

Fluoridation: Errors and Omissions in Experimental Trials  
2nd edition pages:

1-4	statistical observations on fluoridation trials
1	American Medical Association
1	no randomization to eliminate bias
2	no estimate of variability between or within examiners
2	random DMF variation unrecognized or ignored
2	bias in presentation of results
	Ontario Department of Health
2	relatively quick drop in DMF rates discounts systemic effect theory
2-3	percentage reductions exaggerate
3	divergent DMF results from different examiners
3-4	omission of Sarnia and Stratford DMF reductions
4	two disturbing features
5	basis for the fluoridation hypothesis
5-6	errors, omissions and mis-statements
5	gingival and periodontal sequelae
7	necessity for controls requirements of a control "uncontrolled causes which may influence the result are always strictly innumerable" socio-economic status "of less importance" "verification" of fluoridation requires control with a comparable water quality
7-8	effect on "fluoride potency" of other constituents of waters
8	"soft waters...cause the most severe mottled enamel" influence of rare elements
8	water composition unstated in the trials

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Fluoridation: Errors and Omissions in Experimental Trials  
2nd edition continued:

8	effect of climate on water consumption
8	need for comparable baseline caries rates
8	need for random sampling
8-9	variation in DMF due to chance
9	examiner variability
9	examiner bias
10-15	the Grand Rapids study
10	Grand Rapids vs Muskegon
10	large differences in sample size
	a "group" of one child
	sampling by school class
	different methods of sampling
10-11	changes in examiners
11	examiner variability not assessed
11	late examination of control city
11	water of control (Muskegon) fluoridated
11-12	ignorance of commencement of fluoridation in Muskegon
12	variations in Muskegon rates
12-13	magnitude of decay reductions in Muskegon disguised by omission
13	"sampling error" applied only to the control city
13	variation in Muskegon
13	comparison with Aurora, Illinois
13	limitations of Aurora data
16-36	Evanston study
16	importance of X-ray examinations
16	the ideal control community (Oak Park)
16-17	different rates in student groups

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Fluoridation: Errors and Omissions in Experimental Trials  
2nd edition continued:

17	exclusion of data
17-18	an altered explanation
18-19	"correction" of data
19-20	altered methods in Evanston 1958 report
20-21	late examination in the control city
21	ten year delay in the publication of data
21	gross differences in initial caries rates
21-22	much unpublished data
23	disagreements between results
23-24	disagreements between tables
24	no data for deciduous teeth in Oak Park
24-25	variations in caries rates in control
25	inadequacy of the control and the authors' excuse for it
25-26	differences between school groups
26	"nearly comparable" or significantly different
26-28	decline in eruption of molars
28	odd method of assessing eruption
28-29	strange superiority of artificial fluoridation
29	"weighting" of results and example
29-30	significance tests and "weighting"
30	random variation ignored
30	original results altered
30	system of computation changed
30-31	the new method of computation
31	errors in amended rates
31	a confusing calculation
31-32	sampling

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Fluoridation: Errors and Omissions in Experimental Trials  
2nd edition continued:

32	were children "continuous residents"?
32	disturbing disagreements
32-33	gross discrepancies between sample sizes
33-34	disparities in Negro sample sizes
34	further unexplained differences
34-35	incompatible statements
35-36	remarkable changes in assessment of statistical significance
37-47	the Brantford studies
37	City Health Department study
37	no control
37	were results combined or averaged?
38-47	National Health and Welfare study
38	late commencement
38	DMF reduction within two years
38-39	the control cities
39	superior dental care in Brantford
39	no pre-fluoridation survey
39-40	doubtful comparability of data
40-41	the influence of treatment
41	tooth mortality
41	differences in oral hygiene
42	the concentration of fluorides
42-43	differing opinions on fluoride contents
43-44	three misleading statements
44	omission of decreases
44	different rates reported
45-46	significant fluctuations in controls
46	larger "percentage" changes in a control

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Fluoridation: Errors and Omissions in Experimental Trials  
2nd edition continued:

