

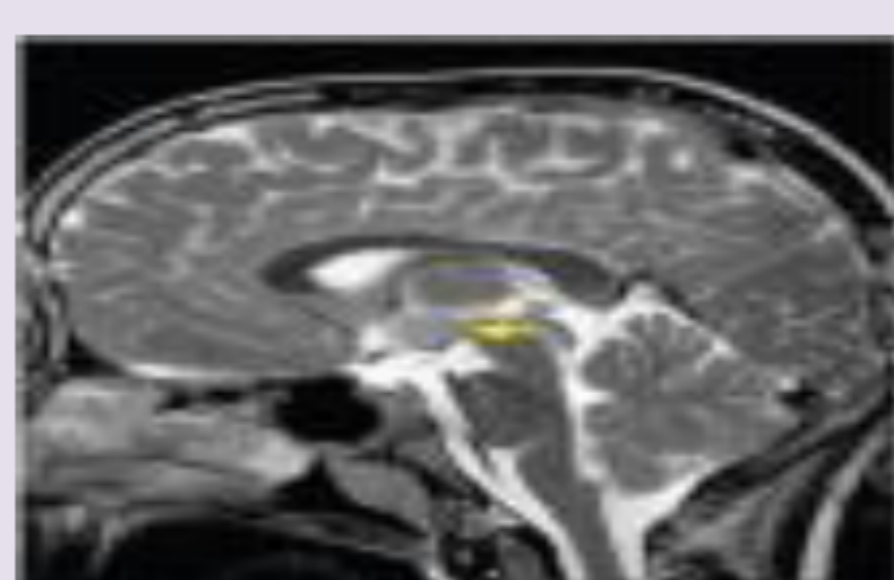
Introduction

Xenoestrogens are artificial estrogens which are found in our environment throughout products that many of us use every day. Mimic the effect of endogenous estrogen and thus have been implicated in the process of early puberty, which is the appearance of secondary sexual development.



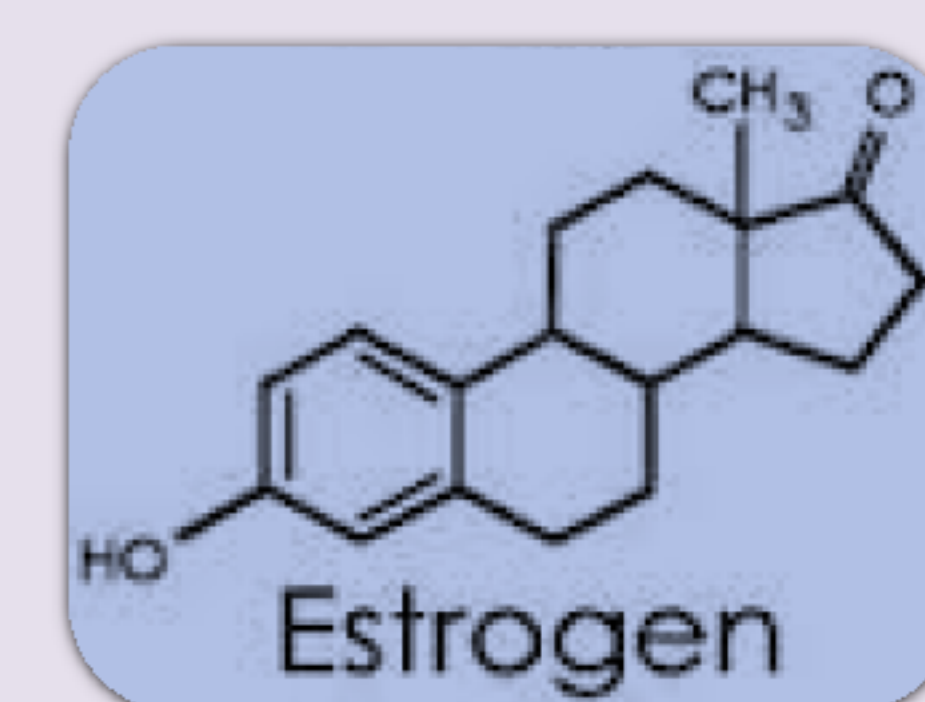
Objective

To investigate relationship of using various xenoestrogen products and early puberty among young females living in Jeddah.



Materials & Methods

- Study design: The quantitative design
- Data collection: A questionnaire- utilized to determine exposure to xenoestrogen products, adequacy of nutrition, history of early puberty and awareness in the family.
- Study sample: 400 of random young females (6 to 14 years old).
- Study setting: Shopping Centers in Jeddah.
- Study analysis: Descriptive.



Results

Xenoestrogen Products	Significance	Relation
children's plastic bottles	.966	inverse relation with no significant
plastic packing materials	.351	inverse relation with no significant
women cosmetic	.654	inverse relation with no significant
food preservatives	.217	inverse relation with no significant

Table 1: the relation between xenoestrogen products and breast development

Xenoestrogen Products	Significance	Relation
plastic water bottles	.583	inverse relation with no significant
children's plastic bottles	.446	inverse relation with no significant
children toys	.049	inverse relation significant

Table 2: the relation between xenoestrogen products and age of menarche

Discussion

The onset of puberty is characterized by increased levels of (GnRH), triggers the secretion of luteinizing hormone(LH) and follicle-stimulating hormone(FSH) from the anterior pituitary gland, which causes the ovaries to secrete estrogen. Increases in gonadal estrogen promote breast development [4,5], chronic exposure to xenoestrogens, early pubertal signs development happens without the normal release of(GnRH).[6]

Literatures review confirmed a positive relationship between appearance of secondary sexual development in young females and using xenoestrogen products.

Conclusions

Study confirmed the association between using xenoestrogen products and early puberty in young females living in Jeddah, Saudi Arabia. Therefore, we advise to decrease the use of products contain xenoestrogens in our daily life.

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