

## Oral, Olfactory & Gustatory Systems

The oral, olfactory & gustatory sensory systems are all closely related with the mouth. The olfactory system is the sense of smell and the gustatory system is the sense of taste. There are lots of sensory receptors in and around the mouth area – these tell us if the food is sweet, salty, tart, sour, spicy, mild, hot, cold, smooth or crunchy. These senses help us to determine whether food is safe to eat. Our sense of smell helps to keep us safe as it enables us to detect a smell that could be harmful e.g. smell of gas or food that has gone bad.

### Hyper reactive

Some children are very sensitive to oral, olfactory and gustatory experiences and have an aversion to certain food textures, temperature and taste and they may be very fussy eaters and resistant to new food. They may use their teeth to remove food off of utensils rather than their lips. Frequently children have a preference for bland or 'beige' food and they may use ketchup or similar on all food as a flavour masker. These children may dislike or be resistant to teeth cleaning and resistant to washing face/mouth. Some children may gag at certain smells.

Strategies to try:

- Deep pressure to and around the lips.
- Chewing i.e. chewy tube, gum.
- Forewarn of need to touch the face or lips.
- Avoid strong perfumes, fabric conditioners, air fresheners, etc.
- Use a few drops of child's favourite smell on a tissue and use this to block out any aversive smells
- Count to see how long it takes for the smell to fade to the point that the child doesn't notice it any more.
- Slowly introduce new smells to the child.

### Hypo reactive

Some children are seeking oral, olfactory and gustatory sensations and frequently mouth objects and they may lick, chew and bite non-food items. They may be a messy eater, slow eater and/or stuff their mouth with food. These children may prefer strong flavours. They might make peculiar mouth movements, have unclear speech and they may frequently dribble and have a chapped lower lip.

Strategies to try:

- Strong flavoured foods.
- Vibration (electric toothbrush, etc.).
- Sucking, blowing, making noises, whistles, etc.
- Crunchy snacks.
- Sour & fizzy food.
- Oral chewy toys.

Please see oral motor activities and chews factsheet for further information on strategies.

### Contact details

**Children's Therapy Services**

Telephone number: 0300 019 2936

For further general health-related information, please ask the relevant department for an information prescription or contact:

Patient Experience  
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**If you wish to make any comments or to ask about any research evidence used to write this leaflet, please contact the Patient Experience Team on 0300 019 8499, write to the Patient Experience Team (address above) or email [patientexperienceteam@uhd.nhs.uk](mailto:patientexperienceteam@uhd.nhs.uk)**

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