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57	unexplained marked decreases in the control
57	the increase in caries-free teeth in the control
57-58	"analysis" of findings
58	changes in caries-free teeth in the control
58-59	changes in the sampling method
59	continuous residence only assumed
59-60	population changes in Newburgh
60	population movement in Kingston
60-61	considerable alterations in populations
61	data of migrants excluded only in Newburgh
61	alterations in sample size
61-62	sampling by selection
62	a decrease in the "per cent difference"
63-71	discussion
63	World Health Organisation
63	United Kingdom Mission
63-64	New Zealand Commission of Inquiry
64	United Kingdom Mission on controls
65	initial caries rates
66	delayed tooth eruption in Feltman study
66-67	emotional opposition and favourable interpretation
72	summary
73-128	criticisms and comments
74-83	Dr Donald Galagan
74-75	fluoridation trials not the sole basis for demonstrating success of fluoridation
75	examiner variability not overlooked

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Fluoridation: Errors and Omissions in Experimental Trials  
2nd edition continued;

75-76	delayed tooth eruption
76-83	commentary on the Galagan review
76-78	"demonstrations" or experimental trials?
79-80	examiner variability
80	caries occurrence in a population
80-81	Feltman study
81	delayed tooth eruption inadequately studied in Newburgh-Kingston study alone
81-82	Short report does not deal with eruption pattern or eruption delay
82-83	Dr Galagan's views on the "opposition" to fluoridation
84-94	Dr J R Blayney and Dr I N Hill
84-85	comparability of control and study areas
85	caries prevalence in Evanston vs Aurora
85-86	variations in number examined
86-94	commentary on the Blayney/Hill review
87	"median" vs "mean" rental/dwelling values
87	different initial caries rates
87-88	unexplained exclusion of data
88-89	data not published
89	hidden variables
89-90	effect of constant examination on interest in dental health
90	lack of yearly assessment of control
90	lack of assessment of random variation
90-91	discrepancy in numbers explained
91	more discrepancies
91-92	no attempt to limit examinations to continuous resident children
92-93	more discrepancies

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Fluoridation: Errors and Omissions in Experimental Trials  
2nd edition continued:

93	Evanston report XVII
93-94	error not corrected
94	majority of errors, omissions and mis-statements remain unexplained
95-110	Dr R M Grainger
95	numbers of children examined
95	date of commencement of fluoridation
95	error in percentage reduction conceded
95	late commencement of caries study
96	selection of control cities
96	difference in level of dental care
96	comparability of caries rates
96	concentration of fluorides
96	re statement by Brown, et al
96-97	reason for omission of data
97	examiner variability
97	fluctuations in controls
97	larger percentage changes in controls
97	smaller percentage decrease after longer fluoridation due to random fluctuation
97-98	quote from Ontario Government Report
98	weighting effect alleged due to age distribution
98-110	commentary on review by Dr R M Grainger
98	the "unimpeachable study"
98-99	an impossible situation
99	eight errors and two omissions on one page
100	pre-fluoridation caries rate and selection of the control
100	selection of the control cities
101	influence of dental care and regular examinations

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Fluoridation: Errors and Omissions in Experimental Trials  
2nd edition continued;

101	doubtful comparability of rates
101	"Brown's statement"
101-102	effect on findings of differences in oral hygiene
102	concentration of fluorides
102	guesses on fluoride content
102-103	an incorrect statement on concentrations
103	period of fluoridation or observation?
103	decrease in d.f. rates for 9-11 group in Sarnia
103-104	decrease in Brantford not "over the period 1948 to 1955
104	d.f. rates for Stratford
104-105	astonishing omission of reduction in control city
105	reduction in control city
105	examiner variability
105-106	significant fluctuations in controls
106	downward trend only in one age group
106-107	larger percentage changes in control
107-108	smaller percentage decrease after longer fluoridation
108-109	quotation "out of context"
109-110	possible weighting effect
111-128	Mr J Ferris Fuller
111-114	criticisms of first edition
114-128	commentary on the Fuller review
129	conclusion
130-142	references

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A Struggle With Titans pages:

12	high caries in high-fluoride area of Arizona
13	contribution of other minerals unknown
20	concentration control
55	Paulev studies show delay in onset or recognition of decay
63	Boulder survey excludes 3rd molars
119	Armstrong and Brekhus claim less fluoride in decayed teeth
194	promotion in naturally fluoridated cities reveals lack of sounder teeth
287	scientism
305	Dr Armstrong can't make up his mind 6 ppm did not prevent tooth decay in rats non-essentiality for dental health
319	sugar responsible for decay
332	Armstrong reverses decision mottling too high a price to pay in Israel substantial decay in high-fluoride area of India
333	Iowa infant
334	deplorable teeth in Baltimore

