

Bisphenol A and its association with type 2 diabetes mellitus: A review

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Abstract

Type 2 Diabetes Mellitus (T2DM) has dramatically increased in prevalence. Genetic predisposition and lifestyle behaviors of physical inactivity and unhealthy diet are common reasons for the increase. However, in the last decade, there are accumulating evidences that environmental toxins such as bisphenolA (BPA) are associated withthe development of T2DM. People are widespread and continuously exposed to BPA, mainly through food, drinking water, dental sealants, dermal exposure, and inhalation of dusts. Diet experiments and studies in vivo have implicated the plausibility of BPA effects. In this article, we review the recent epidemiologic evidences to provide a conclusive summary of the association between BPA and T2DM. We searched the articles using PubMed, Medline and Ovid focusing on epidemiologicalstudies associating T2DM with BPA exposure. This review was not able to show the association between T2DM and BPA exposure. Further longitudinal studies are needed to confirm the association between T2DM and BPA exposure with consideration of all the confounding factors. This warranted for an evidence-based decision to protect public health. If the association was true, it will change the perspective and strategies of T2DM management.

Keywords: Type 2 Diabetes Mellitus, Bisphenol A, Review, Environmental Toxins