

- My name is Beth Kitchen and I am a Autism and Sensory Processing Specialist Educational consultant.
- With my expertise in autism and sensory processing, alongside my many roles within education, I know there is a huge gap in the system for support with those with SPD.
- I am passionate about the subject and I am so pleased that you are joining me on my mission to change the UK's outlook on sensory processing.
- Although I work all over the UK in person, I have written and designed this course specifically for the online community. The idea is that you can access and complete units of the course, in your own time and at your own speed.
- All together you will complete 12 units, and a short assessment will follow after each one- this maybe a short quiz or a case study to complete.







# Course Outcomes

- Sensory Processing- What is it?
- Sensory Processing Behaviors
- The Senses and Their Roles in SPD
- Sensory Profiling
- Sensory Diets
- Sensory Circuits
- Sensory Action Plans
- Regulation
- ARFID- a basic introduction
- Sensory in the Home
- Ethical and Professional Considerations
- Summary and Assessment





**APPROVED  
PROVIDER**

**#781613**

Verify @ <https://thecpdregister.com>



**ACCREDITED  
ACTIVITY**

**8 CPD CREDITS**

**#1015575**

Verify @ <https://thecpdregister.com>

# CERTIFICATE

Of Completion

\_\_\_\_\_  
This is to certify that the above candidate  
has completed the Advanced Sensory Needs  
Practitioner Training with BSensory Training