Fluorine in Stomatology and Hygiene pages:

227-230
298-332
745-784

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Fluoridation and Truth Decay pages:

8	fluoride bad for teeth
10	Dr F J Stare of Harvard Dept of Nutrition reassures mothers
16	Dr C C Bass opposed to fluoridation and topical fluoride treatments
16	past president of The American Cancer Society opposes and denounces fluoridation
17	dentists waking up to the fluoridation con
18	no FDA research on alleged effectiveness of Crest
46	138% reduction in caries from multi-fluoride treatment?
50	Mayor sees no dental benefit in Concord, New Hampshire
67	decay rampant in Puerto Rico
67-8	dental decay in children who moved from Milwaukee
110	fluorosed teeth are to be called "rampant caries"
133-4	Dr W D Armstrong's error and water under the bridge
196-7	more caries, malocclusion and periodontal disease in Newburgh than in Kingston — but report "revised"
197	caries postponed, not prevented
197	Dr Leone's testimony in Eire
198	98% of Irish people suffering from decaying teeth or gum inflammation, eight years after fluoridation
216	Dean's study of mottling in 21 cities
216	Dean's call for USPHS investigation into dangers of cumulativity
216	US Public Health Service
216	dentist doubts fluoride hypothesis, requests study of decay resistance in Hereford and Deaf Smith County, Texas
216-7	Hereford study conclusions on caries and mottling
217	fluoride gets the credit for high local mineral content of soils and the food grown therein
219-221	Newburgh-Kingston "studies"



Fluoridation and Truth Decay continued:

Fluoridation and Truth Decay continued:

- 233 diet and education the only answer
- 233 ADA replies to National Confectioners Association  
claim that sweets do not cause cavities
- 233-4 "plaque control"
- 234 discoverer of "plaque control" believes fluoridation  
increases activity of existing periodontoclasia  
and is potentially harmful mass medication
- 237 FDA bans fluoride supplements for pregnant women on  
grounds of uselessness and danger of mental retardation
- 240 no drop in caries with fluoridation in Curico, Chile
- 275 topical treatment abandoned at  
Dental Infirmary for Children, Boston, Massachusetts
- 275 neither fluoridated toothpaste nor topical application  
with stannous fluoride found to be of benefit — McClure
- 275 Proctor and Gamble pay \$500,000 in grants to Dr Muhler  
at U of Indiana for research on Crest's efficacy
- 276 validity of Dr Muhler's research questioned
- 276 four year experiment involving 1000 English  
children abandoned when no significant differences  
found between fluoride and non-fluoride dentifrices
- 276 statistical work in some US toothpaste  
experiments was done by the toothpaste  
manufacturers or firms paid by them
- 276 NIDR report fluoride toothpastes ineffective
- 276 UK study of 719 children shows fluoride paste no  
better, more black-brown stains in experimental group
- 298 fluoridation — an American disaster
- 299 Dr H R Muhlmann of Zurich University  
Dental Institute speaks out
-

The Fluoride Question pages:

8	twice the number of dentists in the longest fluoridated towns of the US
	US dental decay crisis
10	a little but not very much
14	pros and antis
21	physiological effects
27	research of H T Dean
45	decay not due to absence of fluoride
147	the Acid Theory

Fluoridation \ The Great Dilemma pages:

55-6	effect of diet
55-8	historical background
56	causes
56	DMFs
56-7	economic impact
57	effect on general health
	prevention
58-60	mechanism
64	DMFs
65	prevention
67-71	fluoridation pilot studies
80-3	F <sup>-</sup> content of teeth
185-190	fluoridation pilot studies
	unreliability of data
186-191	DMFs
187-90	inconsistencies in DMF data
190-3	effect of minerals on

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Fluoridation \ The Great Dilemma continued;

192-3	effect of diet
303	F <sup>-</sup> content of teeth
357-8	inconsistencies in DMF data
	unreliability of data
377-9	effect of diet
377-80	prevention
379	effect of minerals on
	mechanism

