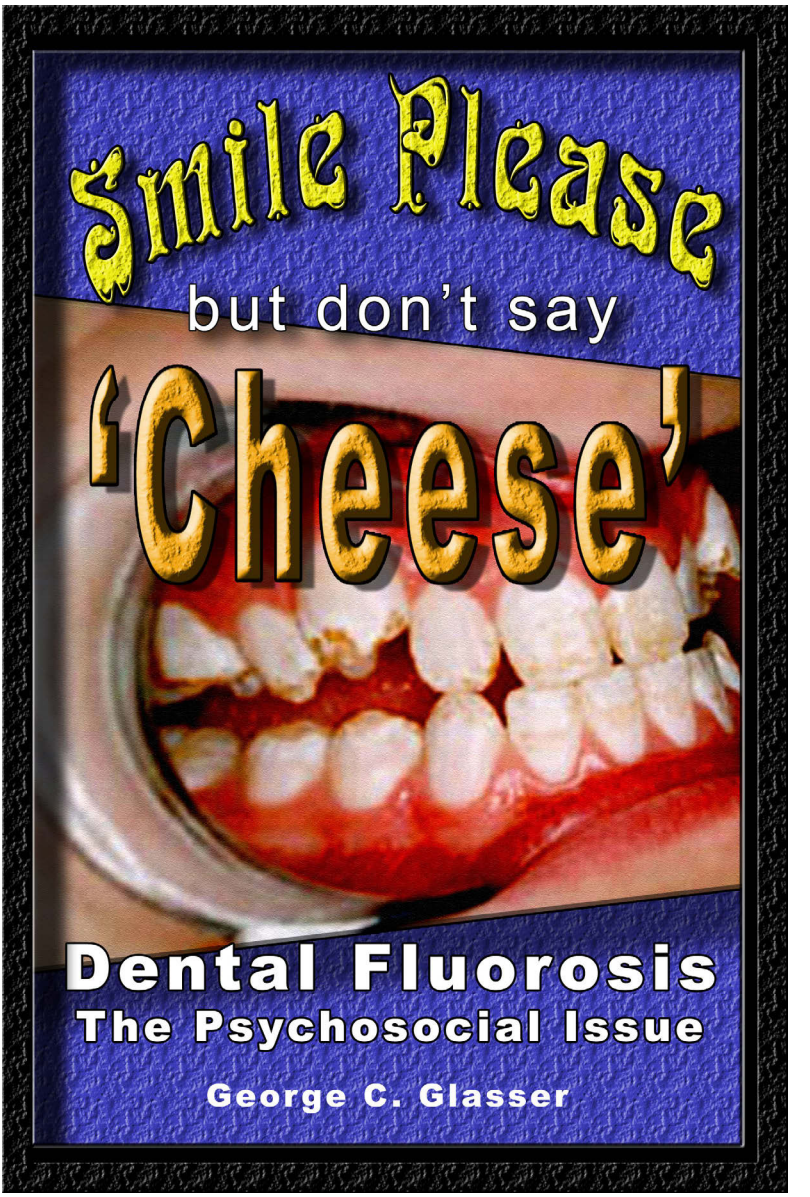
Smile Please
but don't say
'Cheese'
Dental Fluorosis
The Psychosocial Issue
George C. Glasser


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Moderate/Severe Fluorosis
Photos courtesy of Fluoride Action Network

Dental Fluorosis
The Psychosocial Issue

by

George C. Glasser

Dental Fluorosis
The Psychosocial Issue

Published by Lulu.com
First Printing

Dedicated to Jane Jones
Intrepid Human Rights Campaigner
and
My Late Wife
1936 – 2004

Cover Design – George C. Glasser
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~ Index ~

~ Prologue ~

My late wife, Jane Jones, before her involvement as Campaign Director for the UK based National Pure Water Association had once been a psychiatric nurse.

Back in the 2001, we were discussing the psychological impact of Dental Fluorosis, which is a discolouring of the teeth caused by ingesting too much fluoride. It was about first impressions people have of someone after with stained teeth after we read a cosmetic dentistry article.

> ***"It only takes 30 seconds to make a first impression that is nearly impossible to reverse. Your teeth alone can give people the perception of intelligence, education level and personality Make sure your teeth send the message you want the world to hear."***

At the time, the statistical data from the US Centers for Disease Control and Prevention indicated that the prevalence of Dental Fluorosis was:

> *"A nine percentage point increase in the prevalence of very mild or greater fluorosis was observed among children and adolescents aged 6-19 years when data from 1999-2002 were compared with those from the NIDR 1986-1987 survey of school children (from 22.8% in 1986-1987 to 32% in 1999-2002)."*

Dental Fluorosis occurs when children ingest too much fluoride from infancy until they develop their permanent teeth, and cosmetic solutions are not advised until a child is in their late teens.

Before our discussion about Dental Fluorosis, I wrote an article titled, *"Charlie's Story,"* about a mother's point of view watching her child grow up with the stigma attached to a 'moderate form' of the condition.

> *For thirty years, Anita believed that she was responsible for her son's health problems…She recalls that he was ridiculed by other*

> *children because of his fluorosed teeth. "I remember walking into the bathroom and watching Charlie trying to scrape the stains off his teeth with a sewing needle. People asked him if he ever brushed his teeth."*

Jane said that she wondered what affect it would have on a child's psychological development. At that point, we decided to investigate the issue and came out with two articles.

The first article we titled *"Dental Fluorosis: Smile please, but don't say 'Cheese,'"* which investigated the psychological impact it has on a child's personality development, and how people viewed children with facial disfigurements such as Dental Fluorosis.

The second article titled, *"The Public Perception of Dental Fluorosis: The Crucial Issue,"* which dealt with adult psychosocial issues and socioeconomic factors arising from Dental Fluorosis.

NINE YEARS LATER: In November of 2010 the US Centers for Disease Control and Prevention came out with another Dental Fluorosis survey of the United States. The figures for the increased incidence of Dental Fluorosis were even more alarming than in the 2001 report.

