



Sensory processing signs of difficulty - Gustatory (taste)

You will have heard about our 8 sensory systems: hearing, sight, taste, smell, touch, vestibular, proprioception and interoception. You will have also heard about how we process our sensory information; we receive and organise sensation from the environment, then we process that information and make an effective meaningful response.

Now we can consider what it may look and feel like if we have a difference in our Gustatory sensory system.

Gustatory systems are responsible for tasting:

Our tongue reacts to food and drink. It tells us about flavours, texture and temperature. They are clustered in the mouth, tongue and throat and receive five specific tastes - salty, sweet, bitter, sour and savoury.

Processing Gustatory sensory information



You will remember that we used cups to describe how we register sensory information.

When we have a little cup, it does not take much information before we notice it - your little cup fills up very quickly! We call this over responsive.

When we have a big cup, it takes a lot more information for us to notice - it takes more to fill up our cup. We call this under responsive.



Remember that this is not always a problem, and that our ability to register, process and integrate our sensory information can sometimes feel difficult - when we are tired, unwell or overwhelmed it can feel like our cup fills up quickly.

Signs of Difficulty:

Over Responsive 	Under Responsive 
<ul style="list-style-type: none">• Dislikes strong tastes• Prefers bland tastes• Over reacts to new tastes• Certain textures cause discomfort - may only eat smooth foods• Has a limited food repertoire• Gags at the sight/smell of certain foods	<ul style="list-style-type: none">• Under-reacts to strong flavours• Prefers strong tastes• Likes hard, crunchy foods• Eats non-edible foods• Seeks out strong tastes.



Strategies to support:

Over Responsive 	Under Responsive 
<ul style="list-style-type: none">• Imaginative play - with a dolly tea set, or play kitchen• Messy play - away from the table. This could be any tactile play, such as sand and water tables.• Food play - again, away from the table. Find toys in a bowl of pasta, drive a car through some custard, or stack a tower of Weetabix!• For older children this could be food preparation - stirring a pot, rolling out a dough - both of these do not require your hands to get messy.• With all messy play - start with dry textures, before moving to wet, and then to sticky.• You are aiming for positive interaction with low pressure• Variations on food already tolerated• Serve small portions• Try having a shared plate for the whole family, with no pressure to try. You may just talk about what it looks/smells like first.• Plate with compartments• Food exploration, grading this:<ol style="list-style-type: none">1. Sniff /smell2. Touch, poke, prod3. Kiss, touch with tongue4. Nibble / tiny tastes5. Bite, but don't eat6. Eat a small piece	<ul style="list-style-type: none">• Provide chewy foods• Provide deep pressure• Provide heavy muscle work, carrying - pushing object• Provide sucking activities i.e. though a long straw, sports bottle, thick shake, ice lollies• Provide blowing activities i.e. blowing bubbles, musical instruments



Occupational Therapy Service for Children and Young People
Aneurin Bevan University Health Board