DATE: \_\_\_\_\_

*B. Kitchen*

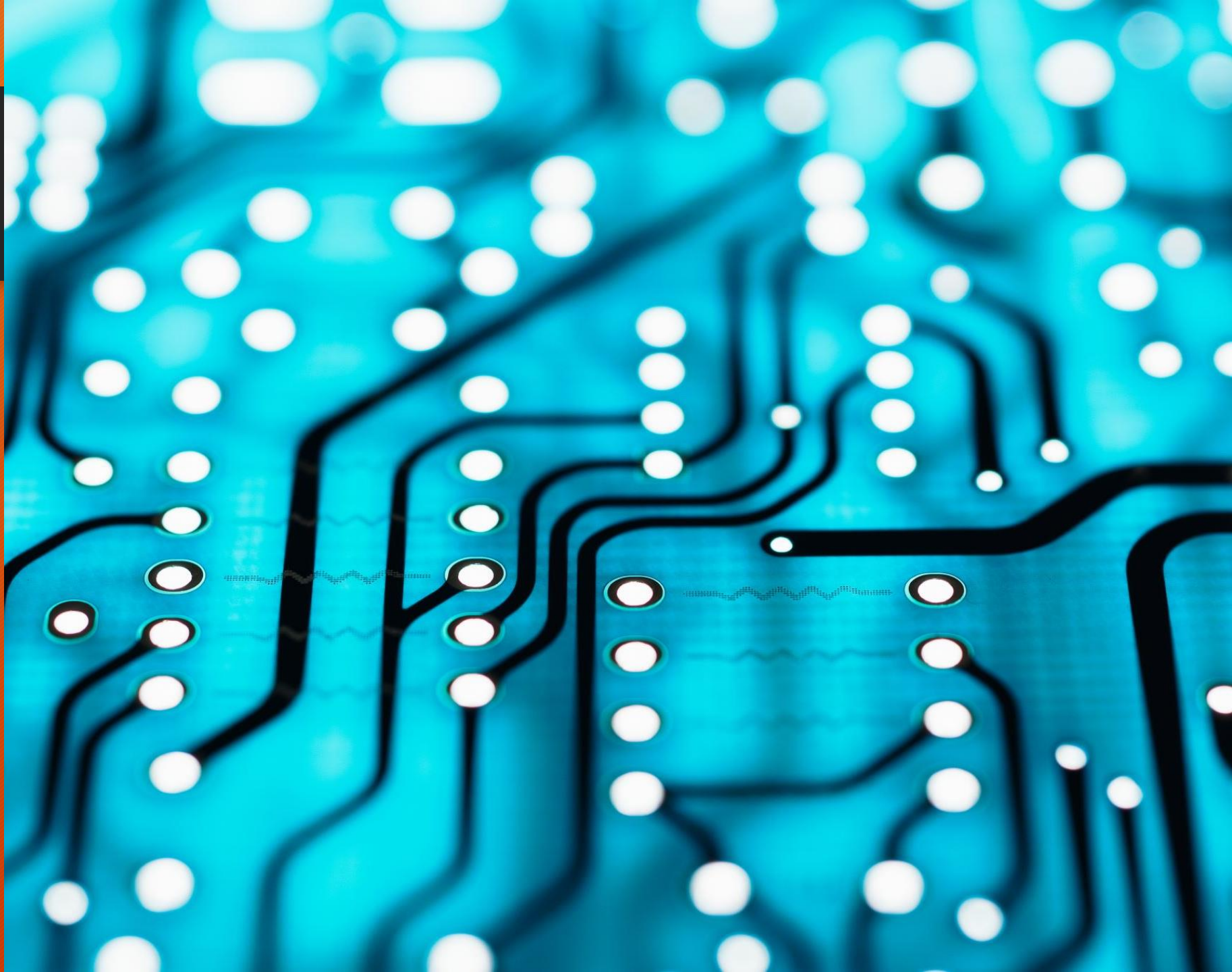
BETH KITCHEN

Managing Director BSensory.org





# Sensory Processing Difficulties (SPD)





# Unit 1- What is Sensory Processing?





# Everybody has sensory needs...

- What do you seek? What do you avoid?
- Does it impact on your everyday life?







Provided by the NAS



# I'm not naughty, I just get too much information

- Noises- music, alarms, balloons, talking, machines, people drinking/eating (misophonia), laughter, plastic bags
- Lights- Main lights, reflective tiles, flashes, T.V's
- Patterns- Patterned tiles, colorful bags, logos, shop windows, shoe lace undone
- Smells- food, perfume, other people
- Movement- movement of people, added movement (eye on the T-Shirt), movement of toys
- Other people- looking, facial expressions, touching or getting too close
- Other considerations- anxiety, temperature changes







# What is SPD?

- SPD (Sensory Processing Difficulties) is a condition where the brain and nervous system have trouble processing or integrating stimulus.
- SPD is a neurophysiological condition in which sensory input – either from the environment or from one's body – is poorly detected or interpreted and (or) to which atypical responses are observed.

## Describe Sensory Processing Disorder

**“a neurological disorder that is like a virtual traffic jam in the brain. The information from all eight senses is misinterpreted which causes a child (person) to often act inappropriately.”**

**October is  
Sensory  
Awareness  
month**





# What is sensory Integration?

- Normal neurological process of organising sensation for use in everyday life
- If there is a problem with the way a child processes this sensory information, then this can result in delays in development and can be extremely uncomfortable for the child





# SPD Studies



- Recent research and studies on SPD have shown a growing understanding of the neurological basis of the disorder.
- There is evidence to suggest a genetic component to SPD, as well as an association with other developmental disorders such as autism spectrum disorder.
- Researchers have also identified differences in brain structure and function in individuals with SPD, particularly in areas related to sensory processing and integration.
- Additionally, studies have highlighted the impact of early intervention and sensory-based therapies in improving outcomes for individuals with SPD.
- Overall, the latest research emphasizes the importance of recognising and addressing SPD as a legitimate neurodevelopmental condition that requires specialised support and accommodation in educational and child service settings.



# Not just ASC!



90% of children with ASC have SPD



# Conditions Linked to Sensory Processing Difficulties



Autistic  
Spectrum  
(ASC)



Attention Deficit  
Hyperactivity  
Disorder



Anxiety  
Disorders



Obsessive-  
Compulsive  
Disorder



Developmental  
Coordination  
Disorder (DCD)



Learning  
Disabilities



Post-Traumatic  
Stress Disorder



Tourette  
Syndrome (rs)



Sleep  
Disorders



Feeding and  
Eating Disorders



Depression



Panic Attacks



Panic Fatigue  
or Exhaustion



Chronic Fatigue  
or Exhaustion



# But what does SPD look like?

- Your brain is designed to do 2 things- keeping yourself safe and to learn
- Our natural primitive “fight or flight” instinct is what keeps us safe
- In order to learn the brain will take in information from all the senses and process this information for us to learn from