Fluoridation 1979:

Scientific Criticisms and Fluoride Dangers pages:

69-92	the efficacy of artificial fluoridation is
	questionable
69	determination of changes in
	caries prevalence
70	longditudinal trials of fluoridation
71	the need for controls in
	experimental trials
73	premature establishment of
	fluoridation trials
74	small number of fluoridation trials
	with experimental controls
74	fluoridation demonstrations
75	the terms "controlled study" and
	"controlled fluoridation"
77	results, reports of results, and
	opinions of fluoridation trials
78	the gross errors in the main
	American/Canadian fluoridation trials
79	additional errors in the Evanston trial data
81	the question of delayed eruption of teeth

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Fluoridation 1979:

Scientific Criticisms and Fluoride Dangers continued;

82	reduction or retardation of dental caries
88	reports from statisticians
260	"mediocrity of the literature demonstrating its efficiency in the prevention of dental caries"
260	compromise between fluorosis and "some possible reduction in dental decay"
261	difficulty of multivariate analysis

Fluoride \ The Aging Factor pages:

48	fluoride content of teeth
87	relation to caries not evidence of essentiality
94	Cox's "discovery"
96-98	fluoride content of enamel no decay reduction in animal studies
99	no effect on tooth decay rates in humans
100	correlation between decay, fluoride and other minerals
100-103	no effect on tooth decay rates in humans
103-107	fluoridation trials in US and Britain
108	decay down in unfluoridated areas
109	"super bad" dental problems in fluoridated area same increase in dental costs in areas with and without
110	costs in fluoridated and non-fluoridated areas compared
112	Cox and ALCOA
138	ADA warning

Fluoride in Australia \ A Case to Answer pages:

- 8 dental improvement in non-fluoridated areas too
- 14 fluoridation of control city
- 27 benefits better broadcast than actually established
- 27-8 no agreement on mechanism of anti-carries action
- 28 "50% increase" in caries-free children in Bacchus Marsh  
turns out to mean three children instead of two
- 28-9 Tasmanian Dept of Health pamphlet's comparison of  
decay levels criticised by Dr J Polya  
Grand Rapids sampling design  
"conspicuous by its absence"
- 30 poor design of early studies
- 31-2 relevance of North American fluoridation  
trials to Australia
- 32 failure of fluoridation in  
Kilmarnock, UK and Hastings, NZ  
"a large number of poor studies does not  
equal one good study"
- 32 flaws in N American studies replicated in Australia
- 32-33 data omitted in Sydney and Bunbury-Bussleton study  
no controls in most Australian fluoride-carries studies
- 33 "no scientific evidence to link the reported drop in  
tooth decay with fluoridation"
- 33 speakers and scientists at Boston conference would  
not identify factors responsible for caries decline  
in both fluoridated and unfluoridated countries
- 34 headlines claiming various percentage  
reductions in decay
- 35 NSW Health Commission's northern Sydney survey  
fluoride dentifrices given the credit, but no evidence
- 37 promoters underplay the inadequacy of  
epidemiological studies
- 46 incorporation of fluoride into bones and teeth
- 50 propaganda insinuates fluoride is inert in  
the body apart from the dental benefits
-



Fluoride in Australia \ A Case to Answer continued:

- 51 Japan's leading toothpaste manufacturer removes  
fluoride from all its formulas
- 51 corrective versus antidotal prevention
- 53 interest of makers of cariogenic foods in fluoridation
- 53 fluoride dentifrice manufacturers' interest in  
fluoridation
- 60 fluoridation promotion directs attention away from the  
real cause of dental disease
- 60 fluoridation propaganda implies that fluoride alone can  
maintain healthy teeth
- 61 fluoridation an alternative to dietary correction
- 65 diet last of six factors in preventing  
tooth decay, according to Dr Craig
- 69 NRC committee member B G Bibby recommended lead fluoride
- 70 no evidence that reducing sweets will  
reduce tooth decay — Stare
- 73 Mars Bars fund dental conference — sugar  
not to blame for tooth decay
- 82 enamel becomes so brittle dentists can  
concentrate on the more profitable work of  
fitting crowns — Prof J C Muhler
- 84 unwillingness of dental experts to oppose  
sale of cariogenic foods
- 84-5 Hobart dental convention; "You can eat as many  
biscuits and Mars Bars as you like  
— so long as you clean your teeth properly"
- 85 dental profession discourages dental hygiene
- 90-1 dentists pessimistic about dietary changes
- 91 measures to reduce sugar intake in Norway
- 93 the only research necessary in Australia
- 93 Australian studies on dental decay unscientific
- 94 drop in decay in Brisbane without fluoridation
- 95 rejection of Diesendorf article by New Doctor
-

