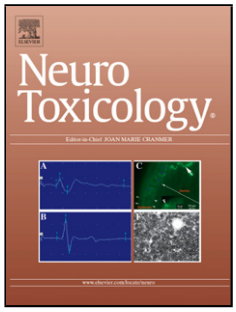

Title: Metabolic effects of manganese in the nematode *Caenorhabditis elegans* through DAergic pathway and transcription factors activation

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Metabolic effects of manganese in the nematode *Caenorhabditis elegans* through DAergic pathway and transcription factors activation.

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HighlightsMn increased fat storage in *Caenorhabditis elegans*.

- The oxygen consumption was decreased by Mn.
- Mn did not caused death in dopaminergic neurons in L4 larval stage.
- Mn changed the expression of fat storage regulator genes *sbp-1* and *let-363.*

Abstract

Manganese (Mn) is an essential trace element for physiological functions since it acts as an enzymatic co-factor. Nevertheless, overexposure to Mn has been associated