

<b>COMPLAINT NUMBER</b>	18/291
<b>COMPLAINANTS</b>	R Hawkes & others
<b>ADVERTISER</b>	Fluoride Free NZ
<b>ADVERTISEMENT</b>	Fluoride Free NZ Print
<b>DATE OF MEETING</b>	9 October 2018
<b>OUTCOME</b>	Upheld, in part

## SUMMARY

The newspaper advertisement for Fluoride Free New Zealand showed a photo of a child drinking a glass of water with the heading “Fluoride is a Neurotoxin that Reduces Children’s IQ”. Below this photo was the heading “International Experts share latest research linking fluoride to neurological damage and other harms.” Details about three speakers and the venue for the talk were included. The website and Facebook addresses of the advertiser were also included, along with the Fluoride Free New Zealand logo.

The ASA received seven complaints about the newspaper advertisement for Fluoride Free New Zealand. The Complainants raised concerns the advertisement was misleading because it exaggerated the neurological effects of fluoride on children and used fear to spread a counter-scientific message that fluoride is dangerous to children.

The Advertiser said the purpose of the advertisement was to encourage people to attend a presentation given by world experts on fluoride about the neurological harm caused by fluoride, especially to children. The Advertiser said they also felt a social responsibility to advise the general public that fluoride has been found to be a neurotoxin, according to recent scientific research.

The Complaints Board agreed the advertisement before it was clearly an advocacy advertisement against water fluoridation. It also noted the Advertiser was clearly identified as Fluoride Free New Zealand and therefore met the identification provision of Rule 11 of the Code of Ethics.

The Complaints Board agreed the advertisement was not likely to mislead as the Advertiser did provide a level of substantiation for the claims made, and, in the context of an advocacy advertisement, this was deemed sufficient.

The Complaints Board agreed the advertisement did unjustifiably play on fear because the combined effect of the photo of the child drinking a glass of water, along with the text, “Fluoride is a Neurotoxin that reduces Children’s IQ” created the impression that this is a likely outcome from drinking fluoridated water in New Zealand. This implication is not adequately supported by the substantiation provided by the Advertiser and the resulting effect was socially irresponsible.

The Complaints Board ruled the complaint was Upheld, in part.

Please note this headnote does not form part of the Decision.

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## COMPLAINTS BOARD DECISION

The Chair directed the Complaints Board to consider the complaint with reference to Basic Principle 4 and Rules 2, 6 and 11 of the Code of Ethics.

Basic Principle 4 required the Complaints Board to consider whether or not the advertisement had been prepared with a due sense of social responsibility.

Rule 2 required the Complaints Board to consider whether the advertisement contained any statement or visual presentation or created an overall impression which directly or by implication, omission, ambiguity or exaggerated claim is misleading or deceptive, is likely to deceive or mislead the consumer, makes false and misleading representation, abuses the trust of the consumer or exploits his/her lack of experience or knowledge.

Rule 6 required the Complaints Board to consider whether the advertisement exploited the superstitious, without justifiable reason, or played on fear.

The Complaints Board said the advertisement before it fell into the category of advocacy advertising and noted the requirements of Rule 11 of the Code of Ethics. The Complaints Board noted Rule 11 allowed for expression of opinion in advocacy advertising, provided that the expression of opinion is robust and clearly distinguishable from fact. Also applicable were the Advocacy Principles, developed by the Complaints Board in previous Decisions for the application of Rule 11. These said:

1. That Section 14 of the Bill of Rights Act 1990, in granting the right of freedom of expression, allows advertisers to impart information and opinions but that in exercising that right what was factual information and what was opinion, should be clearly distinguishable.
2. That the right of freedom of expression as stated in Section 14 is not absolute as there could be an infringement of other people's rights. Care should be taken to ensure that this does not occur.
3. That the Codes fetter the rights granted by Section 14 to ensure there is fair play between all parties on controversial issues. Therefore, in advocacy advertising and particularly on political matters the spirit of the Code is more important than technical breaches. People have the right to express their views and this right should not be unduly or unreasonably restricted by Rules.
4. That robust debate in a democratic society is to be encouraged by the media and advertisers and that the Codes should be interpreted liberally to ensure fair play by the contestants.
5. That it is essential in all advocacy advertisements that the identity of the advertiser is clear.

**The Complaints Board ruled the complaint was Upheld, in part.**

### **The Complaints**

The ASA received seven complaints about the newspaper advertisement for Fluoride Free New Zealand. The Complainants raised the following general concerns about the advertisement:

- It was scaremongering and misleading by exaggerating the neurological effects of fluoride on children
- While anyone consuming significant quantities of fluoride would experience harm, the amounts added to water and toothpaste are considered by most scientists to be harmless
- The claim that fluoride is a neurotoxin that reduces children's IQ is unsubstantiated and has no scientific backing in credible academic literature
- The advice of most health and dental professions in New Zealand is that fluoride is added to water and toothpaste to prevent tooth decay
- Using fear to spread a counter-scientific message that fluoride is dangerous to children could result in a significant cost to public health if readers are unduly frightened by this hyperbolic claim

### **The Advertiser's response**

The Advertiser said the purpose of the advertisement was to encourage people to attend a presentation given by world experts on fluoride about the neurological harm caused by fluoride, especially to children.

