

## **Dental Fluorosis in Domestic Animals Inhabiting Industrial Area of Udaipur, Rajasthan, India**

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**Abstract :** Fluoride is essential for teeth and bones development not only for human beings but also for animals. But excess intake of fluoride causes harmful effects on health. Fluorosis is a worldwide health hazard and India is also one of the endemic countries. Udaipur district of Rajasthan is also prone to fluorosis and superphosphate industries are aggravating fluoride toxicity in this area. Grazing fields for animals in the close vicinity of the industries, fodder and water are fluoride contaminated. Fluoride toxicity in the form of dental fluorosis was observed in domestic animals, inhabiting industrial area near Udaipur, where superphosphate fertilizer plants are functioning and releasing fluoride and fumes and effluents into the surroundings. These fumes and gases directly affect the vegetation of grazing field, thus allowing entry of fluoride into the food chain. A survey was conducted in this area to assess the severity of fluorosis, in 2015-16. It was a house to house survey and animal owners were asked for their fodder and water supply. Anterior teeth of the animal were observed. Domestic animals exhibited mild to severe signs of dental fluorosis. Teeth showed deep brown staining, patches, lines and abrasions. Even immature animals were affected badly. Most of the domestic animals were affected, but goats of this area showed chronic symptoms of fluorosis. Due to abrasion of teeth and paining teeth their chewing or grazing capacity and appetite reduced. Eventually, it reduced the life span of animals and increased the mortality rate.

**Keywords :** domestic animals, fluoride toxicity, industrial fluorosis, superphosphate fertilizers

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