



australasian society of clinical immunology and allergy inc.

Guidelines for prevention of food anaphylactic reactions in schools, preschools and childcare centres

CONTENTS

1. INTRODUCTION
2. THE FOUR STEPS IN THE PREVENTION OF FOOD ANAPHYLACTIC REACTIONS IN CHILDREN AT RISK IN SCHOOLS, PRESCHOOLS AND CHILDCARE CENTRES
3. GENERAL FOOD POLICY MEASURES
4. FOOD POLICY MEASURES SPECIFIC TO SCHOOL AGE CHILDREN
5. FOOD POLICY MEASURES SPECIFIC TO PRESCHOOL AGE CHILDREN
6. REFERENCE LIST

1. INTRODUCTION

These guidelines have been prepared to assist in preventing life threatening anaphylaxis. This document has been reviewed by ASCIA members, and takes account of the published literature at the time of review. It is not intended to replace professional medical advice. Any questions regarding a medical diagnosis or treatment should be directed to a medical practitioner.

The intent of these guidelines is to provide advice for minimising the risk of food-induced anaphylaxis in schools, preschools and childcare centres. In developing these guidelines the ASCIA Anaphylaxis Working Party has taken into account established guidelines (1) and has been mindful of the:

- needs of the food allergic child
- difficulties in advocating measures which are not necessarily proven to be effective
- stresses on parents (2) teachers and carers
- available epidemiological information on food anaphylactic reactions in preschool and school age children
- nationwide implications of the recommendations.

Although allergic reactions to food are common in children, severe life threatening reactions are uncommon and deaths are rare.

- The majority of food reactions, even to highly allergenic foods such as peanuts are not anaphylactic (3).
- In Australia the prevalence of food induced anaphylaxis in pre-school age children was 1 in 170 and in school age children was 1 in 1900 (4).
- The majority of food allergic and anaphylactic reactions occur in preschool age children. An Australian survey of over 4000 children indicated that more than 90% of anaphylactic food reactions (13/14) occurred in preschool age children and only one in a school age child (4).
- However more than 90% of fatal reactions to foods have occurred in children aged 5 years and older (5). This indicates the importance of food avoidance for those school age children considered to be at risk.
- The risk of anaphylaxis in an individual case depends on a number of factors including the age of the child, the particular food involved, the amount of the food ingested and the presence of asthma.
- Peanuts and other nuts are the most likely foods to cause anaphylaxis.
- Anaphylaxis is very unlikely to occur from skin contact or exposure to food odours (6).

2. THE FOUR STEPS IN THE PREVENTION OF FOOD ANAPHYLACTIC REACTIONS IN CHILDREN AT RISK IN SCHOOLS, PRESCHOOLS AND CHILDCARE CENTRES

- (i) Obtaining medical information about children at risk by school, preschool or childcare centre personnel.
- (ii) Education of those responsible for the care of children concerning the risk of food anaphylaxis.
- (iii) Implementation of practical strategies to avoid exposure to known triggers.
- (iv) Age appropriate education of children with severe food allergies.

(i) Obtaining medical information

The initial step should be that schools, preschools and childcare centres ask for medical information at the time of enrolment of children.

Following identification of children with allergies, the next step is the provision of documentation by parents, such as an ASCIA Anaphylaxis Action Plan, which has been provided by a registered medical practitioner and includes the following;

- Clear identification of the child (photo)
- Documentation of the allergic triggers
- Documentation of the first aid response including any prescribed medication
- Identification and contact details of the doctor who has signed the action plan.

Concerning identification at schools, preschools or childcare centres, a signed anaphylaxis action plan containing photo identification of the child is considered sufficient. The identification of children by Medic Alert bracelets or other forms of

distinction is not considered mandatory. As food allergies may change with time it is important that schools, preschools or childcare centres ensure that the medical information is reviewed every 1-2 years.

(ii) Education of carers

Recognition of the risk and understanding the steps that can be taken to minimise food anaphylaxis by all those responsible for the care of children in schools, preschools or childcare centres, are the basis of prevention.

Important topics that need to be addressed in the educational process are:

- What is allergy?
- What is anaphylaxis?
- What are the triggers for allergy and anaphylaxis?
- How is anaphylaxis recognised?
- How can anaphylaxis be prevented?
- What should be done in the event of a child having a severe allergic reaction?
- Instruction on EpiPen® use.

Ideally, education of all staff on these topics should be provided by appropriately qualified professionals such as allergy nurse educators, doctors or qualified first aid trainers and reinforced at yearly intervals.

(iii) Practical strategies to avoid exposure to known triggers

Avoidance of specific triggers is the basis of anaphylaxis prevention. Appropriate avoidance measures are critically dependant on education of the child, his/her peers and all school personnel.

The measures that are appropriate will depend on the nature of the institution, the possible routes of exposure to food allergens and the age of the child.

As a general principle it is not recommended that children in schools, preschools or childcare centres with a food allergy be physically isolated from other children.

(iv) Age appropriate education of children with severe food allergies

Whilst it is primarily the responsibility of parents that the child is taught to care for themselves, the school also has a role to implement the care plan and reinforce appropriate avoidance and management strategies.

In childcare centres and preschools, children are dependant on carers for providing a safe environment.

As children mature they are able to take more responsibility for their own care.

