

A BI-MONTHLY NEWSLETTER OF THE SEBASTOPOL TOXICS EDUCATION PROGRAM

Toxics & The Thyroid

Bustling along in our everyday lives, we can often not even think about the countless amazing systems in our bodies that silently keep us functioning and alive. That is, until one of these internal mechanisms fails or is at risk.

Take, for instance, the thyroid. Part of our endocrine system and located in our neck (just under the Adam's apple), the thyroid regulates our metabolism, thus controlling how our body burns calories, makes proteins, maintains temperature, and responds to other hormones.

Unfortunately, it's estimated that between 13 and 30 million Americans have a thyroid disorder, although these issues are often misdiagnosed or overlooked.

Dysfunctions in this gland can bring problems such as low energy, depression, weight gain, hair loss, changed heart rate, swollen feet or legs, high cholesterol, even cancer. Women can also experience reduced sex drive, trouble becoming pregnant, miscarriages, irregular menstrual periods, and difficult menopause. The thyroid plays a major role

in children's development, so its impairment risks their reduced IQ, mental retardation, loss of hearing and speech, abnormal testicular development, and motor skills deficits.

The Toxic Connection

Even people concious of thyroid issues can be unaware that, in addition to diet and heredity, toxics can be a cause of thyroid disorders.

One chemical shown to cause problems is perchlorate, which is now common in our water and food. Perchlorate inhibits the thyroid's ability to take up iodide, a nutrient vital for hormone production.

According to Environmental Protection Agency (EPA) data, perchlorate has been found in at least 160 public drinking water systems in 26 states, plus agricultural and private wells. Most perchlorate contamination in U.S. drinking water stems from improper disposal at rocket test sites, military bases, and chemical plants.

Through this water, perchlorate has also found its way into our food supply. For instance, the Environmental Working Group (EWG) found perchlorate in half of store-bought winter lettuce samples, 31 of 32 California milk samples, and 100% of wine, beer, and fruit samples.

In a long-awaited study, published in *Environmental Health Perspectives*, researchers from the Centers for Disease Control (CDC) found that perchlorate exposure is indeed impacting thyroid hormone levels in American women, particularly those with lower iodide intake. Based on this information, the EWG estimates that approximately 44 million U.S. women are at particular risk for perchloraterelated health effects, because they have lower iodide intake, are hypothyroid, and/or are pregnant.

See Thyroid, over



It's Our Birthday!!

With this issue, we're celebrating eight years publishing The Next STEP (TNS)! The goal of this innovative City project is to nurture a healthier Sebastopol for everyone by reducing our exposure to toxics.

Thus we encourage voluntary reductions in the use of toxics in all areas of our lives — including our homes, schools, businesses, parks, food, and environment.

TNS is produced by a small team of local citizens, working on a volunteer basis (which keeps costs very low) because we support this goal! We're grateful to the City Council and staff for acting in the community's best interest with this project.

Please fill out the enclosed survey card to give us your feedback about our efforts. Also let us know how we can best support your toxics reduction in the upcoming year, including any questions, tips, story ideas, or success stories. Your support is what makes this project possible. Thank you!



"Patricia – You are doing a wonderful job with the newsletter. I can't even begin to tell you how many things I have learned and use in my daily life. I take your newsletters to work and hang them up in the workroom to share with people. Keep up your hard work. Sebastopol is a better place to live thanks to people like you. Best wishes for a beautiful New Year." Chris Nelson, Sebastopol Realtor

Thyroid, continued

Government Regulation

To protect public health, scientists and nonprofits have been calling on the federal government to set strong national limits on the amount of perchlorate allowed in drinking water. Over the past few years, the EPA had been developing these standards.

However, now it seems that the agency is preparing a stunning change in direction. This September, an EPA "preliminary regulatory determination" document indicated that, under pressure from the White House and Pentagon, the EPA has decided not to set any limit for perchlorate in drinking water, contrary to their own scientists' call for regulation of the chemical. The EPA document was heavily edited by White House officials, eliminating for instance references to scientific studies that link perchlorate to key health problems.

