

The Feingold Program does not eliminate Fluoride, but marks products in the *Foodlist* that contain it. It is known to increase uptake of lead, never a good thing for people with ADHD. Large amounts have often been shown to produce neurological damage including inability to walk. The following is an interesting study:

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=9518651&query_hl=5&itool=pubmed_DocSum

Brain Res. 1998 Feb 16;784(1-2):284-98.

Chronic administration of aluminum-fluoride or sodium-fluoride to rats in drinking water: alterations in neuronal and cerebrovascular integrity.

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This study describes alterations in the nervous system resulting from chronic administration of the fluoroaluminum complex (AlF₃) or equivalent levels of fluoride (F) in the form of sodium-fluoride (NaF). Twenty seven adult male Long-Evans rats were administered one of three treatments for 52 weeks: the control group was administered double distilled deionized drinking water (ddw). The aluminum-treated group received ddw with 0.5 ppm AlF₃ and the NaF group received ddw with 2.1 ppm NaF containing the equivalent amount of F as in the AlF₃ ddw. Tissue aluminum (Al) levels of brain, liver and kidney were assessed with the Direct Current Plasma (DCP) technique and its distribution assessed with Morin histochemistry. Histological sections of brain were stained with hematoxylin & eosin (H&E), Cresyl violet, Bielschowsky silver stain, or immunohistochemically for beta-amyloid, amyloid A, and IgM. No differences were found between the body weights of rats in the different treatment groups although more rats died in the AlF₃ group than in the control group. The Al levels in samples of brain and kidney were higher in both the AlF₃ and NaF groups relative to controls. The effects of the two treatments on cerebrovascular and neuronal integrity were qualitatively and quantitatively different. These alterations were greater in animals in the AlF₃ group than in the NaF group and greater in the NaF group than in controls.

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CHEMICAL & ENGINEERING NEWS

Brain damage in rats from fluoridated water

An animal study links low levels of fluoride in water to brain damage [*Brain Res.* 784, 284 (1998)]. The research was a collaboration among a chemist and two

psychologists (including lead author Julie A. Varner) at Binghamton University, Binghamton, N.Y., and an EPA neurotoxicologist. Twenty-seven rats were divided into three groups and for one year were given either distilled water, distilled water with 2.1 ppm NaF—the same concentration of fluoride normally used in fluoridated drinking water—or distilled water with 0.5 ppm AlF₃. In both treated groups, the aluminum levels in the brain were elevated relative to controls. The researchers speculate that fluoride in water may complex with the aluminum in food and enable it to cross the blood-brain barrier. Both treated groups also suffered neural injury and showed increased deposits of β -amyloid protein in the brain, similar to those seen in humans with Alzheimer's disease. "While the small amount of AlF₃ ... required for neurotoxic effects is surprising, perhaps even more surprising are the neurotoxic effects of NaF at 2.1 ppm," the authors write. ◀