

**Bisphenol S: Today's Remedy, Tomorrow's Misery?
(Reviewing the Impacts of BPS on Reproductive Tissues)**

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Abstract

Many substances released in the environment were once considered safe but were later discovered to adversely affect the environment and human health. Such is the case of Bisphenol A (BPA), a high production chemical used as a primary ingredient of polycarbonate plastics and epoxy resins useful for industrial, commercial, and household applications. Numerous studies have shown that BPA affects the hormonal system responsible for growth, homeostasis, reproduction, and developmental processes of an organism. The rising concern regarding the impacts of BPA led to stringent restrictions on its production, and at the same time, resulting in the search for safer alternatives for this chemical. One of these alternatives is Bisphenol S (BPS). Although studies on the impacts of BPS on female reproduction have not yet been exhaustively studied, initial studies have indicated that BPS can interfere with female hormones' actions, affect ovarian morphology, and negatively impact oocyte quality. Any alteration on endocrine and ovarian functions may lead to impairment in the ovarian processes, development of diseases, and eventually infertility. The similarity of BPS with BPA in terms of chemical structure and effects, as reported by a handful of studies, would indicate that BPS might be another incidence of regrettable substitution. The strategy to replace a chemical analogous to the one being replaced, without an adequate test to ensure their safety might bring irreversible consequences to the environment and human health. Therefore, intensive studies on the effects of BPS on female reproductive tissues in various model and non-model species at different concentrations, exposure periods, and duration have to be carried out. Further, the mode and mechanism of actions of BPS and its possible role in the promotion of reproductive diseases have to be explored.