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August 30, 2005

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ARTIFICIAL WATER FLUORIDATION CAUSES FLUORIDE POISONING IN HORSES

There is a vast literature on fluoride poisoning in animals, especially in cattle. The sources of fluoride are emissions from aluminum, coal, and steel industries, phosphate fertilizer and feed supplements. The exposure is usually very heavy and the life-span relatively short. Now we have before us another situation in horses exposed to relatively low fluoride but for a very long time.

A community in Colorado fluoridated the water some 20 years ago in a concentration of 1.3 parts per million (ranging from 0.35 to 1.35). For a local Quarter Horse operation, from 6 to 10 horses, this was the only source of water. There were no phosphate fertilizer used or any phosphate supplements for the horses. Signs of fluoride poisoning started to appear after five years and included interference with reproduction, crooked leg bones. Blood analyses showed decreased levels of thyroid gland hormone. Post-mortem examination of cannon-bones revealed pile-up of bone tissue on the inner surface (endostosis) and chemical analysis of dried bone confirmed the diagnosis of chronic dental fluorosis which grew worse with time and finally showed severe destruction of tooth-supporting bone. Over the years, 5 horses were killed because of progressive signs of chronic fluoride poisoning.

The horses did not die in vain. They played a role in the successful campaign to discontinue artificial water fluoridation in the community. The lesson to be learned is obvious: prevent fluoride poisoning by NOT fluoridating the water.

Respectfully submitted

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