

Management Board  
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# EFSA PANEL ON CONTAMINANTS IN THE FOOD CHAIN

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Chair of the CONTAM Panel

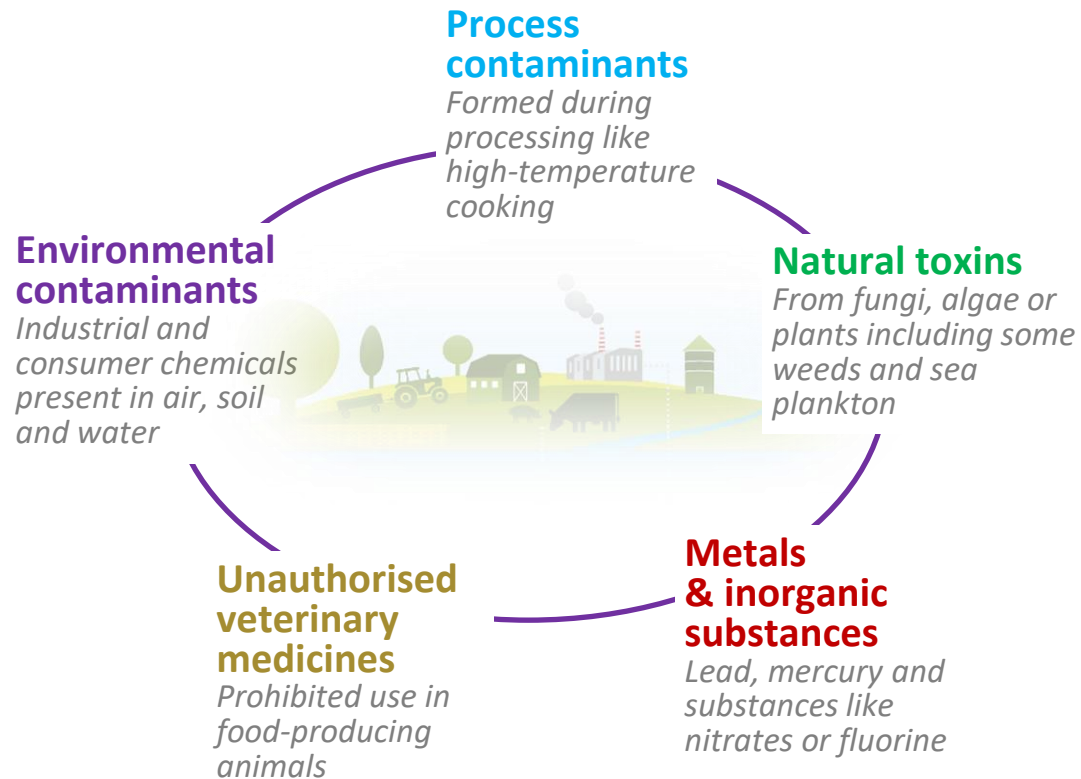
# OUTLINE

- ❖ Introducing the CONTAM Panel
- ❖ Insight on recent CONTAM Opinions
- ❖ Ongoing CONTAM Opinions
- ❖ Scientific Challenges



# THE CONTAM PANEL

The CONTAM Panel provides scientific advice on **contaminants in the food chain and undesirable substances** mainly through **generic mandates**:



CONTAM Panel members have expertise in:

- ✓ Chemistry
- ✓ Exposure assessment
- ✓ Toxicology (human and veterinary)
- ✓ Epidemiology
- ✓ Statistics
- ✓ Toxicology modelling
- ✓ Animal nutrition



# INSIGHT ON RECENT CONTAM OPINIONS

## Hydroxymethyl furfural (HMF) in feed for bees (March 2022)



- Contaminant (degradation product of a type of sugar) present in honey and bee feed.
- Chemical stressor to bees other than pesticides.
- **Conclusion:** A concern for bee health identified when bees are exposed to HMF contaminated bee feed for several months.

# INSIGHT ON RECENT CONTAM OPINIONS

## N-nitrosamines (N-NAs) in food (January 2023)



- N-NAs can form in food as a result of food preparation and processing (processing contaminant).
- Found in, e.g. cured meat products, processed fish, cocoa and beer
- N-NAs are genotoxic and induce liver tumours in rodents.
- **Conclusion:** Current dietary exposure raises a health concern.

