

# What You Should Know About BPA

After a long day at the gym, you are tired, sweaty, and most of all, thirsty. However, when you take a swig from your bottle, do you know what you are actually consuming? Besides that well-earned 20oz. of water, you could be drinking an unhealthy amount of Bisphenol A, also known as BPA.

## A Brief History:

Introduced in the 1930's during the search for synthetic estrogen, BPA is a chemical that emulates the female hormone, but can provide adverse effects. The first evidence of a noticeable BPA hormone came from experiments on rats conducted in the 1930s, but it was not until 1997 that adverse effects of low-dose exposure on laboratory animals were first proposed (TIME). During the earlier years of its use, BPA was introduced into cattle and poultry in order to promote growth among livestock. In the 1950's, Bayer and General Electric chemists had concluded that BPA had been helpful in hardening polycarbonate plastics and making epoxy resin. A lot of companies more recently take advantage of this chemical by using it in many consumer products, from dental sealants and cosmetic products, to baby bottles and the adhesive for canned goods.

## So, what is the concern?

BPA is a great solution for those who are in the plastics industry but there are pretty important consequences to be discussed. BPA is known as an endocrine disruptor, meaning it acts like a hormone and disrupts the function of the actual hormone; in this case, the actual hormone being estrogen. To this day, there have been many case studies with rats that oversee the effects of such a hormone on bodily functions. Findings have reported a number of incidents with infant and fetal development, citing that they could not rule out concern for BPA's influence during these crucial times (CERHR Expert Panel). In more mature organisms, especially male, prostate cancer and sexuality could be the bigger concern. During many case studies involving rats, BPA has been known to cause enlargement to the prostate and can possibly decrease sperm count accordingly (Rapp).

## All right this is bad for us. How do we decrease the amount of BPA we consume?

It's pretty difficult to totally avoid BPA, because it is so popular with plastics manufacturing and packaging, but we can work to reduce such exposure. Animal studies suggest that infants and children have the highest risk to BPA exposure; therefore here are some suggestions that parents can use to decrease contact with BPA contaminated items:

- Do not microwave your food with plastic coverings (saran wrap), or any type of polycarbonate plasticware. Over certain periods of time, these plastics may wear down and the chemicals can be inhaled/absorbed into foods.
- Use bottles that specifically state that they are BPA-free. These are much more common nowadays and can be seen in popular areas such as Wal-Mart, or Starbucks.

- Reduce your use of canned foods; of which use BPA as part of their adhesive in food production.
- Attempt to use other alternative materials when handling food, especially food in very warm or hot temperatures, such as glass, porcelain, or stainless steel.

Hopefully, these suggestions will guide you in the right direction toward a healthier lifestyle for your family, because while the usage of BPA is good for the plastics industry, it is certainly not good for us.

## Works Cited

CERHR Expert Panel. *Report on the Reproductive and Developmental Toxicity of Bisphenol A*. Evaluation. Research Triangle Park: U.S. Department of Health and Human Services, 2007. Web.

TIME. "The Perils of Plastic." *TIME* 1 April 2010. Magazine.

Vogel, S. "The Politics of Plastics: The Making and Unmaking of Bisphenol A "Safety" ." *American Journal of Public Health* (2009). Document.