The Advertiser said they also felt a social responsibility to advise the general public that fluoride has been found to be a neurotoxin, according to recent scientific research.

The Advertiser referred to the 2017 Bashash study from Mexico and a Canadian study yet to be published, to support this view. Information about this research and 53 other studies was also provided in their response.

### **The Media's response**

The Media said they appreciate that the information in the advertisement can be an emotive subject, but they believe that the organisation complies with all rules and regulations for advertising within NZ.

### **Precedents**

In considering the issues raised by the Complainants, the Complaints Board referred to two precedent decisions: Decision 14460, which was Upheld and Decision 15503, which was Upheld, in part.

Decision 14460 concerned an advertisement on the Fluoride Free New Zealand website which stated, in part: "Informed Doctors and Dentists say: KEEP FLUORIDE OUT. Keep Rotorua's water safe. It's our right to choose. Swallowing Fluoride is unsafe for babies, doesn't protect teeth and can cause harm."

The Complaints Board said the claim that trusted authorities say swallowing fluoride is "unsafe for babies" and "can cause harm" played on fear, particularly in the case of parents. It said that as no substantiation was provided to support the claims, the advertisement was likely to mislead and played on fear unjustifiably.

Decision 15503 concerned three newspaper advertisements for Fluoride Free New Zealand that cautioned readers about the health concerns that arise from an excess of fluoride.

The Complaints Board acknowledged there was growing body of evidence that challenged the benefits and safety of water fluoridation. It said oppositional evidence in the context of an advocacy advertisement was often adequate evidence to substantiate contradictory claims.

Using these guidelines, the Complaints Board ruled the following parts of the advertisements were Upheld as they went beyond the latitude provided for under the rules of advocacy:

- *“What will you choose toxic waste or toothpaste.” Upheld*
- *“Study signals water fluoridation increases hormone disorder.” Upheld*

The remaining headings and statements were Not Upheld by the Complaints Board as they were opinion statements of the Advertiser based on oppositional evidence it supplied. Examples include:

- *“We now know that the benefits of Fluoride arise from direct action on the surface of the tooth...There is no need to swallow it to benefit.” Not Upheld*
- *“44.5% of eight - 30 year olds by the 2009 New Zealand Oral Health Study”...with 2% having moderate fluorosis a level severe enough to compromise the tooth integrity” Not Upheld*
- *“With no significant difference between fluoridated and non-fluoridated areas it seems likely that that fluoride toothpaste has had a significant part to play ...” Not Upheld*
- *“Due to a lack of recent research it is not known if there is any benefit from water fluoridation when fluoride toothpaste is available.” Not Upheld*

### **Complaints Board Discussion**

#### *Was the advertisement Advocacy Advertising?*

The Complaints Board agreed the advertisement before it was clearly an advocacy advertisement against water fluoridation. It also noted the Advertiser was clearly identified as Fluoride Free New Zealand and therefore met the identification provision of Rule 11 of the Code of Ethics.

#### *Consumer Takeout*

The Complaints Board considered the likely consumer takeout of the advertisement. The Complaints Board agreed the advertisement is an invitation to an event where information about how “Fluoride is a Neurotoxin that reduces Children’s IQ” would be presented. The Complaints Board said the text in the advertisement, when combined with the photo of the child drinking a glass of water, implies that the fluoride in drinking water in New Zealand reduces children’s IQ.

#### *Was the advertisement misleading?*

The Complaints Board then considered whether the advertisement was likely to mislead or deceive the consumer.

The Complaints Board agreed the advertisement did not meet the threshold to mislead consumers as the Advertiser did provide a level of substantiation for the claims made, and, in the context of an advocacy advertisement, this was deemed sufficient.

#### *Did the advertisement exploit the superstitious, without justifiable reason or play on fear?*

The Complaints Board then considered whether the advertisement exploited the superstitious without justifiable reason or played on fear.

The Complaints Board agreed the advertisement did unjustifiably play on fear because the combined effect of the photo of the child drinking, along with the text, "Fluoride is a Neurotoxin that reduces Children's IQ" created the impression that it is dangerous for children to drink water in New Zealand. In the Complaints Board's view, this implication is not adequately supported by the substantiation provided by the Advertiser and the resulting effect is socially irresponsible.

#### *Summary*

The Complaints Board said the identity of the Advertiser, Fluoride Free New Zealand, was clear and ruled the identification requirement of Rule 11 had been met. Therefore, in accordance with this ruling, the Complaints Board considered the rest of the complaint in conjunction with the liberal interpretation available under the application of the Advocacy Principles.