## The Job of the Brain



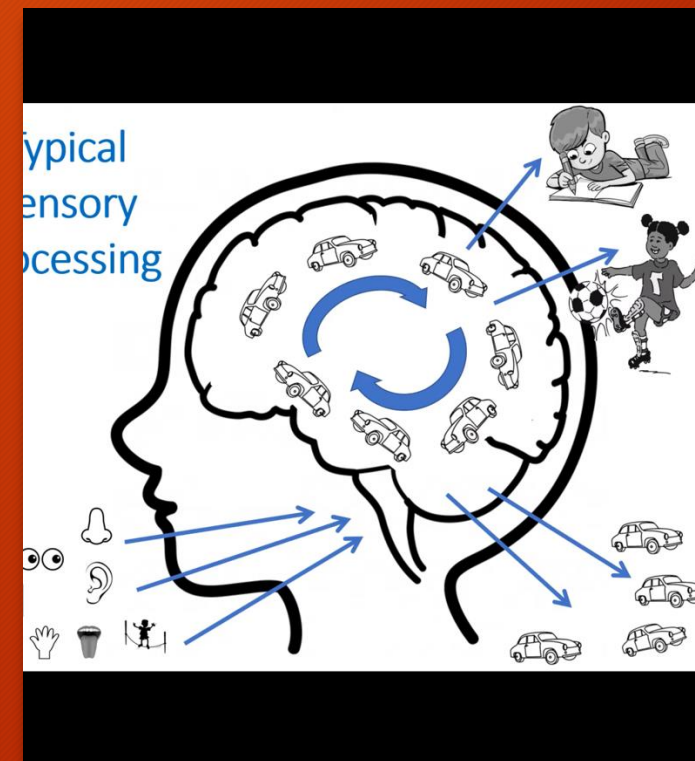
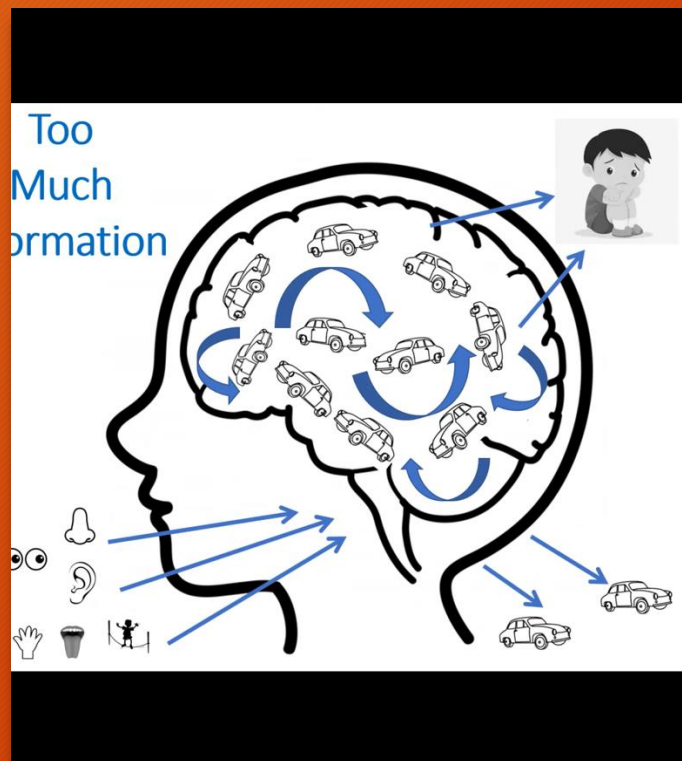
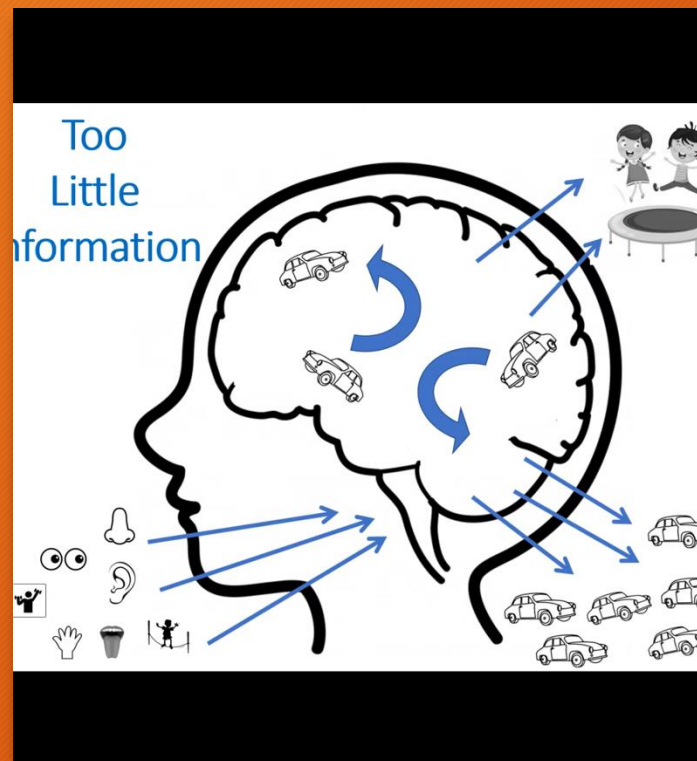
1<sup>st</sup> – Keep us safe!

