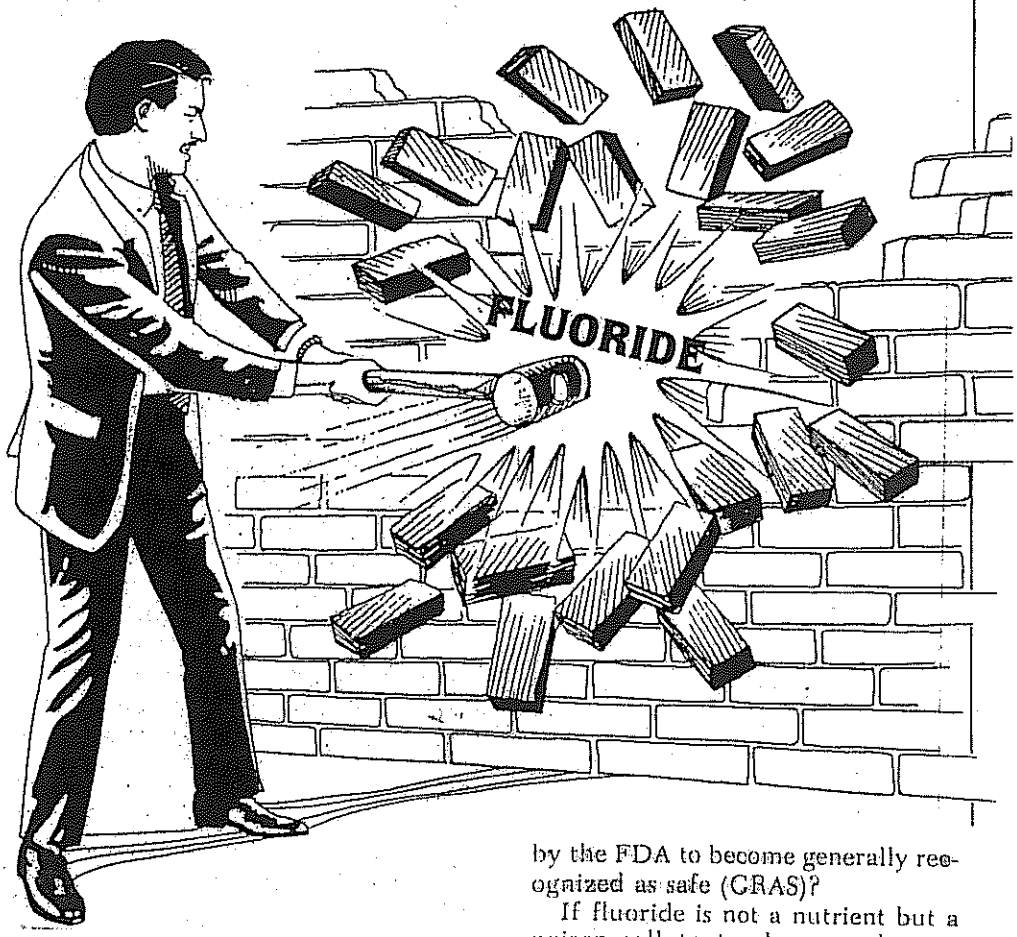
FLUORIDE UPDATE:

FLUORIDE IS NOT A NUTRIENT



by Richard A. Passwater, Ph.D.

Fluoride is essential for healthy and strong teeth, therefore fluoride is an essential nutrient — right? Wrong! wrong, wrong!

Fluoride is not needed for strong, healthy teeth, fluoride is not an essential nutrient — in fact, fluoride is not even a nutrient. It does not nourish — it poisons. It is not involved in any biochemical reaction — it is involved in enzyme-poisoning reactions and bone and tooth deformation. Absence of fluoride produces no illnesses, disorder or disease, while relatively small amounts (comparable to poisons such as arsenic) can produce fluorosis and death.(*)

If fluoride is not a nutrient, then is it a drug or food additive or plain old pollutant? If it is not a nutrient, then is fluoridation forced mass medication, illegal dumping of hazardous waste, or adulterated water? I won't ask about the effect of this non-nutrient poison pollutant on the aquatic life in our rivers and bays that get millions of tons of fluoride dumped into them under the guise of fluoridation. But the aluminum and fertilizer folks would have to pay billions to safely dispose of this hazardous material if it couldn't be sold to dump into drinking water.

If fluoride is not a nutrient but a drug, where are the toxicological studies of the caliber required to submit to the FDA to introduce new drugs?

If fluoride is not a nutrient but an unapproved food additive, where are the toxicological studies required by the FDA to become generally recognized as safe (GRAS)?

If fluoride is not a nutrient but a poison pollutant, where are the toxicological studies required by the EPA to allow it to be sold?

