

Vision, Hearing, Smell and Taste

CYP may also experience over and under-responsive reactions within any of their other senses, hearing, vision, taste, and smell. Generally, if the foundation sensory systems of proprioception, interoception, vestibular and tactile, are in a calm 'just right' state, the presentation of issues within the other sensory systems is likely to be much less significant. However, if a CYP is experiencing sensory needs within these sensory foundation systems, they are more likely to present with and experience difficulties within the other systems.

If you are seeing a CYP who is displaying anxiety or fear around smells or sounds within the environment some of the core strategies associated with the tactile and proprioceptive systems will help to alleviate these difficulties. Refer to the '[Activities to help balance the sensory systems](#)' table.

If you are seeing behaviours representing needs with the other sensory systems, the first consideration should be **environment or place**. Check that all the strategies recommended in the Environmental audit have been considered and reasonable adjustments made to support the CYP.

Smell (Olfactory)

Smell information goes directly to the emotional centre of the brain, its effects are therefore fast; smells can be reassuring and organising or create anxiety and stress.

Smells in the environment can easily be overlooked by adults whose sensory system is not impacted by them. So **ALWAYS** think what smells are present.

Be mindful of the smells that you add to the environment, it is very easy to layer a number of different smells (shampoo, shower gel, hair spray and scent), that make the environment hostile to the CYP. It is important that if smell is an issue for the CYP we consider how we add-to the smell environment and try to make the smell environment as CYP friendly as possible.

Smell of a parent or favourite food can be used to support the CYP's calming, these can be carried by the CYP using a handkerchief with this smell infused into it. The CYP can access this when and where they need to in a discrete manner.

What you Might See

As described in the 'What you might see' overview

If a CYP is **seeking** more smells (olfactory stimuli) they may:

- Sniff other people
- Sniff foods before eating them
- Sniff items for exploration
- Enjoy 'smelly' places, foods, products and people

If a CYP is **under responsive** to smells (olfactory stimuli) they may:

- Be unable to smell even strong odours
- Be unable to identify items by smell alone
- Have poor personal hygiene awareness



Step 2 Smell and Taste

If a CYP is **over responsive** to smells (olfactory stimuli) they may:

- Have strong dislike/like of people based upon how they smell
- Gag or vomit for 'no reason'
- Struggle in 'smelly' places such as kitchens, bathrooms, perfume counters, restaurants
- Become distracted or distressed seemingly for no reason but due to smells around them that others might not notice

Step 2 Smell and Taste

You can support these **olfactory/smell** sensory processing needs by using some of the following activities:

What you see	Initial activities	When?/How long for?/Techniques	What to be aware of	Images
<p>CYP finds it difficult to go into the Dining room/restaurant etc but it is not the sound that is a trigger</p> <p>Over-responsive</p>	<p>Use a familiar and safe smell to mask the environmental mix of smells, e.g. a familiar and safe perfume on a handkerchief or the cuff of the CYP's clothes</p> <p>CYP to have sandwiches out of the main dining room</p>	<p>Duration of meal</p>	<p>If the CYP has a medical condition such as asthma in response to specific smells</p> <p>If the CYP has a history of asthma related to smells this might become an emotionally tagged response and therefore is a behaviour and not a sensory problem</p>	
<p>Avoidance of a specific environment due to the smells</p> <p>Over-responsive</p>	<p>It might be necessary to adjust the normal plan for the individual CYP.</p> <p>CYP might benefit from going to the disabled access toilet rather than the class toilets</p>		<p>CYP who avoid going to the toilet during the school day can cause themselves more complex medical conditions. They might also limit their food or fluid intake during the day to maintain control in avoiding this space</p>	

See additional smell and taste activities sheet for more ideas

Taste (Gustatory)

Many CYP can be wary of trying new or unfamiliar foods. Generally, it takes up to twenty tastings before new foods are accepted. Mealtimes are always an emotive time when the CYP and their family can become anxious and feel under pressure to eat foods. Sometimes CYP who have autism will try foods in the school setting that they will not tolerate trying at home because it is not part of their routine at home to eat the new foods. Schools can therefore be the perfect place for CYP to try new foods.

What you Might See

As described in the 'What you might see' overview

If a CYP is **seeking** more taste (gustatory stimuli) they may:

- Like spicy/strong flavours
- Regurgitate foods for the acidic feedback
- Like to eat 'inedible' substances
- Cram food until mouth is full

If a CYP is **under responsive** to taste (gustatory stimuli) they may:



- Not be very interested in food as it all tastes very similarly bland

If a CYP is **over responsive** to taste (gustatory stimuli) they may:

- Have a very limited diet
- Have rigid routines and anxiety around mealtimes
- Be able to identify subtle differences in foods
- Gag or vomit if forced to try new foods
- Can only cope with small amounts in mouth

Step 2 Smell and Taste

You can support these **gustatory/taste** sensory processing needs by using some of the following activities:

What you see	Initial activities	When?/How long for?/Techniques	What to be aware of	Image
CYP has a limited diet but will eat a range of food textures (soft/hard or warm/cold)	This is likely to be a behaviour or rigidity, not a sensory problem		In most cases CYP with limited diets will thrive, in this case there is little cause for concern	
CYP has limited diet and eats foods of similar texture, colour and temperature only Over responsive	This might be a sensory issue. Provide opportunities for the CYP to play with and experience the look, touch and smell of the foods without any pressure to taste	Frequent practice with the same foods: up to 20 opportunities with each new food type	Do not force trying DO NOT hide the food amongst other food that the CYP will eat If the CYP tries the new food, adults should avoid a big reaction as this can add to the CYP's stress and anxiety and result in them not repeating the food tasting	
CYP dislikes it when foods touch or blend on the plate Over responsive	Separate the foods so there is space between each taste, this can be done on a standard plate or use a divided plate	Routinely	Do Not force the CYP to eat foods blended together	

See additional taste activities sheet for more ideas

Smell and Taste: Additional Activities Sheet

These lists are by no means definitive but a good starting point to discover what does and does not work for individuals.

