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## Environmental heavy metal pollution and toxic effects in maternal and fetal tissues with protective role of dimercaprol (BAL)

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Heavy metal exposure in animals can lead to profound effect on growth, development and biochemical constituents. An experimental study was performed with viviparous animal *Heterometrous fulvipes* to access the cumulative effect of chronic heavy metals exposure. Chronic heavy metal exposure resulted in decrease in biochemical constituents of carbohydrates, proteins and lipids, with alteration in enzymes level of AAT, ALAT, SDH and GDH. There was also significant decrease in hepato-pancreatic weight, hepato-somatic index and embryonic length/weight in these experimental animals. It is necessary that the heavy metal toxicity be well documented and adequate precaution should be taken in mother and fetus to decrease its detrimental effects. The antidote Dimercaprol, administered along with the sub lethal doses of mercury and lead to the gravid females of *Heterometrous fulvipes*, induced an antidotal effect by reversing or by tending to reverse the effects of heavy metals on the biochemical constituents and the level of enzyme activity. This effect was observed in both the maternal tissues and embryos. This significant observation prompts the optimistic suggestion that under conditions of inevitable exposure of pregnant females to toxicants, protection can be provided to the embryos and the maternal animal in general by administering the antidote while risking the exposure.

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