Since the FDA and EPA have never been presented adequate toxicological studies, and since the FDA and EPA have never approved the fluoridation of water, then it must be banned unless fluoridation proponents cannot continue their pretext that fluoride is a nutrient. In light of the recent data showing no meaningful benefit of fluoridation and reduction of tooth decay and the evidence that fluoride causes cancer in laboratory animals, the misinformation that fluoride is a nutrient and that people are fluoride-deficient must be promoted at all cost if fluoridation is to be allowed to continue.

(*)This is not to imply that fluoridation is a deadly direct poison to healthy persons, but the poisoning effect of fluoride on body enzymes is harmful, and physically impairs many who are sensitive to fluoride (allergic) or who have kidney disease or arthritis. A fluoride level of just two parts per million causes systemic fluorosis expressed visibly as mottling (dental fluorosis). An adult has died from a fluoride level of 50 ppm (Annapolis spill) and children have died from swallowing about a gram of fluoride gel in a dentist's office. Fluoride is listed as having a lethal toxicity of 2.5 grams for adults, which compares to arsenic.

Fluoride at three parts per million and at levels occurring naturally has been found to depress growth in farm animals and humans, and studies indicate that even at one part per million gum damage may be occurring.

However, this is not happening. Scientists are no longer hoodwinked into believing that fluoride is a nutrient. Look at how the RDA Subcommittee of the self-appointed Food and Nutrition Board has had to back off. In the Seventh Edition of the Recommended Dietary Allowances it was claimed, "Fluoride is incorporated in the structure of teeth and is necessary for maximal resistance to dental caries (decay). For these reasons, it is considered to be an essential nutrient."(1) Two references were cited as proof of fluoride increasing bone and tooth strength. Neither article contained scientific proof of this claim, and as the previous article in this series showed, the evidence shows that fluoride actually weakens bones and teeth by decreasing elasticity and increasing brittleness.

In 1980, the Ninth Edition of the RDA claimed, "Although the results of these studies have not confirmed independently and the method of growth stimulation remains unknown, fluorine can be considered an essential element for the growing organism on the basis of its proven beneficial effects on dental health."(2)

The first article in this series discussed the fact the fluoridation proponents have been unable to demonstrate a significant reduction of cavities in fluoridated areas over non-fluoridated areas. Tooth decay has decreased in all areas due to other factors which include better nourishment and hygiene.

The 1980 RDAs went on to discuss the increasing concern for fluoride toxicity and increasing fluoride contamination. One of the two references cited in the 1968 RDAs "proving" the essentiality of fluoride was dropped.

In 1989, the Tenth Edition of the RDA reports in part, "The status of fluorine as an essential nutrient has been debated. Several studies in rodents have provided conflicting results...These contradictory results do not justify a classification of fluorine as an essential element, according to accepted standards."(3)

ESSENTIAL NUTRIENT CRITERIA. The criteria for being recognized as an essential nutrient has been summarized by Dr. E.J. Underwood and accepted by the National Academy of Sciences. "First, it should be possible to demonstrate repeated and significant responses in growth and health to dietary supplements of the element and to the element alone; second, it should be possible to develop a deficiency state on diets that lack that element but that are otherwise adequate and satisfactory. Such diets should contain all other known dietary essentials in adequate amounts and should be free from toxic compounds. With most elements that have been shown to be essential, it has also been possible to [see a] definite correlation between amounts of the element present in various body organs and amounts present in the diet."(4,5)

"Unequivocal evidence that fluorides perform any vital function in animals has yet to be produced."(4) Dental decay "is no indication of fluorine essentiality inasmuch as [cavity] incidence depends on many factors, and many persons with perfectly sound teeth have only minimal exposure to fluoride."(4)

In the case of an element, if it is not an "essential nutrient," it is not a nutrient at all. This is different than with carbohydrates, proteins and fats, which can contribute energy and be involved in metabolic processes even though they are not "essential."

LABORATORY TESTS. A diet containing 45 micrograms of fluoride per kilogram (45 parts per trillion or 0.000045 parts per million) nourished laboratory animals as well as any other diet devised, no matter how little or how much fluoride was present. This diet was prepared from yeast and chlorella by researchers at the London Hospital Medical College. Four generations of animals were closely monitored metabolically. Their teeth and bones were strong and healthy, they suffered no illnesses, and their growth rate and longevity were identical to control animals receiving standard laboratory diets.(6)

Previously, University of Arizona researchers fed a low-fluoride diet to laboratory animals through six generations. They found no adverse effects from diets containing added fluoride.(7)

Prior to this University of Arizona study, another University of Arizona study used a diet having less than 0.005 parts per million of fluoride. The study could not detect any difference in general health between rats fed the fluoride-free diet and the same diet plus two parts per million fluoride added to their drinking water.(8)

One of the first studies was by Drs. Richard Maurer and Harry Day of the University of Indiana. They used a diet containing 0.007 parts per million fluoride through four generations of rats, comparing them to rats fed two parts per million fluoride in their drinking water.

