Prevalence of allergen avoidance advisory statements on packaged processed foods in a supermarket

Jennifer J Koplin, Nicholas J Osborne and Katrina J Allen

TO THE EDITOR: Allergen avoidance is the mainstay of food allergy management. Consumers with food allergies rely on accurate labelling of foods to avoid ingestion of allergens and subsequent allergic reactions. Current Australian legislation states that ingredients derived from common allergens (peanuts, tree nuts, eggs, wheat, cows milk, soy, fish, shellfish and sesame) must be clearly labelled.1 However, use of shared processing facilities can result in cross-contamination of other ingredients with these allergens. This has led to the use of advisory statements such as "may contain traces of" by manufacturers. A recent Food Standards Australia New Zealand survey found that consumers with food allergies are frustrated by such labelling.² There is also confusion among the medical profession about whether to advise patients with food allergies to avoid all foods with allergen avoidance advisory statements. The perception by some in the general population and in the medical community is that these statements are so widely used that avoidance would be overly prohibitive. However, there are currently no published data on the extent of advisory labelling use in Australia.

We aimed to assess the prevalence of advisory labelling for three common food allergens — peanuts, tree nuts and eggs — on the packages of products for which these allergens were not listed as ingredients. Products containing one type of tree nut (eg, macadamia nut) could still have advisory labelling for other tree nuts (eg, almond). All products were therefore examined for advisory labelling for any tree nut which was not listed as an ingredient.

Packages of non-refrigerated processed foods were examined between August and September 2008 at a large supermarket in Melbourne. All product types were examined within each category (eg, for the savoury biscuits category, we examined rice crackers, flavoured wheat crackers and water crackers) and, for each product type, one flavour per brand was selected for examination. Single-ingredient foods, such as flour, sugar, fruit and vegetables, were excluded. Advisory statements included, but were not limited to, "may contain traces

Allergen avoidance advisory statements on packaged processed foods at a large supermarket in Melbourne, August–September 2008

Number (%) of products with an advisory statement*

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Category of food	Peanut	Tree nuts	Egg
Sweet biscuits (n = 130)	117 (93%)	120 (92%)	48 (70%)
Chocolates $(n = 60)$	43 (80%)	49 (82%)	2 (4%)
Bakery items (eg, cakes) ($n = 35$)	24 (71%)	30 (86%)	10 (71%)
Muesli bars and snack bars ($n = 27$)	13 (67%)	20 (74%)	4 (15%)
Dinner bases and stocks ($n = 32$)	19 (59%)	9 (28%)	5 (17%)
Savoury biscuits ($n = 41$)	23 (56%)	23 (56%)	20 (51%)
Lollies (<i>n</i> = 55)	29 (56%)	25 (45%)	1 (2%)
Breakfast cereals $(n = 63)$	25 (41%)	37 (59%)	3 (5%)
Instant noodles $(n = 18)$	7 (39%)	6 (33%)	8 (50%)
Pasta sauces $(n = 15)$	5 (33%)	4 (27%)	0
Bread ($n = 16$)	5 (31%)	5 (31%)	5 (31%)
Soups $(n = 20)$	3 (15%)	3 (15%)	4 (21%)
Cake mixes $(n = 30)$	4 (13%)	20 (67%)	11 (58%)
Tinned meals ($n = 17$)	2 (12%)	2 (12%)	1 (7%)
Baby foods $(n = 30)$	3 (10%)	3 (10%)	1 (4%)
Pasta $(n = 13)$	0	0	4 (39%)
Chips $(n = 20)$	0	0	0
Other (eg, tinned fish, breadcrumbs, sauces, custard powder) ($n = 139$)	26 (19%)	28 (20%)	19 (14%)

^{*} Number of products that had an advisory statement but did not have the allergen of interest listed as an ingredient. The denominators used to calculate percentages were the numbers of products within each category of food that did not have the allergen of interest listed as an ingredient.

of", "processed on the same line as" and "made on equipment that also processes".

Overall, 761 products were examined. Of these, 384 (50%) carried an advisory statement for one or more tree nuts. Of 737 products that did not list peanut as an ingredient, 348 (47%) carried an advisory statement regarding peanut. Of 641 products that did not list egg as an ingredient, 146 (23%) carried an advisory label for egg. The presence of advisory statements varied between categories of food, with sweet biscuits most likely to carry labelling for peanut and tree nuts and bakery items most likely to carry labelling for egg (Box).

Advisory statements have been widely adopted by manufacturers across a range of products, and are likely to limit food choices for consumers with food allergies who avoid all foods labelled with advisory statements. Unfortunately, there is no evidence on the frequency of trace allergen contamination in Australian products, although studies in the United States found that only 10% of 179 products with advisory labelling for peanut contained detectable levels³ and that, as for Australia, this labelling was widely used for some product categories.⁴ There is also no

evidence regarding the proportion of consumers with food allergies who will develop an allergic reaction (including anaphylaxis) to trace contamination of food. Scientific assessment of the risks posed to consumers with food allergies by trace contamination is urgently required. This evidence would allow the development of informative labelling guidelines, including changes to legislation where required, to allow consumers with food allergies to safely manage their allergies, hopefully without the need to avoid entire categories of common foods.

Jennifer J Koplin, PhD Student¹ Nicholas J Osborne, Postdoctoral Fellow¹ Katrina J Allen, Paediatric Allergist²

- 1 Murdoch Childrens Research Institute, Melbourne, VIC.
- 2 Department of Allergy and Immunology, Royal Children's Hospital, Melbourne, VIC. katie.allen@rch.org.au
- 1 Food Standards Australia New Zealand. Standard 1.2.3 — mandatory warning and advisory statements and declarations. Canberra: FSANZ, 2002. http://www.foodstandards.gov.au/_srcfiles/ Standard_1_2_3_Warning_Statements_v103.pdf (accessed May 2010).
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- 4 Pieretti MM, Chung D, Pacenza R, et al. Audit of manufactured products: use of allergen advisory labels and identification of labeling ambiguities. *J Allergy Clin Immunol* 2009; 124: 337-341.