The Complaints Board said the advertisement did not reach the threshold to be misleading as sufficient substantiation had been provided for the claims in the context of an advocacy advertisement.

However, The Complaints Board said the advertisement unjustifiably played on fear and was therefore socially irresponsible.

The Complaints Board ruled the advertisement was in breach of Basic Principle 4 and Rule 6 of the Code of Ethics. The Complaints Board ruled the advertisement was not in breach of Rule 2 of the Code of Ethics.

Accordingly, the Complaints Board ruled the complaint was Upheld, in part.

## **DESCRIPTION OF ADVERTISEMENT**

The newspaper advertisement for Fluoride Free New Zealand showed a photo of a child drinking a glass of water with the heading "Fluoride is a Neurotoxin that Reduces Children's IQ". Below this photo was the heading "International Experts share latest research linking fluoride to neurological damage and other harms." Details about three speakers and the venue for the talk were included. The website and Facebook addresses of the advertiser were also included, along with the Fluoride Free New Zealand logo.

## **COMPLAINT FROM R HAWKES**

I believe that this ad from the Dominion Post on 3rd September 2018 contravenes principle 2: Truthful Presentation. The scaremongering claim at the top of the ad misleads consumers by exaggerating the neurological effects of fluoride on children.

While anyone consuming significant quantities of fluoride would indeed experience harm, as with concentrated doses of most chemicals, the amounts added to water and toothpaste are considered by most scientists to be harmless and framing fluoride as "hazardous waste" added to drinking water by "bad science and powerful politics" is misleading as well. The advice of most health and dental professions in NZ is that to prevent tooth decay we need fluoride added to water and toothpaste, and this is not due to a conspiracy for disposing of toxic waste but backed by scientific/medical consensus (see following links).

<https://www.fluoridefacts.govt.nz/node/24#orgsendorse/> <https://healthcentral.nz/fluoride-in-drinking-water-improves-public-health-not-worsens-it-saysdental-association/>  
<https://www.health.govt.nz/our-work/preventative-health-wellness/fluoride-and-oral-health>.

A lack of naturally occurring fluoride in NZ water is a public health issue that leads to dental issues, especially in children. Using fear to spread a counter-scientific message that fluoride is dangerous to children could result in a significant cost to public health if readers are unduly frightened by this hyperbolic claim.

While fluoride is a contentious issue and the speakers listed do have a right to hold and advertise their meeting despite the medical community's disagreement with their claims, it is misleading to make a blanket claim designed to scare readers into thinking their children's IQ is being lowered by fluoridated water and that fluoride is a public health risk when the facts reflect the opposite of this.

### **COMPLAINT FROM A LENSEN**

The claim that "Fluoride is a Neurotoxin that Reduces Children's IQ" is completely unsubstantiated and has no scientific backing in the credible academic literature. Such a claim is likely to directly harm the most vulnerable in society, as fluoride has been extensively shown to be significantly beneficial in improving dental health, especially in children and low-income households.

### **COMPLAINT FROM D EASTHAM**

This is akin to "fake news", as such claims are completely unsubstantiated by the world health organisation, indeed there are global standards recommending a level of fluoride to be added to drinking water supplies.

I do not think that such dubious claims or experts should be placing adverts without a prominent disclaimer for their prejudice.

### **COMPLAINT FROM I MCFARLAND**

Basically the large text reading "Fluoride is a neurotoxin that lowers children's IQ" is misleading and needless/dangerous fear-mongering.

Like all things poisonous, dosage is the most important factor in determining how poisonous a thing is. A thing which is beneficial at a low dosage may be poisonous at a large dosage.

The only point to an advertisement like this is to spread fear and distrust of our institutions. If there really was conclusive evidence of fluoride being dangerous then a submission of their studies to the relevant boards would be enough.

### **COMPLAINT FROM I GRANT**

The add suggests that fluoride is poisonous, and that there is either uncertainty or concern in the medical community about the safety of fluoride. Fluoride has been repeatedly proven to have a positive impact on community health and one of the most cost effective ways for a government to do so.

### **COMPLAINT FROM J HAMILTON**

The advertisement misleads the public by claiming that drinking water fluoride reduces child IQ. It makes this claim with a picture of a toddler drinking a glass of water under the banner "fluoride is a neurotoxin that reduces children's IQ"

This claim is false and has no scientific backing and is in breach of the medicines act 1981 section 4 57 1 f

Fluoride is in drinking water for public dental health and therefore can be regarded as a medicine.

## COMPLAINT FROM N SMITH

The ad advertises for a free seminar on the topic "Flouride is a Neurotoxin that Reduces Children's IQ". This heading is superimposed on a photo of a child drinking a glass of water. The implication of this photo, in the current context of the the attempt by various groups to protest flouridisation of New Zealand tap water, is that the flouridation of New Zealand water can and will reduce the IQ of children who drink it.

