232 Toxic Chemicals found in 10 Babies

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Laboratory tests commissioned by the Environmental Working Group have detected bisphenol A (BPA), a plastic component and synthetic estrogen, in umbilical cord blood of American infants.

Nine of 10 randomly selected samples of cord blood tested positive for BPA, an industrial petrochemical.

BPA has been implicated in a lengthening list of serious chronic disorders, including cancer, cognitive and behavioral impairments, endocrine system disruption, reproductive and cardiovascular system abnormalities, diabetes, asthma and obesity.

In all, the tests found as many as 232 chemicals in the 10 newborns, all of minority descent. The cord blood study has produced hard new evidence that American children are being exposed, beginning in the womb, to complex mixtures of dangerous substances that may have lifelong consequences.

And in a separate study, researchers found that complications of pregnancy, such as preterm labor, preterm birth, and infection were lowest in women with the highest vitamin D levels.

Blood levels of activated vitamin D usually rise during very early pregnancy, and some of it crosses the placenta to bathe the fetus, especially the developing fetal brain, in activated vitamin D. But many -- in fact most -- pregnant women do not make as much vitamin D as they need.

4,000 IU of vitamin D per day during pregnancy was found to be safe (not a single adverse event). However, this amount only resulted in a mean vitamin D blood level of 27 ng/ml in the newborn infants, indicating that even 4,000 IU per day during pregnancy is not enough.

Sources:

- **Mothering December 9, 2009**
- **Environmental Working Group**

- **New Research Findings Two December 3, 2009**
- **National Institutes of Health**

Dr. Mercola's Comments:

Babies are born at considerable risk nowadays due to the toxic load of their mothers. If a baby is exposed to numerous toxic compounds in utero, changes may occur that either directly cause cancer, or lengthen the period of sensitivity to carcinogens, therefore making the child more susceptible to cancer, and other diseases, later in life.

This EWG study is the first to detect BPA in umbilical cord blood, which is a very concerning finding considering this chemical has been linked to endocrine system disruption, reproductive and cardiovascular system abnormalities, diabetes and more at very low levels.

However, it is not the first to show just how extensive a chemical cocktail newborn babies are being exposed to.

Exposure to Nearly 300 Toxic Chemicals … Before Birth

A prior study by EWG found that blood samples from newborns contained an average of 287 toxins, including mercury, fire retardants, pesticides, and Teflon chemicals.

Of the 287 chemicals EWG detected in umbilical cord blood, it's known that:

- 180 cause cancer in humans or animals
- 217 are toxic to your brain and nervous system
- 208 cause birth defects or abnormal development in animal tests

Children, meanwhile, experience greater exposure to chemicals pound-for-pound than adults, and have an immature and porous blood-brain barrier, which allows greater chemical exposures to reach their developing brain.

Children also have lower levels of some chemical-binding proteins, according to EWG, which allows more of a chemical to reach their organs, while systems that detoxify and excrete chemicals in adults are not fully developed. These factors, coupled with the fact that a child will be around for 80 years or more, allowing more than enough time for chemicals to do their damage, signals a major challenge for kids born today.

Experts believe rising rates of birth defects, asthma, neuro-developmental disorders and other serious diseases in U.S. children are a result of these early chemical exposures.

BPA: A Toxic Plastic Chemical to Watch Out For

Plastics chemicals are among the most pervasive and potentially damaging toxins for a fetus, so if you're pregnant or thinking of becoming pregnant, now is the time to start limiting your exposure.

This includes BPA, which EWG detected in newborn umbilical cord blood. BPA is an endocrine disruptor, which means it mimics your body‘s natural hormones and can trigger major changes in your body. Of 115 published animal studies, 81 percent found significant effects from even low-level exposure to BPA.

This toxic chemical first caught researchers’ attention after normal mice began to display uncommon genetic abnormalities. The defects were linked to plastic cages and water bottles that had been cleaned with a harsh detergent, causing BPA to leach out of the plastic. After determining how much BPA the mice had been exposed to, the researchers realized even an extremely small dose of 20 parts per billion daily, for just five to seven days, was enough to produce effects.

Some of the greatest concern surrounds early-life exposure to BPA.

This can lead to chromosomal errors in the developing fetus, which can cause spontaneous miscarriages and genetic damage. And being exposed to just 0.23 parts per billion of BPA is enough to disrupt the effect of estrogen in a baby's developing brain.

Again, for this reason women of childbearing age and those who are pregnant should be especially diligent at avoiding BPA, but practically no one is immune. A study last year found the chemical can lead to heart disease, diabetes and liver problems in adults, and previous research has linked BPA to:

- Structural damage to your brain
- Hyperactivity, increased aggressiveness, and impaired learning
- Increased fat formation and risk of obesity
- Altered immune function
- Early puberty, stimulation of mammary gland development, disrupted reproductive cycles, and ovarian dysfunction
- Changes in gender-specific behavior, and abnormal sexual behavior
- Stimulation of prostate cancer cells
- Increased prostate size, and decreased sperm production
- Diabetes
- Heart disease
- Liver damage

As it stands, BPA is one of the world's highest production-volume chemicals and is widely used in the production of:

• Plastic water bottles

• Plastic gallon milk bottles

• Plastic microwavable plates, ovenware, and utensils

• Tooth sealants

• Canned foods and soda cans (most have plastic lining in the cans)

• Baby toys, bottles, pacifiers, and sippy cups

Avoiding these items is an important step to limit your BPA exposure, and you can find even more tips in this past article.

