

8 Concluding remarks

This study provided comprehensive dose-response data for male reproductive effects following *in utero* and lactational exposure to the plasticizer DEHP. According to Foster (2006), the effects induced by perinatal exposure to DEHP and other phthalates constitute a continuum of response with the most severe manifestations and highest incidence of reproductive tract malformations observed at high doses (e.g. 750 mg DEHP/kg/day). Our results show that when we extend the range of doses toward lower exposures we still observe some reproductive tract malformations (although at much lower incidences) as well as the manifestation of other subtle effects such as delayed onset of puberty, altered testis weight and reduced sperm production. The fact that some endpoints (testis weight at weaning and brain aromatase activity in newborn males) showed biphasic responses indicates that a full picture of DEHP effects can only be observed when a wide range of low and high doses are used. Further experimental research is needed to clarify whether concomitant exposure to low doses of various active phthalates and other substances acting through similar mechanisms of action is able to work in an additive or synergistic fashion.