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## Toxic Metals in Delhi Vegetables Markets

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According to **National Environmental Engineering Research Institute (NEERI) study**, vegetables grown on the **Yamuna floodplain** have been found to contain **high doses of lead**, which, on prolonged consumption, could trigger a range of diseases.

### Findings

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- The heaviest lead contamination was found in coriander collected from east Delhi.
- **Except for cabbage**, lead levels were found to be above the standard in all vegetables collected from vendors, with the **highest level found in spinach (14.1 mg/kg)**.
- While the **safe limit for lead in vegetables has been set at 2.5mg/kg** by the **Food Safety and Standards Authority of India (FSSAI)**, the level of the metal detected in vegetable samples collected from the floodplain **ranges from 2.8mg/kg to 13.8mg/kg**.
- The study was conducted in February 2019 by the NEERI and the findings were placed before the **National Green Tribunal (NGT)** in May 2019.

### Background

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- Even though only 2% of the Yamuna's stretch passes through Delhi, it receives around **70% of the Capital's polluted water**.
- In 2015, the NGT had banned the cultivation of edible crops and fodder on the floodplain saying that such vegetables were highly contaminated. Despite this, the practice continues.
- The source of lead could be industries dealing in automobile parts, batteries, paint and polythene. Various kinds of usage of lead-based compounds may also be potential sources.

### Health Effects

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- Heavy-metal toxicity can lower energy levels, damage the functioning of the brain, lungs, kidneys, and liver.
- They can also damage the blood composition and other important organs.
- Long-term exposure to these metals could even cause cancer.
- Lead poisoning can lead to mental retardation in children.

### **National Environmental Engineering Research Institute (NEERI)**

- National Environmental Engineering Research Institute (NEERI) is one of the 38 national laboratories of Council of Scientific & Industrial Research (CSIR) working in various areas of science and technology.
- Its mandate is to conduct and development studies in environmental science and engineering and to participate in CSIR thrust areas and mission projects.
- Council of Scientific & Industrial Research (CSIR) is an autonomous body under Ministry of Science & Technology, Govt. of India.

**Source: HT**