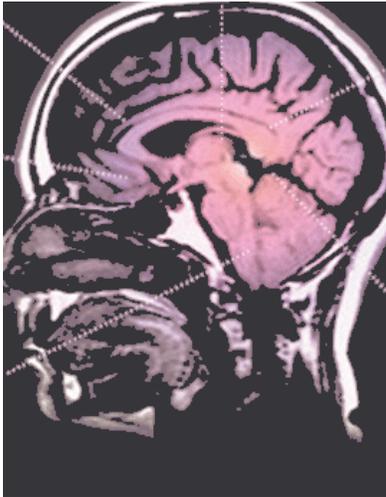


Fluoride and the Brain



“Studies in animals and human populations suggest that fluoride exposure, at levels that are experienced by a significant proportion of the population whose drinking water is fluoridated, may have adverse impacts on the developing brain. Though no final conclusions may be reached from available data, the findings are provocative and of significant public health concern. Perhaps most surprising is the relative sparseness of data addressing the central question of whether or not this chemical, which is intentionally added to drinking water, may interfere with normal brain development and function.” GREATER BOSTON PHYSICIANS for SOCIAL RESPONSIBILITY REPORT: In Harm's Way: Toxic

Threats to Child Development May 2000

Fluoride is:

- an “endocrine disruptor” [NRC 2006].
- a universal and a well-established thyroid stimulating hormone (TSH) clone.
- a “universal G protein activator” meaning it can activate all G protein families. G proteins transfer/amplify signals from outside cells to inside cells.
- Aluminum Fluoride (AlFx) mimics the chemical structure of a phosphate [the body’s “energy currency” and important cell signaling mechanism].

National Research Council 2006 Excerpts:

“Fluorides also increase the production of free radicals in the brain through several different biological pathways. These changes have a bearing on the possibility that fluorides act to increase the risk of developing Alzheimer’s disease.” p186

“On the basis of information largely derived from histological, chemical, and molecular studies, it is apparent that fluorides have the ability to interfere with the functions of the brain and the body by direct and indirect means.” p187

“The possibility has been raised by the studies conducted in China that fluoride can lower intellectual abilities.” p187 [19 human studies to date]

Scientific American January 2008, p80:

“Prenatal exposures, she reported, correlated with hyperactivity in young rats, especially males, whereas exposures after birth had the opposite effect, turning female rats into what Mullenix later described as “couch potatoes.” & “a series of epidemiological studies in China have associated high fluoride exposures with lower IQ...”