Endocrine Disruptors, Adipose Tissue, and Obesity-Related Cancer

Maha Ahmad Abuhaimed, MD* Mohammed Alromayan, MD**

ABSTRACT

The endocrine system plays a crucial role in modulating the metabolism. Endocrine-disrupting chemicals (EDCs) are environmental chemicals that have been shown to interfere with the functioning of hormones. The aim of this literature review is to demonstrate the link between exposure to endocrine disruptors and the development of obesity-related cancer. Studies on the cancer-causing effects of EDCs focus mostly on those with estrogenic potential because the mammary gland and the uterus are the main estrogen target organs. In addition to their direct effects on the estrogen target organs, estrogenic EDCs may also indirectly increase or decrease the risk of developing cancer by affecting other risk factors. Human studies have showed inconsistency regarding the exact effect of EDCs and flame retardants on thyroid hormones. EDCs are known to mimic natural hormones and negatively affect the function and growth of normal reproductive organs.

Keywords: Adipose tissue; Cancer; Endocrine-disrupting chemicals; Neoplasm; Obesity

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* Family medicine
Riyadh second health cluster,Ministry of health, Riyadh, Kingdom of Saudi Arabia
Maabuhaimed@moh.gov.sa
Mahaabuhaimed1@gmail.com

** General, Bariatric and GI surgery
Security Forces Medical City,
Riyadh, Kingdom of Saudi Arabia
Maalromyan@moi.med.sa