

Appendix 1: Further information on Allergy

Allergy is a very big topic, and it was thought that for this module, pointing clinicians to further sources of information on each area within allergy would be helpful.

It also helped shorten the module – while allowing useful information to be made quickly available. For example, a food diary is important in diagnosing food allergy, but it is a page in length – the link to it below (Appendix 1d) allows interested clinicians to print this resource, without making this module too unwieldy.

Sources of information were all checked in April 2015. The topics are listed in this appendix in the same order as they appear in the Information Section.

a) Urticaria/Angioedema and Anaphylaxis

Resuscitation Council (UK) -Emergency treatment of anaphylactic reactions- guidelines for healthcare providers

<http://www.resus.org.uk/pages/reaction.pdf>

GPs – key decisions on prescribing adrenaline auto injectors

<http://www.anaphylaxis.org.uk/healthcare/gps/key-decisions-on-prescribing-adrenaline>

Anaphylaxis Campaign - guide to using autoinjectors (links to videos)

<http://www.anaphylaxis.org.uk/healthcare/gps/key-decisions-on-prescribing-adrenaline>

Anaphylaxis Action Plans for all 3 UK prescribable adrenaline autoinjectors

<http://www.bsaci.org/about/download-paediatric-allergy-action-plans>

MHRA guide. Autoinjectors: advice on use

http://www.anaphylaxis.org.uk/userfiles/files/MHRA_AAI_Guidance_June2014.pdf

Salicylate intolerance guidance from Allergy UK

<http://www.allergyuk.org/drug-allergy/aspirin-intolerance-and-salicylates#what-about-salicylates-in-food>

b) Atopic dermatitis

National Eczema Society - Info sheet of Topical Steroids for families

<http://www.eczema.org/corticosteroids>

then download 'Factsheet – Topical Steroids' using the link on the RHS of page

c) Allergic rhinitis

BSACI SOP on 'how to use a nasal spray' includes guidance on bioavailability of commonly used intra nasal steroid sprays [www.bsaci.org/ literature 121182/How to use a nasal spray](http://www.bsaci.org/literature/121182/How_to_use_a_nasal_spray)

BSACI SOP on nasal douching [www.bsaci.org/ literature 133142/SOP Nasal Douching 1st Edition 2014](http://www.bsaci.org/literature/133142/SOP_Nasal_Douching_1st_Edition_2014)

d) Food allergy

NICE guideline : Food allergy in children and young people Excellent 'Care Pathway' on page 13 and 14 <https://www.nice.org.uk/guidance/cg116/evidence/cg116-food-allergy-in-children-and-young-people-full-guideline3>

Green Book 2014 Chapter 9 Influenza – guidance on when it is safe to use the influenza vaccine in egg allergic patients – see p206 and pp210-212

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/385226/Green_Book_Chapter_19_v8_2.pdf

Allergy UK

- Example of a Food diary

<https://www.allergyuk.org/downloads/diary-examples/food-symptoms-diary.pdf>

- Immunisations- advice for parents on immunisations in egg allergy
<http://www.allergyuk.org/advice-for-parents-with-a-new-baby/immunisations>

e) Contact dermatitis (info included here though the module does not go into this topic in detail)

Health and Safety Executive

- Examples of skin irritants and sensitisers together with occupations where they occur
<http://www.hse.gov.uk/skin/professional/causes/agentstable1.htm>
- Skin at work – resources for all
<http://www.hse.gov.uk/skin/index.htm>
- Guidance to duties for employers of hairdressers
<http://www.hse.gov.uk/pubns/guidance/sr11.pdf>

General resources

Royal College of Paediatrics and Child Health

- Allergy Information for children, young people and their families-leaflets
<http://www.rcpch.ac.uk/child-health/research-projects/care-pathways-children-allergies/information-families/allergy-informa>
- Understanding Complementary and Alternative Medicine for Allergies
http://www.rcpch.ac.uk/system/files/protected/page/2011_RCPCH_Allergy_CAM%20Leaflet%20v4.pdf

British Society of Allergy and Clinical Immunology - Resources for Allergy Sufferers
<http://www.bsaci.org/resources/most-common-allergies>

Allergy UK - good resource for parents and families www.allergyuk.org

Children and Young Peoples Allergy Network Scotland <http://www.cyans.org.uk>

Further reading

1/ British Society of Allergy and Clinical Immunology – UK topic- based guidelines, also includes some Primary Care Guidelines <http://www.bsaci.org/Guidelines/bsaci-guidelines-and-SOCC>

2/ Allergy Asthma and Clinical Immunology journal - Practical guides in common allergic conditions (North American) <http://www.aacijournal.com/supplements/7/S1>