I have no particular expertise in the area, but my limited understanding is that the science would agree that:

- a) flouride can be linked to the reduction of IQ in children; but that
- b) notwithstanding any other concerns that could be raised with the research, the levels of flouride in NZ water do not pose serious concerns

I am of the view that the advert would be in breach of Rule 1(g) and 1(h) of the Code, and that the advert is misleading in terms of Rule 2(b).

## CODES OF PRACTICE

### **Basic Principle 4**

All advertisements should be prepared with a due sense of social responsibility to consumers and to society.

**Truthful Presentation** - Advertisements should not contain any statement or visual presentation or create an overall impression which directly or by implication, omission, ambiguity or exaggerated claim is misleading or deceptive, is likely to deceive or mislead the consumer, makes false and misleading representation, abuses the trust of the consumer or exploits his/her lack of experience or knowledge. (Obvious hyperbole, identifiable as such, is not considered to be misleading).

**Fear** - Advertisements should not exploit the superstitious, nor without justifiable reason, play on fear.

**Advocacy Advertising** - Expression of opinion in advocacy advertising is an essential and desirable part of the functioning of a democratic society. Therefore such opinions may be robust. However, opinion should be clearly distinguishable from factual information. The identity of an advertiser in matters of public interest or political issue should be clear.

## RESPONSE FROM ADVERTISER, FLUORIDE FREE NZ

## Description of advertisement



**International Experts share latest research linking fluoride to neurological damage and other harms.**



**Dr Vyvyan Howard**, former Professor of Bioimaging, Nano Systems Biology, Centre for Molecular Biosciences, University of Ulster.

**Declan Waugh**, Environmental Scientist and Risk Management Consultant, author of a number of Fluoride Risk Assessments.



**Professor Paul Connett**, Executive Director of Fluoride Action Network (FAN) and the Co-author of *The Case Against Fluoride – How Hazardous Waste Ended Up in Our Drinking Water and the Bad Science and Powerful Politics That Keeps It There.*



**7pm – 9pm Thursday  
6th September**

**Mecure Hotel  
Cnr Willis and Dixon Streets  
Wellington**

## FREE ENTRY

[www.fluoridefree.org.nz](http://www.fluoridefree.org.nz)  
[www.facebook.com/FluorideFreeNewZealand](https://www.facebook.com/FluorideFreeNewZealand)

Authorised by  
Fluoride Free New Zealand.  
027 3615951





## Response

We have been asked to respond to this complaint under the following codes:

Code of Ethics – Basic principle 4  
 Code of Ethics – Rule 2  
 Code of Ethics – Rule 6  
 Code of Ethics – Rule 11

## Code of Ethics

**Basic Principle 4:** all advertisements should be prepared with a due sense of social responsibility to consumers and to society.

**Rule 2:** truthful presentation advertisements should not contain any statement or visual presentation or create an overall impression which directly or by implication, omission, ambiguity or exaggerated claim is misleading or deceptive, is likely to deceive or mislead the consumer, makes false and misleading representation, abuses the trust of the consumer or exploits his/her lack of experience or knowledge. (obvious hyperbole, identifiable as such, is not considered to be misleading).

**Rule 6:** fear advertisements should not exploit the superstitious, nor without justifiable reason, play on fear.

**Rule 11:** advocacy advertising expression of opinion in advocacy advertising is an essential and desirable part of the functioning of a democratic society. Therefore, such opinions may be robust. However, opinion should be clearly distinguishable from factual information. The identity of an advertiser in matters of public interest or political issue should be clear.

## Preamble

We note the complainants accept that fluoride is neurotoxic but make the unsubstantiated assertion that the amount ingested in fluoridated communities is insufficient to cause this. The scientific research presented at this talk demonstrates that it is.

We note that it is not required that this be proven “beyond reasonable doubt” or “with absolute scientific certainty”. The half-life of medical-scientific knowledge is currently about 5 years (that is, in 5 years half of everything doctors are taught today will be superseded). Science is never settled.

The Supreme Court (SC 141/2016 [2018] NZSC 59) cited with approval the position of the Canadian Supreme Court (emphasis added):

[118] In terms of the standard of proof, ... [i]n Atkinson, the court of appeal discussed the debate about the evidential requirements of the R v Oakes test used by the supreme court of Canada, citing an extract from an article by Professor Choudhry which acknowledges that public policy decisions are often based on approximations and extrapolations from the available evidence.<sup>112</sup> the court in Atkinson also referred to the Canadian Supreme Court decision in RJR-Macdonald Inc v Canada, citing a passage from McLachlin J’s reasons where she stated that “proof to the standard required by science is not required”, rather “the balance of probabilities may be established by the application of common sense to what is known, even though what is known may be deficient from a scientific point of view”

As shown by the evidence presented by these scientists, discussed below, the weight of evidence that fluoride lowers IQ when consumed at the levels it is in fluoridated communities in NZ today is now well past the “balance of probabilities” test. Accordingly, we would be

entitled to state it as fact under the Supreme Court's ruling (although we do not consider we have done so in this case).

