Bisphenol A (BPA) is a synthetic compound that has long been used in the production of polycarbonate plastics and epoxy resins. The majority of human exposure to BPA is a direct result of food and beverage consumption, as BPA has been used as a component in food and beverage containers (e.g. water bottles, cartons, food storage containers, polycarbonate tableware, etc.), as well as the lining of food and beverages storage cans. BPA mimics certain naturally occurring human hormones and can potentially interfere with functionality of the endocrine system. Regulatory agencies worldwide have recognized the harmful effects caused by the use of BPA and have started banning its use in certain products related to food and beverage consumption.

Several manufacturers have begun to use bisphenol S (BPS) as an alternative to BPA. The most prevalent use of BPS is in thermal receipt paper; however, BPS has also been used as a key ingredient when manufacturing polyethersulfone (PES) plastic as a replacement for the polycarbonate plastics previously made with BPA. A study conducted by the University of Texas has shown that BPS may be just as harmful to human health as its predecessor, BPA.¹ The study shows that BPS, like BPA, has the ability to mimic estrogen, thereby disrupting the endocrine system and altering hormone levels. Additional studies have supported this evidence as well. In one particular study, zebrafish pairs were exposed to varying concentrations of BPS over a fixed amount of time; observations showed that even at exposure to low level concentrations of BPS, the endocrine system was disrupted and the development of offspring was negatively impacted.² It is extremely important to monitor for the presence of BPA, and now one of its substitutes, BPS, especially as manufacturers turn to BPS to comply with restrictions to BPA use.

Bisphenol A diglycidyl ether is a derivative of bisphenol A, used as a cross-linking agent in epoxy resins. There are concerns about its overall health effects as it has been used in coatings for certain food containers and demonstrated migration into foods packed in such containers.

References