



## MEDICAL CONDITIONS

# HOW DO I KNOW IF ASTHMA IS CAUSED BY ALLERGY?

### ***What are common allergens that cause asthma?***

Frequently, an inhaled allergen is responsible for the disease, as the lung is its first point of contact with the body and it's here that the allergic response occurs. Common allergens include pollens, dust mite, cockroaches, animal dander (the saliva of cats when they lick their fur is more of a problem than the fur itself), feathers and mould.

Occasionally, foods can cause an allergy; especially monosodium glutamate (MSG), sulphur-containing preservatives, and some food colourants like tartrazine. But food sensitivity is not always considered to be a true allergy, as IgE antibodies are not always involved in the body's reaction.

### ***How do they induce asthma?***

During the allergic response from an inhaled allergen, IgE antibodies bind to cells in the lungs known as mast cells. They contain granules, which are minute "packets" of chemicals like histamine. When the allergen comes into contact with these sensitised mast cells, the granules are released from the cell, and cause an inflammatory response.

The lungs respond by contracting muscle, which restricts the passage of air.

At the same time, sticky mucus is produced, and this may block the airway, causing part of the lung to collapse.

### ***How can it be avoided?***

Once the asthma attack is in progress, it is too late to avoid the allergen and treatment to widen the air passages is needed. However, in between attacks, several measures may be helpful:

- Mattresses and pillows may be encased in allergen-proof covers.
- Carpets should be vacuumed regularly or removed altogether in favour of floor covering such as tiles, to discourage dust mites.
- Indoor temperature may be reduced (in winter) and humidity kept to a minimum to discourage dust mites and mould.
- Pets may be removed from the home, or, if this is not acceptable, kept outside as far as possible and not allowed in the asthmatic's bedroom.
- Cigarette smoke and other irritants should be avoided.