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Sesame seed labeling and health protection of allergic consumers

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ABSTRACT

Purpose. Sesame can cause food allergy and according to European legislation, its presence in food must be declared on the label. The purpose of this paper is to investigate the presence of sesame in food products carrying no mention of sesame on the ingredient label and in food products carrying the voluntary labelling statement "may contain traces of sesame".

Design/methodology/approach. Packaged bakery and non-bakery food items were collected at retail. Sample size was calculated according to estimated prevalence of 2 per cent and precision of 5 per cent: in total 32 samples of packaged bakery and non-bakery food were collected for each food category. The RIDASCREEN®FAST Sesame test (R-Biopharm AG, Darmstadt, Germany) was used for the analysis: its limit of detection was fixed in the laboratory at 0.5ppm.

Findings. Of the 32 food samples that did not mention sesame seed on the ingredient label, one (3.1 per cent) breadsticks sample tested positive at a concentration (326ppm). Of the 32 food samples that carried the precautionary label statement "may contain traces of sesame", one (3.1 per cent) breadcrumbs sample tested positive (305ppm). Comparison between the allergen concentration and the published eliciting dose (ED5) for sesame proteins (1mg) was performed. The calculated exposure was more than 2 the ED05 reported in the literature.

Originality/value. To date, few studies investigating compliance with food-allergen labeling requirements are available. This survey provides data for preliminary risk assessment for sesame allergenic consumers.

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