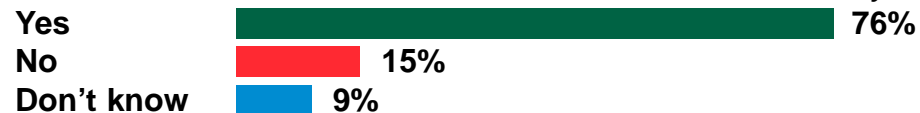
1985 nationwide survey by Gallup for NAHA

Do you think fluoride should be added to water if it can reduce tooth decay?



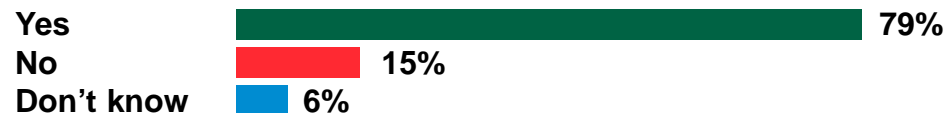
1987 nationwide survey by Gallup for NAHA

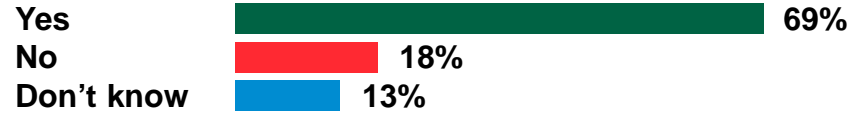
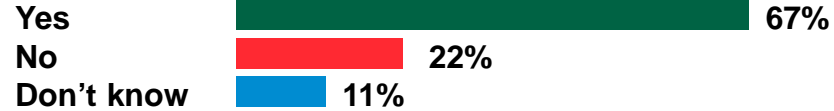
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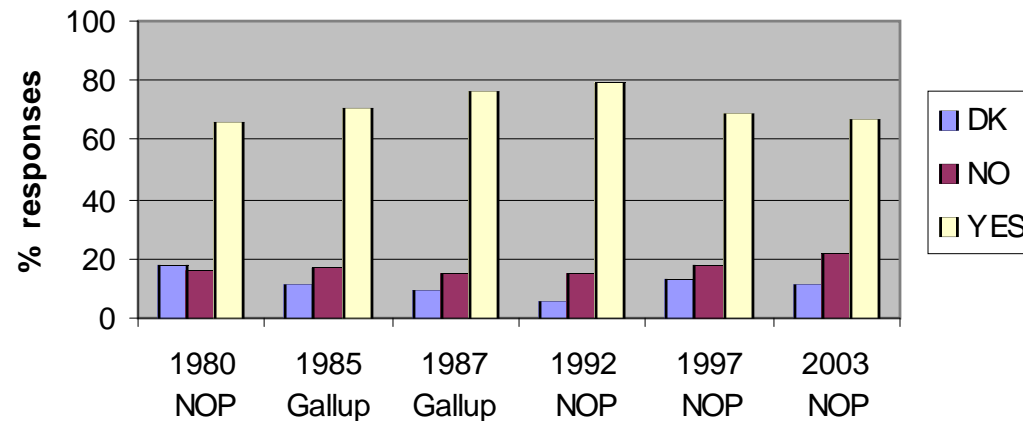
1992 nationwide survey by NOP for British Fluoridation Society

In May 1992 the British Fluoridation Society commissioned NOP to conduct a nationwide survey. NOP used the same basic set of questions as the three previous surveys in face-to-face interviews with a randomly selected sample of people across England, Scotland and Wales. This time the results were:



1997 nationwide survey by NOP for the British Fluoridation Society*Do you think fluoride should be added to water if it can reduce tooth decay?***2003 nationwide survey by NOP for the British Fluoridation Society***Do you think fluoride should be added to water if it can reduce tooth decay?*

What is clear from all of these surveys of public opinion over almost 20 years is that consistently at least two thirds of the British public support water fluoridation. Few, if any, public health issues have been subjected to such extensive opinion research at national level. All the evidence is that the majority of people support water fluoridation as a means of preventing tooth decay on a community-wide basis.

Public opinion surveys 1980 to 2003

Over 40% of those interviewed thought they were already receiving fluoridated water, compared with 11% or thereabouts who were actually receiving it.

More people think their water is fluoridated than is actually the case

In 1988 the number of people in the UK estimated to be drinking fluoridated water was around 6 million - one in every nine people in the country. What opinion research reveals, however, is that many more people think their water is fluoridated even though it is not. In the 1992 NOP survey, and again in the 2003 survey, over 40% of those interviewed thought they were already receiving fluoridated water, compared with 11% or thereabouts who were actually receiving it. This suggests a gap between public expectations on the one hand and what health authorities have been able to achieve on the other.

