

Advice 13-2017 of the Scientific Committee of the FASFC in regard to action levels for erucic acid, ochratoxin A, the ergot of rye and tropane alkaloids in certain foodstuffs, animal products and feed

Background & Terms of reference

The Scientific Committee is requested to propose action limits for certain chemical contaminants in foodstuffs, animal products and feed to provide the FASFC with a scientific basis in view of the protection of the safety of the food chain.

More specifically it is asked to determine action limits for:

- erucic acid in mustard;
- ochratoxin A in bovine, calf, porcine, poultry, hen, turkey, horse, ovine, caprine kidneys and in muscular tissue of fish (rainbow trout);
- the sum of the 12 ergot alkaloids in wheat, rye, oats, spelled, wheat flour, oat flour, rye flour, spelled flour, oat groats, bread, rye bread, biscuits, cereal bars, breakfast cereals, cereal-based baby foods, (wheat) pasta, as well as in cereals (triticale, rye, spelled) and compound feed containing unground cereals (rye, triticale, spelled) for animal feed;
- tropane alkaloids (hyoscyamine and scopolamine) in cereals (buckwheat, sorghum, millet, maize) and products thereof, cereal flours and breakfast cereals, food supplements, infusions, tea, oilseeds (linseed, sunflower, poppy, rapeseed, ...), protein crops (peas, lentils ...), rusks, maize starch (maize flour meal, ...) and polenta.

Methodology

The Scientific Committee has relied on a methodology described in the document "Inventory of actions and action limits and proposal of harmonization in the framework of official controls - Part 1 Action limits for chemical contaminants" (FASFC, 2017) in order to define action limits. The action limits have been calculated by dividing the toxicological reference value of the chemical contaminants by the 97.5th percentile of consumption of the different foodstuffs.

Results

The following action limits are proposed by the Scientific Committee:

1. Erucic acid

Foodstuff	Proposed action limit
Mustard	15 g/kg (based on consumption data of children) or 40 g/kg (based on consumption data of adults)

2. Ochratoxin A

Foodstuff	Proposed action limit
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Kidneys	4 µg/kg
Fish	5 µg/kg

3. Ergot alkaloids

Foodstuff	Proposed action limit
Wheat, rye, oats, spelt	150 µg/kg
Wheat flour, rye flour, oats flour, spelt flour	150 µg/kg
Oat groats	200 µg/kg
Bread	90 µg/kg
Rye bread	90 µg/kg
Biscuits	100 µg/kg
Cereal bars	100 µg/kg
Breakfast cereals	200 µg/kg
Cereal-based baby foods	80 µg/kg
Wheat pasta	100 µg/kg

4. Tropane alkaloids

Foodstuff	Proposed action limit
Cereals (buckwheat, sorghum, millet, maize)	2 µg/kg
Cereal flours	2 µg/kg
Breakfast cereals	3 µg/kg
Infusions	5 µg/kg
Tea	5 µg/kg
Oilseeds (linseed, sunflower, poppy, rapeseed, ...),	8 µg/kg
Protein crops (peas, lentils, ...)	10 µg/kg
Rusks	2 µg/kg
Maize starch (maize flour meal, ...)	40 µg/kg
Polenta	7 µg/kg

Conclusions

The Scientific Committee proposes action limits for erucic acid, ochratoxin A, ergot alkaloids and tropane alkaloids in different matrices.

The Scientific Committee is not able to propose action limits for rye ergot alkaloids in cereals (triticale, rye, spelt) in feed and compound feed containing ungrounded cereals (rye, triticale, spelt).

The full text is available on this website in dutch and in french.