

DIOXINS

WHAT ARE DIOXINS?

Dioxins are produced by natural processes (eg. bushfires) and industrial processes (eg. power generation, pesticide manufacture). Dioxins occur in small amounts in air, water and soil throughout the world. Dioxins do not break down easily in the environment and their concentration increases up the food chain. Nearly all people in developed countries have dioxins in their body. This is mainly from the food that we eat, in particular food from animals such as meat and dairy products. The level of dioxin in our bodies increases with age. However, around the world overall human levels of dioxin have been falling due to international efforts to reduce production. The National Dioxins Project demonstrated that the level of dioxins found in people in Australia is low compared to other countries.

WHAT EFFECTS CAN DIOXINS HAVE?

One of the main health effects in question for dioxins is the risk of cancer in adults. Dioxins have been linked to cancer in animal studies and in studies of people exposed to high levels. In animals, effects on hormones, reproduction and development have also been seen and there is some non conclusive evidence that there may be some similar effects among humans. These effects have occurred at dioxin levels 100 to 1000 times higher than the dioxin levels that people are generally exposed to in developed countries, and 100 to 1000 times higher than the levels found in prawns in Parramatta River. The World Health Organisation states that dioxin does not affect genetic material and there is a level of exposure below which cancer risk would be negligible.

EFFECTS OF EATING PRAWNS OR FISH CONTAINING DIOXINS

Australian health authorities have established a 'tolerable monthly intake' of dioxins. The current recommendation to restrict consumption of fish from Sydney Harbour and Parramatta River to 150gm per month for a 70kg adult (less for lighter adults or children) is based upon this guideline and is protective of human health. A similar recommendation to restrict prawn intake to two 150gm serves has been made. It is highly unlikely that the occasional eating of prawns or fish containing the level of dioxins found in the recent study from the Parramatta River and Sydney Harbour would have any adverse effect on health.

SHOULD I HAVE A HEALTH CHECK IF I HAVE EATEN FISH OR PRAWNS?

There is no good predictor between body dioxin levels and health effects. Dioxins enter the body from many sources. There is no test that can distinguish where an individual's dioxin intake has come from. Undergoing routine health check-ups is all that is recommended.

WHAT ABOUT IF I AM PREGNANT?

The same 'tolerable monthly intake' applies for pregnant women and they should restrict their intake of seafood from Sydney Harbour as recommended.

For further information please contact your doctor, local public health unit, or community health centre.

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