3. GENERAL FOOD POLICY MEASURES

- There should be no trading and sharing of food, food utensils and food containers.
- It is ideal that children with severe food allergies should only eat lunches and snacks that have been prepared at home.
- Bottles, other drinks and lunch boxes provided by the parents for their children should be clearly labelled with the name of the child for whom they are intended.
- The use of food in crafts, cooking classes and science experiments may need to be restricted depending on the allergies of particular children.
- Food preparation personnel should be instructed about measures necessary to prevent cross contamination during the handling, preparation and serving of food. Examples would include the careful cleaning of food preparation areas after use and cleaning of utensils when preparing allergenic foods.
- The risk of a life threatening anaphylaxis from casual skin contact, even with highly allergenic foods such as peanuts, appears to be very low (6). On occasions casual skin contact will provoke urticarial reactions (hives). Simple hygiene measures such as hand washing and bench-top washing are considered appropriate (7).
- Food removal from preschools or childcare centres should only occur following recommendation by a relevant medical specialist and the provision of documentation of this recommendation.

4. FOOD POLICY MEASURES SPECIFIC TO SCHOOL AGE CHILDREN

Risk minimisation with regard to particular foods (peanuts and tree nuts) is indicated, however the implementation of blanket food bans or attempts to prohibit the entry of food substances into schools are not recommended.

Issues considered in not recommending blanket food bans were;

- the practicalities of such measures
- the issue that for school age children an essential step is to develop strategies for avoidance in the wider community as well as at school
- the lack of evidence of the effectiveness of such measures
- other guidelines and position statements (1;8) and experts do not recommend such measures (9;10)
- some guidelines state that such a policy should be “considered” for a specific foodstuff such as peanut (11) rather than recommended
- food bans at schools are not recommended by allergy consumer organisations
- the risk of complacency about avoidance strategies if a food is banned.

For schools where there are children with severe allergies to nuts (peanuts and tree nuts) a risk minimisation policy for school canteens should be implemented. This involves removal of items with the relevant nut as an ingredient, but does not apply to those foods labelled "may contain traces of nuts".

Risk minimisation in schools may also include asking parents of classmates not to send peanut butter on sandwiches if a class member in early primary years (Kindergarten to 7 year old) has peanut allergy. This is due to the higher risk of person to person contact in younger children.

On school camps where there are children with severe nut allergy, it should be requested that foods containing nuts are not taken or supplied, consistent with the nut minimisation policy in the school canteen.

Bullying by provoking food allergic children with food to which they are allergic should be recognised as a risk factor and addressed by anti-bullying policies.

5. FOOD POLICY MEASURES SPECIFIC TO PRESCHOOL AGE CHILDREN

Where meals are brought from home

- Measures should be taken to remove highly allergenic foods where transfer from one child to another is likely (such as whole eggs or egg containing foods and peanut products). Parents of all children should be asked not to send meals containing highly allergenic foods such as egg and nut products to preschools or childcare centres at which there is a child at risk of anaphylaxis to these foods.
- It is realised that it is not possible to eliminate all food products such as milk products in bread or margarines from the foods brought to preschools or childcare centres.
- In some circumstances it may be appropriate that a highly allergic child does not sit at tables where the food to which they are allergic is being served.

Where meal preparation is undertaken at child care centres and preschools

- For severely allergic children the best option may be to bring meals prepared from home.
- If it is decided to provide meals prepared at the preschool or childcare centre to a child at risk, then the meal prepared for all children should not contain the ingredients such as milk, egg and nut products to which the child is at risk.
- Meals prepared at preschools or childcare centres which contain ingredients with "May contain traces of nuts" on a label should not be given to nut allergic children.
- Food removal from preschools or childcare centres should only occur following recommendation by a relevant medical specialist and provision of documentation of this recommendation.

6. REFERENCE LIST

- (1) Anaphylaxis in schools and other childcare settings. AAAAI Board of Directors. American Academy of Allergy, Asthma and Immunology, J Allergy Clin Immunol 1998; 102(2):173-176.
- (2) Avery NJ, King RM, Knight S, Hourihane JO, Assessment of quality of life in children with peanut allergy. Pediatr Allergy Immunol 2003 Oct 14:378-382.
- (3) Lack G, Fox D, Northstone K, Golding J, Factors associated with the development of peanut allergy in childhood. N Engl J Med 2003; 348(11):977-985.
- (4) Boros CA, Kay D, Gold MS, Parent reported allergy and anaphylaxis in 4173 South Australian children. J Paediatr Child Health 2000; 36(1):36-40.
- (5) Kemp AS, EpiPen epidemic: Suggestions for rational prescribing in childhood food allergy. Journal of Paediatrics and Child Health 2003; 39(5):372-375.
- (6) Simonte SJ, Ma S, Mofidi S, Sicherer SH, Relevance of casual contact with peanut butter in children with peanut allergy. J Allergy Clin Immunol 2003; 112(1):180-182.
- (7) Perry TT, Conover-Walker MK, Pomes A, Chapman MD, Wood RA, Distribution of peanut allergen in the environment. J Allergy Clin Immunol 2004 May 113:973-976.
- (8) The diagnosis and management of anaphylaxis. Joint Task Force on Practice Parameters, American Academy of Allergy, Asthma and Immunology, American College of Allergy, Asthma and Immunology, and the Joint Council of Allergy, Asthma and Immunology, J Allergy Clin Immunol 1998 Jun 101:S465-S528.
- (9) Rhim GS, McMorris MS, School readiness for children with food allergies. Ann Allergy Asthma Immunol 2001; 86(2):172-176.
- (10) Munoz-Furlong A, Daily coping strategies for patients and their families. Pediatrics 2003 Jun 111:1654-1661.
- (11) Vickers DW, Maynard L, Ewan PW, Management of children with potential anaphylactic reactions in the community: a training package and proposal for good practice. Clin Exp Allergy 1997; 27(8):898-903.

ASCIA
© June 2004

The Australasian Society of Clinical Immunology and Allergy (ASCIA) is the peak professional body of Clinical Allergists and Immunologists in Australia and New Zealand.

Email: education@allergy.org.au

Website: www.allergy.org.au