2<sup>nd</sup> – To learn



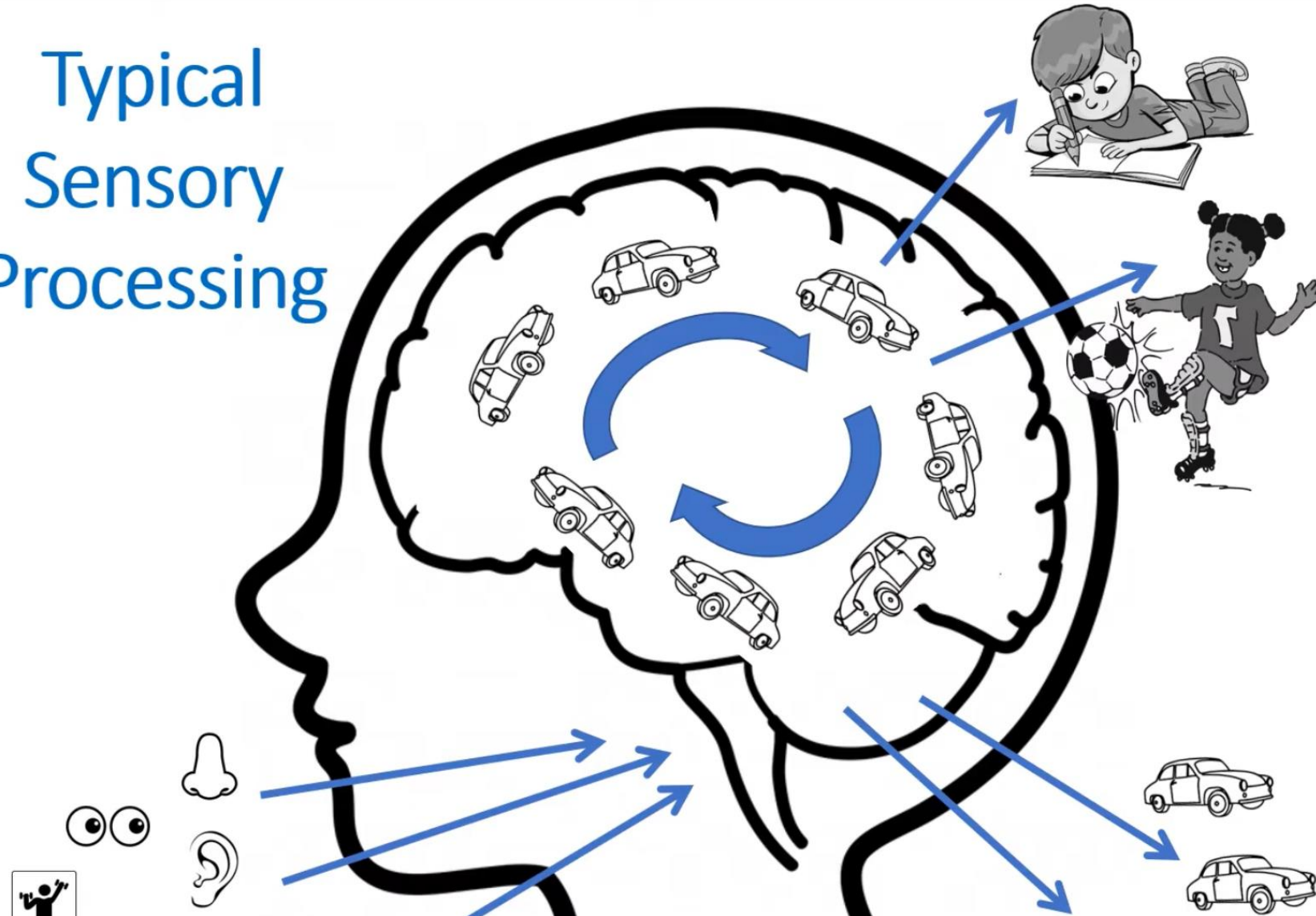
In order to do this the brain needs a range of appropriate sensory information.