We now wish to address the false claim by the complainants that "the majority" agree that fluoridation is safe and effective and our claims are those of a minority. On the global scale, the situation is the exact reverse. If the complainants were to proclaim in Germany, France, Sweden, or one of a countless number of other countries, that fluoridation was "safe and effective" they would be ignored as ill-informed. It is only in a handful of countries, such as NZ, Australia and the USA, that this view is the "consensus reality"

We raise this to ensure the ASCB does not start from a predetermined position on whether fluoridated water is safe or not.

## **Basic Principle 4 - Due sense of social responsibility**

### **Complaint relating to Basic Principle 4**

Iain McFarland: "The only point to an advertisement like this is to spread fear and distrust of our institutions"

### **Response from FFNZ**

The point of our advertisement was to encourage people to attend the presentations given by world experts on fluoride and let people know that neurological harm from fluoride was the main topic of discussion. We also wanted members of the public who would not attend, to be alerted to the fact that fluoride has been found to be a neurotoxin, at the levels we are exposed to in fluoridated NZ communities, according to now-irrefutable scientific research.

The Bashash study from Mexico last year, and a study from Canada this year, confirm levels of fluoride able to affect neurological development are experienced in fluoridated areas.

We feel a social responsibility to let people know so they are aware and can take steps to avoid fluoride as much as possible. We are especially concerned about children being exposed in utero and the first years of life.

Therefore, our advertisement does not breach basic principle 4 as we did prepare the advert with a sense of social responsibility.

## **Rule 2: Truthful Presentation**

### **Complaints pertaining to Truthful Presentation**

Iain McFarland: "like all things poisonous, dosage is the most important factor in determining how poisonous a thing is. A thing which is beneficial at a low dosage may be poisonous at a large dosage."

Iain Grant: "the add suggests that fluoride is poisonous, and that that there is either uncertainty or concern in the medical community about the safety of fluoride. Fluoride has been repeatedly been proven to have a positive impact on community health..."

Andrew Lensen: "the claim that "fluoride is a neurotoxin that reduces children's IQ" is completely unsubstantiated and has no scientific backing in the credible academic literature"

Dale Eastham: “..as such claims are completely unsubstantiated..”

Nigel Smith: “ .. The levels of flouride in NZ water do not pose serious concerns ..”

Rebecca Hawkes: “..misleads consumers by exaggerating the neurological effects of fluoride on children...”

## Response from FFNZ

### The 53 Human Studies

There are now 53 human studies out of 60 that have found that fluoride is a neurotoxin. There are also hundreds of animal studies.

In 2006 the US Government’s National Research Council produced a report fluorides in drinking water<sup>1</sup>. This was a 12-member, three-year review and is still the most comprehensive review of fluorides in water to date.

This panel concluded that “it is apparent that fluorides have the ability to interfere with the functions of the brain”. At this stage there were only five published studies.

By 2012 there were 27 studies. A team of researchers from Harvard then published a metaanalysis<sup>2</sup> of these in environmental health perspectives. Twenty-five of the studies were from china and two from Iran. The Harvard team acknowledged that there were weaknesses in many of the studies. However, **they stressed that the results were remarkably consistent**. In **26 of the 27 studies** average IQ in the “high fluoride” village was lower than the “low fluoride village “. The average loss was **7 IQ points**.

### New Zealand Report

In 2014, a review commissioned by the prime minister of NZ’s chief science advisor Sir Peter Gluckman and the royal society of New Zealand’s president Sir David Skegg, *health effects of water fluoridation: a review of the scientific evidence*<sup>3</sup>, concluded:

“Recently there have been a number of reports from china and other areas ...that have claimed an association between high water fluoride levels and **minimally** reduced intelligence (measured as iq) in children....the claimed shift of less than one iq point

<sup>1</sup> <https://www.nap.edu/catalog/11571/fluoride-in-drinking-water-a-scientific-review-of-epas-standards> p 22

<sup>2</sup> [https://www.thelancet.com/journals/laneur/article/piis1474-4422\(13\)70278-3/abstract](https://www.thelancet.com/journals/laneur/article/piis1474-4422(13)70278-3/abstract)

<sup>3</sup> [www.pmcsa.org.nz](http://www.pmcsa.org.nz)

<sup>4</sup> [https://www.thelancet.com/journals/laneur/article/PIIS1474-4422\(13\)70278-3/abstract](https://www.thelancet.com/journals/laneur/article/PIIS1474-4422(13)70278-3/abstract)

