

Unit 2 discussion

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Submission date: 03-Apr-2018 05:58AM (UTC-0500)

Submission ID: 940337731

File name: Impacts of Bisphenol.docx

Word count: 721

Character count: 3963

Impacts of Bisphenol-A (BPA)

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Unit 2 Discussion Board

SCI 101-1802A-21

Introduction

The use of scientific research and innovative technology has the sole aim of commandeering a frontline of robust productiveness and the general improvement of lifestyle. But this steps of progress for the humankind has always been a subject of debate from environmentalists who argue that the human race is heading towards self-destruction with such uncontrolled innovations. In the midst of this debate is a chemical used for hardening plastics and manufacture of epoxy resin called Bisphenol-A (BPA) therefore this paper provides an insight into the benefits that such chemical has brought to the human populations and how it ironically threatens the living beings across the globe.

According to the article written by Vogel (2009), the initial production of BPA was meant to meet the needs of reproductive health in women. In 1940 Dr Edward Charles Dodds of the University of London discovered the estrogenic property of BPA which he was certain would provide the solution for menstruation, menopause and prevent miscarriages. However, various medical research established that the chemical caused virginal cancer and was burned in 1979. Apart from its medical use, the industrial use for the chemical started during the 1950's where it was polymerized to produce a hard plastic called polycarbonate and production of the epoxy resin used for insulating of metals piping and drums (Vogel, 2009). The resultant product, polycarbonate, had the added advantage of being hard like steel and clear like glass which made it preferred for manufacturing of food containers, automobiles and safety equipment.

The economic advantage of BPA has made it popular among very many production industries, and it has received a safety go-ahead based on the toxic point of view but not its hormone-like behaviour. In this case, the toxic effect of BPA is relatively negligible, but it is its estrogen characteristics that raise health issues. According to the reports released by CDC in

research carried on the urine sample of 394 Americans, there are ninety-five percent of the urine samples contained BPA (Kelley, Wetie & Darie, 2015). This massive extent of exposure implies that as much as BPA has minimal effects to the health of human beings, there are certain health complications triggered by the use of this chemical, for example, polycystic ovarian syndrome and recurrent miscarriages. In research on women above forty years that have heard discourages for more than three times established BPA blood level that is three times higher than other fertile women (Kelley, Wetie & Darie, 2015).

Despite the health challenges, the government of the United States through the Federal Food, Drugs and Cosmetic Act (FDA) maintains public safety against harmful products. FDA is mandated to protect the public against health concerns related to the chemicals used in the production, packaging and distribution of food either indirectly and directly. According to ⁵ Schechter, Malik, Haffner, Smith, Harris, Paepke and Birnbaum (2010), FDA considers BPA pose an indirect effect on food and does not have significant effects to be burned.

Conclusion

From the result in and the presentation of evidence by the researchers, I don't find any substantial reason to consider the use of such a chemical dangerous and should not receive further restriction. The chemical has minimal toxic effects to those exposed to it which should have been the major concern of environmentalist. The fact that BPA is present in many of American with no danger implies that there is no need to be alarmed by such a chemical. Also, the fact that the chemical is found in women with reproductive complications does not justify it as the sole cause of such complications (Kelley, Wetie & Darie, 2015). Therefore I find no reason for label requirement for a product that has minimal or no effect on the health of human beings; this will only cause panic to the public.

References

- ² Schechter, A., Malik, N., Haffner, D., Smith, S., Harris, T. R., Paepke, O., & Birnbaum, L. (2010). Bisphenol a (BPA) in US food. *Environmental science & technology*, 44(24), 9425-9430.
- ³ Kelley M, Wetie AGN, Darie CC (2015) Correlation between Bisphenol A Exposure and Adverse Health Effects. *Mod Chem appl* 3:147. doi: 10.4172/2329-6798.1000147
- Vogel, S. A. (2009). The Politics of Plastics: The Making and Unmaking of Bisphenol A “Safety.” *American Journal of Public Health*, 99(Suppl 3), S559–S566.
<http://doi.org/10.2105/AJPH.2008.159228>

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