



Glands Gone Wild: Environmental Toxins' Role in Disrupting Thyroid Function

Unless you are dealing with a thyroid condition, the last time you thought about goiters was probably while reading Agatha Christie's 'A Murder is Announced' (Spoiler alert: a goiter plays a significant role). These highly visible irregular growths of the thyroid gland are usually harmless, despite their appearance, and cause little to no impact on thyroid function.

On the other end of the spectrum, some of the biggest threats to the thyroid are the ones we can't see: tiny particulates of environmental toxins in our air, water, soil and everyday household cleaning and beauty products. An increasing body of research has discovered that such toxins negatively impact thyroid function. Given its role in producing hormones that help to manage energy levels and the body's metabolic rate, any impacts are significant

Common Thyroid-Related Health Issues

The thyroid produces two main hormones: triiodothyronine (T3) and thyroxine (T4). Together, they play a vital role in digestion, heart and muscle function, brain development and the maintenance of bones. When things go wrong, either too much or too little of either hormone is released.

Too much T4 can result in thyrotoxicosis, a condition whose symptoms sound like the 'side effects may include' section of a television ad. Those symptoms include intolerance to heat, weight loss, increased appetite, increased bowel movements, irregular menstrual cycle, rapid or irregular heartbeat, hair loss and thinning, irritability, tremors, palpitations, and retraction of the eyelids which creates a staring effect (think Bette Davis eyes).

On the other hand, sometimes the thyroid can't produce enough T3 and T4 which creates a condition known as hypothyroidism. Again, the symptoms are numerous and unpleasant: fatigue, constipation, weight gain, dry skin, increased sensitivity to cold, elevated blood cholesterol, puffy face, hoarseness, muscle weakness, slowed heart rate, depression, heavier than normal menstrual periods, impaired memory and pain, aches or stiffness in joints.

Environmental Toxins that Impact the Thyroid

So what does all this have to do with environmental toxins? Plenty, according to research. Here is an abbreviated list of the toxins found to interfere with or compromise thyroid function:



- **Heavy metals** such as lead, mercury, cadmium and aluminum and found in industrial waste, dental amalgams, drinking water, plastics, fertilizers, beauty products, electronics and costume jewelry
- **Flame Retardants** are used in furniture, fabric, clothing and carpets to reduce their flammability.
- **BPA (bisphenol-A)**, an industrial chemical used to make certain plastics and resins, usually found in food and beverage storage containers (i.e., water bottles)
- **Fluoride** in drinking water
- **PFCs (Perfluorochemicals)** are used to make fluoropolymer coatings and products that resist heat, stains, oil, grease and water such as Teflon cookware.
- **Pesticides** used in commercial agriculture

How Environmental Toxins Impact the Thyroid

These toxins affect the thyroid in multiple ways. Some, like flame retardants, mimic thyroid hormones and compete to attach to hormone receptor sites. Pesticides and herbicides reduce the thyroid's ability to use iodine, cause excess thyroid hormones to leave the body, and are associated with an increased risk of hypothyroidism.

Heavy metals and fluoride also increase that risk. One study found that hypothyroidism rates were nearly doubled in urban regions with fluoridated tap water compared with regions that did not. PFCs, meanwhile, have been found to disrupt thyroid balance.

Ways to Support Thyroid Function

- Exercise boosts metabolism and increases the production of T3 and T4.
- Eat iodine-rich foods such as eggs, Brazil nuts, pasteurized dairy products and seaweed
- Avoid processed foods and foods with refined sugar.
- Look for BPA-free containers for food and drink
- Invest in stainless steel or enameled cast iron cookware

Detoxing the Thyroid

Another way to support thyroid function is by gradually eliminating toxins from your system. Vitality Detox Drops are a form of soluble zeolite that gently and safely removes toxins and exchanges them with silica, the building block of all bodily structures. To learn more about how this works, [click here](#).

Sources

[“Six Toxins that Threaten Thyroid Health”](#) Rose Wellness Center for Integrative Medicine, March 12, 2021

[“How Environmental Toxins Harm the Thyroid”](#) by Chris Kresser, Kresser Institute for Functional and Evolutionary Medicine, September 6, 2017

[“Environmental Toxins and their Role in Thyroid Diseases”](#) by Mindd Foundation, Retrieved December 16, 2021