<sup>5</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4265943/>

<sup>6</sup> <https://www.health.govt.nz/our-work/preventative-health-wellness/fluoride-and-oral-health/waterfluoridation/national-fluoridation-information-service>

<sup>7</sup> <https://www.ncbi.nlm.nih.gov/pubmed/28937959>

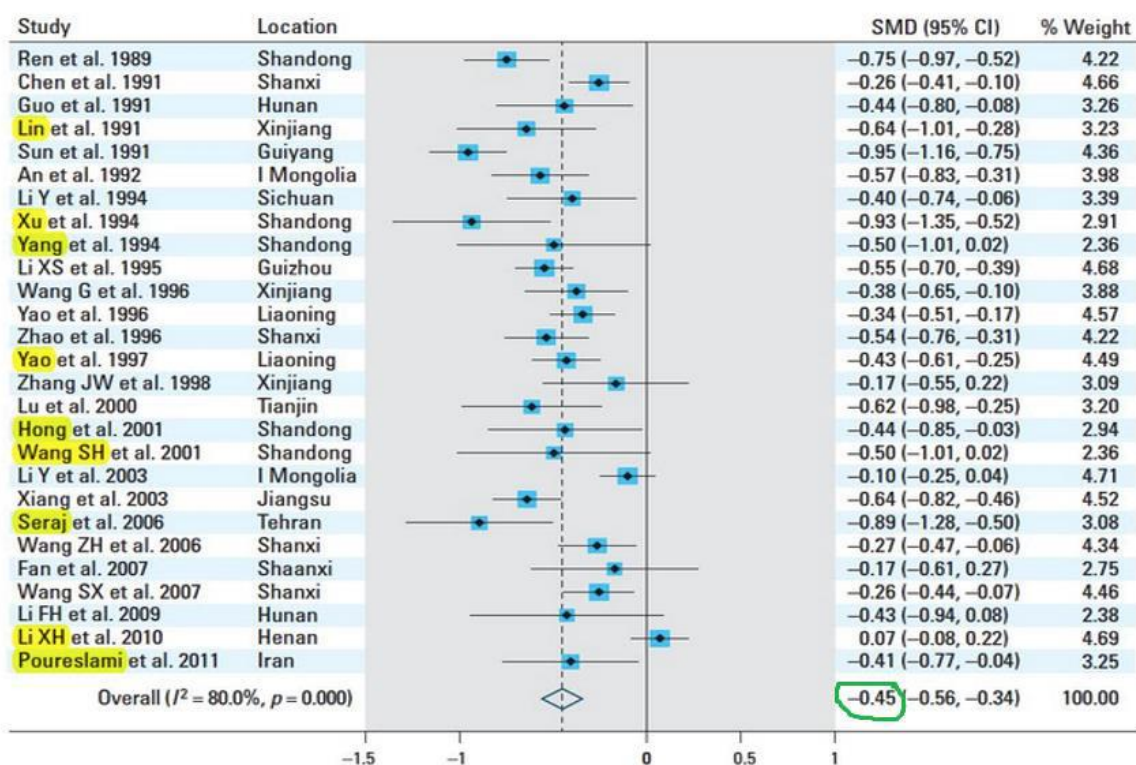
<sup>8</sup> <http://nutr2015.p.events4you.currinda.com/days/2015-12-02/abstract/307>

<sup>9</sup> <https://isesisee2018.org/wp-content/uploads/2018/08/Abstract-Book-V4-COMPLEET-20-08.pdf>

suggests that this is likely to be a measurement or statistical artifact of no functional significance”

This will no doubt have led many people in New Zealand to believe there was no reported drop in IQ, when in actual fact these studies did show an average drop of 7 IQ points. A drop of 5 IQ points across society will halve the number of geniuses and increase by 50% the number of mentally impaired. This is not a “minimal reduction” and it is definitely of “functional significance”.

TABLE 1



**Figure 2.** Random-effect standardized weighted mean difference (SMD) estimates and 95% CIs of child's intelligence score associated with high exposure to fluoride. SMs for individual studies are shown as solid diamonds (◆), and the pooled SMD is shown as an open diamond (◇). Horizontal lines represent 95% CIs for the study-specific SMDs.

## The Lancet

In 2014 a study *Neurobehavioural effects of developmental toxicity*<sup>4</sup> identified fluoride as “an emerging developmental neurotoxin”. The authors say “In 2006, we did a systematic review and identified five industrial chemicals as developmental neurotoxicants: lead, methylmercury, polychlorinated biphenyls, arsenic, and toluene. Since 2006, epidemiological studies have documented six additional developmental neurotoxicants—manganese, fluoride, chlorpyrifos, dichlorodiphenyltrichloroethane, tetrachloroethylene, and the polybrominated diphenyl ethers.”

