

Evaluation of Allergenicity of Genetically Modified Foods

Report of a Joint FAO/WHO Expert Consultation
on Allergenicity of Foods Derived from
Biotechnology

22 - 25 January 2001

Rome, Italy



Allergenicity

- Most frequently asked questions
 - safety of genetically foods
- reliable methodology to assess the allergenicity of foods produced by the recombinant DNA technique needed



Scope

- General consideration of allergenicity of genetically modified foods
- Consideration of the decision-tree approach
- Specific questions arising in relation to the assessment of allergenicity of genetically modified foods



Food Allergies

„Overwhelming pathological reactions of the body due to intercurrent contact with antigens“ Clemens von Pirquet 1906

- IgE-mediated allergy
- Cell-mediated allergy
- Oral allergy syndrome

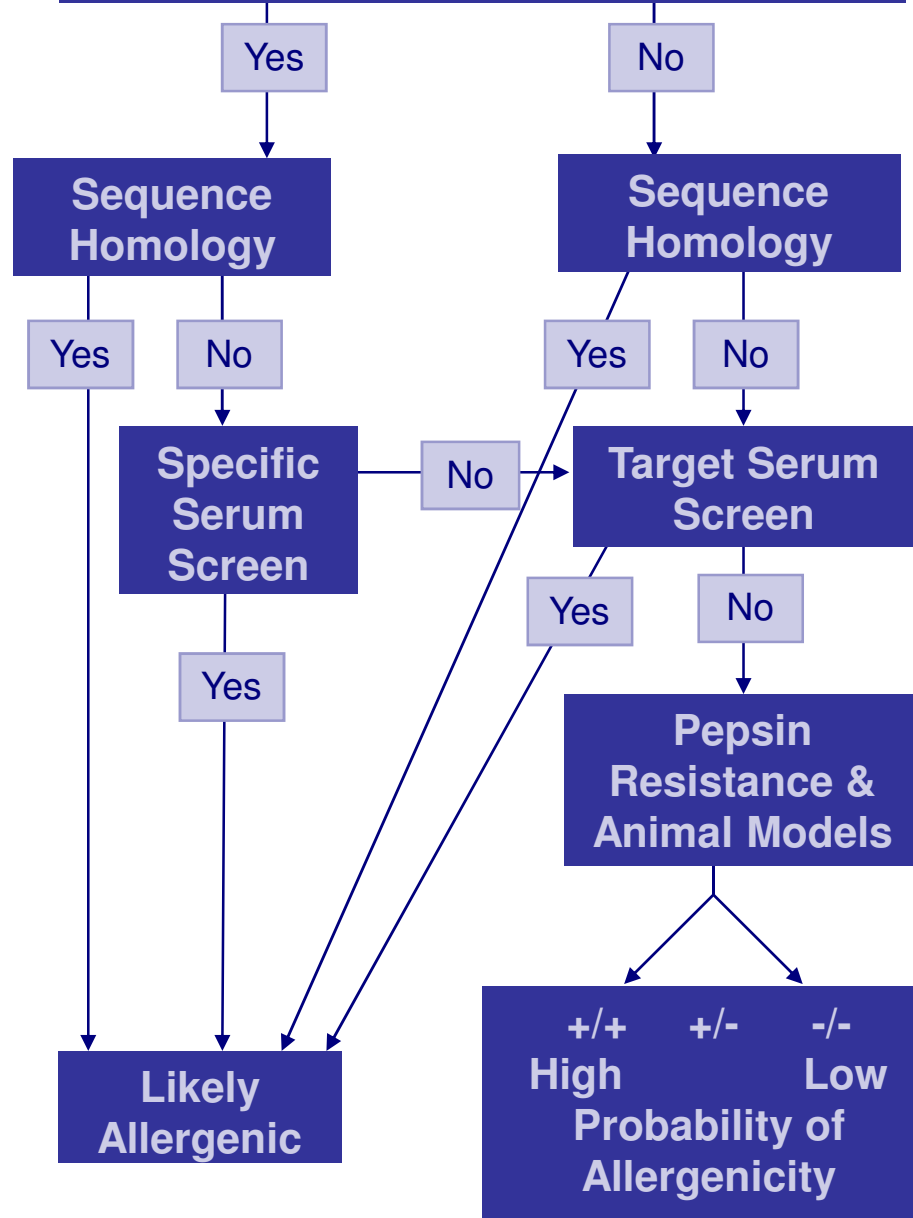


Decision tree

■ Criteria

- source of the transferred genetic material,
- molecular weight,
- sequence homology,
- heat and processing stability,
- effect of ph and/or gastric juices and
- prevalence in foods.

Source of gene allergenic





Post marketing surveillance

- Traceability and labelling
- Lack of background data
- Many confounding food and non-food related factors
- Changes in diets over time
- Lack of trained experts an infrastructure



Other criteria

- Level of expressions
- Unintended effects