



A BI-MONTHLY NEWSLETTER OF THE SEBASTOPOL TOXICS EDUCATION PROGRAM

Health Effects: Are Toxics Helping Make Us Fat?

Losing weight (and keeping it off) is certainly one of the nation's biggest pastimes, struggles, and obsessions. The current debate about health care costs and the impacts of being overweight have only increased the amount of concern.

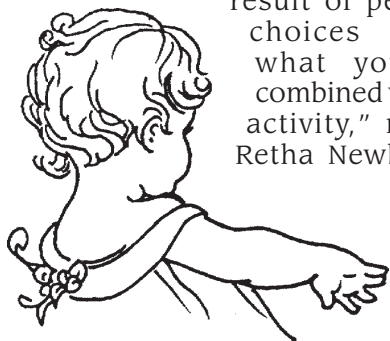
And certainly calorie totals, exercise frequency, and genetics are key contributors to our weight levels.

However, according to *Newsweek* magazine, scientists have been finding that toxic chemicals (nicknamed "obesogens") can add another hurdle to our weight maintenance challenges. This is especially true for people under the age of 50 who were exposed to toxics in the womb or as infants. This exposure can, for instance, turn more precursor cells into fat cells and alter the metabolic rate so that the body hoards calories instead of burning them.

The result can be a lifelong battle to maintain a healthy weight, even with committed dieting activities.

"The evidence now emerging says that being overweight is not just the result of personal

choices about what you eat, combined with inactivity," reports Retha Newbold of



the National Institute of Environmental Health Sciences (NIEHS), part of the National Institutes of Health (NIH). "Exposure to environmental chemicals during development may be contributing to the obesity epidemic."

The connection between chemical exposure in utero and serious illness later in life has long been known. For instance, women whose mothers took the estrogen-like anti-miscarriage drug DES were later found to have a notably higher risk of cervical and vaginal cancer.

Researchers are now discovering links between early toxic exposures and later weight gain. For instance, one study found that newborn mice exposed to low doses of hormone-mimicking compounds were, six months later, 20% heavier and carrying 36% more body fat. This is even though their calories consumed and exercise were exactly the same as the control group. Another study found that pregnant mice who were fed a toxic material had offspring that were born with more fat and fat cells, and became 5 to 20% fatter by adulthood.

These conclusions have been confirmed by human studies, such as two that have correlated high pesticide exposure in the womb with a greater risk of being overweight as toddlers.

"One of the messages of the obesogens research is that prenatal exposure can reprogram metabolism so that you are predisposed to become fat," says Bruce Blumberg of the University of California at Irvine.

Fortunately, we can overcome the handicaps of toxic exposure, adds

We Invite Your Feedback!

Thanks to everyone who's returned your STEP Survey cards. We appreciate it! And if you haven't sent in yours yet, there's still time. We're in the process of making our plans for the year and value your input.

It's ideal if you can respond with the yellow card enclosed in your last bill. But if you can't find it, there's a replacement form at <www.healthyworld.org/STEP_Survey.html>. As usual, we'll report the results in the next issue.

Blumberg, "but you have to work at [weight control] that much harder."

And, of course, we can reduce this burden by lowering our individual and shared exposure to toxics from the start.

~ Patricia Dines

SOURCE: "Born to Be Big: Early exposure to common chemicals may be programming kids to be fat," by Sharon Begley, *Newsweek*, Sept. 21, 2009, www.newsweek.com/id/215179

Toxic Tips & Answers Online

The online STEP Index can answer your questions on a wide variety of toxics issues. To look up topics from ants to fleas to weeds, just see www.healthyworld.org/STEPIndex.html.



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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