# INSIGHT ON RECENT CONTAM OPINIONS

## N-nitrosamines (N-NAs) in food (January 2023)

### Extensive media and social media coverage:

- **80 articles** in key media, EU/UK/USA
- **78% positive sentiment**, only 1% negative
- **13,300 visualisations in 24h (Twitter and LinkedIn)**



# ONGOING CONTAM OPINIONS

## Mineral oil hydrocarbons (MOH) in food

➤ Public consultation held April-May 2023, finalisation foreseen July/Sept. 2023

- MOH are chemical compounds obtained mainly from petroleum distillation and refining.

Two main groups:

- **MOSH** (Mineral Oil Saturated Hydrocarbons)
- **MOAH** (Mineral Oil Aromatic Hydrocarbons)

*Draft conclusions:*

- ✓ **MOSH**: current dietary exposure does not raise a health concern.
- ✓ **MOAH**: Possible concern for human health due to the genotoxicity and carcinogenicity associated with some compounds.



# ONGOING CONTAM OPINIONS

## NATURAL TOXINS



- Viability of **Ambrosia seeds** in feed (finalisation foreseen June 2023)
- **Ochratoxin A** in feed (finalisation foreseen Sept. 2023)
- **Ergot alkaloids** in feed (finalisation foreseen Nov. 2023)

➤ Foreseen mandate on **d8-tetrahydrocannabinol (d8-THC)** in food





# ONGOING CONTAM OPINIONS

## ENVIRONMENTAL CONTAMINANTS

- Brominated flame retardants (**BFRs**) in food – updates of previous Opinions 2010-2012
  - **Ongoing** – *PBDEs*: finalisation foreseen Dec. 2023  
*TBBPA and Brominated Phenols*: finalisation foreseen June 2024  
*Emerging and Novel BFRs*: finalisation foreseen Nov. 2024
- Polychlorinated naphthalenes (**PCNs**) in food and feed – first time evaluation
  - **Ongoing** – finalisation foreseen Dec. 2023



- Industrial chemicals used in many articles, e.g. electronic devices and textiles
- Persistent and bioaccumulating in the environment

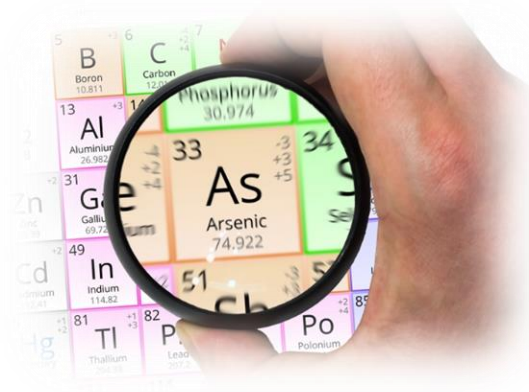
➤ Foreseen mandate on **perchlorate in food** (update of the previous Opinion 2014)



# ONGOING CONTAM OPINIONS

## ENVIRONMENTAL CONTAMINANTS

- **Inorganic Arsenic in food** – update of the 2009 Opinion (finalisation foreseen Dec. 2023)
- **Organic Arsenic in food** (finalisation foreseen Dec. 2023)
- **Combined exposure to Inorganic and Organic Arsenic** (finalisation foreseen June 2024)



- Occurs naturally in soil ground water and plants.
- Inorganic arsenic is a known carcinogen.
- Use of **epidemiological data** (observations in humans) for the risk assessment.



# SCIENTIFIC CHALLENGES

- **Use of epidemiological data in human risk assessments:**
  - Within EFSA's remit there are well established procedures and guidelines covering the use of **controlled animal experiments** for the risk assessment.
  - For other sources of evidence such as epidemiological studies, procedures and/or guidance are **limited or lacking**, for example, on dose-response modelling of human data.
- **Application of the EFSA Scientific Committee Guidance on Uncertainty:**
  - Increase in time and resources needed.





## Contaminants in the Food Chain

More about CONTAM at the EFSA website:

**Panel page:**

<https://www.efsa.europa.eu/en/science/scientific-committee-and-panels/contam>

**Topic 'Chemical contaminants in food and feed' page:**

<https://www.efsa.europa.eu/en/topics/topic/chemical-contaminants-food-feed>