> *In 1986–1987, 22.6% of adolescents aged 12–15 had Dental Fluorosis, whereas in 1999–2004, 40.7% of adolescents aged 12–15 had Dental Fluorosis. . . . The prevalence of very mild fluorosis increased from 17.2% to 28.5% and mild fluorosis increased from 4.1% to 8.6%. The prevalence of moderate and severe fluorosis increased from 1.3% to 3.6%.*

After some reluctance to become involved in the fluoride issue again, I decided to resurrect, update, and create a booklet from the original articles Jane and I wrote, mainly because I feel they have even more significance today.

Letters from People Impacted by Dental Fluorosis

The following is a sampling of emails sent to the Fluoride Action Network (FAN) from people impacted by Dental Fluorosis.

------ Forwarded Message

From: [...]

Date: Tue, 19 Apr 2005 21:34:12 EDT

To: personal@fluoridealert.org

Subject: Depressing Fluorosis

My name is Jennifer and I have severe Dental Fluorosis. I am now 20 and have had this since I was very young. This has really affected my life to the fullest extent. In elementary, middle, and high school, I was teased really bad by the other kids. People did not understand what I was talking about when I tried to explain, they thought I just did not brush my teeth. I can't smile or even look people in the eye when I talk to them. It is completely devastating. Thank God I am finally getting it fixed. I am going in one month for a Composite Bonding. I wish more people knew how exactly this affects children. Especially when they grow older, everyone would like a nice smile, but this makes it so much worse, especially since it is permanent. To everyone else that has it, remember you are not the only ones!!

~ Introduction ~

Before I knew what Dental Fluorosis was, I knew several people who suffered with the condition. One was a child about six years old, I watched after him in the afternoons when he came home from school until his mother came home from work. He had what is classified as moderate fluorosis. As usual, with many children that age, especially boys, they have a propensity to avoid any sort of personal hygiene.

I would always tell him the brownish stains on his teeth were from being to lazy to brush his teeth, hand him a toothbrush slathered with fluoride toothpaste, and make sure he brushed his teeth.

My second exposure to someone with moderate fluorosis was when I was in the military service. The poor fellow acquired the nickname of "Garbage Mouth."

It was back during the Vietnam War, and I was one of those unwilling volunteers who had a choice of being conscripted in to the Army or joining the military. I didn't care about advancement, I was just there to do my time and get out. I was pretty slovenly and really didn't care about passing inspections – basically, I did the minimum to get by.

'Garbage Mouth' was my roommate for a while. I remember the perception everyone had about him strictly from the appearance of his teeth. My friends would often say, "I'll bet your room stinks. Does 'Garbage Mouth' ever take a shower?"

However, my roommate made sure everything was squared away. He would make my bunk, straighten my locker, and when

we had an inspection, he made sure that I had clean, ironed uniform and polished shoes.

But unfortunately, it was as if the perception became a reality to those around me when in fact, ‘Garbage Mouth’ was a very fastidious individual and quite intelligent. However, he was labeled as ‘stupid’ and ‘dirty.’

His peers often openly and on occasion mercilessly ridiculed him about his teeth.

One evening when a bunch of us were going out on the town, ‘Garbage Mouth’ wanted to tag along. He was told in no uncertain terms that none of us stood a chance of picking up a girl if he was along.

It wasn’t long after that he finally cracked. I came back from a flight and found him curled in a fatal position on the floor. At first, I thought he was just sick, but he ended up in the psychiatric ward in a semi catatonic state. But even then, my peers still ridiculed him as a being a vegetable.

However, if he had been a more aggressive personality type, the situation could have very easily have turned out differently, it could have ended up with most of his tormentors laying dead or dying on the barracks day room floor.

So in writing this booklet, I do so with first hand experience and being guilty of prejudging people based on the appearance of their teeth who had no control their appearance. In fact, it was a condition imposed upon them under the auspice of ‘a beneficial public health measure.’ They were the sacrificial lambs for the good of the all.

As was quoted earlier in the prologue, from the 1987 to the 2001 CDC report, the prevalence of moderate and severe fluorosis adolescents aged 12–15 increased from 1.3% to 3.6% and on average, 41% of adolescents have Dental Fluorosis.

Essentially, that means in a city with a population of 200,000 adolescents, 82,000 will have some degree of Dental Fluorosis. Out of that, more than 2,952 of those adolescents will be classified as “Garbage Mouths” to be ridiculed, and shunned by their peers.

However, in cities where the water is artificially fluoridated, the adjusted statistics strongly suggest that the incidence of Dental Fluorosis is upwards to a staggering 71%!

So, in a city with a population of 200,000 kids between the ages of 12 and 15, 142,000 exhibit some degree of Dental Fluorosis, and 5,012 are classified as “Garbage Mouths.”

However, most all those young people will suffer some degree of prejudicial treatment just because of a preventable condition they suffer from through no fault of their own.

The American Dental Association (the primary supporter and promoter of artificial water fluoridation) and the US Centers for Disease Control and Prevention state that increased incidence of Dental Fluorosis in areas where the drinking water is fluoridated, is a “Classic public trade off.”

However when there is disfigurement occurring on this massive scale, and not only physical disfigurement but the psychological trauma attached, there has to be a knock-on impact to society as well.

If a person can’t afford cosmetic remedies, they’re stuck with the condition and the stigma attached. But even if a person can afford the necessary remedies, there are psychological scars that never go away.

These psychological scars affect the way people interface with the social structure of a community in many different ways, and often have a negative impact

That is what this booklet addresses along with a possible legal recourse for those who have Dental Fluorosis.

Most likely, tens of millions of people in the United Stated suffer some form of discrimination or emotional suffering from the end result a public health measure that from the inception foresaw that at least 10% - 12% of the population’s teeth would be disfigured to some extent.

For of those people, it meant a life long pattern of discrimination, job opportunities lost, relationships, exclusion, depression, ridicule, and often, relegated to the underclass of society with no chance of escape.

However, for the people promoting drinking water fluoridation, it meant good paying jobs, prestige, and life long security.

In fact, if a reasonably intelligent attorney did a little investigating, he or she might just see that fluoridation of the public water supplies is a violation of The Civil Rights Act of 1991, because it creates subsets of the population vulnerable to discrimination.

