



Are There High Levels of Fluoride in Foods?

January 13, 2007: A presentation was hosted by the Citizens for Safe Drinking Water, an anti-fluoridationist group. At this meeting, there was **again** a display of food products labeled with the following high fluoride contents:

Post Office Box 3710
Wilsonville, Oregon 97070-3710

(503) 218-2010
Fax (503) 218-2009

Fluoride content as claimed by the anti-fluoride group CSDW

| | |
|--------------------------|-------------------------------------|
| Gerber Berry Juice | 3.00 parts per million (ppm) |
| Gerber White Grape Juice | 6.80 ppm |
| Fruit Loops | 2.10 ppm |
| General Mills Wheaties | 10.10 ppm |
| Kellogg's Shredded Wheat | 9.40 ppm |
| Post Grapenuts Cereal | 6.40 ppm |
| Cabbage | 45.00 ppm |
| Citrus Fruits | 95.00 ppm |
| Lettuce | 180.00 ppm |

For **actual** fluoride content of foods, read on...

The attached letter was written in response to similar claims made **prior to 2004**. The letter is written by Dr. Steven Levy, an expert on fluorides, who has many peer-reviewed articles specific to fluoride. Dr. Levy tested food products for fluoride content and included the results within this letter.

Perhaps it's time for the Citizens for Safe Drinking Water to quit disseminating this false information.



COLLEGE OF DENTISTRY

Department of Preventive and Community Dentistry

329 Dental Science N

Iowa City, Iowa 52242-1010

319-335-7184 Fax 319-335-7187

February 13, 2004

I write as a concerned citizen and scientist regarding the three pages of materials you recently faxed me about fluoride, fluoridation, and fluoride levels of foods and beverages. I believe the information was quoted as originally coming from Citizens for Safe Drinking Water and others.

As you know, I have spent much of my professional career trying to better understand the fluoride levels of foods and beverages and fluoride intake from other sources. We have received eight different NIH grants related to this and are working on a grant application to continue this work. We have followed a group of nearly 1,000 children longitudinally from birth to current ages 9-12 and are studying dental caries, dental fluorosis, and bone development related to fluoride and other factors. We have tested thousands of foods and beverages for fluoride content over the past 10 years.

Because of both my familiarity with published and unpublished findings and our extensive research concerning fluoride levels of foods/beverages, I was very surprised and concerned to see isolated data (probably from a single laboratory in July 1960) reportedly showing three different brand name cereals with fluoride levels of 6.4, 9.4, and 10.1 ppm, respectively. These are completely out of line with all other published and unpublished findings. In addition, the 2.1 ppm value for Fruit Loops seemed too high. The fluoride levels of dry cereals and of milk have consistently been much lower than these stated values, which naturally would contradict the whole presentation saying "a bowl of Wheaties, a glass of milk, and a Coke or orange juice delivers twice the fluoride salesman's daily goal of fluoridation." Obviously, there is no information on these pages to fully understand the origins of the claims (dates, labs, etc.). (Note that whoever prepared these documents also made a major error in using the faulty values. Even if the fluoride levels were correct, the 232% excess is off by 100%.)

Because of our concern for the validity of these data and the statement above, we decided to purchase and test for fluoride content several of the same cereals, milk, and a few extra similar cereals (but different brands). We purchased them locally and assayed them (in September 2001), using the same methods we've used in our other published work. The results are very consistent with our previous assays of similar products and other published, scientific results, and are very much lower than those high levels stated on the sheet you sent.