Most people do not realise that fluoride is present naturally in water

Unlike many of the other substances that are added to water to make it fit to drink, fluoride is present naturally in all water supplies. In fact, in some places it occurs in sufficient concentrations - one part of fluoride per million parts of water - to prevent tooth decay.

The existence of natural fluoride in water was how scientists first discovered the link between fluoride and dental health. However, surveys suggest that most people do not realise that fluoride is a natural constituent of water and that fluoridation is simply the process of topping up something that is already there rather than adding something ordinarily absent.

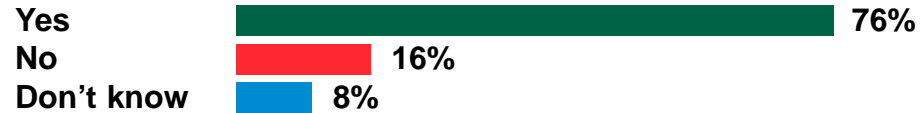
In the 1992 and 2003 NOP surveys, only around 30% said (correctly) that there was natural fluoride in water, while around 35% of the sample of adults questioned thought there was no fluoride present naturally in water and the remaining 35% said they did not know.

8. Support from the public in regional and local opinion surveys

Over the past 30 years, several regional and local opinion surveys based on a similar questionnaire design to the national polls cited in section 5 above have also been carried out on behalf of NHS organisations. In nearly all cases, the findings have been broadly in line with the results of the nationally conducted surveys. For example:

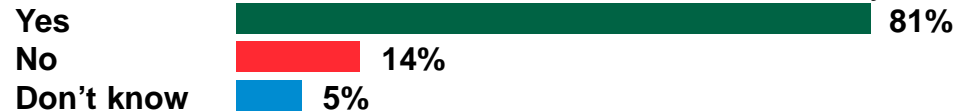
1992 survey by NOP for Southampton and South West Hampshire Health Authority

Do you think fluoride should be added to water if it can reduce tooth decay?



1992 survey by NOP for British Fluoridation Society in Mersey Region

Do you think fluoride should be added to water if it can reduce tooth decay?



1992 survey by NOP for British Fluoridation Society in Northern Region

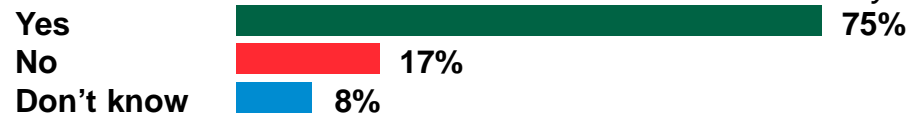
Do you think fluoride should be added to water if it can reduce tooth decay?



1995 survey by NOP for Dudley, North Worcestershire and Worcester and District Health Authorities (as part of public consultation on proposals to extend water fluoridation in those areas)

(i) Opinions in those areas not already fluoridated at the time:

Do you think fluoride should be added to water if it can reduce tooth decay?



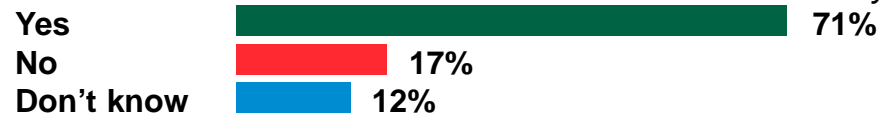
(ii) Opinions in those areas of Dudley and Worcestershire already fluoridated at the time:

Are you happy for your water to continue to be fluoridated?



2000 regional survey by MORI for three West Midlands Strategic Health Authorities (Birmingham and The Black Country SHA, Shropshire and Staffordshire SHA and West Midlands South SHA)

Do you think fluoride should be added to water if it can reduce tooth decay?



2008 survey by ICM in the NHS South Central region (conducted prior to the start of public consultation on proposals to fluoridate water in Southampton and neighbouring parts of South West Hampshire)

The results of this survey conducted by ICM for South Central Strategic Health Authority cannot be directly compared with those of the national and other regional and local surveys cited above. This is partly because of differences in the questions asked, and partly also because of the methodology employed. Whilst all of the other surveys were based on face to face interviews with respondents, ICM's interviews were conducted by telephone. Results are given for the region as a whole and for Southampton and South West Hampshire in particular.

