Fipronil in eggs
Fipronil in eggs: public health risk?

**SCIENTIFIC FACTS**

- World Health Organisation (WHO) Class II: "moderately hazardous", no genotoxic or carcinogenic demonstrated (EFSA)*
- Not authorised in Food producing animals
- Detection Limit: 0.005 mg/Kg in chicken eggs and meat. Correspond to MRL (Maximum Residue limits)**
- Potential Health risk for levels > 0.72 mg/kg in eggs and egg-products.

**TOXICITY**

To reach the level of toxicity, a person of 80Kg would need to eat at least 17 jumbo eggs per day. A child of 15kg, 3 eggs per day.

**Public Health risk considered to be low**

Only 3 samples out of more than thousands controlled presented levels above 0.72 mg/kg of Fipronil. These Eggs have been withdrawn and farms are under strict controls.

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* European Food Safety Authority (EFSA), Conclusion regarding the peer review of the pesticide risk assessment of the active substance fipronil (2006)
**Fraudulent Scheme**
*(Ongoing judicial investigation BE, NL and DE)*

Company (BE)

Makes illegal products for poultry by mixing fipronil in legally marketed products:
Some products labelled as "natural extracts"

Sold by a Romanian trader to

Pest-control Companies

Poultry Farms (disinfected)

Poultry Farms Buying directly

Egg and Egg-products

**FIPRONIL**

**legal substance** authorised as:
• veterinary medicinal products for pets
• Biocide but not for food producing animals
• Pesticides for seeds ➔ ending Sept 2017

Who knew? Who is Responsible?

Health and Food Safety
Economic Interest: Adulteration with Fipronil

**Company**
Mixing an extremely effective insecticide/acaricide (fipronil) in legal products which have no effects on red mites. Competing with legally authorised products to fight against Red mite.

**Pest-control Companies**
By using a very effective, adulterated product, they gain market shares over the other pest-control companies. Fipronil allows less treatments per year (vs. phoxim: 4-6 treatments).

**Chicken farmers**
They get rid of red-mite, an ectoparasite of poultry which feeds on chicken's blood causing anaemia and animal stress. If untreated, a massive infestation can compromise the health of the hen. **no eggs** = economic loss.
**Timeline and Food Fraud Criteria**

**Whistleblowing**
Dutch Food Authority informed of illegal use of Fipronil in poultry, but no analytical results, source not established.  
*November 2016*

**Detection**
Detection of Fipronil from an FBO in Belgium (*own checks*). BE authorities started investigation.  
*2 June 2017*

**EU Food Fraud Network**
Belgium activates FF network → request info to the Netherlands.  
*6 July 2017*

**RASFF Notification**
Belgium informs all Member States and the EC.

**Actions taken**
- Shared info on applicable Maximum Residues Levels and measures to be taken on illegally treated farms
- Note on Fipronil shared to EU global partners
- EU-wide monitoring exercise on the possible use of illegal substances
- Measures to avoid that contaminated products or animal byproducts find their way into animal feed and in the food chain
- Judicial investigation in NL, BE and DE
- Member States adopt national plans to monitor the production of egg products

**Impact on**
- 26 Member States
- 23 Third Countries

### 1. Violation of EU Food Law
- Fipronil is **prohibited for food producing animals**

### 2. Intention
- **Responsibility to be determined** by judicial investigation (who knew? manufacturer, pest control business, farmers?)
- Fipronil illegally added

### 3. Economic Gain
- Fipronil is very effective: few treatments needed vs. other authorised veterinary medicinal products
- Competitive advantage for pest-control companies using it

### 4. Customer Deception
- Consumer's food scare: loss of confidence
- Agro-industry paying recall/withdrawal/destruction (difficulties with processed products)
- Decrease in Egg consumption?
- Farmers:
  + suspension of production
  + contaminated hens (quarantine/euthanize)
  + destruction of eggs
Outcome of Ministerial meeting 26 September

• Commission and Member States agree on concrete measures against food fraud.
• **Main strategic and systematic actions needed at Member State and EU-level:**
  - improve risk communication between MS and Commission making sure it reaches the general public in a more coherent and swift way;
  - ensure rapid common risk assessment when such situations emerge;
  - bridge the gap between the use of RASFF and AAC;
  - consider how to establish a 'food safety officer' in each Member State to make sure information flows as fast and as efficient as possible;
  - capacity building activities including trainings and regular crisis exercises.
Lessons Learned

1. Fipronil contamination incident is not a public health issue, but was perceived as such. Communication issue.
2. Fipronil was found by own control of a company and it was not picked up/detected by the official control monitoring programmes in place (veterinary drug residues/pesticide residues).
3. Use of Administrative Assistance and Cooperation System (AAC) and the EU Rapid Alert System for Food and Feed (RASFF). Connection between systems and networks.
4. Secrecy of judicial investigations can hinder Public health Transparency.
5. Is there a systematic check if alerts on prohibited substances reported in RASFF are related to isolated contamination cases or if it relates to a more extensive/wider use of illegal practice?
6. Need for a "coordinated approach and commitment by MS to take measures in line with the coordinated approach."