The brain takes in information, filters out unnecessary information and keeps what it needs to know

# Typical Sensory Processing



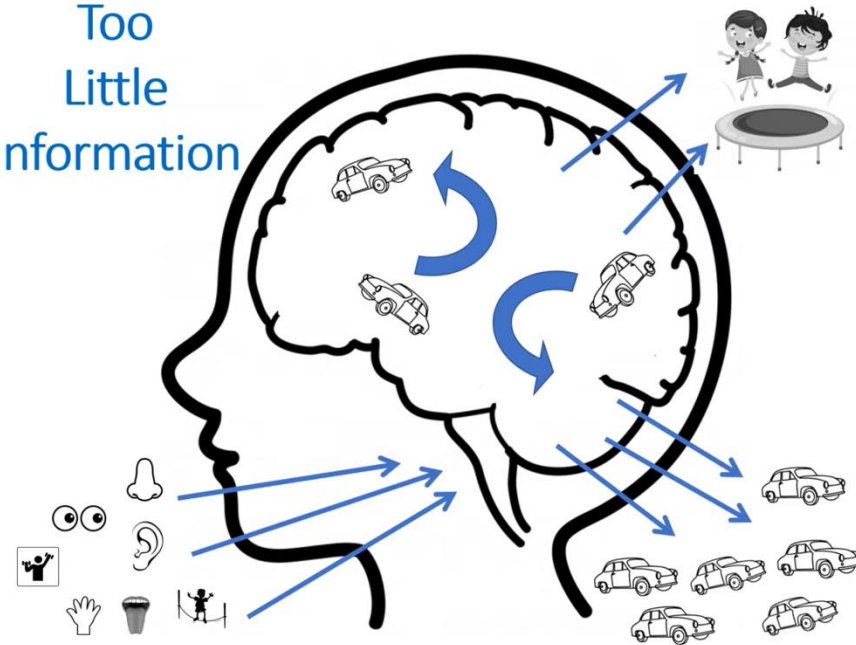




## Too Little

- Sometimes the brain filters out too much information
- This means the brain is under stimulated and this can cause someone to lethargic and sluggish
- Sometime these children can act unexpectedly to a situation or person they have previously enjoyed
- These behaviours can be quite subtle, and often get missed. The problem with not tackling these behaviours mean that children can suddenly become overwhelmed or over time the behaviours can become more extreme