Fifteenth Century alchemist, Paracelsus, credited with the practice of modern medicine said, *"All things are poison, and nothing is without poison; only the dose permits something not to be poisonous."*

In essence, the practice of using a highly toxic substance like fluoride to inhibit decay is based on a fifteenth century concept, and as Paracelsus' critics responded to his statement, ***"Is the dose the poison, or the poison the dose?"***

~ 1 ~
Overview

Dental Fluorosis (Dental Fluorosis, or "mottled teeth"), has long been recognized as an endemic problem affecting areas of the world with high levels of naturally occurring fluorides in the drinking water.

When artificial drinking water fluoridation began in the United States in the mid twentieth century, the US Public Health Service estimated that 10% -12% of children consuming water fluoridated between 0.9 - 1.2 parts per million would develop mild Dental Fluorosis. There was a general assumption that drinking water would be the only source of exposure to fluorides.

Today, some sixty-five years later, populations are exposed to fluorides from a wide range of sources, including air pollution, drinking water, toothpaste, mouth rinses, foods, beverages, medicines, anesthetics, fluoride supplements, pesticide, and herbicide residues. The result of these multiple exposures has led to a dramatic increase in the prevalence of mild, moderate, and severe Dental Fluorosis. It has become a problem even in areas where the public drinking water has never been artificially fluoridated.

In the 1980s, studies in selected U.S. communities reported significant increases in Dental Fluorosis, paralleling the expansion of water fluoridation and the increased availability of other sources of ingested fluoride, such as fluoride toothpaste and fluoride supplements.

According to the US Centers for Disease Control and Prevention 2001 Report, the primary concern is the increasing prevalence of Dental Fluorosis in fluoridated and non-fluoridated areas:

- *"Cases of moderate and severe forms occurred even among children living in areas with low fluoride concentrations in the drinking water. Although this level of enamel fluorosis is*

not considered a public health problem, prudent public health practice should seek to minimize this condition, especially moderate to severe forms. In addition, changes in public perceptions of what is cosmetically acceptable could influence support for effective caries-prevention measures."

In 2010, the new CDC Report says:

- *"The report describes the prevalence of Dental Fluorosis in the United States and changes in the prevalence and severity of Dental Fluorosis among adolescents between 1986–1987 and 1999–2004… The prevalence of very mild fluorosis increased from 17.2% to 28.5% and mild fluorosis increased from 4.1% to 8.6%. The prevalence of moderate and severe fluorosis increased from 1.3% to 3.6%.*

However, the dental profession considers artificial water fluoridation to be an effective way of reducing tooth decay in children and regards Dental Fluorosis as "merely a cosmetic effect."

Public health officials consider (and have described) Dental Fluorosis as a *"classic public health trade-off" – an acceptable minor risk - resulting from "a beneficial, cost-effective public health measure which reduces inequalities in dental health."*

The National Academy of Sciences publication, "Health Effects of Ingested Fluoride" (1993) indicates that Dental Fluorosis (from very mild to severe) ranges from 22% - 84% in fluoridated and non-fluoridated areas. The use of fluoridated products has produced a widespread 'halo effect' extending into non-fluoridated areas.

In a study published in the British Dental Journal in 2000, leading UK researchers from Newcastle City Health NHS Trust found that the prevalence of Dental Fluorosis among 8 - 9-year-old children in fluoridated Newcastle was 54%. They also found that in "fluoride-deficient" Northumberland, 23% of 8 - 9-year-old children have Dental Fluorosis. They concluded that the prevalence of "aesthetically important" Dental Fluorosis in the fluoridated area was 3% - six times higher than found in the non-fluoridated area, where 0.5% of the children were affected. This demonstrates that over-exposure to fluorides can be seen in areas where the drinking water is not fluoridated.

If the findings of the Newcastle researchers are correct, then, for every 10,000 children born in fluoridated areas, 300 have developed "aesthetically important" Dental Fluorosis and, for every 10,000 children born in non-fluoridated areas, 50 are similarly affected.

In 2000, the same year as the Newcastle study appeared in the British Dental Journal, the British Medical Journal published a systematic scientific review of water fluoridation, commissioned by the UK Government and carried out at the NHS Centre for Reviews and Dissemination at York University. It reported that 48% of the populations living in fluoridated areas develop Dental Fluorosis of all types. This figure is somewhat lower than that found by the Newcastle researchers.

However, the York reviewers stated that 12.5% of those exposed to water fluoridation - 1,250 people in every 10,000 - exhibit Dental Fluorosis "of concern."

In the two studies discussed above, researchers are agreed that Dental Fluorosis is widespread. They differ only on the degree of prevalence of aesthetically important Dental Fluorosis. In either case, it is clear that fluorosis of aesthetic concern affects a large subset of the population.

Neither of these studies acknowledged that Dental Fluorosis may have other profound consequences for individuals and society as a whole.

~ 2 ~

The Public Perception of Dental Fluorosis

"After a handshake, a friendly smile is one of the most important elements in creating a good first impression. However, it's hard to smile if you're self-conscious about teeth that are yellow or stained." (School of Dental Medicine at the University of New York).

A 1998 survey by the American Academy of Cosmetic Dentistry showed that:

- *more than 92% of adults agree that an attractive smile is an important social asset*
- *85% believe that an unattractive smile makes a person less appealing to the opposite sex;*
- *75% believe that an unattractive*
- *smile can be detrimental to a person's chances of career success; and · half of the respondents see unattractive teeth as a sign of poor personal hygiene.*

Overall, the survey found that people with unattractive smiles are more likely to experience social and employment discrimination.

In 1985, following a review commissioned by the United States Environmental Protection Agency, an independent panel of behavioral scientists found that people with moderate to severe fluorosis are at increased risk of experiencing psychological and behavioral problems.

People afflicted with Dental Fluorosis are more likely to experience discrimination from an early age. Teachers often prejudge a child's intellect and personality based on appearance alone. These children are more often likely to be considered as troublemakers or non-scholars. Such biased views reinforce a negative stereotype, with self-fulfilling results.

Thousands of official documents confirm that artificial fluoridation of drinking water can, and does produce the "aesthetically objectionable" effect of moderate to severe Dental Fluorosis. The psychological damage suffered by millions of victims of Dental Fluorosis is given little attention.

The US Department of Health and Human Resources asserts that water fluoridation is the most cost-effective means of reducing tooth decay. However, the Department turns a blind eye to the huge financial burden on individual patients who require remedial treatment for unsightly fluorosed teeth.