## Broadbent et al

By 2016 there were 55 human studies with 49 showing a lowering of IQ in high fluoride

villages. One of the six studies that did not find an association was the Broadbent study<sup>5</sup> from Dunedin. However this study reported very few controls: **891** lived in fluoridated area, and only 99 in non-fluoridated. In an article for the Government's National Fluoridation Information Service<sup>6</sup>, Broadbent admitted that 46 of the children in the nonfluoridated area were taking fluoride supplements, bringing their control down to only 53 compared to over 900 (taking fluoride supplements results in the same level of fluoride as drinking fluoridated water). This study did not allow for maternal IQ, the biggest known predictor of IQ, nor maternal exposure to fluoride, as we will see may be the most important aspect. Note also that this study was conducted by dentists, not neuroscientists. Dr Broadbent was fluoridation spokesperson for the NZ Dental Association at the time.

## **Bashash 2017**

In September 2017, a landmark IQ study, [Prenatal Fluoride Exposure and Cognitive Outcomes in Children at 4 and 6–12 Years of Age in Mexico](#)<sup>7</sup>, was published in *Environmental Health Perspectives*, the world's leading environmental health science journal. The funding agencies for this study were U.S. National Institutes of Health (NIH), U.S. National Institute of Environmental Health Sciences (NIEHS), U.S. Environmental Protection Agency (EPA), National Institute of Public Health, and the Ministry of Health of Mexico. This study was completed by a team of distinguished neurotoxicity researchers who have produced over 50 papers on the cognitive health of children as related to environmental exposure to other toxins like lead and mercury. The researchers were from highly respected Universities in North America such as Harvard, Toronto, McGill and Michigan and Public Health in Mexico. The study reported that for every 0.5 mg/L increase of fluoride in the urine of the mothers there was a statistically significant decrease in average IQ of the children of about 3 IQ points. Therefore, a fluoride level increase in urine of 1 mg/L could result in a loss of 5 – 6 IQ points. This is particularly relevant to the New Zealand situation where [fluoride urine levels](#)<sup>8</sup> have been found to be in exactly the same range as the Mexican women. The lead investigator had this to say: "This is a very rigorous epidemiology study. You just can't deny it. It's directly related to whether fluoride is a risk for the neurodevelopment of children. So, to say it has no relevance to the folks in the U.S. seems disingenuous..." – *Dr. Howard Hu, Dean of the Dalla Lana School of Public Health at the University of Toronto* on Bashash et al. (Sept 2017).

## **Relating Bashash to NZ**

The range of urinary fluoride levels in the Mexico City pregnant women are almost identical to the range found in Palmerston North by Brough et al, 2015 The exact median and quartile values for Bashash are 0.82 (0.64, 1.07) mg/L urine F. Brough found a median concentration of 0.82 (0.62, 1.03) mg/L urine F. Note the numbers in parenthesis are the 25th and 75th Inter-Quartile percentile values The exposures in the Bashash study are about as similar to those in New Zealand as you could get.

## **Canadian study has confirmed Bashash**

On the 28th of August 2018, a study was presented at the ISES – ISEE Joint Annual Meeting in Ottawa, Canada<sup>9</sup>. This study was carried out using data from pregnant women in Canadian towns and cities both fluoridated and not. They have found the same results as the Bashash study. It is expected that this study will be published in the next few months

## **Conclusion**

Our statement that fluoride is a neurotoxin that reduces the IQ of children is true according to the current scientific research, certainly to the balance of probabilities as set by the NZ Supreme Court. The latest science is finding that this effect is happening at the doses that we are exposed to in fluoridated communities. Therefore, our advert does not contravene Rule 2 Truthful Presentation, as it is indeed the truth.

To summarise the facts in relation to the specific claims by the complainants as noted above:

*Iain McFarland: "Like all things poisonous, dosage is the most important factor in determining how poisonous a thing is. A thing which is beneficial at a low dosage may be poisonous at a large dosage."*

**Response: We agree. The science shows that fluoride is neurotoxic at the doses experienced in fluoridated NZ communities. (There is no reliable evidence that fluoride at any level of ingestion is beneficial – Cochrane Review 2015)**

*Iain Grant: "The add suggests that Fluoride is poisonous, and that that there is either uncertainty or concern in the medical community about the safety of Fluoride. Fluoride has been repeatedly been proven to have a positive impact on community health..."*

**Response: There has been concern in the scientific community for decades (See for example the National Research Council Review, 2006). There has been similar concern throughout the medical world outside a handful of countries like NZ, where "consensus reality" has prevented any scientific debate. There is no reliable evidence that fluoride at any level of ingestion is beneficial – Cochrane Review 2015, York Review 2000.**

*Andrew Lensen: "The claim that "Fluoride is a Neurotoxin that Reduces Children's IQ" is completely unsubstantiated and has no scientific backing in the credible academic literature"*  
*Dale Eastham: "...as such claims are completely unsubstantiated..."*

**Response: As demonstrated in this response the claim is fully substantiated by the scientific literature. Mr Lensen is merely showing he hasn't read it and is promoting his personal beliefs as fact.**

*Nigel Smith: "... the levels of flouride in NZ water do not pose serious concerns ..."*

Response: The science described in this response proves otherwise, to the balance of probabilities.

