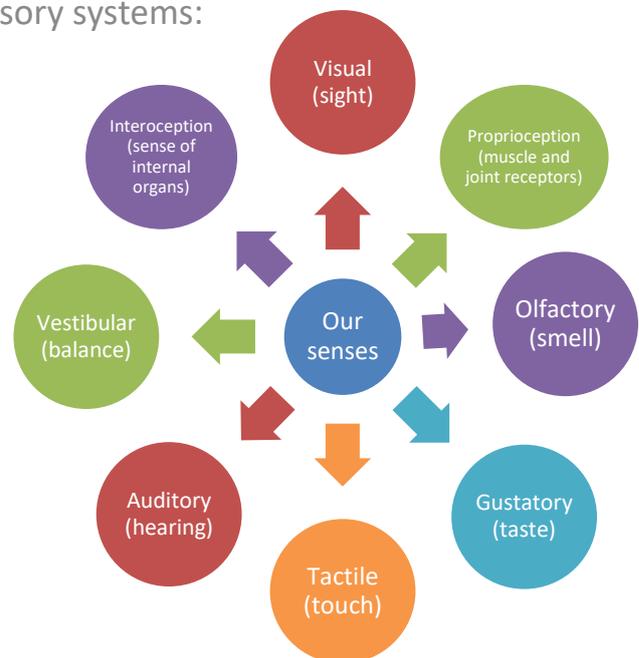
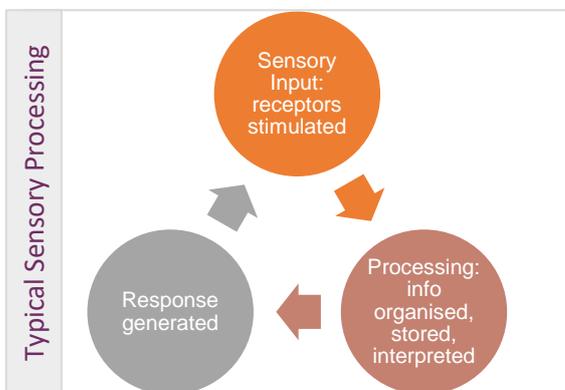




## Sensory Processing Difficulties

Sensory Processing is a neurological process that refers to our ability to take in information through our body and from the world around us. It's how we organise, interpret and make sense of this information to enable a purposeful response. Our senses are fundamental to development and the ability to participate in daily activities.

We have eight sensory systems:



Our fundamental systems are vestibular, proprioceptive and tactile.

### The Tactile System (touch, pain, temperature and vibration):

Touch is vital for secure emotional development; our wellbeing is affected by how we experience and interpret touch. It senses both light touch (alerting) and deep pressure (calming) as well as enabling us to discriminate between objects/surfaces.

The tactile system has a primitive response to danger that can trigger a fight or flight response. Tactile discrimination enables us to identify the size, shape, texture and temperature of an object.

Note: Deep pressure touch is calming and over-rides alerting light touch. We can use this to help with regulation.

*Note: Many children with sensory differences have eating difficulties - eating is the only activity that children do which requires them to use all 8 senses at the same time.*

# Sensory Processing Difficulties



**ADDvanced Solutions**  
Supporting you to find the answers

## The Vestibular System (balance, movement and gravity):

Our vestibular system is based close to our inner ear and provides an unconscious awareness of position and movements in and through space. It detects all head movements and also gravitational force.

This system supports muscle tone, posture and balance, and stabilises our visual field when our head moves.

Note: Rotary movement is **alerting**, rhythmic linear movement is **calming**, we can use both to help with regulation.

## The Proprioceptive System (body awareness, muscles & joints):

This system picks up the position of our body, or body segments in space and provides information regarding effort needed to grasp and lift. It follows the same pathway to the brain as deep pressure touch and so is calming and regulating.

Note: Proprioceptive input is **calming** when we need it or **alerting** when we need it, we can use this to help with regulation.

### In any of our eight senses we can:

- ❖ Be hyper- or over-responsive: over sensitive to this sensation
- ❖ Be hypo- or under-responsive: under sensitive to this sensation
- ❖ Have discrimination difficulties: where it is difficult to process and make sense of this sensation

**Interoception** - tells us what is going on inside our body, e.g. hot / cold, hungry / full up, thirsty, nausea, fever, internal pain, and when we need to go to the toilet

**Visual (vision):** processing visual information. A person with a visual processing difficulty could have perfect vision but struggle to process visual information.

**Auditory (hearing):** effective auditory processing enables us to filter out non-essential sounds to enable a person to focus on essential auditory information

**Olfactory (smell):** smell is the most difficult sense to treat, try to over-ride it with a smell that they are able to tolerate.

**Gustatory (taste):** children may prefer very strong or very bland tastes.

Liverpool / Halton / Knowsley / Sefton / Wirral: 0151 486 1788

St Helens: 01744 582172

Warrington: 01925 320863

Email: [info@advancedsolutions.co.uk](mailto:info@advancedsolutions.co.uk)

[www.advancedsolutions.co.uk](http://www.advancedsolutions.co.uk)