The researchers reported, "Under the extremely rigorous conditions of this study, fluorine was not found to have any influence on the growth and well-being of rats. There were not even any grossly detectable dental defects."(9)

Numerous other studies have shown that the absence of fluoride is not harmful, and that adding even small amounts of fluoride can be detrimental.(10-15)

Where did they ever get the idea that fluoride was essential? Well, there were two experiments that indicated that fluoride was essential, but they were not confirmed by other scientists repeating the experiments.

One test was by a scientist who I admired so well that I dedicated my book on selenium to him — Dr.

Numerous studies have shown that the absence of fluoride is not harmful, and that adding even small amounts of fluoride can be detrimental.

Klaus Schwarz.(16) Dr. Schwarz discovered several essential trace minerals, but his first look at fluoride was flawed by an experimental oversight. The experiment was not designed to be unequivocal, and Dr. Schwarz would be among the first to acknowledge that the lack of confirmation indicated that his "first look" at the the premise was invalid.

Trying to purify a diet to be almost free of fluoride is extremely difficult. Dr. Schwarz had to resort to a synthetic diet consisting of purified chemicals known to be essential. As I have discussed in many of my articles, there are still trace factors — such as my elusive growth factor G — that are in whole foods but which have not been isolated.(17) Dr. Schwarz's diets were too synthetic to support life adequately in both control and experimental animal groups. In other words, all of his mice were too malnourished and sick to be meaningful subjects for study. This was apparent from the photos in his report — the animals were horrible-looking.(18)

In 1974, Drs. F.H. Nielson and A.A. Sandstead repeated the experiment and concluded that all animals were too sick and that differences between the groups were too small to be meaningful.(19)

FLUORIDE-FREE TEETH. Animal studies through four generations of fluoride-free diets show healthy, sound, cavity-free teeth. But what about humans? The earliest publications I have seen on this question involve the reports of Dr. Robert Mick and Dr. William P. Odom. The researchers were sent by the U.S. Public Health Service in 1949 to study areas where people had beautiful teeth, yet *no fluoride* in the diet.

One example was the town of Tororo in then what was the Belgian Congo near the Uganda border. Members of the Wasaga tribe had no cavities, no malformed teeth, no dental stains, and perfect arches. Their high animal protein diet had virtually no greens and fruits. It had not rained for 18 months to three years. Not only was there no fluoride in the water, there was no water. They reported, "in fact, we saw no water."(20) The diet was essentially free of fluoride, as much as a non-purified diet can be.

They also noted towns such as Kisumu, Kenya, where volcanic ash had added about 0.25 parts per million fluoride to the drinking water (fluoridation is at 1 part per million). The natives had a one percent rate of tooth decay and no mottling, whereas middle-class Indian immigrants had a 26 percent rate of tooth decay and a 22 percent rate of dental mottling.(21)

Dr. Mick compared these figures to the 94 percent rate in fluoridated New York and Philadelphia at that time.(22) The natives consumed a very natural whole foods diet, whereas the immigrants ate more refined and sweetened foods. Fortunately, as Americans have improved their nourishment and learned better dental hygiene, this horrendous decay rate has fallen — as it has around the "westernized" world in fluoridated and non-fluoridated areas.

These findings parallel animal studies. At Cornell University, Drs. William Ramseyer, C.A.H. Smith and C.M. McCay studied 456 rats (pregnant females and their offspring) through a total span of 526 days, which is equivalent to approximately 50 years in human lifespan.

One group was fed non-fluoridated water, while another three groups were fed three levels of fluoridated water, including the one part per million level used in fluoridated communities. All of the fluoridated groups had marked dental disorders. Teeth were missing in a ratio that increased as fluoride level increased, and tooth decay was frequent. Neither tooth decay nor missing teeth affected the non-fluoridated group. Also of interest is the fact that the hypertrophy and hyperplasia of the kidney tubules were found in the rats receiving fluoride, but not in those drinking non-fluoridated water.(23)

THE OFFICIAL VERDICT. The "official" dogma of fluoride being a nutrient or pollutant has been changed. In 1973, the FDA officially recognized fluoride as a nutrient.(24) In 1975, the FDA classified fluoride as "not generally recognized as safe."(25) Fluoride was never on the GRAS list, not because it was never considered, but because it was considered and rejected due to its toxicity. The FDA ruled fluoride to be a food additive when used at any level. Fluoride is not permitted to be added to any food or over-the-counter dietary supplements because of its toxicity.

In 1976, the FDA weakened its classification of fluoride from "essential" to "essential or probably essential."(26) In 1979, the FDA deleted all previous references to fluoride as essential or probably essential.(27) Now there is no reference anywhere in the Federal Regulations listing fluoride as essential or probably essential. The same is true of the RDA.

In the next article in this series, I will discuss the data from the NTP study which shows that fluoride causes cancer. In an earlier article I showed the data by considering the incidence of cancers versus the concentration of fluoride. In the next article, we will examine the time of cancer occurrence versus fluoride concentration. The cancers appear earlier in the higher dose fluoride groups in a very linear fashion. □

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