**Response: The science described in this response proves otherwise, to the balance of probabilities.**

*Rebecca Hawkes: "...misleads consumers by exaggerating the neurological effects of fluoride on children..."*

**Response: The science described in this response confirms the neurological effect of fluoride on children. It is denial of this effect that misleads consumers**

## **Rule 6: Fear**

### **Claims that the advertisement breaks Rule 6:**

Iain McFarland: " is misleading and needless/dangerous fear-mongering..."

Rebecca Hawkes: "...The scaremongering claim at the top of the ad misleads consumers by exaggerating the neurological effects of fluoride on children..."

### **Response from FFNZ**

The claim that fluoride reduces children's IQ, even at the doses we are exposed to in New Zealand is a statement based on the latest science, establishing this effect to the balance of

probabilities, as set by the NZ Supreme Court. Letting people know this cannot be considered to be “exploiting the superstitious”. Neither is it “playing on fear” when the purpose of the advertisement is to encourage people to attend a lecture to hear the latest science and make up their own minds based on that science. We are not exaggerating the harm that fluoride is likely to be doing. The latest science (Brough) indicates that around half of New Zealand women who are pregnant and living in a fluoridated area, are exceeding the level of fluoride

found to cause a lowering of IQ in their children. The current scientific evidence shows that reasonable people should be very wary of fluoride, especially during pregnancy and early childhood years.

In this context we note that a bottle of fluoride tablets states “do not take during pregnancy”, and that one tablet has the same amount of fluoride as around three glasses of fluoridated water. As the Supreme Court has now ruled that water fluoridation is medical treatment, it necessarily follows that the same warning applies to consuming fluoridated water during pregnancy. Alerting the public to this risk can hardly be considered scaremongering unless the warning on fluoride tablet bottles is also scaremongering.

### **Rule 11: Advocacy Advertising**

#### **Response from FFNZ**

The name of our organisation was very clear to the reader. As we were advertising talks it is obvious that this is an advocacy position.

The complainants quote only the header to the advertisement, out of context.

The advertisement reads :

“Fluoride is a neurotoxin that reduces children’s IQ”

Below this is a picture of a child drinking water.

Directly below the picture, in a font of similar size to the heading, the advertisement then states:

“International experts share latest research linking fluoride to neurological damage and other harms.”

In all, the headings read:

“Fluoride is a neurotoxin that reduces children’s IQ International experts share latest research linking fluoride to neurological damage and other harms.”

We think the reasonable out-take from this, in total, is that the first line is the advertiser’s advocacy position based on recent scientific research referenced in the second line. As such we do not think in this context the reasonable person would take the first line as an absolute statement of fact.

### **Conclusion**

The 2014 New Zealand Report concluded with “It is recommended that a review such as this one is repeated or updated every 10 years – or earlier if a large well-designed study is published that appears likely to have shifted the balance of health benefit vs health risk.”

The Bashash study and the Canadian study, currently in the publication process, which confirms the Bashash study, meet the criteria for a review of fluoridation policy as set by the Prime Minister's Chief Science Advisor's office. This may well see an end to fluoridation in New Zealand. Therefore, it would be completely illogical and inconsistent that our group is censured for alerting people to a danger that is likely to become common knowledge in the short or medium-term future.

We also suggest that members of the Advertising Standards Board, and the complainants, watch the presentations given at Otago University to gain full understanding of how the title of the talks, provided on the advert, was appropriate

### **Otago University Talks September 2018**

Paul Connett <https://www.youtube.com/watch?v=3uDvD5UcSwg&t=3s>

Vyvyan Howard <https://www.youtube.com/watch?v=e0o3kxZNXcw&t=6s>

Declan Waugh [https://www.youtube.com/watch?v=lx4\\_DIUGJZg&t=52s](https://www.youtube.com/watch?v=lx4_DIUGJZg&t=52s)

Also accessed via <https://fluoridefree.org.nz/international-experts-to-speak-in-dunedin-andwellington-september-2018/>

### **RESPONSE FROM MEDIA, STUFF**

We appreciate that the information in the advertisement can be an emotive subject, but we believe that the organisation complies with all rules and regulations for advertising within NZ.

We welcome any recommendation the ASA have in regards to this advertising or type of campaign in the future

#### **APPEAL INFORMATION**

According to the procedures of the Advertising Standards Complaints Board, all decisions are able to be appealed by any party to the complaint. Information on our Appeal process is on our website [www.asa.co.nz](http://www.asa.co.nz). Appeals must be made in writing via email or letter within 14 days of receipt of this decision.