Cosmetic veneers provide an extremely lucrative spin-off for the cosmetic dentists that charge up to tens of thousands of dollars for veneering and repeat treatments are required every five or six years throughout the victim's life.

People who cannot afford cosmetic veneers, professional bleaching or micro-abrasive treatments have no option but to live with their fluoride-damaged teeth and the attendant social stigma and psychological trauma.

While the public health sector refuses to see a problem with Dental Fluorosis as far as the individual's psychological wellbeing, and how others perceive them; numerous studies state that discolored teeth are a social and psychological problem.

For instance:

A dentist working at the Federal Correctional Institution, Terminal Island, San Pedro, California wrote:

- *The stains of endemic Dental Fluorosis can have a tremendous psychological impact on the patient. Perhaps this might be a contributory factor in the psychological make-up of the individual who displays anti-social behavior. If so, it might be possible to effect change by removing the stains. Many patients [convicts] have been pleased with the results [bleaching of teeth], and even displayed a willingness to smile.* P.G. Colon, Removal of Tooth Stains in Prisoner Rehabilitation, Dental Survey Publications, Vol. 48, No 22, 1972.
- **IRISH** *dental surgeon, Donal McAuley, wrote in the British Medical Journal: "Fifty per cent of our population has Dental Fluorosis. I see patients daily in my surgery who are damaged by fluoride. They do not smile, they are teased at school, and they are traumatised by having 'rotten' teeth." Drinking water in Ireland is artificially fluoridated.* [6]

- **In 1994, a KENYAN** *survey noted that between 60 and 84% of respondents viewed Dental Fluorosis as an important problem because of its unfavourable effects on an individual's personality."* Mwaniki DL, Courtney JM, Gaylor JD. Endemic fluorosis: an analysis of needs and possibilities based on case studies in Kenya. Soc Sci Med 1994; 39: 807-13.
- **A later CANADIAN** study examined the influence of fluoride exposures on the wide-spread *"aesthetic problems" caused by Dental Fluorosis. It acknowledged that forty six percent (nearly half) of the participants had Dental Fluorosis. The effect on personal appearance, as defined by the participants themselves, was more prevalent in the over-11 age group.* Clark DC, Berkowitz J. The influence of various fluoride exposures on the prevalence of esthetic problems resulting from Dental Fluorosis. J Public Health Dent 1997; 57:144-9.
- The trauma experienced by young people with Dental Fluorosis is depressingly apparent in a SOUTH AFRICAN study conducted by the North West Province Department of Health: *"The psychological effect in terms of the unsightly, brown-stained teeth has induced the adolescents with fluorosed teeth to demand that these teeth be extracted and replaced with dentures."* Mothusi, B. Psychological Effects of Dental Fluorosis. Department of Health, North West Province, South Africa.
- **AMERICAN and ENGLISH** researchers noted that the prevalence of Dental Fluorosis appears to be on the increase. *"Although in its mild form the condition is not considered to be of cosmetic significance, the more severe forms can cause great psychological distress to the affected individual."* McKnight CB, Levy SM, Cooper SE, Jakobsen JR. A pilot study of esthetic perceptions of Dental Fluorosis vs. selected other dental conditions. ASDC J Dent Child 1998; 65: 233-8, 229. Rodd and Davidson. The aesthetic management of severe Dental Fluorosis in the young patient. Dental Update 1997; 24: 408-11.
- ***An AUSTRALIAN*** *Health Department analysed society's perceptions of Dental Fluorosis, based on over 3,000 responses. Lay and professional observers recog-nised that higher degrees of fluorosis increasingly embarrass the child. All observers, except the dentists, felt that the more severe fluorosis indicated neglect on the part of the child.* Riordan PJ. Perceptions of Dental Fluorosis. J Dent Res 1993; 72: 1268-74.

- **EGYPTIAN** *researchers observed that friends and relatives ridicule the patient by inferring that these stains are associated with smoking and/or poor oral hygiene. They noted that such personal remarks lead an individual into severe psychological depression*. Rahmatulla. Clinical evaluation of two different techniques for the removal of fluorosis stains. Egypt Dent J 1995; 41: 1287-94.

- **AMERICAN** *The prevalence of fluorosis has increased over the past fifty years, and with this increase, esthetic concerns pertaining to fluorosis should also be taken into consideration. Canadian, Australian, and British studies have explored perceptions concerning enamel fluorosis, but no studies in this area have been published from the United States. In the previous studies, esthetic concerns resulting from fluorosis generally were not compared with the esthetic perceptions of other conditions such as isolated opacities, tetracycline staining, or various types of malocclusion. In the present investigation, respondents answered written questions about paired photographs, one of fluorotic teeth and the other with one of the other conditions.* ***Results show that not only is fluorosis noticeable, but it may be more of an esthetic concern than the other conditions****. ASDC J Dent* **.** McKnight CB, Levy SM, Cooper SE, Jakobsen A pilot study of esthetic perceptions of Dental Fluorosis vs. selected other dental conditions. JR Child. 1998 Jul-Aug; 65(4):233-8, 229.

- **British** *The influence of tooth colour on the perceptions of personal characteristics among female dental patients: comparisons of unmodified, decayed and 'whitened' teeth. S. Kershaw[1], J. T. Newton & D. M. Williams British Dental Journal 204, E9 (2008) Published online: 15 February 2008 |doi:10.1038/bdj.2008.134*

  Physical appearance plays a key role in human social interaction and the smile and teeth are important features in determining the attractiveness of a face. Furthermore, the mouth is thought to be important in social interactions. The purpose of this study was to determine the relationship between tooth colour and social perceptions.

  One hundred and eighty female participants viewed one of six images, either a male or a female digitally altered to display one of three possible dental statuses (unmodified, decayed, or whitened). The images were rated on four personality traits:

social competence (SC), intellectual ability (IA), psychological adjustment (PA), and relationship satisfaction (RS).

Decayed dental appearance led to more negative judgments over the four personality categories. Whitened teeth led to more positive appraisals. The gender of the image and the demographic background of the participant did not have a significant effect on appraisals.

Tooth colour exerts an influence on social perceptions. The results may be explained by negative beliefs about dental decay, such as its link with poor oral hygiene.

