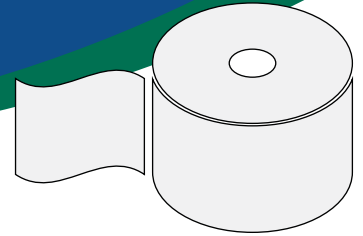




AUBURN PHARMACY

BPA



The rising awareness of BPA and its effects!

Summer time is here, and people are always looking for ways to live a healthier lifestyle. One topic that is starting to raise a little concern is the use of bisphenol A (BPA) in the production of different goods we purchase everyday. BPA is a chemical compound commonly used to produce polycarbonate plastics such as plastic food containers, bottled water, other beverage containers, and even receipt paper. BPA can also be found in the linings of many brands of canned foods. The Food and Drug Administration (FDA) regulates the amount of BPA that is to be allowed in the different products we purchase.

BPA is similar to estrogen, which is a hormone that is produced in our bodies. Since BPA is similar to estrogen in structure, it is considered an endocrine disrupting chemical. This means that BPA can negatively affect the way hormones are regulated in our bodies. Dr. Hugh S. Taylor, the director of Reproductive Endocrinology and Infertility department at Yale School of Medicine conducted a study on BPA and its effects. Dr. Taylor's study focused on the effect BPA has on a fetus while in the uterus and later in life. The study was conducted on mice as fetuses and exposed to BPA. The results showed the mice that were exposed to BPA as a fetus have higher risks of breast and uterine cancer, and infertility. The way that BPA can cause permanent damage is by altering a certain part of the DNA, and causing genes to become supersensitive to estrogen as well and may lead to cancer. The BPA caused new uncontrollable growth of mammary tissue in the mice, which supports Dr. Taylor's statement that a higher risk of breast cancer is present after exposure to BPA as a fetus. He is relating this occurrence with women who were exposed to BPA as a fetus, and as they grow older they have a higher risk of breast cancer.

Not only has Dr. Taylor proved the affects of low doses of BPA, but Frederick vom Saal a biologist at the University of Missouri's Endocrine Disruptors Group, has also found similar findings in mice and humans. Vom Saal also observed some abnormalities with prostates in male mice. Just like Dr. Taylor he fed BPA to the pregnant mice in amounts thousands lower than what could cause harm. Vom Saal found that the sons of the pregnant mice had prostate abnormalities, and during adulthood they developed prostate cancer. So BPA not only can affect females, but males as well. BPA studies have been conducted with BPA entering the body orally, but Vom Saal has also shown how it can enter through our skin. Many retail businesses print out receipts using thermal receipt paper, but many people do not realize that a high amount of free BPA is on the paper to help the print develop on the receipt. Vom Saal's study with receipt paper

showed how BPA is transferred from the receipt paper to a person's hands and is absorbed, and also to their mouth when eating after handling the receipt paper. Another key factor is that there is hand sanitizer present at many establishments by the registers. In the study, it was shown that hand sanitizer lead to an increase in the amount of BPA that was absorbed because hand sanitizer contains other chemicals that allows for easier penetration into the skin. This not only allows the hand sanitizer to be absorbed into the skin, but also the BPA from the receipt paper. This study shows that BPA can get into the body through skin and orally.

The rising awareness of BPA and its effects shows how cautious we should be with all the plastics, canned foods, and receipt paper we purchase or come in contact with. Ultimately, not only should pregnant women limit their exposure to BPA, but everyone else as well. A few ways to achieve this would to use any plastic containers that are labeled as BPA free, and avoid ones that have a number 7 recycle code on the bottom. Also eliminating canned foods as much as possible, and using glassware or stainless steel as containers for food and water. Lastly anyone that works in retail should avoid using hand sanitizer right before or after a transaction that involves handling receipt paper. BPA is found in many things that you may or may not have already known, and more people should be aware of its presence in the vast amount of products that we purchase everyday. Knowing what BPA is, where it is found, and what it can do to the human body can help decrease the risk for different types of cancer from occurring or increasing.



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