

*Private Members' Business*

in MMT, can damage brain cells and is linked to many diseases such as Huntington's chorea, amyotrophic lateral sclerosis and others. It also can cause displays of symptoms of Parkinson's disease and Alzheimer's disease in patients, as well as influence violent behaviour, hallucinations and loss of libido.

This metal can adversely affect many vital systems in the human body, such as the central nervous system and the reproductive system. It can damage not only the physical human body, but as well the human mind.

I understand that in the United States, where MMT is currently disallowed by the Environmental Protection Agency, the argument rages over whether MMT contributes to efficiency of automobiles. In Canada, I submit we should rise beyond that debate, saying we care far more for the health of our people than we do for the health of our automobiles.

I ask the industry to give us gasoline that does not interfere with hormones of reproduction, make people violent or cause paralysis and tremors in its victims.

I know representatives of Health and Welfare Canada have said MMT should hold no fear for Canadians. I also know, however, that recent studies at the Albany Medical College in New York have shown that iron deficiencies can lead to a magnetic-like attraction to manganese.

In my work as a physician and as Liberal critic for health and welfare, I have become aware of the profile of iron deficient people. Usually they are those who have poor diets. Those people with a poor diet are usually the same people who live in poverty. Coming from the urban area of Winnipeg, I have seen the inner city poverty that would help pinpoint those most susceptible to manganese poisoning.

These people have already been dealt enough hard knocks in life. Why add to their burden? Why when we have seen the work of Dr. John Donaldson, whose paper for the National Research Council showed that a manganese "hit" in the womb can trigger an acceleration of the brain's aging process?

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Where are the defenders of MMT? One of those defenders would be Ethyl Corporation of the United States, which currently produces 60 million pounds of

tetraethyl lead for gas in Canada, shipping it to the Third World countries and other less industrialized nations. So Canada has quietly aided and abetted the poisoning of fathers, mothers and children from South America to Asia.

Now this same company is preparing to bring MMT into the United States if it can get past the EPA, which has denied the application three times. The company had argued that Canadian data supports its position. I submit that we have an obligation to set an example for the international community and thereby not be seen supporting the use of this metal.

I ask again: Why is this additive allowed in Canada? Dr. Donaldson, who began his work on brain cells—and I am proud to say at my own former university, the University of Manitoba—has found that manganese, although found naturally in many foods, is toxic when inhaled into the lungs or absorbed through the skin. It causes brain cells to die, according to Donaldson's research.

Let me quote from an article by Nicolas Regush, a *Montreal Gazette* reporter who has also chronicled the medical devices catastrophes at the Health Protection Branch. I have chosen to quote from him because he is able to narrate to us in the language of many his observations on this issue. He states:

Biochemical analysis of the central-nervous-system tissue in humans and monkeys poisoned by manganese showed that the metal reduced the levels of dopamine—a brain chemical which seems to prevent nervous system disorders—causing brain cells to die. The data suggested that manganese could target the region of the brain known as substantia nigra, where dopamine-containing cells originate and then project into the basal ganglia region. Brain-chemistry disruptions and cell death in these regions appear crucial to the development of other progressive neurological disorders. Probably most vulnerable to the metal's toxic "hit" are infants, young children, and women, whose defense systems against the retention of excess manganese—the blood-brain barrier and the excretory system—have been shown to be less efficient.

I have read the speech of the Parliamentary Secretary to the Minister of National Health and Welfare and find her arguments ignore any of these studies. Interestingly, she supported her resistance to this bill by saying the Environmental Protection Agency in the United States had found no health risks in MMT. The EPA hearing documents reveal findings were inconclusive and that the studies did not show that MMT did not harm humans.