

# Effect of aqueous extract of *Hibiscus sabdariffa* L. on the weight and the activity of superoxide dismutase (SOD) and malondialdehyde (MDA) in the brain of *Rattus norvegicus*

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## ABSTRACT

The effect of aqueous extract of *Hibiscus sabdariffa* L. on the weight and the activity of superoxide dismutase (SOD) and malondialdehyde (MDA) in the brain of *Rattus norvegicus* was studied in this research. The results from this study revealed that the consumption of zobo drink *ad libitum* increased the weight of the treated animals so much ( $223.00 \pm 8.30^*$ ) when compared with that of the control ( $176.00 \pm 3.76$ ) at  $P < 0.05$ . The result of this study also revealed that the consumption of zobo drink *ad libitum* increased the enzyme activity of the enzyme superoxide dismutase (SOD) of the treated rats ( $8.78 \pm 0.15$ ) when compared with that of the control ( $6.83 \pm 0.88$ ) at  $P < 0.05$ . This was not the same for malondialdehyde (MDA) as the treated had a reduced enzyme activity ( $3.90 \pm 0.34$ ) when compared with that of the control ( $4.51 \pm 0.25$ ) at  $P > 0.05$ . The result from this study has shown that zobo drink, if taken in adequate manner serve as an antioxidant which reduces the activity of oxidants within the cells of the brain of the treated rats thus, the consumption of zobo drink *ad libitum* reduced oxidation reaction in the brain cells which is good for health.

**Keywords:** Zobo drink, *Hibiscus sabdariffa* L., superoxide dismutase, malondialdehyde, *Rattus norvegicus*.

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## INTRODUCTION



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