
Egg protein: a hidden allergen in candies

Egg is one of the most allergenic of all foods, and minute amounts of egg can result in symptoms within minutes, including life-threatening anaphylaxis.¹ This food is frequently implicated in allergic reactions in children but is very rare in adults. People may experience allergic reactions following the ingestion of a specific food, which in some cases, turns out to be a hidden ingredient.²

A 25-year-old woman, with no personal or family history of allergy, attended an allergic clinic. She suffered two episodes of shortness of breath, chest pain, and vomiting a few minutes after eating an omelette on one occasion, and spaghetti on the other. After these episodes she decided to avoid egg dishes. She tolerated chicken without any reaction and had no pets or birds.

Allergy studies were performed 1 week later. Skin prick tests to the usual airborne allergens were negative, and positive to whole egg, yolk and egg white, ovalbumin, and chicken. Hematologic laboratory tests and serum IgE level were within normal limits. Serum-specific IgE

tests were positive to whole egg (9.02 KU/L) and ovalbumin (4.05 KU/L), and negative to ovomucoid and chicken.

Finally, she was diagnosed of as having egg allergy and was instructed to avoid egg proteins. Two months later she suffered another episode after eating a strawberry and cream candy, but no egg compound was stated on the candy label. Prick-prick with the candy was positive and the presence of ovalbumin, which is added to candies as a binder, was confirmed by the manufacturers.

Egg components may be individually used for certain purposes in food preparation. Hidden allergens may be present in processed food when such an ingredient is added for a specific application (eg, binder, emulsifier, or coagulant).¹

In addition, various descriptions may indicate the presence of egg protein such as lecitin, lysozyme, livetin, albumin, and several others in a product.³ Legislation may permit a manufacturer not to list an ingredient constituting less than a specific percentage of the total product. Further, labeling is sometimes incomplete or misleading.¹ Thus, in some cases egg protein is not

indicated on food labels and may constitute a dangerous hidden allergen.

The physician should be alert to possible unknown hidden allergens that may cause erroneous diagnosis and unnecessary food avoidance recommendations.⁴ Candies may be an unusual and unexpected source of egg allergens. Consumers, manufacturers, government agencies, and allergists should collaborate to ensure that label information is adequate.

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