Phthlates: Another Plasticizer Chemical to Avoid

Phthalates, or "plasticizers," are a group of industrial chemicals used to make plastics like polyvinyl chloride (PVC) more flexible and resilient. They're also one of the most pervasive of the endocrine disrupters.

These chemicals have increasingly become associated with changes in development of the male brain as well as with genital defects, metabolic abnormalities and reduced testosterone in babies and adults.

Phthalates are found in, among other things:

- Processed food packaging
- Hoses
- Raincoats
- Shower curtains
- Vinyl flooring and wall coverings
- Lubricant and adhesives
- Detergents
- Beauty products like nail polish, hair spray, shampoo, deodorants, and fragrances
- Toys

11 Tips to Minimize Your Chemical Exposure

There are about 75,000 chemicals regularly manufactured and imported by U.S. industries. Rather than compile an endless list of what you should *avoid*, it's far easier to focus on what you should do to lead a healthy lifestyle with as minimal a chemical exposure as possible:

1. As much as possible, buy and eat organic produce and free-range, organic foods to reduce your exposure to pesticides and fertilizers.

2. Rather than eating conventional or farm-raised fish, which are often heavily contaminated with PCBs and mercury, supplement with a high-quality purified krill oil, or eat fish that is wild-caught and lab tested for purity.

3. Eat mostly raw, fresh foods, steering clear of processed, prepackaged foods of all kinds. This way you automatically avoid artificial food additives of all kinds, including dangerous artificial sweeteners, food coloring and MSG.

4. Store your food and beverages in glass rather than plastic, and avoid using plastic wrap and canned foods (which are often lined with BPA-containing liners).

5. Have your tap water tested and, if contaminants are found, install an appropriate water filter on all your faucets (even those in your shower or bath).

6. Only use natural cleaning products in your home.

7. Switch over to natural brands of toiletries such as shampoo, toothpaste, antiperspirants and cosmetics. The Environmental Working Group has a great safety guide to help you find personal care products that are free of phthalates and other potentially dangerous chemicals.

8. Avoid using artificial air fresheners, dryer sheets, fabric softeners or other synthetic fragrances.

9. Replace your Teflon pots and pans with ceramic or glass cookware.

10. When redoing your home, look for "green," toxin-free alternatives in lieu of regular paint and vinyl floor coverings.

11. Replace your vinyl shower curtain with one made of fabric.

Vital Information Every Pregnant Woman Needs to Know

Just as important as avoiding potentially harmful substances is making sure you're getting enough of the good ones – and one of the most important is vitamin D.

I am convinced that in the not too distant future it will be mandatory for women to receive regular vitamin D blood test levels.

Why?

There is powerful new evidence emerging that sufficient vitamin D levels can reduce your risk of having a premature delivery. It can also help protect your newborn baby from other health problems.

In what is considered the first scientific trial that meets the most stringent criteria for "evidence-based inquiry," U.S. researchers Drs. Hollis and Wagner divulged their findings at a recent international vitamin D research conference in Brugge, Belgium.

Their findings included:

- Mothers who took 4,000 IU's (ten times the RDA of 400 IU) of vitamin D during pregnancy had their risk of premature birth reduced by half
- Premature babies born to women taking high doses of vitamin D were reduced by half at both 32 and 37 weeks
- There were also fewer babies who were born "small for dates"
- Women taking high doses of vitamin D had a 25 percent reduction in infections, particularly respiratory infections such as colds and flu as well as fewer infections of the vagina and the gums
- The "comorbidities of pregnancy" were reduced by 30 percent in the women who took the high-dose vitamin D. (Including diabetes, high blood pressure, and pre-eclampsia -- a potentially deadly increase in blood pressure and fluid)
- Babies getting the highest amounts of vitamin D after birth had fewer colds and less eczema

Another 2009 study on vitamin D deficiency in newborns with acute lower respiratory infection confirmed a strong, positive correlation between newborns' and mothers' vitamin D levels.

That study found that over 87 percent of all newborns and over 67 percent of all mothers had vitamin D levels lower than 20 ng/ml, which is a severe deficiency state. As a result, the researchers recommended that all mothers optimize their vitamin D levels during pregnancy, especially in the winter months, to safeguard their babies' health.

In addition, numerous other studies have found that vitamin D may protect against a number of birth defects and autism.

But many -- in fact most -- pregnant women do not make as much vitamin D as they need.

It is absolutely imperative that pregnant women maintain a blood level of between 50 and 70 ng/ml of 25 hydroxy D. So please watch my free one-hour vitamin D lecture to find out how to get your levels optimized.

Related Links:

- **No-Nonsense Guide to a Naturally Healthy Pregnancy and Baby**
- **Can These Household Chemicals Crush Your Son's Masculinity?**
- **Children's Diseases Linked to Chemicals Are on the Rise**

Reference website: http://articles.mercola.com/sites/articles/archive/2009/12/31/232-Toxic-Chemicals-found-in-10-Babies.aspx