

EFFECTIVE ALLERGEN MANAGEMENT



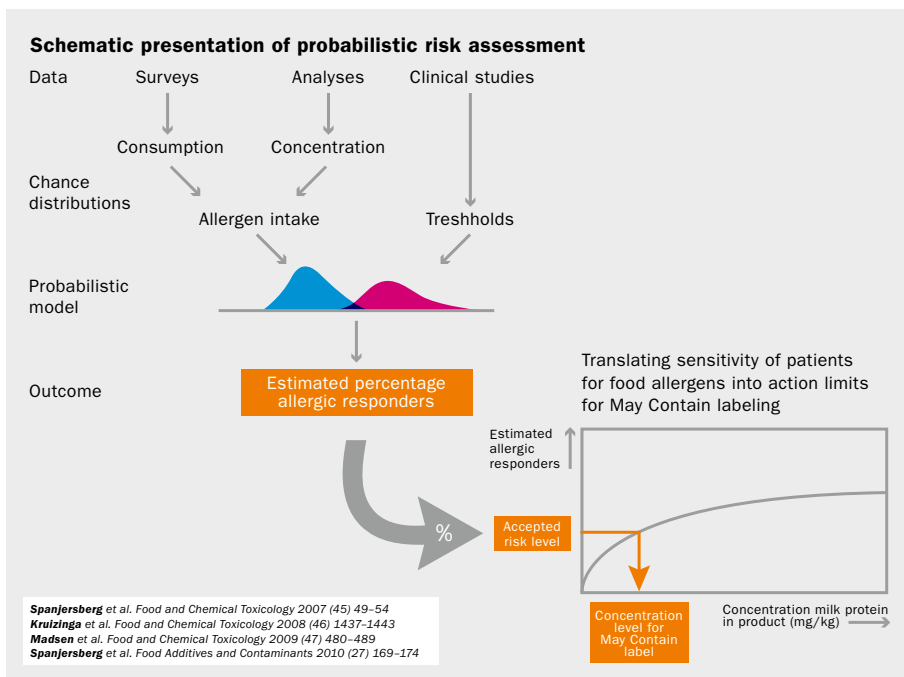
TNO innovation
for life

When do you label food products as having been possibly cross contaminated by allergens? TNO can help you to develop a quantitative risk management guidance for food allergens, based on a unique method that quantifies the risk of food allergen traces in products and validated data on thresholds. This helps industry anticipate and deliver safe products, consumer needs and preferences.

CROSS-CONTAMINATION

Allergens in food form a risk for the allergic consumers. Sometimes allergens can even have major health implications for an individual. Current EU rules establish a list of 14 food allergens which have to be indicated on packaging whenever these, or ingredients derived from them, are used at any level in pre-packed foods. However, traces of allergens are specifically a problem when they are unexpected or incidental. Allergens can be present in the final food product due to cross-contamination of raw materials or production facilities. Although the allergens are mostly present at low levels, they can pose a threat to allergic individuals, occasionally with serious reactions.

At the moment there aren't any clear quantitative rules or regulatory guidelines, that help the food industry in its decision to label its products with a warning for the potential presence of food allergens, the 'precautionary (may contain) labeling'. As a result, companies deal with this in different ways, this can be confusing and does not provide a proper and effective warning for the allergic consumer. Currently, the presence or absence of a precautionary statement does not correlate with the actual risk to the allergic population. Consumers, therefore, refrain from buying certain products unnecessarily or ignore the alerts.



TNO quantitative risk assessment

The unique method is a probabilistic risk assessment that quantifies the risks of allergens based on data from food consumption and sensitivity of patients for food allergens.

Starting with a certain amount of the allergen in a product it then is calculated into how many allergic consumers will react to this level. Conversely, this method can be easily used to calculate the maximum concentration of an allergen in a specific product subjecting it to a risk limit the manufacturer is willing to accept, or by legislation in the future.

GUIDANCE FOR CROSS-CONTAMINATION AND PRECAUTIONARY (MAY CONTAIN) LABELING

The decision to label a product as potentially being cross-contaminated is complicated by the lack of clear action limits. TNO is working with international parties, to establish limits and develop international guidelines. The goal is to introduce more uniform and transparent risk information.

TNO has developed risk assessment methodologies and a database of food allergen susceptibility data which is seen as the best way forward developing a quantitative risk assessment guideline (Spanjersberg 2007; 2010, Madsen 2009). This will help to ensure that the labels on food products become more valuable to consumers.

ALLERGEN MANAGEMENT CONSULTANCY

A company decision about how to label potential cross contact of food products with an allergen is usually based on allergen analysis and qualitative evaluation of the contamination risk. TNO offers a quantitative risk assessment, giving you insight into the relevance of the concentrations of allergen detected in your product for the allergic consumers. Additionally, TNO has expertise in assessing production processes and facilities and cleaning procedures. This helps management making decisions about relevant analytical program, process adjustments and risk management, in the current

legal context. As a result of a vast on-site experience, TNO offers very practical solutions for handling allergen issues in your factory and for your specific considerations about product labeling. In recent years, TNO has collected extensive information on the sensitivity of patients (thresholds) for most major food allergens. By international cooperation with clinical and scientific allergy centers, TNO continuously updates its database with more data on thresholds and new food allergens. In short, TNO offers you science based practical solutions to strengthen your allergen management and to consolidate your efforts ensuring food safety.

MORE INFORMATION

Do you want to know how quantitative risk assessment can help you in improving your allergen management? Do you worry about allergens in your products? For more information on TNO's databases and risk assessment and for a practical and science based approach to bring clarity in your allergen labelling, please contact us. We will be glad to discuss your specific allergen challenge and advise on your allergen management decision.

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HEALTHY LIVING

TNO initiates technological and social innovation for healthy living in a vital society.

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