

Do your Vegetables contain Lead?

As backyard vegetable gardens and allotments become more popular, environmental officials and scientists are warning homeowners that there may be lead in the soil.

Flakes of lead paint from old homes often create contamination around houses that vegetables can take up. Remnants of leaded petrol might also be in the soil near busy roads.

While the problem is pervasive in urban areas, suburban homes that were built



near apple orchards are also at risk, because lead arsenate was once used regularly as a pesticide.

Soil around homes can contain everything from arsenic to motor oil, but lead is one of the most common contaminants, and to children, one of the most dangerous. Even tiny amounts of lead in the blood can cause learning disabilities and behavioural problems. In adults, lead can contribute to high blood pressure, reproductive problems, and memory loss.

Backyard vegetable gardens and allotments are making a comeback as petrol and food prices soar, and as more people are becoming aware of the health benefits of eating organic. Few things can compare to the pleasure of picking guaran-

teed fresh, in season ingredients for your dinner right out of your backyard.

Lead contamination, however, is no trivial matter.

Make Sure Your Garden Vegetables are Safe to Eat

If you live in an urban area, it's probably best to assume that your soil is contaminated with lead to some extent or another. About 10 percent of soil samples test positive for unsafe levels of lead.

Garden soil is considered contaminated if it contains more than 400 parts per million (ppm) of lead. Some urban areas test as high as 1,000 ppm on average. Unfortunately, lead can persist in soil for hundreds of years, so waiting for it to clear up won't do you much good. Instead, if you're planting a garden, it's most wise to take precautions to prevent your vegetables from absorbing the heavy metal. Plant foods do tend to contain some level of lead naturally, as plants absorb soil lead very efficiently, and also retain the lead they have absorbed. Approximately 7 percent of the lead in the soil will be taken up by the plants growing in it. Excessive lead levels will kill the plant entirely. Additional lead fallout from the air tends to remain in the top inch of the soil, making shallow-rooted plants such as root vegetables, potatoes, and leafy vegetables particularly vulnerable to higher contamination levels.

Good varieties to grow due to their reduced lead uptake include:

- Tomatoes
- Peas

- Sweet Corn (Maize)

Your best bet is to build or buy a raised garden container, and fill it with organic topsoil. That way you know what your vegetables are growing in. Adding mulch on top of other areas of your yard, such as your flowerbeds, will keep any contamination there from spreading to your vegetable garden.

What You Need to Know About Lead Poisoning

We suggest you visit the



science section of our website for more information about lead:

<http://www.humet.com/acatalog/lead.html>

A chelating process using **Humet-R** can help extract not only lead, but also mercury, cadmium, arsenic, antimony, and many other heavy metals from your body"

We are indebted to the Boston Globe newspaper and to www.mercola.com for helping us with this article.

SPECIAL POINTS:

- ◆ Lead, cadmium, and mercury are dangerous heavy metals.
- ◆ They can accumulate in the body and contribute to a variety of serious illnesses
- ◆ Humet-R provides a safe, gentle way to help remove these metals



Your Tuna Is Getting More Toxic

IF YOU CANNOT
RESIST SOME LOVELY
FRESH FISH, THEN
CLEAN UP
AFTERWARDS WITH
SOME HUMET-R

US Government study: Tuna and other Pacific fish, such as Pacific salmon, has 30% more toxic mercury than in 1990 and will grow 50% more contaminated by 2050.

If you eat tuna, read this.

The rate of mercury contamination in tuna has increased 30% since about 1990, and is expected to increase another 50% if China continues to build more coal-fired power plants to fuel its industrial revolution. The data comes from a new federal study by the U.S. Geologic Survey that was published in the peer-reviewed scientific journal *Global Biogeochemical Cycles*.

Mercury levels in the Northern Pacific have already increased a staggering 30% in about 15 years, and are expected to rise another 50% by 2050. This stunning increase is a direct result of China's rapid industrialization, which has included the construction of as many as one new coal-fired power plant a week.