Too  
Little  
Information

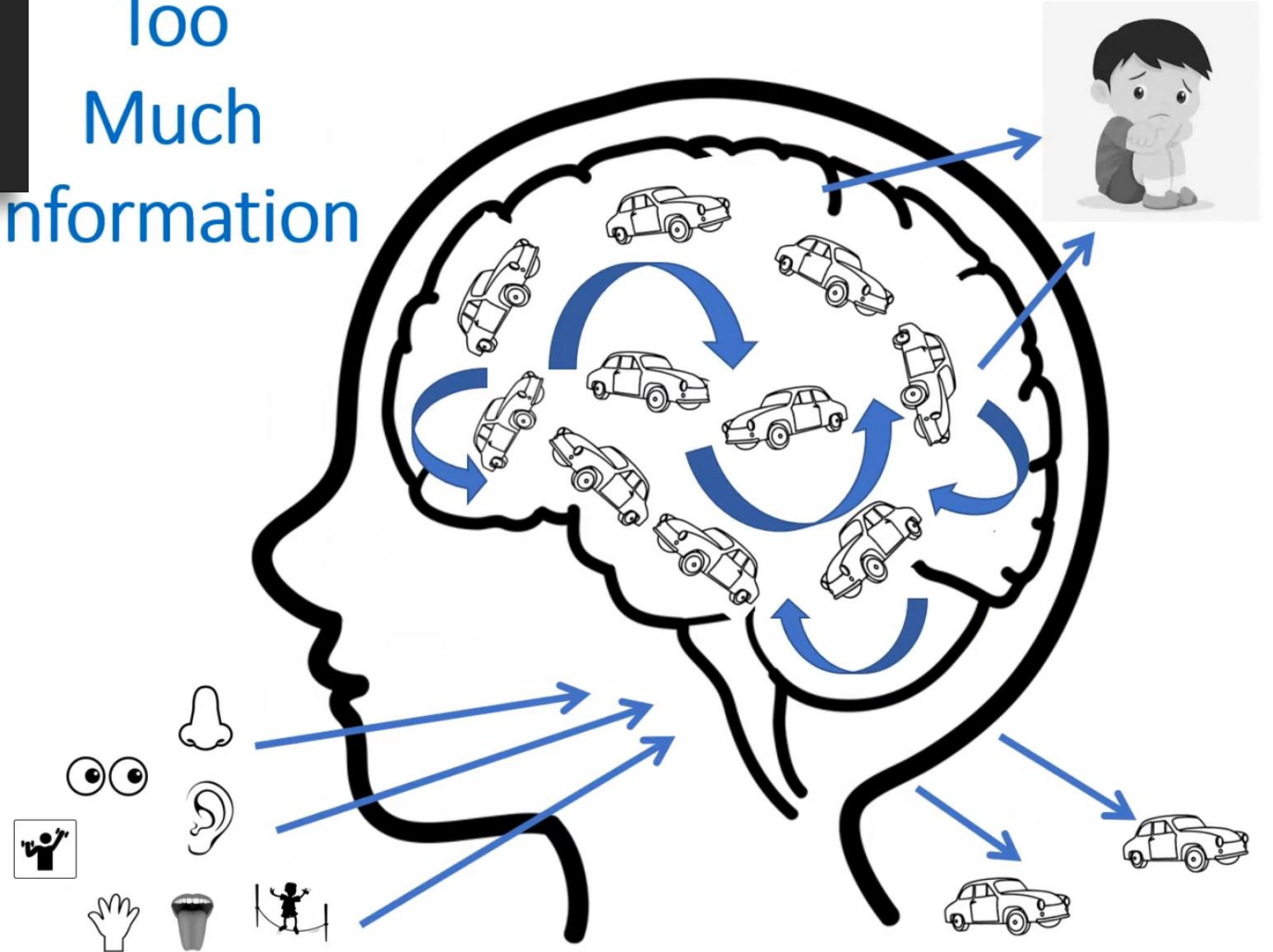




# Too Much

- Sometimes the brain doesn't filter out enough information
- This results in the brain being over stimulated and can result in confusion, upset, frustration and the brain "shutting down" to cope
- This is not a "meltdown", it is sensory crisis

## Too Much Information







# A Fine Line...

- Most people can stay in a constant balanced state of calm and alert- this is where we are settled but if needed to we will flit into alert- such as reacting to a fire alarm or preforming an emergency stop in the car. We would go into high alert to keep us safe, but can easily return to calm after the incident.
- High arousal is when we we are required to be on high alert and taking a lot of information in (for example playing a sport, having an argument, keeping yourself safe)
- Low arousal is when we tell our body and brain to start relaxing and “shutting down” so we are able to fall asleep at night



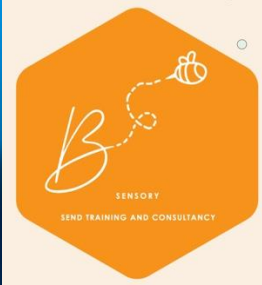


# A Fine Line....

- People with SPD often struggle to stay in the calm and/or alert status and will spend more time in the low and/or high level of arousal
- It also means that people with SPD can suddenly flit from low arousal with “no obvious build up or triggers” and/or they go from “0-100 in a split second”
- Because there is such a fine line, often there little escalating behaviors that lead to the high arousal, meaning it is hard to step in and deescalate the situation







# Sensory Processing



Eyes- 10,000,000 bits per second



Ears- 100, 000 bits per second



Nose- 100,000 bits per second



Mouth- 1,000 bits per second



Body- 1, 000, 000 bits per second



Sensory input=  
11 million bits/sec

Attention, educational retainment,  
social integration, emotional  
regulation =  
70 bits/sec.... Max!







