

[P-45]**EFFECTS OF ANTIOXIDANTS ON
DI(2-ETHYLHEXYL)PHTHALATE INDUCED ENDOCRINE
DISRUPTION**In Sun Kim and Byung Mu Lee

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Effects of antioxidant vitamins were investigated in di(2-ethylhexyl) phthalate (DEHP)-induced endocrine disruption toxicity. After rats were treated with DEHP, and vitamin C and vitamin E were supplemented for 30 days.

Rats treated with DEHP showed a significant increase in testes aromatase activity, decrease in zinc levels and increase in, but antioxidant supplementation blunted or restored the effects. Antioxidants also significantly ($p < 0.05$) normalized the increase of calcium levels in liver and the decrease in serum induced by DEHP treatment. Other endocrine disrupting metals such as, calcium, cadmium and copper levels were increased in serum by decreasing them in liver, whereas antioxidant supplementation normalized their increase back to control levels.

These results suggest that the toxic action of DEHP was related to zinc deficiency, increased aromatase activity and increase in serum heavy metals, which could be prevented by supplementation with antioxidant vitamins.

keyword : Di(2-ethylhexyl)phthalate (DEHP), antioxidants, endocrine disruption