

Auramine

Prelims: Current events of national and international importance | Health

Why in news?

India continues to face recurring episodes of chemical adulteration in food, one of the most persistent among them is auramine O, banned under Indian foodsafety regulations.

- Auramine O It is a *synthetic yellow dye*, produced from compounds such as dimethylaniline and formaldehyde.
 - The dye appears as yellow flakes or powder and dissolves easily when mixed with solvents.
- **Used in** *Industry*, including textile and leather processing, printing inks, paper manufacturing, etc.
- Banned for food use It is bright in colour, easily available and low-cost, yet remains unapproved for use as a food additive.
 - **International Agency for Research on Cancer** (IARC) classifies auramine as a substance that is possibly *carcinogenic to humans*.

Other adulteration - Metanil yellow, rhodamine B, Sudan dyes, Argemone oil, calcium carbide, urea, other mineral oil, chalk powder, etc.

- Commonly found in Sweets, turmeric powder, and street food snacks, gives a bright yellow hue that looks more appealing to consumers.
- Effects -
 - Toxic effects Range of health risks, including liver and kidney damage, enlargement of the spleen, mutagenic effects, etc.
 - **Persistent exposure** Even small amounts consumed regularly can accumulate and cause long-term harm.
 - **Children at risk** Brightly colored foods often target children, increasing vulnerability.
- Global context In the U.S., EU, and East Asian nations classify

- auramine strictly as an industrial dye, and its presence in consumables triggers product recalls and import alerts.
- Findings from investigation in India Despite a strong legal framework, weak enforcement, economic pressures, and fragmented supply chains allow banned dyes like auramine to persist in Indian food.
- Significance of violation In *India, food regulator bans* the use of such dyes, but mix of informal trade, high demand, weak testing and limited awareness of safety standards allows these chemicals to circulate -
 - Leads to public health risks, erosion of consumer trust, regulatory strain, and structural weaknesses in the food economy.

References

- 1. The Hindu | Auramine in Indian food
- 2. Ground Report | Auramine