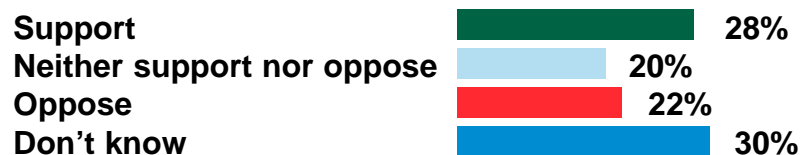
(i) Results across the whole of NHS South Central Region

Please tell me to what extent you support or oppose fluoride being added to the water?



(ii) Results for Southampton and South West Hampshire

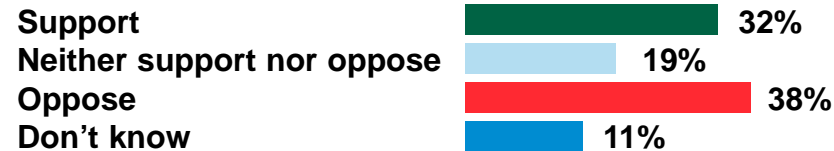
Please tell me to what extent you support or oppose fluoride being added to the water?



2008 survey by ICM for South Central Strategic Health Authority in Southampton and parts of South West Hampshire (conducted during public consultation on fluoridation proposals)

The results of this survey conducted by ICM for South Central Strategic Health Authority cannot be directly compared with those of the national and other regional and local surveys cited above. This is partly because of differences in the questions asked, and partly also because of the methodology employed. Whilst all of the other surveys were based on face to face interviews with respondents, ICM's interviews were conducted by telephone.

Based on whatever you know, do you support or oppose adding fluoride to the water supply where you live?



2010 survey by Ipsos MORI for West Midlands Strategic Health Authority

There is broad scientific agreement that adding fluoride to tap water reduces tooth decay. On this basis, do you think fluoride should be added to tap water?



References

1. World Health Assembly (1978): *Fluoridation and dental health*. Resolution: WHA31.50. Geneva. World Health Organisation
2. World Health Organisation Expert Committee on Oral Health Status and Fluoride Use (1994): *Fluorides and Oral Health*. WHO Technical Report Series no. 846. Geneva. World Health Organisation.
3. World Health Assembly (2000): *Strategies and approaches in oral disease prevention and health promotion*. Resolution: WHA53.17. Geneva. World Health Organisation.
4. World Health Organisation (2003): *The World Oral Health Report 2003*. Geneva. World Health Organisation.
5. Fédération Dentaire Internationale (FDI) (2000): *Fluoride and dental caries*. Adopted by the FDI General Assembly, November 2000, Paris.
6. Fédération Dentaire Internationale (FDI) (2008): *Promoting dental health through water fluoridation*. Adopted by the FDI General Assembly, September 2008, Stockholm.
7. World Congress of Preventive Dentistry (2005): *The Liverpool declaration – promoting oral health in the 21st century*. Event organised by the International Association for Dental Research, the World Health Organisation, the European Association of Dental Public Health, and the British Association for the Study of Community Dentistry. Liverpool. United Kingdom.
8. Royal College of Physicians (1976): *Fluoride, teeth and health*. Pitman Medical. London.
9. British Dental Association (2008): *Statement on fluoride*. 27th November 2008.
10. British Medical Association (2010): *Statement on BMA policy on fluoridation of water*. 12th January 2010.

11. US Centers for Disease Control and Prevention (1999): *Ten great public health achievements, United States, 1900-1999*. Morbidity and Mortality Weekly Report, 2nd April 1999, 48(12), 241-243
12. Department of Health and Human Services, US Public Health Service (2000): *Oral Health in America, a report of the US Surgeon General*.
13. Dr Audrey F. Manley, Acting US Surgeon General (1995): *Surgeon General's statement on community water fluoridation*. US Public Health Service.
14. Dr David Satcher, Surgeon General (2001): *Surgeon General's statement on community water fluoridation*. US Public Health Service.
15. Dr Richard H. Carmona, Surgeon General (2004): *Surgeon General's statement on community water fluoridation*. US Public Health Service.
16. Australian Dental Association (2007): *Community oral health promotion – fluoride use*. Policy statement 1.2.1 adopted by ADA Federal Council, November, 2007
17. Public Health Association of New Zealand (2003): *Policy statement on water fluoridation*, 2003
18. Canadian Medical Association (2004). *Policy statement on water fluoridation*. Resolution GC77-27, February 2004.
19. Ontario Public Health Association (2009): *Ontario Public Health Association resolution paper*, 2009.
20. All Party Parliamentary Group on Primary Care and Public Health (2003): *Report on Inquiry into Water Fluoridation*.