



# Skin Prick Testing

Skin prick testing is the best way to detect IgE against common environmental and food allergens. When used in the appropriate clinical context it is a very useful tool in assessing allergy, second only in use to a skilled clinical history.

Pathlab offer a range of common aero and food allergens for your patients (see list below).

## Aero Allergens:

1. Grass Mix 2. White Birch 3. Plantain 4. Aspergillus 5. Alternaria 6. Cat Epithelia 7. Dog Epithelia 8. House Dust mite (D. Pteronyssinus)

## Food Allergens:

9. Fish Mix 10. Egg (white) 11. Cow's milk 12. Wheat flour 13. Soya bean flour 14. Peanut  
The testing however should only be used in the appropriate clinical context.

Skin prick testing to aeroallergens (for example, house dust mite, pollens, pets and moulds) is useful in the following situations:

1. Rhinitis/rhinoconjunctivitis/rhinosinusitis/allergic conjunctivitis
2. Asthma
3. Atopic dermatitis (eczema)

For common food allergens (form example, peanut, cow's milk, egg white, soy) it is only useful when there are acute allergic reactions thought to be related to a particular food or in young children where food is playing a role in their eczema.

Skin prick testing is **NOT** useful in the following situations:

- Non-specific rashes
- Conditions not caused by IgE (coeliac disease, lactose deficiency etc.)
- Food intolerances (bloating, diarrhoea, headaches, fatigue)
- Behavioural disorders
- Respiratory reactions to irritants (smoke, perfumes, cleaning products etc.)
- Chronic urticaria

Positive results in these situations can be very misleading and lead to unnecessary avoidance and in some cases clinical harm.

Skin prick testing is the method of choice as it is immediate and relatively cheap compared to specific IgE (blood) testing. However, it does require the patient travel to the centres where this is done and also requires they are off all antihistamines and related medications for at least three days prior to testing.

Appointments can be made at the following rooms:

- BOP – Main lab Cameron Rd and Baymed.
- Waikato - Main lab Tristram St, Matamata, Thames and Cambridge.
- Whakatane - Whakatane Hospital, afternoon appointments only.
- LSR – Lakeland Health Clinic.

Specific IgE testing is more expensive but does offer a wider range of allergens that can be tested. There are particularly clinical situations where specific IgE is preferred over skin prick testing. such as patients with generalised dermatological conditions, dermographism, poor subject co-operation, pregnancy, poorly controlled asthma and patients unable to cease drugs with anti-histaminic properties or drugs where skin prick testing maybe more hazardous ( for example beta blockers).

To summarise skin prick testing is a very useful tool in the assessment of allergy but it does not take the place of a good history taken by a knowledgeable clinician. From that perspective, there are many excellent resources available on the Web that can assist you in learning these skills. Some useful websites are included at the end of the article

References:

- The Australasian Society of Clinical Immunology and Allergy <http://www.allergy.org.au/>
- The American Academy of Asthma, Allergy and Immunology <http://www.aaaai.org/home.aspx>
- The European Academy of Allergy and Clinical Immunology. <http://www.eaaci.org/index.php>
- World Allergy Organisation: <http://www.worldallergy.org/index.php>
- The contact allergen database: <http://www.contactallergy.com/>
- The ThermoScientific specific IgE allergen database <http://www.phadia.com/Products/Allergy-testing-products/ImmunoCAP-Allergens/>

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CLINICAL UPDATE