

Is There An Environmental Connection to Thyroid Problems?

The American Cancer Society reports that thyroid cancer is one of the few cancers that have been on the rise in recent decades, with cases increasing six percent annually since 1997. Many researchers, however, attribute these increases to our having simply gotten better at detection. Regardless, exposures to stress, radiation and pollutants have been known to increase a person's risk of developing thyroid problems.

Thyroid disease takes two primary forms. Hyperthyroidism occurs when the thyroid produces too much of the T3 and T4 hormones that regulate metabolism. This can cause a racing heart, weight loss, insomnia and other problems. In cases of hypothyroidism, the body produces too few hormones, so we feel fatigued and may gain weight, among other symptoms. According to the American Thyroid Association (ATA), many people with thyroid problems don't realize it, as symptoms can be mistaken for other problems or attributed to lack of sleep. Thyroid problems in children can delay or impair neurological development.

Doctors are not sure why some people are prone to thyroid disease while others aren't, but genetics has much to do with it. One recent UCLA study found that genetic background accounts for about 70 percent of the risk. However, researchers have begun to find links between increased risk of thyroid disease and exposure to certain chemicals, especially among women. "Pesticide Use and Thyroid Disease among Women in the Agricultural Health Study," published in the American Journal of Epidemiology in 2002, found that Iowa and North Carolina women married to men using such pesticides as aldrin, DDT and lindane were at much higher risk of developing thyroid disease than women in non-agricultural areas. According to Dr. Whitney S. Goldner, lead researcher on the study, 12.5 percent of the 16,500 wives evaluated developed thyroid disease compared to between one and eight percent in the general population.

It's not just farm women who should worry. Trace amounts of chemical pesticides and fertilizers most certainly end up in some of the food we eat. The nonprofit group Beyond Pesticides warns that some 60 percent of pesticides used today have been shown to affect the thyroid gland's production of T3 and T4 hormones. Commercially available insecticides and fungicides have also been implicated.

Likewise, some chemicals used in plastics and flame retardants contain toxins shown to trigger thyroid problems in those genetically predisposed. And a 2007 study at the University of Texas Health Sciences Center at San Antonio found that triclosan, an anti-bacterial agent found in everything from hand soaps to facial tissues to toys-it's present in the bloodstreams of three out of every four Americans-could be causing some mothers' thyroid glands to send signals to fetuses that may in turn contribute to autism.

An increasing number of doctors now believe that hypothyroidism could be precipitated by a dietary deficiency in iodine, a trace element found in the thyroid's T3 and T4 hormones and essential in small amounts for good health. Besides eating more seafood, switching to iodized salt and/or taking iodine supplements can boost iodine intake without the need for medications. But too much iodine is not healthy, so always consult with your doctor before embarking on any new health or diet regimen.