

Arsenic

Safe Use And Risks

What Is It?

Arsenic is a naturally occurring element found in the environment. It is found in some types of rock, soil, water sources. Due to its toxicity, arsenic is added to some pesticides, herbicides, and wood preservatives, which eventually find their way into our environment.

Arsenic exists in two forms: organic and inorganic. Inorganic arsenic is considered more harmful.

Hazardous To Health?



Arsenic is carcinogenic and neurotoxic. The health effects of very low-dose exposure to arsenic are not clear. Intake of small amounts from our diet and the environment are not believed to pose a health risk.



Short-term exposure to very high doses of arsenic can result in shock and death following abdominal pain, vomiting and diarrhoea, renal failure, and delirium.



Long-term exposure to inorganic arsenic has been linked with skin, lung, bladder, kidney, and liver cancer as well as muscle cramps, weakness, and numbness or pain in the hands and feet.



How Am I Exposed?



Arsenic may be found in drinking water, Health Canada has set a guideline of no more than 0.01 mg/L



Fruits, vegetables, and grains that have been grown in soil that is arsenic rich or has been previously treated with arsenic containing pesticides or fertilizers



Rice and rice products often have a higher arsenic content than other foods as rice absorbs arsenic more easily than other grains.

Child Considerations



Children may be at increased risk due to small size and long lives ahead



Avoid smoking, as exposure may occur through tobacco smoke



Diet during infancy may be a source of arsenic exposure. Rice-based baby cereals should be used in moderation



Rice cereals should be fed to infants in moderation



Do not allow children to play in areas that may have arsenic in the soil



Encourage children to wash their hands after playing outside, especially if they have been using wooden structures that may have been treated with CCA

How Can I Avoid It ?

1. **Test your water.** If your water source is not already tested as part of a regular program, have it tested yourself. If arsenic levels exceed 0.01 mg/L, use bottled water for drinking and cooking.
2. **Be aware of arsenic sources in your environment,** such as arsenic-based pesticides or fertilizers, and contaminated soil or products, and try to avoid them. If you have concerns about arsenic in your food, check the Health Canada or US FDA websites for more information.
3. **Be aware of foods high in arsenic and eat them in moderation.** Consider low-arsenic alternatives.
4. **Eat a balanced diet.** By eating a variety of foods, ingestion of arsenic will be minimized. This is important for both adults and children.

Sources

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