- *People make judgements about the personal characteristics of photographed individuals based on dental appearance.*
- *Teeth that appear whitened elicit preferable judgments in comparison to normal enamel. This has implications for whether cosmetic tooth whitening should be provided by the NHS.*
- *Teeth that appear decayed elicit judgements that are unfavourable in comparison to normal enamel.*

The appearance of a person's teeth plays a crucial role on how society perceives them and how he or she functions in society.

~ 3 ~

The Psychosocial Impact

Numerous studies published in prominent dental journals demonstrate that dental professionals have been aware for many years that unattractive teeth can adversely affect the psychological wellbeing of children and adults.

A 1981 study on the attractiveness of teeth concluded, *"The hypothesis that children with a normal dental appearance would be judged to be better looking, more desirable as friends, more intelligent, and less likely to behave aggressively was upheld."*

Spencer, et al (1996), acknowledged the findings of three studies published in 1993 showing that children from 10 - 17 years of age readily recognize "very mild" and "mild" Dental Fluorosis, and that even mild changes in coloration cause embarrassment and self consciousness. Spencer wrote that *the "psycho-behavioral impact was similar to that of crowding and overbite, both considered key occlusal traits driving the demand for orthodontic care."*

Dental Fluorosis is visible as soon as the secondary teeth erupt. While developing social and early life skills, children are at their most vulnerable to the psychological impact of discrimination.

Further research in 2002 confirmed that participants in a study of the psychosocial perception of dental abnormalities, such as Dental Fluorosis, believed that people with dirty (stained) teeth have a "lack of social skills, lower intelligence and poor psychological adjustment."

Studies sponsored by Government and industry have repeatedly established that Dental Fluorosis and dental abnormalities have negative psycho-social impacts and that the public commonly perceives people with dental abnormalities to have:

- poor health
- low intelligence
- poor psychological adjustment
- poor personal hygiene
- lack of social skills

This negative public perception has led to a defined pattern of prejudice, discrimination, and social exclusion. Teachers often prejudge a child's intellect and personality based on appearance alone. Such negative perceptions have been found to impact adversely on the victims' personalities.

The impact

The consequences of artificial water fluoridation and widespread, poorly, or unregulated use of fluoridated products have created a growing subset of the population more likely to endure lifelong discrimination and develop psycho-behavioral problems.

In 1984, following a review commissioned by the United States Environmental Protection Agency, an independent panel of behavioral scientists stated that people with moderate to severe fluorosis are at increased risk of experiencing psychological and behavioral problems.

In 1997, Rodd, et al observed: *"Although in its mild form the condition is not considered to be of cosmetic significance, the more severe forms can cause great psychological distress to the affected individual."*

Children who develop Dental Fluorosis-related behavioral problems are more likely to:

- be disruptive in school
- underachieve, academically
- regularly truant from school
- have histories of antisocial behavior (police records)
- become drug and/or alcohol abusers

Many of these children carry these negative behavioral traits into adulthood and are more likely to:

- live on welfare benefits
- fail to obtain or retain work
- become homeless

- fail to make or maintain relationships
- be more prone to violence
- spend time in prison
- become repeat offenders
- suffer from some form of mental illness
- suffer from drug addiction/alcoholism
- have suffered from child abuse, and are child abusers

Such well-documented negative outcomes indicate the existence of an important socio-economic element which is never included in 'cost-benefit' analyses of water fluoridation.

Despite anti-discrimination laws:

- The unattractive appearance of people with Dental Fluorosis can severely limit their academic performance, employment choices, and future prospects.
- Teeth which appear "dirty" can seriously affect an individual's ability to interact and form relationships with members of the opposite sex leading to exclusion, loneliness, and long-term depression.

Such conditions can precipitate feelings of frustration and anger which in turn, could lead to criminal behavior.

Promoters of water fluoridation are aware of, but do not warn the public about the foreseeable adverse effect of Dental Fluorosis or the foreseeable psychological damage which can and does occur to subsections of the population.

Parents also commonly experience feelings of anguish and guilt over their children's fluorosed teeth.

For thirty years, until she discovered the scientific literature, Anita Knight endured a private agony over her son's lack of self esteem and emotional problems.

"I was outraged," she said. *"It was immediately obvious to me that so-called scientists and public health officials had arrogantly and callously written off my son as a laboratory rat in their inhuman experiment."*

~ 4 ~

The Socio-economic Consequences

In the most optimistic case scenario mentioned above, if 'only' 3.6% of artificially fluoridated populations develop moderate to severe Dental Fluorosis, this minority of 'problematic people' can have a significant impact on the wellbeing of communities with all the attendant costs to society.

For example, if the recorded births for a particular fluoridated city are 20,000. At the 3.6% estimate given by the US Centers for Disease Control and Prevention for aesthetically objectionable Dental Fluorosis is correct, 720 of these children will go on to develop moderate to severe Dental Fluorosis. If the higher estimate of esthetically objectionable Dental Fluorosis is 12.5% as stated by the York Review is correct, the number of children with Dental Fluorosis will be 2,500. It is worth noting that these figures are compounded year on year with the addition of annual births.

The fact is that mostly children from poorer backgrounds are more likely to develop Dental Fluorosis and will find it difficult to afford the expensive cosmetic dentistry procedures; they are more or less relegated to the social under classes.

A large body of published, peer-reviewed work reveals that public health policy has led to the creation of a significant subset of the population which is more susceptible to social and employment discrimination. The effects on health, education, and social services budgets and on the wider economy have been completely overlooked.

Many people suffering with Dental Fluorosis become liabilities rather than assets to their community – an economic drain rather than contributing to the local economies and society as a whole.

Exclusion from society instills resentment in many victims.

~ 5 ~
Potential Legal Remedy

When a plaintiff suffers harm, whether physical or psychological, it is only necessary for him to show the court that the injury was reasonably foreseeable.

As far back as the late 1980s, some prominent researchers have pointed out that those dentists who knowingly promote treatment which leads to Dental Fluorosis place themselves at risk of litigation. *Whitford, GM. Physiological and Toxicological Characteristics of Fluoride, Journal of Dental Research 1990; 69, Spec No: 539-49; discussion 556-7.*

However, in the mid-1990s, I worked with several law firms in an attempt to file several Dental Fluorosis Toxic Tort lawsuits. My job was to collect the pertinent information from potential plaintiffs, such as sources of fluoride in the child's diet, if the child took fluoride supplements, etc.