According to the *Washington Post,* the document nevertheless estimates "that up to 16.6 million Americans are exposed to perchlorate at a level many scientists consider unsafe; independent researchers, using federal and state data, put the number at 20 million to 40 million."

The Senate Environment and Public Works Committee, chaired by California's Barbara Boxer, has endorsed legislation requiring that the EPA set a standard for perchlorate

ABOUT STEP

The Next STEP (TNS) is published six times a year by the Sebastopol Toxics Education Program (STEP). STEP is a project of the City of Sebastopol, implemented by local citizen volunteers. STEP's mission is to support city residents in reducing their toxic use and exposure, creating a healthier and safer Sebastopol for everyone.

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STEP, P. O. Box 1776, Sebastopol CA 95473 <www.ci.sebastopol.ca.us> and monitor it in tap water. Boxer criticized the agency for refusing to establish a federal exposure limit.

"Perchlorate has been a serious, persistent and widespread problem which threatens the health of our families, especially our children," Boxer said. "For the Bush EPA to walk away from this problem and shrug off this danger is, in my view, unforgivable and immoral."

On Oct. 3, Earthjustice, an Oakland nonprofit environmental law firm, announced its intention to sue the EPA if its final document doesn't call for a national standard. Several states are not waiting for the EPA and have set their own limits. This includes California, whose standard of 6 parts per billion (ppb) is within the 1 to 6 ppb range recommended by a 2005 National Academy of Sciences panel.

What You Can Do

- Contact your federal representatives and our new President to insist on strong national limits on the perchlorate allowed in water that's used for drinking, agriculture, and food processing. Because it's difficult for an individual to identify which food or water has this toxic, we must minimize it at the source.
- Buy food that's grown and processed locally. This reduces our risk of exposure, because our area is largely away from military facilities.
- Support and get current information from nonprofits, such as Earthjustice (www.earthjustice.org,

800-584-6460) and EWG (www.ewg. org, 510-444-0973).

If you have or suspect thyroid problems, get diagnostic assistance from your health professional, then reduce your overall toxic exposures and explore dietary remedies.

~ Patricia Dines

SOURCE: <u>EPA Unlikely to Limit Perchlorate</u> <u>in Tap Water</u>, by Juliet Eilperin, Washington Post, September 22, 2008, <www.washingtonpost.com/wp-dyn/content/article/2008/09/21/AR2008092102352.html>.

Timely Detox

Are you looking for ways to detox your life? The STEP Online Index of past issues can help! It offers a veritable cornucopia of useful tips for identifying and reducing the toxics in all areas of our everyday lives. Just look by category at <www.healthy world.org/STEPIndex.html>.

For instance, you can find less-toxic tips for managing the **Slugs & snails** and **Ants** that love to emerge in the winter rains; less-toxic **Pet care** remedies; and less-toxic approaches to **Mold & Mildew**. There are even tips and steps described for starting your spring **Garden** on a good foundation.

Also, for information on **proper disposal of toxics**, including electronic waste (e.g., phones, TVs, etc.), see the Sonoma County Waste Management's information at <www.recyclenow.org>, 565-3375, or under "R" in the AT&T Yellow Pages.

Free E-Waste Recycling Event

Disposing of electronic waste (or e-waste) properly is a vital way to keep toxics out of our shared environment. At this free event, you can conveniently drop such items off while avoiding the fees that some places charge. Plus proceeds from the recycler will benefit Park Side School! The event is accepting TVs, computers, printers, phones, MP3 players, fax machines, copiers, video game consoles, VCRs, and DVD players.

WHEN: Sat. Feb. 28 and Sun. March 1, 10am-4pm

WHERE: Park Side School, 7450 Bodega Ave. (at Dutton), Sebastopol **FOR MORE INFORMATION:** Contact Jude at 829-7400 or jkreissmanibo @sebusd.org