

eCommons@AKU

Community Health Sciences

Department of Community Health Sciences

July 2016

Impact of consumption of canned food during pregnancy

Maryam Pyar Ali Lakhdir Aga Khan University

Follow this and additional works at: https://ecommons.aku.edu/pakistan fhs mc chs chs

Recommended Citation

Ali Lakhdir, M. P. (2016). Impact of consumption of canned food during pregnancy. *Journal of Pakistan Medical Association*, 66(7), 912.

Available at: https://ecommons.aku.edu/pakistan_fhs_mc_chs_chs/491

LETTER TO THE EDITOR

Impact of consumption of canned food during pregnancy

Maryam Pyar Ali Lakhdir

Madam, as the world moves towards modernisation, the preference forcanned foods is increasing day-by-day especially during pregnancy when a woman wants to nurture her foetus with the best quality of food available in the market. Such food include salad toppings with frozen vegetables, sauces and meat, canned fish and other canned sides, without knowing the harmful effects of these on pregnancy.

Bisphenol, phthalates, polyvinylchloride, and hexachlorobenzene are some of the compounds which are used in canned food for lining and preservative purposes.¹ Such chemicals can be absorbed by the food from container they come in.² Impact of such chemicals is not constrained only to the mother but also affects her foetus.¹

Chemical exposure from such canned foods may result in miscarriages, or severe complications including premature deliveries and preeclampsia by altering hormone level.³ Furthermore, it alters the development of female reproductive tracts and mammary tissues which can hinder normal gestation period.² Due to the estrogenmimicry effect of such chemicals, the fertilised egg is unable to be packed right way in follicles. This increases the chances of detachment, which may result in miscarriages or lead to birth defects.^{3,4}

Amniotic fluid allows foetal exposure to different chemicals from the mother with detectable level of phytoestrogens which are common in canned foods.

Department of Community Health Sciences, Aga Khan University, Karachi. **Correspondence:** Email: maryampyarali.lakhdir@gmail.com

Studies have found compelling evidence that chemicals in canned food may cause chromosomal damages in foetus leading to birth defects including Down's syndrome.^{2,5} A United Nations (UN) research team has reported that exposure to such chemicals can affect either genders. In a female foetus, it can alter the hormone levels and affect the reproductive organs, leading to delayed menstruation later on, whereas in a male foetus, it can alter testicular hormonal activity which can result in undescended testis at birth and low sperms count in adulthood.³

Pregnant women should avoid the use of canned food items, full of preservatives and chemicals, which find their way onto our dining tables through eye-catching products and wide availability nowadays in supermarkets. One should use fresh fruits and vegetables, and freshly prepared meat during pregnancy to provide nutrition for the baby.

References

- Braun JM, Kalkbrenner AE, Calafat AM, Bernert JT, Ye X, Silva MJ, et al. Variability and predictors of urinary bisphenol A concentrations during pregnancy. Environ Health Perspect 2011; 119: 131-7.
- Leclerc F, Dubois MF, Aris A. Maternal, placental and fetal exposure to bisphenol A in women with and without preeclampsia. Hypertens Pregnancy 2014; 33: 341-8.
- Mariscal-Arcas M, Rivas A, Granada A, Monteagudo C, Murcia MA, Olea-Serrano F. Dietary exposure assessment of pregnant women to bisphenol-A from cans and microwave containers in Southern Spain. Food ChemToxicol 2009; 47: 506-10.
- Lee YJ, Ryu HY, Kim HK, Min CS, Lee JH, Kim E, et al. Maternal and fetal exposure to bisphenol A in Korea. ReprodToxicol 2008; 25: 413-9.
- Troisi J, Mikelson C, Richards S, Symes S, Adair D, Zullo F, et al. Placental concentrations of bisphenol A and birth weight from births in the Southeastern U.S. Placenta 2014; 35: 947-52.