

## Protective Approach of Mentha Piperita against Cadmium Induced Renotoxicity in Albino Rats

**Authors :** Baby Tabassum, Priya Bajaj

**Abstract :** Cadmium is the second most hazardous heavy metal occurring in both elemental as well as compound forms. It is a highly toxic metal with a very high bio-concentration factor (BCF>100). WHO permitted groundwater cadmium concentration is 0.005 mg/L only, but reality is far away from this limit. A number of natural and anthropogenic industrial activities contribute to the spread of cadmium into the environment. The present study had been designated to find out the renal changes at functional level after cadmium intoxication and protection against these changes offered by Mentha piperata. For the purpose, albino rats were selected as the model organism. Cadmium significantly increases the serum level of serum proteins and nitrogenous wastes showing reduced filtration rate of kidneys. Pretreatment with Mentha piperata leaf extract causes significant retention of these levels to normalcy. These findings conclude that Cadmium exposure affects renal functioning but Mentha could prevent it, proving its nephro-protective potential against heavy metal toxicity.

**Keywords :** albino rat, cadmium, Mentha piperata, nephrotoxicity

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