About 40% of all exposure to mercury comes from eating contaminated tuna and roughly 75% of all human exposure to mercury comes from eating fish. Mercury poisoning, even very small amounts, early in life can lead to permanent developmental effects.

Mercury becomes toxic when it is converted by bacteria into a form called methylmercury. Scientists have long known how this conversion takes place in freshwater lakes, reservoirs and rivers. Health advisories caution people -- particularly young children and pregnant or nursing women -- against

eating many fish caught recreationally. But this study is the first to document how that conversion takes place in the ocean:

"This study documents for the first time the formation of methylmercury in the North Pacific Ocean. It shows that methylmercury is produced in mid-depth ocean waters by processes linked to the "ocean rain." Algae, which are produced in sunlit waters near the surface, die quickly and "rain" downward to greater water depths. At depth, the settling algae are decomposed by bacteria and the interaction of this decomposition process in the presence of mercury results in the formation of methylmercury. Many steps up the food chain later, predators like tuna receive methylmercury from the fish they consume."

Asia is an important source of mercury in the Pacific not only because prevailing winds carry air pollution over the ocean, where it rains down, but also because ocean currents carry the pollution throughout the basin. The U.S., more than 100 years into its industrial revolution, has only now begun to crack down on mercury pollution from coal-fired power plants. The US Environmental Protection agency (EPA) has also recently announced plans to regulate mercury emissions from another major source: cement plants. Chinese coal-fired power plants have been a growing concern not only because of mercury, but because

of carbon dioxide emissions, which have helped China catapult ahead of the U.S. as the world's top emitter of the greenhouse

<http://toxics.usgs.gov/investigations/mercury.html>





A Worrying Story



CHILD FLU VACCINE CONTAINS MERCURY

Flu jab: Up to a million children have been given vaccines containing mercury.

Sunday January 9, 2011 By Lucy Johnston, Health Editor

Up to a million under-fives have been inoculated against the flu virus with a controversial vaccine containing poisonous mercury. Pandemrix has been given to almost all healthy babies and young children as well as thousands of older children with health problems.

Inquiries by the Sunday Express reveal it contains a preservative made with a form of mercury that was phased out of childhood vaccines in 2004 after fears about its safety. The preservative, called thimerosal, has been linked with autism and developmental disorders in children and was withdrawn from childhood vaccines in the United States and parts of Europe 10 years ago. Yet the UK government has always insisted there is no persuasive evidence it poses a health risk. When it was withdrawn, Labour health minister Rosie Winterton said the move was part of "a global goal to minimise environmental exposure to mercury".

However, many experts disagree. Dr Richard Halvorsen, author of the book, *The Truth About Vaccines*, said: "Thimerosal is an extremely toxic substance and known poison to the brain. There is enough convincing evidence linking thimerosal with developmental disorders and learning problems in individual children to warrant its removal from any childhood vaccine. It is irresponsible to administer a jab with little proven benefit which contains potentially harm-

ful toxic substances." Jackie Fletcher, of support group Jabs, which backs parents who fear vaccines have harmed their children, said: "Thimerosal was removed from childhood vaccines, now they are readministering it. This is worrying." Pandemrix also contains a substance called squalene used to boost the immune response to the jab. It has been linked with adverse reactions including nerve problems and Gulf War syndrome.

There are many versions of the flu jab, most without thimerosal or squalene yet 86 per cent of the 3,310 reports of suspected side effects to all flu vaccines, including 29 deaths, have been linked to Pandemrix. Department of Health figures show that last winter just under a quarter of children aged between six months and four years were given Pandemrix during the winter flu campaign. Last week doctors were told to give this version of the vaccine to vulnerable children if they could not obtain the routine seasonal flu jab, which has run out in some areas.

