

Title	Evaluation of DDTs Intake Through Food Items and Serum From Reproductive Age Group Women in Bangladesh
<p>This research was conducted to identify and reduce human exposure to DDT, especially women of reproductive age in Bangladesh, and determine a relation between the DDT exposure levels in serum and major food items.</p> <p>DDT is a persistent, lipophilic chemical that is known to accumulate in human tissues. Exposure to these chemical has been linked to reproductive health effects, cancer, and impaired growth and development of children. Primary routes exposure to DDT are through diet, breastfeeding, and placental transfer. DDT has significant potential to bio accumulate in the food chain and living organisms due to its persistence, and is a major public health concern, especially in areas prone to malaria.</p> <p>In Bangladesh, the utilization of DDT as a pesticide in agriculture to increase crop production can be traced back to the mid-1950s. DDT products have been mostly used chemicals for public health, particularly for mosquito eradication program, started in 1965, as indoor residual spray (IRS) which was supplied by the World Health Organization. In early 1980s DDT was prohibited for agricultural purposes. Around 1992/93, all usages of DDT products were banned in every sector. Currently, they are used only if a detrimental outbreak occurs in certain focal areas.</p> <p>In this study several POPs (DDTs, PCBs, Chlordanes, HCHs, HCBs, and PeCBs) were quantified. Among them DDTs showed the highest concentration. It was followed by PCB > PeCBs, > HxCBs. Furthermore, meat and fish exhibited higher concentrations of DDT and its metabolites (DDTs: <i>p, p'</i>-DDT, <i>p, p'</i>-DDD, and <i>p, p'</i>-DDE). However, only <i>p, p'</i>-DDE was detected in the serum samples. Statistical results suggested that consumption of meat such as beef and mutton may contribute to higher serum levels of <i>p, p'</i>-DDE.</p>	