3/ Royal College of Paediatrics and Child Health -Care Pathways for children with allergies
<http://www.rcpch.ac.uk/improving-child-health/clinical-guidelines-and-standards/published-rcpch/allergy-care-pathways/care>

4/ World Allergy Association – White Book – free evidence based ebook covering all aspects of allergy
<http://www.worldallergy.org/UserFiles/file/WAO-White-Book-on-Allergy.pdf>

Courses for Primary Care clinicians

British Society of Allergy and Clinical Immunology – a list of free and fee-paying online courses
<http://www.bsaci.org/meetings-and-events/online-courses-for-primary-care-workers>

APPENDIX 2 : FOOD ALLERGY DIAGNOSIS ALGORITHM

Initial recognition

- Consider food allergy in a child or young person who:
 - _ has one or more of the signs and symptoms in **table 1** (pay particular attention to persistent symptoms that involve different organ systems) **or**
 - _ has had treatment for atopic eczema, gastro-oesophageal reflux disease or chronic gastrointestinal symptoms (including chronic constipation) but their symptoms have not responded adequately.



History and examination

- Do not offer allergy tests without first taking an allergy-focused clinical history.
- A healthcare professional with the appropriate competencies (a GP or other healthcare professional) should take a clinical history using the questions in **recommendation 1.1.3**.
- Based on the clinical history, physically examine the child or young person, in particular for:
 - _ growth and physical signs of malnutrition
 - _ signs indicating allergy-related comorbidities (atopic eczema, asthma and allergic rhinitis).



When to consider referral (also see referral box below; see recommendation 1.1.17)

If any of the following apply, consider referral to secondary or specialist care:

- The child or young person has:
 - _ faltering growth with one or more gastrointestinal symptoms in table 1
 - _ had one or more acute systemic reactions or severe delayed reactions
 - _ significant atopic eczema where multiple or cross-reactive food allergies are suspected by the parent or carer
 - _ possible multiple food allergies.
- There is persisting parental suspicion of food allergy (especially where symptoms are difficult or perplexing) despite a lack of supporting history.

