Oxford University Hospitals
NHS Trust
Children’s Allergy Clinic

Oral allergy syndrome
Information for parents
What is oral allergy syndrome?

• In the common form, oral allergy syndrome usually causes redness, itching, burning and swelling of the lips, inside of the mouth, tongue and soft palate. A child will often refuse the food once it starts irritating their mouth.

• Occasionally itching and swelling of the throat occurs. Other reactions such as hives (similar to nettle rash), conjunctivitis (itchy, watery eyes), rhinitis (inflammation inside the nose), asthma, nausea and vomiting may occur later.

• Severe symptoms such as anaphylactic shock or breathing problems are rare.

What are the causes?

• Oral allergy syndrome (OAS) is usually caused by an allergy to certain fruit and vegetables, especially when eaten raw.

• Reactions to the same foods when they are cooked are less likely but can sometimes happen. The skin of certain fruit and vegetables can cause a reaction.

• OAS is also associated with an allergy to pollen, especially from silver birch, but also grasses, ragweed (ragwort) and mugwort. 75% of people with silver birch allergy will have OAS. Allergic rhinitis symptoms may flare up when these pollens are in season.

• OAS can also occur in people allergic to rubber latex.

What to do if a child has an allergic reaction

If an allergic reaction occurs, the child should stop eating the food immediately and spit it out. Give the child a dose of antihistamine. In the unlikely event that a severe reaction occurs, then dial 999 for an ambulance.
OAS reactions are usually immediate and occur within 1-5 minutes of the problem food coming into contact with the mouth. The mild/moderate symptoms usually get better rapidly once the offending food has been spat out and removed.

### Common symptoms of OAS

<table>
<thead>
<tr>
<th>Mild or moderate</th>
<th>Less common mild/moderate</th>
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</thead>
<tbody>
<tr>
<td>Tingling or itching sensation in the mouth, lips, tongue</td>
<td>Swelling, particularly of the face</td>
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<tr>
<td>Rapid development of nettle rash/wheals (hives)</td>
<td>Rising anxiety/feeling scared</td>
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<td>Itchy eyes or inside the nose.</td>
<td>Tummy pain</td>
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<td></td>
<td>Nausea and/or vomiting</td>
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<td>Mild wheeziness (give inhaler if available).</td>
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</tbody>
</table>

**Treatment:** Give antihistamines and monitor symptoms

### Rare symptoms of OAS (possibly life-threatening)

- Difficulty in breathing; either wheezy and/or hoarseness and/or croupy sound.
- Decreased level of consciousness, faint, pale and floppy.
- Collapse.

**Treatment:** Dial 999 and seek emergency help immediately
Allergen cross-reactivity

Cross-reactivity may occur. This means that if a person with a known pollen or latex allergy comes into contact with an associated allergen, this may bring on an allergic reaction. For example, a person with an allergy to grasses may also have a reaction to kiwi. The most commonly reported cross-reactivities among pollen, fruits and vegetables are given in the list below.

This does not mean your child should avoid the foods in the associated groups, but you should be aware of them. If a particular food does cause a reaction then it needs to be avoided in the future.

<table>
<thead>
<tr>
<th>Pollen</th>
<th>Associated fruits, nuts and vegetables</th>
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<tbody>
<tr>
<td>Silver birch (causes allergic rhinitis in April)</td>
<td>Almond</td>
</tr>
<tr>
<td></td>
<td>Apple</td>
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<tr>
<td></td>
<td>Apricot</td>
</tr>
<tr>
<td></td>
<td>Brazil nut</td>
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<tr>
<td></td>
<td>Carrot</td>
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<td></td>
<td>Cashew nut</td>
</tr>
<tr>
<td></td>
<td>Celery</td>
</tr>
<tr>
<td></td>
<td>Cherry</td>
</tr>
<tr>
<td></td>
<td>Hazelnut</td>
</tr>
<tr>
<td></td>
<td>Kiwi</td>
</tr>
</tbody>
</table>

<p>| Grasses (causes allergic rhinitis in July) | Bean  | Potato |
|                                           | Kiwi   | Tomato |
|                                           | Lentil | Soya bean |
|                                           | Melon  | Watermelon |
|                                           | Pea    | Wheat   |
|                                           | Peanut |         |</p>
<table>
<thead>
<tr>
<th>Pollen</th>
<th>Associated fruits, nuts and vegetables</th>
</tr>
</thead>
</table>
| Mugwort weed (causes allergic rhinitis in August) | Banana 
Carrot 
Celery 
Chives 
Coriander |
|                             | Fennel 
Melon 
Parsley 
Parsnip 
Peanut |
| Ragweed                    | Banana 
Melon |
| Latex                      | Avocado 
Banana 
Chestnut 
Citrus fruit 
Kiwi 
Grape 
Mango 
Melon |
|                            | Papaya 
Passion fruit 
Peach 
Peanut 
Peppers 
Pineapple 
Plum 
Tomato |

**Living with OAS**

It is important to avoid the foods that cause allergic symptoms, especially in their raw state.

It is not always the case that all the foods in the ‘cross reactivity’ groups will cause a problem. Unless advised otherwise, you do not need to avoid all the foods in the group. Just keep a list of the ones that your child has had reactions to and avoid them in future.

Most people with OAS will only have mild allergic symptoms and generally these reactions will not become severe. Keep antihistamine in the form of syrup or tablets at hand to treat an allergic reaction.
If there is a risk that your child will have a severe allergic reaction, then we will recommend an Epipen (adrenaline pre-filled injection). Most children with OAS do not need an Epipen. The allergy team will have assessed the need for an Epipen in the allergy clinic and they will tell you if your child needs to carry one.

OAS is likely to be life long and some children will become allergic to other fruit and vegetables.

If your child has mild oral allergy syndrome, they may tolerate peeled fruit, unripe or partially ripened fruit or really fresh fruit that’s just been picked. Some kinds of a particular fruit, e.g. certain types of apple, may cause more allergic symptoms than others. Many people who are allergic to the raw fruit will be able to eat it cooked or processed, e.g. apple juice or fruit that’s an ingredient in shop-bought cakes.

Watch out for reactions; if any reaction occurs, your child must stop eating the food.

Nuts or celery which cause OAS should be totally avoided whether fresh or cooked because of the higher risk of a severe allergic reaction.
How to contact us

If you have any questions or concerns, please contact:

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