104                    decline in caries prevalence in  
                     communities with unfluoridated water (including  
                     New Zealand, USA and Great Britain)

116-7                fluoridation "benefits the poor as a  
                     group more than the well-to-do"

122                    Tasmanian Health Department anticipates  
                     encouraging caries figures

124                    report for premier of W Australia criticises  
                     early fluoridation trials

126                    Glen Walker unable to obtain NHMRC report under  
                     Freedom of Information Act

87	comparison of one child with no children shows 38% caries reduction
128-129	Tiel-Culembourg yoghurt discovery
149	same reduction in tooth decay with or without fluoride Tiel reductions hardly attributable to fluoridation
149-150	better teeth in unfluoridated areas (Colquhoun)
171	better teeth in unfluoridated areas (Cook)
172	better teeth in unfluoridated areas (German Association of Gas and Water Engineers)

IX 2 Apr-May 1963 (2)  
IX 3 Jun-Jul 1963  
IX 4 Aug-Sep 1963  
IX 5 Oct-Nov 1963  
IX 6 Dec 63-Jan 1964

National Fluoridation News continued;

X 1 Feb-Mar 1964

X 2 Apr-May 1964

X 3 Jun-Jul 1964

X 4 Aug-Oct 1964

X 5 Nov-Dec 1964

XI 1 Jan-Feb 1965

XI 2 Mar-Apr 1965

XI 3 May-Jun 1965

XII 4 Sep-Oct 1966

XIII 1 Jan-Feb 1967

XIII 2 Mar-Apr 1967

XIII 3 May-Jun 1967

XIII 4 Jul-Aug 1967

XIII 5 Sep-Oct 1967

XIV 1 Jan-Feb 1968

XIV 2 Mar-Apr 1968

(2)

XIV 3 May-Jun 1968

(2)

XIV 6 Nov-Dec 1968

XV 1 Jan-Feb 1969

(2nd print)

XV 2 Mar-Apr 1969

XV 5 Sep-Oct 1969

XVI 5 Nov-Dec 1970

XVII 2 Mar-Apr 1971

XVII 5 Sep-Oct 1971

XIX 4 Oct-Dec 1973

XX 1 Jan-Mar 1974

XX 3 Jul-Sep 1974

XX 4 Oct-Dec 1974

XXI 1 Jan-Mar 1975

XXI 4 Oct-Dec 1975



National Fluoridation News continued;

XXII 2 Apr-Jun 1976

XXII 3 Jul-Sep 1976

XXII 4 Oct-Dec 1976

XXIII 2 Apr-Jun 1977

XXIII 4 Oct-Dec 1977

XXIV 1 Jan-Mar 1978

XXIV 2 Apr-Jun 1978

XXV 1 Jan-Mar 1979

XXV 2 Apr-Jul 1979

XXV 3 Aug-Oct 1979

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XXVI 4 Oct-Dec 1980

XXVII 2 Apr-Jun 1981

(2)

XXVII 3 Jul-Oct 1981

XXVII 4 Nov-Dec 1981

(correction)

XXVIII 2 Apr-Jun 1982

(2)

XXVIII 3 Jul-Sep 1982

XXVIII 4 Oct-Dec 1982

XXIX 1 Spring 83

XXIX 3 Fall 83

(2)

XXIX 4 Winter 1983-84

(4)

XXX 2 Summer 84

XXX 4 Winter 1984-85

XXXI 1 Summer 85

XXXI 4 Spring 1986

declining decay rates  
fluoride promoters meet the press  
fluorides worry pediatricians  
(in Presley)

XXXII 1/2 1986/1987

XXXII 3 1987-88