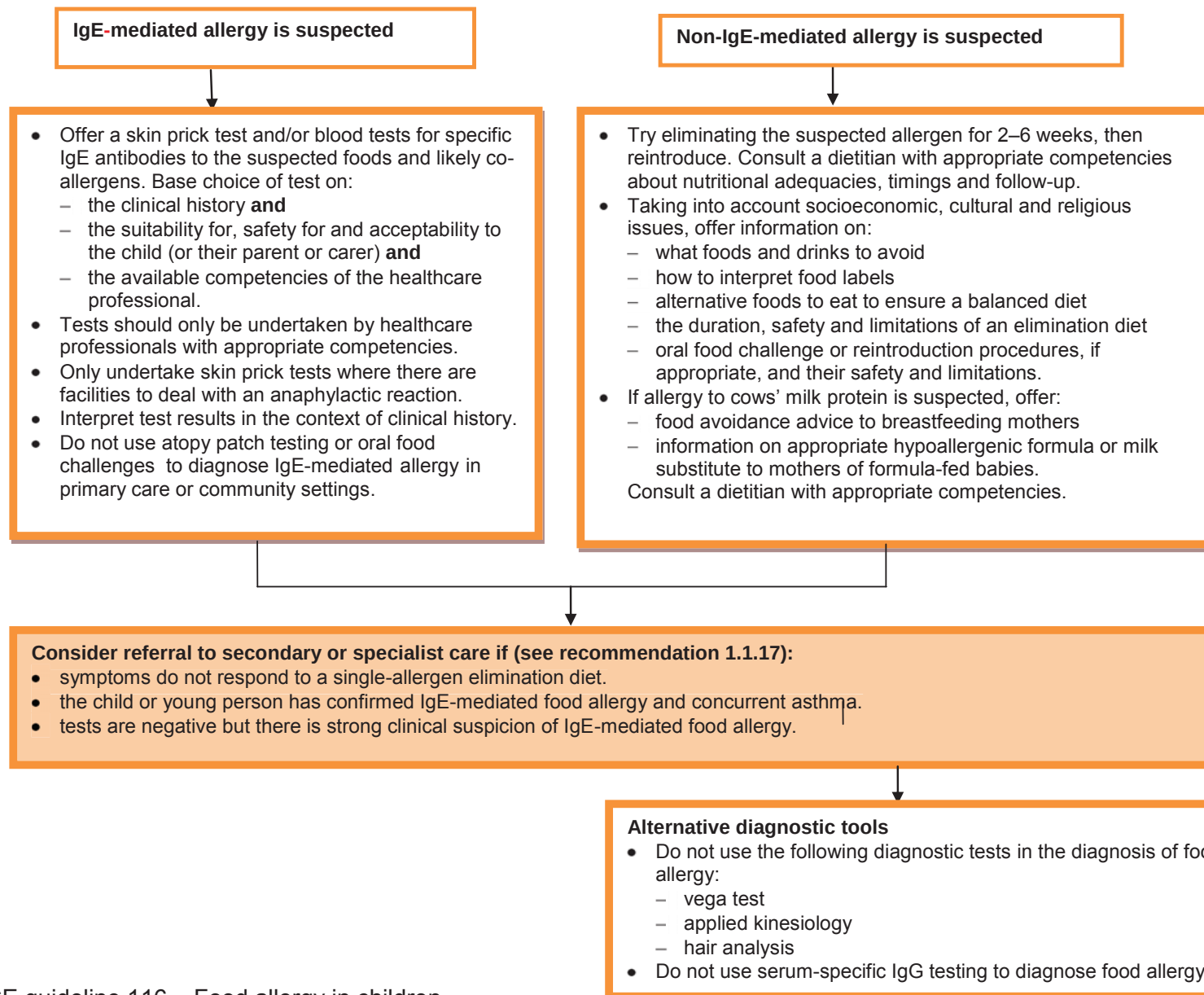
Food allergy is suspected



- Offer age-appropriate information that is relevant to the type of allergy (IgE-mediated, non-IgE-mediated or mixed). Include:
 - _ the type of allergy suspected
 - _ the risk of a severe allergic reaction
 - _ any impact on other healthcare issues such as vaccination
 - _ the diagnostic process, which may include:
 - ◇ an elimination diet followed by a possible planned rechallenge or initial food reintroduction procedure
 - ◇ skin prick tests and specific IgE antibody testing and their safety and limitations
 - ◇ referral to secondary or specialist care.
- support groups and how to contact them.

Assessment

Information and support



Appendix 3. Why is there so much allergic disease, and what can be done about it?

The evolutionary purpose of IgE is thought to be in the hosts defence against helminth infection. Helminth infections are often associated with high levels of IgE and circulating eosinophils without the associated allergic symptoms.

The 'hygiene' hypothesis postulates that the rise in prevalence of allergic conditions as health status improves in 'Westernised' countries is due to an 'underexposure' to pathogens previously widespread - such as serious bacterial, protozoal and helminth infections. As long ago as 1976 it was 'suggested that atopic disease is the price paid for the relative freedom from diseases due to viruses, bacteria and helminths.'

The more recent 'biodiversity' hypothesis suggests that reduced 'external' environmental biodiversity, reduced exposure to pathogens and reduced 'internal' gut and skin microflora biodiversity all predispose to development of allergic conditions. There is a good amount of indirect evidence to support these hypotheses

- an increase in the number of siblings in a family is associated with a reduced prevalence of allergic rhinitis
- living on a German farm and drinking unpasteurised milk is associated with a lower risk of atopy
- being Amish (big family, traditional farming) is associated with a reduced prevalence of asthma and hay fever
- living closer to large amounts of forest and agricultural land is associated with lower risk of atopy
- migrating from a low allergy incidence country to a high allergy incidence country leads to an acquisition by migrants of the host country incidence in the first generation
- countries with a high incidence of childhood diarrhoea, parasitic and helminthic disease have a low incidence of allergy
- some helminth infections (such as schistosomiasis) appear to provide a protective effect against atopy. While IgE levels are high in these patients, skin prick test reactivity is low
- in a study on atopy rates in a remote island in Papua New Guinea, the allergy rate in an isolated mountain village was 0%, compared to 7% in the more developed coastal villages.

For many years 'allergen avoidance' has been the cornerstone of allergic disease management. However, except for the most severe individual cases, there is little evidence that this is effective (it is certainly not effective at the population level).

It may be time for a new paradigm in the way we deal with allergy at the population level. Finland is at the forefront of developing novel evidence-based approaches to allergy:

- endorse health not allergy – healthy 'traditional' diets and outdoor exercise can reduce rates of allergy. Keep antibiotics use low to protect gut microflora
- strengthen tolerance – probiotics and immunotherapy can help in certain populations, and the scope of use of immunotherapy is widening. In milk and egg allergy, 'natural' tolerance can return after many after years of sensitisation
- adopt a new attitude to allergy – only avoid allergens if mandatory – this includes the concept of psychological tolerance where individuals with mild allergy 'just get on with it' rather than trying to identify 'unavoidable triggers'. Further exposure to allergens may lead to tolerance rather than heightened sensitisation
- recognise and treat severe allergies early – this can lead to reduced levels of 'progressive sensitisation' thereby reducing morbidity – concentrate specialist services on providing high quality care to this small population of patients
- improve indoor air quality: including smoking policies.