US health authorities ordered the removal of mercury from childhood vaccines in 1999. There are still 5,000 legal claims relating to autism waiting to be heard. However, both the Medicines Healthcare Regulatory Agency and the Department of Health insist there is no evidence of harm from vaccines containing thimerosal. A spokeswoman from the MHRA said: "The only exception is of possible mild allergic reaction, such as a rash or swelling at the site of injection. Extensive studies have failed to find any evidence that these low levels of thimerosal carry any risk of neurotoxicity."

Pressed about health warnings on its information leaflet, a spokesman for Glaxo Smith Kline, which manufactures the jab, would only refer to his original statement which said: "This vac-

cine has been through a rigorous approval process which has established it is both efficacious and safe. It has been administered to millions of people across the world and there is an extensive database in people of all ages demonstrating safety and efficacy. Thimerosal plays an important role in preventing bacterial contamination. Regulators across the world have concluded there is no evidence the level of thimerosal in vaccines poses a health risk."

"THIMEROSAL WAS REMOVED FROM CHILDHOOD VACCINES, NOW THEY ARE READMINISTERING IT. THIS IS WORRYING."



What's in a name?

To confuse things, Thimerosal is also known as:

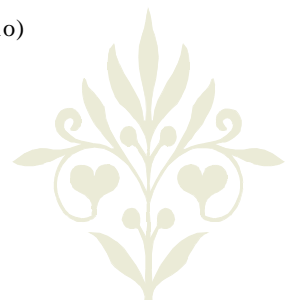
Merthiolate

Thiomersal

Ethyl(2-mercaptobenzoato-(2)-O,S) mercurate(1-) sodium

or

Mercury((o-carboxypehnyl)thio) ethyl sodium salt



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WHAT IS CADMIUM?

Everybody's heard about lead pollution, but perhaps a lesser known and possibly greater threat you hardly hear about is Cadmium.

The most serious source of cadmium poisoning is the smoking of tobacco. The most serious consequence of chronic cadmium poisoning is cancer (lung and prostate). Tobacco leaves contain cadmium. A tobacco addict smoking 20 cigarettes daily absorbs 2-4 micrograms of cadmium each day and accumulates 0.5 mg of cadmium in a year. This may not sound a great deal but then a little cadmium goes a long way! Cadmium is absorbed quickly by the lungs.

Smoking doubles the average daily intake of Cadmium.

Most plastic packaging depends on cadmium for its 'plastic' quality. And a certain amount of this cadmium leaches out of the wrapping into our food.

Mineral water packaged in plastic is especially liable to contain Cadmium, due to the length of storage before distribution.

The problem is that even a tiny amount of cadmium is dangerous. Cadmium is one of the key factors in the development of Osteoporosis. It is known to cause kidney and liver damage. Cadmium has a major effect on the testicles and ovaries and can be a major cause of infertility. Cadmium also hinders the body's ability to absorb essential minerals. Some recent research indicates that cadmium may be a major contributing factor to the development of breast cancer.

Cadmium is used in electroplating,

industrial paints, plastics, and battery factories. Coal and mineral fertilisers also contain Cadmium.

And if you have a cellular 'mobile' telephone, the chances are that it has a nickel-cadmium battery.

In the United States alone, 3,000 tonnes of Cadmium and cadmium compounds are released into the air, water, and landfills every year.

When coal is burned to generate electricity, as well as Mercury, Cadmium is also released into the air.

Once in the air, Cadmium particles can travel long distances before falling to the ground and being washed by rainwater into public water supplies. Amazingly, Cadmium can also be released into drinking water from corrosion in some galvanised pipes in the home and from underground water mains bringing water into the home.

The most extreme exposure comes from smoking or from working in smelting, welding, or shipbuilding industries.

We suggest you visit the science section of our website for more information about cadmium:

<http://www.humet.com/acatalog/cadmium.html>

A chelating process using **Humet-R** can help extract not only cadmium, but also mercury, lead, arsenic, antimony, and many other heavy metals from your body"