The law firms basically looked for two things:

1. someone to place the blame on such as a doctor, and
2. the potential of a market-share product liability class action that would be inclusive of the manufacturers of fluoridated dentifrices.

We wound up in a maze because if a doctor prescribed fluoride supplements, he or she could say they were following procedure and recommended by the government, the American Dental Association, which shouldn't have caused Dental Fluorosis.

Then the responsibility fell back on the parents for the child's condition. The way out was that the parents must not have read the instructions properly. Then there were the numerous sources of fluoride in the diet.

When we looked at market-share product liability, it was another dead end because anyone that sold fluoridated products could say that their product met all the Federal safety guidelines. And once again, the child's condition was the parents fault for not being better informed.

After several years of-and-on work, it seemed that establishing blame on a specific party or parties proved to be a lost cause. However, there was a potential avenue we looked at, but never thought to investigate in any depth.

- *Endorsements designed to sell products are most effective when the endorser is a celebrity or an expert. If such endorsements contain misrepresentations, the endorser risks personal liability. For products related to health and safety, endorsements are subject to evaluation by reliable independent sources. In a number of high-profile cases, the Federal Trade Commission determined that endorsers must have a reasonable basis for their representations.*

  Journal of Advertising © 1997 M.E. Sharpe, Inc.

- *Since the late 1970s, advertising has become increasingly important in product liability litigation when consumers have been harmed by faulty products. Courts seem willing to consider the impact of advertising on consumer behavior leading to injury-causing situations. If consumer reliance on the content of advertising can be established, the marketer may be subject to liability under a variety of theories of recovery, including warranty, misrepresentation, negligence, and strict liability.*

A person or organization that actively promotes the use of or endorses a product that can cause harm is essentially liable for any damage caused.

At the time, I knew about the liability involved with endorsement and promotion of a product, but it wasn't until a year or so ago that it dawned on me as to whom to target in a test case:

May 02, 2011

Celebrating 66 years of fluoridation

States, communities honored at National Oral Health Conference

By Stacie Crozier, ADA News staff

Pittsburgh—The ADA, the Association of State and Territorial Dental Directors and the Centers for Disease Control and Prevention celebrated 66 years of community water fluoridation at the National Oral Health Conference April 12, honoring more

than 100 states and communities with 2010 Fluoridation Awards at Pittsburgh's Westin Convention Center.

Honored: Dr. Steven M. Levy receives the 2010 Fluoridation Merit Award at the National Oral Health Conference April 12 at the Pittsburgh Westin Convention Center from Judith Feinstein, oral health director for the Maine Centers for Disease Control and Prevention and chair of the Association of State and Territorial Dental Directors Fluorides Committee chair.

A total of 22 communities were recognized with Community Fluoridation Initiative Awards for passing water fluoridation initiatives during the past year…

Another 10 communities received Fluoridation Reaffirmation Awards for defeating initiatives to discontinue fluoridation or approving initiatives to maintain fluoridation, including: Crescent City, Calif.; Dubuque and Iowa City, Iowa; Marine City, Mich.; Bolivar, Mo.; Walden, N.Y.; McMinnville and Keizer, Ore.; Proctor, Vt.; and Amery, Wis.

California received a State Fluoridation Initiative Award for having the greatest increase in population receiving fluoridated water in 2010.

Alabama, Alaska, Illinois, Indiana, Massachusetts, Nebraska, North Dakota and Virginia received State Fluoridation Quality Awards for maintaining the quality of fluoridation and optimal fluoride levels.

Sixty-seven water systems received Fifty Year Awards for achieving 50 years of continuous water fluoridation during the past calendar year. A complete list of recipients is available on the ADA Dental Society Services website (www.adadentalsociety.org/members/society/awards/fluoridation.asp).

Dr. Steven M. Levy was honored with the Fluoridation Merit Award in recognition for his outstanding contributions to the science and promotion of fluorides and community water fluoridation.

It was the American Dental Association! They endorsed fluoridation in 1950, and ***"unreservedly"*** reaffirmed their endorsement in 2011 – 61 years down the road - thus enthusiastically accepting any and all liabilities that might arise from the practice.

Further more:

- *For more than 50 years, the American Dental Association has endorsed fluoridation of community water supplies and use of fluoride-containing products as safe and effective measures to prevent tooth decay. To ensure optimal fluoride intake, the ADA urges its member dentists to educate patients about the level of fluoride in bottled water and inquire about their primary and secondary water sources. The ADA supports labeling of bottled water with the fluoride concentration and company contact information. The ADA also advises consumers to check bottled water labels to see if fluoride is added.* Smile Healthy Program (ADA.org Smile Healthy)

An endorsement means any advertising message (including verbal statements, demonstrations, or depictions of the name, signature, likeness or other identifying personal characteristics of an individual or the name or seal of an organization) that consumers are likely to believe reflects the opinions, beliefs, findings, or experiences of a party other than the sponsoring advertiser, even if the views expressed by that party are identical to those of the sponsoring advertiser. The party whose opinions, beliefs, findings, or experience the message appears to reflect will be called the endorser and may be an individual, group, or institution.

The American Dental Association is a trusted institution, and their endorsement and/or promotion of a product or service such as fluoridation of public drinking water is adequate for the average consumer to purchase a product or agree to a service such as the fluoridation of public drinking water.

However, the scope of the American Dental Association's endorsement and promotion of fluoride containing products such as fluoridated public drinking water goes beyond the realm of prudence.

If a community is fluoridated, they still suggest that a person used fluoridated mouthwashes and dentifrices without adequate warnings regarding the potential of children developing Dental Fluorosis. Furthermore, the even have a 'seal of approval' and give awards for communities defeating anti fluoridation challenges

If a community is fluoridated and children are eating food cooked in fluoridated water, drinking beverages made with fluoridated water, they suggest that people bottled drink fluoridated water – just to make sure they get a good daily dose.

As stated in the above article, the American Dental Association takes great pride in the active promotion of drinking water fluoridation and other avenues of administering fluoride to communities and individuals.

Essentially, the American Dental Association shamelessly accepts all liability for anyone who developed Dental Fluorosis.