Specifically, the results were:

| FOOD LABEL | FOOD ITEM | PRODUCT PPM | CSDW claims |
|------------|--------------------------------|-------------|--------------|
| 41 | Wheaties | 0.4 | 10.10 |
| 42 | 2% Milk | 0.04 | |
| 43 | Grapenuts | 0.6 | 6.40 |
| 44 | Original Shredded Wheat—Large | 0.9 | 9.40 |
| 45 | Mini-Wheats—Frosted, Bite-size | 0.5 | |
| 46 | Original Shredded Wheat—Small | 0.6 | |
| 47 | HyVee Nutty Nuggets | 0.3 | |
| 48 | Cheerios | 0.9 | |
| 49 | Fruit Loops with Lemon Stripes | 0.6 | 2.10 |

Based on these current findings, I feel even stronger that it is very unfortunate and inappropriate for the data on the sheets to be disseminated further or provide the basis for discussion of water fluoridation policy. One would need to eat a couple of boxes of cereal to get to the fluoride levels mentioned for the “one bowl of Wheaties”, etc. And I had never before seen any human, cow, or other animal milk fluoride level that wasn’t very low. Our 0.04 level for the 2% milk is consistent with all previous studies and only about 5-6% of that listed value of 0.72 ppm.

In summary on this, I believe strongly that the fluoride values on the sheets you showed me are erroneous and must be discarded/discounted in any discussions about fluorides and fluoridation.

Overall, in summary, I strongly endorse continued use and expansion of community water fluoridation. It is a great public health measure and was reaffirmed in MMWR (August 17, 2001) by the CDC and external experts as the most efficient and cost-effective means of caries prevention.

Please contact me if I can provide additional information.

Sincerely,



Steven M. Levy, DDS, MPH
Professor and Principal Investigator, Iowa Fluoride Study

Steven M. Levy, DDS, MPH
 Professor and Principal Investigator, Iowa Fluoride Study

| <u>Liquids (Juices)</u> | | CSDW claims |
|---|----------|--------------------|
| 1. Gerber Banana Strawberry Juice Medley from conc. – some grape | 1.11 ppm | |
| 2. Gerber Apple Carrot Juice from conc. | 0.95 ppm | |
| 3. Gerber Pear Juice from conc. | 1.04 ppm | |
| 4. Gerber Apple Grape Juice from conc. | 1.17 ppm | |
| 5. Gerber Mixed Fruit Juice from conc (apple, pineapple, and orange) | 0.90 ppm | |
| 6. Gerber Apple Banana Juice | 1.15 ppm | |
| 7. Welch's 100% Red Grape Juice from conc. | 0.40 ppm | |
| 8. Orchard Hill Grape Juice from conc. | 1.57 ppm | |
| 9. Welch's 100% Grape from Concord Grapes | 0.33 ppm | |
| 10. Gerber 100% White Grape Juice from conc. | 1.13 ppm | 6.80 ppm |
| 11. Gerber 100% Apple Cherry Juice | 1.35 ppm | |
| 12. Libby's Juicy Juice 100% Grape Juice (apple and grape) | 1.43 ppm | |
| 13. Minute Maid (Disney) 100% Juice (apple, white grape, pear, red grape) | 0.39 ppm | |
| 14. Welch's Grape Drink – 10% juice | 0.20 ppm | |
| 15. Libby's Juicy Juice 100% Juice (white grape and apple) | 0.44 ppm | |
| 16. Welch's 100% White Grape Juice | 0.43 ppm | |
| 17. Libby's Juicy Juice 100% Grape Juice | 1.15 ppm | |
| 18. Old Orchard White Grape 100% Juice from conc. | 0.61 ppm | |
| 19. HiC Grabbin Grape Drink | 0.18 ppm | |
| | | |
| <u>Solids (still finalizing calculations, but here are estimates)</u> | | |
| 1. Post Grape Nuts | 0.56 ppm | 6.40 ppm |
| 2. Wheaties | 0.39 ppm | 10.10 ppm |
| 3. Post Shredded Wheat | 0.45 ppm | 9.40 ppm |
| 4. Contadina Tomato Paste | 0.49 ppm | |
| 5. Hunts Tomato Paste | 0.27 ppm | |
| 6. Organic Leaf Lettuce – washed | 0.32 ppm | |
| 7. Organic Leaf Lettuce – unwashed | 0.72 ppm | 180.00 ppm |
| 8. Iceberg Head Lettuce – outer layer | 0.14 ppm | |
| 9. Iceberg Head Lettuce – middle layer | 0.08 ppm | |
| 10. Iceberg Head Lettuce – inner layer | 0.08 ppm | |