

Nederlandse Voedsel- en Warenautoriteit Ministerie van Economische Zaken

Advice on preliminary reference doses for allergens in foods

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Regulation EU no 1169/2011 on the provision of food information to consumers

Annex II: substances or products causing allergies or intolerances

- 1. Cereals and products thereof
- 2. Crustaceans
- 3. Eggs
- 4. Fish
- 5. Peanuts
- 6. Soybeans
- 7. Milk
- 8. Nuts namely: almonds, hazelnuts, walnuts, cashews, pecan nuts, Brazil nuts, pistachio nuts, macadamia

- 9. Celery
- 10. Mustard
- 11. Sesame seeds
- 12. Sulphur dioxide and sulphites >10 mg/kg or l
- 13. Lupin
- 14. Molluscs



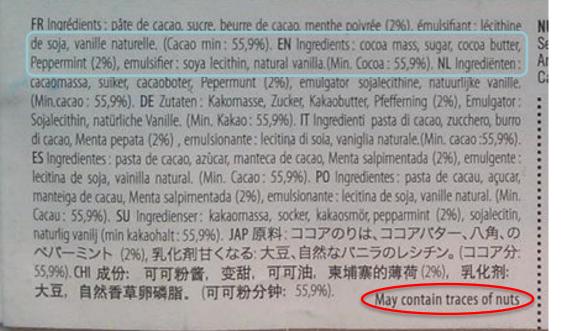


Ingredients

- Regulation aims "to enable consumers, particularly those suffering from a food allergy or intolerance, to make informed choices which are safe for them."
- ... any ingredient or processing aid listed in Annex II or derived from a substance or product listed in Annex II causing allergies or intolerances used in the manufacture or preparation of a food and still present in the finished product, even if in an altered form



In practice: what to do with traces of allergens?







Health problem?

- Up to 25% of European population reacts to food (allergy, hypersensitivity, intolerance)
- 2-3% of population have diagnosed food allergies: 17 million Europeans (in EU with population of 508 million: 13 million allergic consumers)
- DALYs: estimated for NL for peanut: 12,450 per year; cow milk: 5178 (Campylobacter: 635) → substantial burden



Adapt enforcement strategy? Can we use the VITAL system?

- When foods contain allergenic ingredient or trace of allergen: labelling required
- Question now: how much is 'trace'?





VITAL system

- Voluntary Incidental Trace Allergen Labelling
- Developed by industry, now managed by Allergen Bureau of Australia & New Zealand
- VSEP (scientific expert panel): collaboration between Allergen Bureau, Food Allergy Research & Resource Program (FARRP) of the University of Nebraska & the Netherlands Organisation for Applied Scientific Research (TNO)
- Reference doses considered to be safe for allergic consumers
- Number of publications



Results NVWA-BuRO

- Various analytical techniques; no reference material available
- Chance on extensive use of 'may contain' labelling is present; no guidelines
- VITAL uses reference doses based on threshold values. Threshold values are determined by using NOAELs and LOAELs of clinical provocations of allergic persons. ED₀₁ and lowest 95% confidence interval of ED₀₅ used
- EFSA described minimal (observed) eliciting doses (opinion 2014)



Conclusions

- Foods can contain traces of allergens
- There will always be a small (remaining) risk for very sensible allergic persons
- The VITAL approach is valid
- Main question: how did the VITAL expert panel derive the reference doses from the threshold values?
- There is no European reference laboratory for allergens in foods



Thus

- The policy that a food with an allergen that is not declared on the label, is always unsafe can be relaxed
- The VITAL database is unique. How VITAL reference doses were determined is not clear; thus we will not use these values



Advice

- Strive towards a harmonised approach within Europe for foods that contain traces of allergens
- If this cannot be achieved, adapt national food law
- Make available a database to enable determining reference doses for allergens
- Establish a European reference laboratory
- Use preliminary reference doses based on information published on $\rm ED_{01}$ and $\rm ED_{05}$ by VITAL
- Evaluate these reference doses by using cases reported to NVWA



Future actions

- NL will ask EFSA to write an opinion on reference doses for allergens
- No cure for food allergy; protection = abstention; consumers must be able to identify the ingredients they are sensitive to
- Precautionary labelling \rightarrow not trustworthy, limitations to diet
- Determine threshold concentrations of each allergen in food providing an acceptable level of protection for consumers
- Harmonised rules required



Data required to determine reference doses for allergens

- Will EFSA be able to collect data?
- Clinical (double-blind, placebo-controlled) food challenges of food allergic subjects
- Data to come from EuroPrevall (?)
- Many unpublished data
- Role for Focal Points?