Regarding Dental Fluorosis Toxic Tort litigation, several important precedents apply:

1) Foreseeability

2) Duty to warn

3) Causation:

a) " The exposure to the chemical or chemicals did, in fact, occur;

b) The disease or injury complained of did, in fact, occur;

c) An appropriate period of time elapsed between the exposure and onset of disease;

d) Scientific recognition exists as to the relationship between the chemical(s) and injury or disease;

e) Exposure to dose or amount of the chemical was sufficient to cause the injury did occur;

f) Exposure was of such a nature as to cause the injury; and

g) Recognized alternative causes of the injury or disease(s) complained of have been eliminated."

With regard to liability of the endoser:

- *Feldman v. Lederle Laboratories, the plaintiff filed a suit claiming that the discoloration of her teeth was caused by medication prescribed during her infancy.56 The plaintiff's claim was that the defendant was strictly liable for the discoloration of her teeth because the defendant did not warn her of the potential side effect of the drug. It was argued by the defendant that at the time Feldman was administered the drug, it was scientifically impossible to know the potential side effect and therefore to provide warnings of the dangerous side effect.*
- *In Feldman v. Lederle Laboratories, the New Jersey Supreme Court stated that it was the defendant's responsibility to prove that the information was not reasonably accessible at the time; and consequently, lacked actual or constructive knowledge. The Court held that if the risk was scientifically unknowable that no liability could be attached to the defendant's failure to warn.*

However, with Dental Fluorosis, the adverse side effect has been common scientific knowledge for more than ninety years. Communities fluoridating water, the promoters of water fluoridation, and the

manufacturers of fluoride-laced dentifrices do not provide adequate warnings to the public regarding the scientifically knowable adverse effect, Dental Fluorosis.

The argument is straightforward: The undeniable fact is that exposure to fluorides causes Dental Fluorosis, and the potential defendants are aware that ingestion of fluorides will cause discoloration of the teeth; and the potential defendants have failed to adequately warn the public of this adverse effect.

- *Deluca v. Merrel-Dow Pharmaceuticals, Inc., 911 F.2d 941 (3rd Cir. 1990) defining relative risk in terms of exposed populations rather than exposed individuals. ("A relative risk of 'two' means that the disease occurs among the population subject to the event under investigation twice as frequently as the disease occurs among the population not subject to the event under investigation.").*

The only information the American Dental Association posts on their website about Dental Fluorosis, minimizing it effect, is the following:

- *Enamel fluorosis is not a disease but rather affects the way that teeth look. In the vast majority of cases, enamel fluorosis appears as barely noticeable faint white lines or streaks on tooth enamel and does not affect the function or health of the teeth. In fact, in many cases, the effect is so subtle that, usually only a dental expert would notice it during an examination. Enamel fluorosis occurs only when baby and permanent teeth are forming under the gums. Once teeth break through the gums, they cannot develop enamel fluorosis.*

Not only is it potentially possible to file a Toxic Tort suit against the American Dental Association, but considering psychological distress caused from exclusion and discrimination due to a preventable condition, it would seem that a good attorney would add in punitive damages for emotional distress under the *Civil Rights Act of 1991* laws.

The Civil Rights Act of 1991 permits recovery for "emotional pain, suffering, inconvenience, mental *anguish*, [and] loss of enjoyment of life." 42 U.S.C. § *1981a(*b)(3). The following categories would apply to Dental Fluorosis:

Case law for different types of emotional/psychological distress

Anger	Kenney v. R&R Corp., 20 MDLR 29, 32 (1998) ($40,000)
Anxiety	Beldo v. University of Massachusetts, Boston, 20 MDLR 105, 113 (1998) ($60,000) (felt anxiety); Nikolsky v. Summit

	Services Group, Inc., 20 MDLR 126, 129 (1998) ($100,000)
Career	Erewa v. Reis, 20 MDLR 36, 38 (1998) ($50,000) (caused Complainant to leave a field of work she loved and enjoyed)
Trouble Concentrating	Samuelson v. Sungard Financial Systems, Inc., 20 MDLR 197, 204 (1998) ($250,000)
Conduct Not Directed at Complainant	Beldo v. University of Massachusetts, Boston, 20 MDLR 105, 113 (1998) ($60,000) (may recover for distress caused by conduct not directed toward Complainant)
Natural Consequence	Labonte v. Hutchins & Wheeler, 424 Mass. 813, 824 (1997) (emotional distress is normal adjunct of being discriminated against)
Crying—Directly From Discriminatory Actions	Samuelson v. Sungard Financial Systems, Inc., 20 MDLR 197, 204 (1998) ($250,000)
Feeling Degraded	Durante v. Eastern Properties, Inc., 18 MDLR 1, 5 (1996) ($125,000) (feeling dirty and degraded, like a piece of property, after being forced to have sex to keep job)
Depression	Beldo v. University of Massachusetts, Boston, 20 MDLR 105, 113 (1998) ($60,000) (felt anxiety); Nikolsky v. Summit Services Group, Inc., 20 MDLR 126, 129 (1998) ($100,000) (received treatment)
Loss of Enjoyment of Life	Samuelson v. Sungard Financial Systems, Inc., 20 MDLR 197, 204 (1998) ($250,000); Tosti v. Ayik, 400 Mass. 224 (1987) ($275,000 in defamation claim) (deterioration of social life); EEOC Enforcement Policy Guidance No. 915.002 § II(A)(2) (July 14, 1992) (loss of enjoyment of life); "The List" printed in National NELA materials provides a list of hundreds of activities, which may help employees identify the areas of their lives impacted by discrimination.
Fear—General	Beldo v. University of Massachusetts, Boston, 20 MDLR 105, 113 (1998) ($60,000) (feeling intimidated)
Resulting Finances	Durante v. Eastern Properties, Inc., 18 MDLR 1, 5 (1996) ($125,000) (forced to move into a homeless shelter when unable to pay rent after termination); Hurd v. Mass. Port Authority, 20 MDLR 11, 19 (1998) ($15,000) (insecurity about future and career and belief that career was over); Lungelow v. Boston Penal Institution, 14 MDLR 1350, 1362 (1992) ($35,000) (destitute); Tosti v. Ayik, 400 Mass. 224 (1987) ($275,000 in defamation claim) (discharge caused plaintiff to sell two homes, uproot his family, sell furniture, and borrow from relatives);Quint v. A.E. Stanley Mfg. Co., 172 F.3d 1, 14 n. 10 (1st Cir. 1999) (worries over loss of health insurance)

