Dioxins

What are dioxins?

Dioxins are a group of chemicals which are created through activities like the burning of municipal waste, wood burning, iron and steel manufacture, pulp and paper manufacture and smoking. They can also be created through natural processes like forest fires or volcanic eruptions.

How are people exposed to dioxins?

Scientists believe that most dioxins are released into the air. Dioxins can travel long distances, so Canadians may also be exposed to dioxins created in other countries. Dioxins may also be released into waterways and soil. Therefore, people can become exposed to dioxins through air, water, and soil. Since animals and plants are also exposed to these chemicals, people are also exposed to dioxins through food.

Should I be concerned about dioxins in food?

Dioxins are found in food at a very low level, if at all detectable. The levels found in Canada are consistent with those reported in other countries and are miniscule. The World Health Organization(WHO) and the Food and Agriculture Organization (FAO) of the United Nations has formed a Joint Expert Committee on Food Additives. This committee has set a "tolerable" amount for dioxins to which people can be exposed. Tolerable means no serious health effects are expected. The tolerable level for dioxins is about 1-4 picograms per kilogram of body weight a day. A picogram is one-trillionth of a gram.

Canadian studies done on the amount of dioxins in the diet, showed that the average intake is 0.62 picograms per kilogram of body weight a day, lower than the limits set by the Joint Expert Committee.

Canada's Federal Government continues to monitors for these compounds in meat, poultry, dairy products, fish, animal feed, and feed ingredients.

What is being done to reduce dioxins in the environment and food?

An awareness of the impact that burning waste and industrial processes have on the creation of pollutants, has led to a sharp decline in the emission of dioxins. Environment Canada estimates that the emission of dioxins from municipal waste incineration has declined by 60% from 1990 to 1999. The emission from iron manufacturing has been reduced by 45%. Measurements of dioxins in lake sediments show that dioxin levels in the environment have decreased by over 50% compared to since the late 80's and early 90's.

Prepared by the Canadian Cattlemen's Association and Beef Information Centre — 2010
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