It is important to bear in mind age and appropriateness to setting when choosing activities from the lists. Some activities will be more appropriate for younger children and others for young adults whereas some will be more appropriate for home, nursery, school, outdoors etc.

Sensory Seeking

- Introduce frozen fruits, smoothies and yogurt tubes etc. to provide additional stimuli to foods
- Introduce strong flavours to foods such as spices, herbs, sauces, cheeses, seasonings
- Provide a range of salty, sweet, sour, spicy foods
- Messy food play
- Use containers filled with different cotton balls containing essential oils, spices
- Smelly objects to explore e.g. cheese and rubber bands. These could be used as part of a story or science experiment
- Smelly treasure baskets including dried oranges, lavender bag, coffee beans in a mesh bag, cinnamon sticks, bunches of herbs, rubber ball, scented toys/candles, pinecones and soaps etc.
- Scratch and sniff books
- Blindfold games to identify items by smell alone

Under Responsive

- Add strong flavours to meals e.g. chilli flakes, black pepper, sauces
- Discrimination activities to learn to identify edible and non-edible items e.g. place edible items in a green box and non-edible items in a red box. Each time they try to eat a non-edible item, direct them to place it in the red box. A 'No' or 'Stop' sign can be placed on the red box
- Provide strong flavours away from mealtimes such as minty mouth spray, chewing gum, strong toothpaste, flavoured stickers/transfers, herby leaves to chew (mint, basil, mustard cress etc.)
- Strong flavoured ice creams/lollies/ice lollies etc.
- Strong flavoured milk shakes
- Strong flavoured fruit teas/cordials
- Strong flavoured chewing gum
- Mint mouth spray

Exaggerated smelly activities:

- Playing in grass
- Using smelly or scented playdoh
- Cooking with strong smells such as cinnamon, ginger, curry, garlic
- Scented lamp, candle, lotions, liquid soap, markers or stickers
- Provide the student with a scent they prefer and allowing them to sniff and stay alert
- Provide jars of scented oils which can be accessed during the day
- Teach skills to avoid ingesting harmful foods and substances
- Teach to read expiry dates and danger labels as appropriate. A visual reminder page may help with this
- Teach how to spot bad smells using others' reactions (body language and facial expressions)

Over Responsive

- Involve in food shopping and food preparation. This introduces them to the texture and smell of food items without the pressure of eating them. Sensory based play can also be used to introduce different smells and textures
- Keep mealtimes calm
- Allow preferred food items at mealtimes. This will encourage them to eat at mealtimes and establish an eating pattern. New food should be introduced outside mealtimes
- Ensure eating in a calm environment to reduce anxiety. If feeling overwhelmed in a noisy dining hall, they are less likely to eat. It may be appropriate to allow eating in a quiet classroom/room where there are less noises, smells etc.
- Do not persuade or coerce into eating new food as this is likely to increase stress and food refusal
- Use a desensitisation process to introduce new food
- Select a consistent time each day to introduce new food and include this on a schedule or timetable. This may be called 'Trying time'.
- Select an appropriate place to try new food each day. It should be a quiet place with minimal sensory distractions. This will reduce feelings of sensory overload
- Select a new food which is similar to food items which are already eaten. Use the texture of preferred foods e.g. mashed/pureed texture or dry, crunchy texture. Do not introduce a new texture as it is sufficiently challenging to try a new taste. Simultaneously introducing a new taste and texture will be too overwhelming. For example, if they like crunchy textures, introduce raw vegetables rather than mashed vegetables
- Allow time for gradual progress through the steps of desensitisation e.g.
 - Tolerating the new food on a plate in front of them
 - Smelling the food item
 - Touching the food item
 - Holding the food item to lips
 - Touching the food item with tongue
 - Licking the food item
- Eventually biting and swallowing the food item
- Each step in this process may take several days or weeks before progressing to the next step. It is important not to rush or coerce as this increases anxiety
- When the new food item is tolerated, it can be moved to mealtimes and the quantity gradually increased
- Transition to a calming activity after 'Trying time' each day as it is likely to be a challenging activity. Select an activity which is calming e.g. deep pressure input, time on the iPad/computer, listening to music, reading a book
- Some eat better in the company of adults or peers – the student may be more willing to try new foods if they see other people trying the same food and enjoying it
- Use 'Tiny Taste' approaches along with the above, for new foods, e.g. offer a pea sized or even grain of rice sized amount of a new food before offering preferred foods
- Make the environment as fragrance free as possible
- Ask cleaning staff to use fragrance free cleaning products
- Use un-perfumed toiletries
- Seat away from the rubbish bin or other objects that may produce strong odours
- Be aware that if you have a scented object, they may act adversely to that particular smell
- Keep rooms well ventilated, especially when using strong smelling materials
- Allow being seated beside an open window
- Teach appropriate coping strategies such as covering nose with tissue or informing someone that smell is unpleasant, either verbally or using a visual cue
- Provide a preferred scent that could be used to mask unpleasant smells and odours as a coping strategy
- Provide access to bland smelling foods