Frustration	MCAD v. Franzaroli, 357 Mass. 112, 115 (1970)
Helplessness	Beldo v. University of Massachusetts, Boston, 20 MDLR 105, 113 (1998) ($60,000) (feeling helpless and hopeless)
Hopelessness	Land v. Consolidated Freightways, Inc., 20 MDLR 91, 96 (1998) ($50,000) (hopeless about future)
Humiliation	Kane v. Suffolk Co. Sheriff's Dept., 20 MDLR 135, 146 (1998) (being singled out based on handicap); Eng v. American Pie, Inc., 20 MDLR 53, 58 (1998) ($50,000) (humiliated by jokes concerning Complainant's lawsuit); Carter v. Commissioner of Corrections, 43 Mass. App. 212 (1997) ($15,000) (embarrassment); Draghetti v. Chmielewski, 416 Mass. 808 (1994) (ridicule by coworkers)
Inconvenience	Hogan v. Bangor and Aroostook R. Co., 61 F.3d 1034, 1037 (1st Cir. 1995) (wife who had been children's primary caregiver was forced to work so family could have insurance); EEOC Enforcement Policy Guidance No. 915.002 § II(A)(2) (July 14, 1992)
Job Performance	Hurd v. Mass. Port Authority, 20 MDLR 11, 19 (1998) ($15,000) (unable to approach job with focus and drive)
Nightmares	Guth v. Fradellos, 18 MDLR 229, 231 (1996) ($100,000) (nightmares); Land v. Consolidated Freightways, Inc., 20 MDLR 91, 96 (1998) ($50,000) (suicidal dreams)
Reaction to Pretext	Said v. Northeast Security, 18 MDLR 255, 260 (1996) ($300,000) (endured listening to manufactured explanation of employer's actions at hearing); Hurd v. Mass. Port Authority, 20 MDLR 11, 19 (1998) ($15,000) (implied accusation that Complainant stole made her feel ashamed and paralyzed)

The Civil Rights Act of 1991 also opens the door for Toxic Tort lawsuits against local governments fluoridating public water supplies.

Drinking water fluoridation is an intentional tort simply because from the very beginning it was established that approximately 10% - 12% of the population if fluoridated areas would develop Dental Fluorosis.

Presently, the US Centers for Disease Control and Prevention have put out new guidelines for a reduction of fluoride levels in water because of the increasing incidence of Dental Fluorosis.

- *Adjusted fluoridation is the conscious maintenance of the optimal fluoride concentration in the water supply for reducing*

dental caries and minimizing the risk of Dental Fluorosis. **(p iv, 1992 CDC Fluoridation Census).**

- *Why does HHS think that 0.7 milligrams per liter is appropriate?HHS has reviewed extensively the scientific literature on the relationship between fluoride and oral health. The optimal level of fluoride in drinking water provides enough fluoride to prevent tooth decay in children and adults while limiting the possibility for children to develop Dental Fluorosis in teeth that are forming under the gums. Analyses of national survey data show a gradual decline in tooth decay as fluoride content in water increases from very low levels to the recommended level of 0.7 milligrams per liter. However, there were limited changes in tooth decay as the level of fluoride in drinking water increased to 1.2 milligrams per liter. In contrast, the percentage of children with Dental Fluorosis increased as the fluoride concentration in water increased.* USCDC Questions and Answers 2010 – website.

And finally, as far as filing a Toxic Tort lawsuit against the primary endorser and promoter of the unrestricted use of fluorides in products and public drinking water fluoridation:

- ***American Dental Association Supports Fluoridation***
- *The American Dental Association unreservedly endorses the fluoridation of community water supplies as safe, effective and necessary in preventing tooth decay. This support has been the Association's position since policy was first adopted in 1950.*

In addition to that other parties that may be including in a Toxic Tort lawsuit from The American Dental association's website:

- *In addition to the ADA, nearly 100 national and international organizations recognize the public health benefits of community water fluoridation for preventing dental decay. They include the World Health Organization, the U.S. Public Health Service, the American Medical Association, the American Academy of Pediatrics, the American Academy of Family Physicians, the International Association for Dental Research, the National PTA and the American Cancer Society. And just last month, Surgeon General David Satcher wrote in his report, Oral Health in America, "Community water fluoridation is safe and 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."

Reninstatement of (Second) of TORTS § 324A (1965):

- *One who undertakes, gratuitously or for consideration, to render services to another which he should recognize as necessary for the protection of a third person or his things, is subject to liability to the third person for physical harm resulting from his failure to exercise reasonable care to protect his undertaking, if (a) his failure to exercise reasonable care increases the risk of such harm ....*

If you or someone you know has Dental Fluorosis, tell them to take this booklet around to some qualified personal injury lawyers and discuss filing a Dental Fluorosis Toxic Tort lawsuit against the American Dental Association.

The bottom line is that if you suffer from Dental Fluorosis or are even the parent of children victimized by a public health measure that was foreseen to cause injury – disfigurement:

- *The benefits of reduced dental caries and the risk for enamel fluorosis are linked. Early studies that examined the cause of "mottled enamel" (now called moderate to severe enamel fluorosis) led to the unexpected discovery that fluoride in community drinking water inhibits dental caries (57). Historically, a low prevalence of the milder forms of enamel fluorosis has been accepted as a reasonable and minor consequence balanced against the substantial protection from dental caries from drinking water containing an optimal concentration of fluoride, either naturally occurring or through adjustment (11,53). When enamel fluorosis was first systematically investigated during the 1930s and 1940s, its prevalence was 12%--15% for very mild and mild forms and zero for moderate and severe forms among children who lived in communities with drinking water that naturally contained 0.9--1.2 ppm fluoride (53).* Recommendations for Using Fluoride to Prevent and Control Dental Caries in the United States(USCDC)

The Civil Rights Act of 1991 also opens the door sue politicians involved with promoting water fluoridation or passing legislation as they are conspiring to violate the Civil Rights Act.

The Federal government does not mandate drinking water fluoridation as a public health measure, it simply recommend the practice as a public health measure. Fluoridating public drinking the water supply is strictly a voluntary endeavor on the part of a community.

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