Cadmium

Cadmium is a toxic metal. It plays a key role in kidney damage. Cadmium can cause kidney impairment with concentrations as low as $0.5 \mu g/g$ creatinine.

Cadmium has been categorized as human carcinogenic by the U.S. Environmental Protection Agency, and the International Agency for Research on Cancer. It was linked with lung cancer in smokers.

Cadmium can be found in the air, drinking water, and food. Food is the main source of cadmium intake; it ranges from 10-35 μ g/day.

By 2022 China was the main producer of cadmium globally. China refined 10000 metric tons of cadmium that year, followed by South Korea with 4000 metric tons.

In the U.S., men with a higher level of urinary cadmium had a higher risk of all-cause mortality, cancer, and cardiovascular disease. However, this association was not observed among women.

Links

https://www.sciencedirect.com/science/article/pii/S0041008X09001690

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4144270/

<u>Cadmium in drinking-water: background document for development of WHO guidelines for drinking-water quality</u>

https://www.statista.com/statistics/1023116/refinery-production-cadmium-worldwide-by-country/https://ehp.niehs.nih.gov/doi/10.1289/ehp.11236