

Improved labelling of allergens in foods for consumers: Threshold values cannot at present be determined reliably

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Allergic individuals must avoid allergens in foods. Only small traces of allergens can initiate an allergic reaction with negative health effects. Manufacturers of food products are therefore required to label the ingredients on the packaging. A special requirement pertains to the declaration of major allergens such as peanuts, celery or eggs even if these only appear in small amounts within the recipe. However, there is no requirement for allergens that unintentionally enter foods i.e. that are not part of the standard ingredients. Such unintentional traces can enter a food product during the transportation and production processes and constitute a health risk for allergic individuals. Until now, food manufacturers have been able to freely decide whether and how to inform consumers about unintentional traces of known allergens on package labelling. Manufacturers often use notices such as “may contain traces of ...”

Various models of labelling traces of allergens in food products are used internationally. The Federal Institute for Risk Assessment (BfR) and the *Max Rubner-Institut* (MRI) have taken the issue of appropriate threshold values for the labels of allergenic foods into consideration as part of the national action plan against allergies by the Federal Ministry of Food, Agriculture and Consumer Protection (BMELV). An overview of the major allergens was created for this purpose. The aim was to assess the data available on each major allergen and to identify those allergens for which threshold values can be determined based on existing data. No allergic symptoms should be expected in allergic individuals below these threshold values. Reliable and feasible analytics to determine the allergens present in a foodstuff are an important prerequisite for establishing threshold values.

The most vital goal for the determination of threshold values is the protection of allergic individuals, especially in regard to severe allergic reactions. In general, an allergic reaction to foodstuffs can vary greatly from person to person. Furthermore, the fact that the allergy inducing dose can vary even for one individual and is influenced by several circumstances such as nicotine or alcohol intake, medication, infections as well as the general physical and psychological state, must be taken into consideration.

Both BfR and MRI believe present research data on allergy inducing amounts of foods to be insufficient. Both Institutes recommend further scientific research to determine which amounts induce allergic reactions as well as reliable threshold values. In addition, a number of questions remain for the analytics of allergen traces in food products. If temporary threshold values are determined on the basis of existing data, these should be, depending on each allergen and in accordance with the current state of knowledge, between 0.01-0.001% allergenic foodstuff in the food product.

The full version of this BfR Information is available in German on http://www.bfr.bund.de/cm/208/bessere_allergenkennzeichnung_von_lebensmitteln_fuer_verbraucher.pdf