## Unit 2- Sensory Processing Behaviors

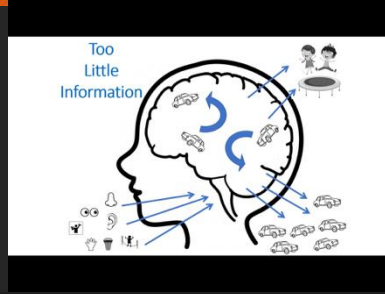
# Seeking, avoiding, sensitivity

- Understanding these distinctions can help caregivers, educators, and clinicians support individuals with sensory processing difficulties by providing appropriate accommodations, sensory strategies, and interventions tailored to their specific sensory needs and preferences.

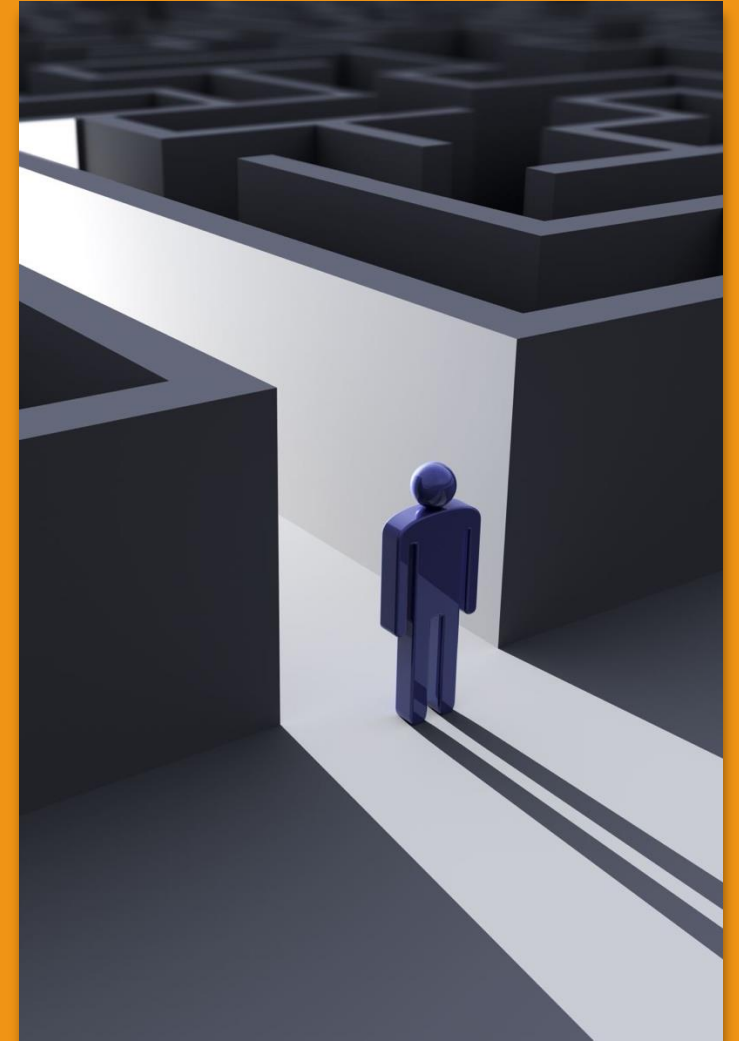




# Sensory Seeking



**Definition:** Sensory seeking refers to behaviours in which individuals actively seek out or crave sensory stimulation. They may engage in activities or behaviours that provide intense sensory input, often seeking out novel or stimulating experiences.



# Characteristics

Seeking out activities that provide intense sensory input, such as spinning, jumping, or crashing into objects.

Craving sensory-rich environments, such as loud music, bright lights, or crowded spaces.

Engaging in repetitive or stimulatory behaviours, like rocking, hand-flapping, or finger flicking.





# Purpose

Individuals with sensory seeking behaviours may seek out sensory stimulation to:

- regulate their arousal levels
- increase alertness
- or satisfy sensory cravings.

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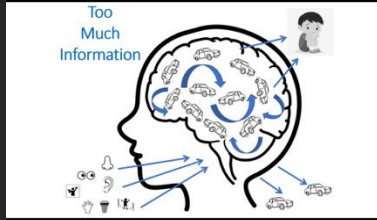
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- # Purpose
- Individuals with sensory seeking behaviours may seek out sensory stimulation to:
- regulate their arousal levels
  - increase alertness
  - or satisfy sensory cravings.





# Sensory Avoiding



- **Definition:** Sensory avoiding involves behaviour's in which individuals actively avoid or withdraw from sensory stimuli that they find aversive or overwhelming. They may exhibit avoidance behaviour's to minimize exposure to certain sensory experiences.





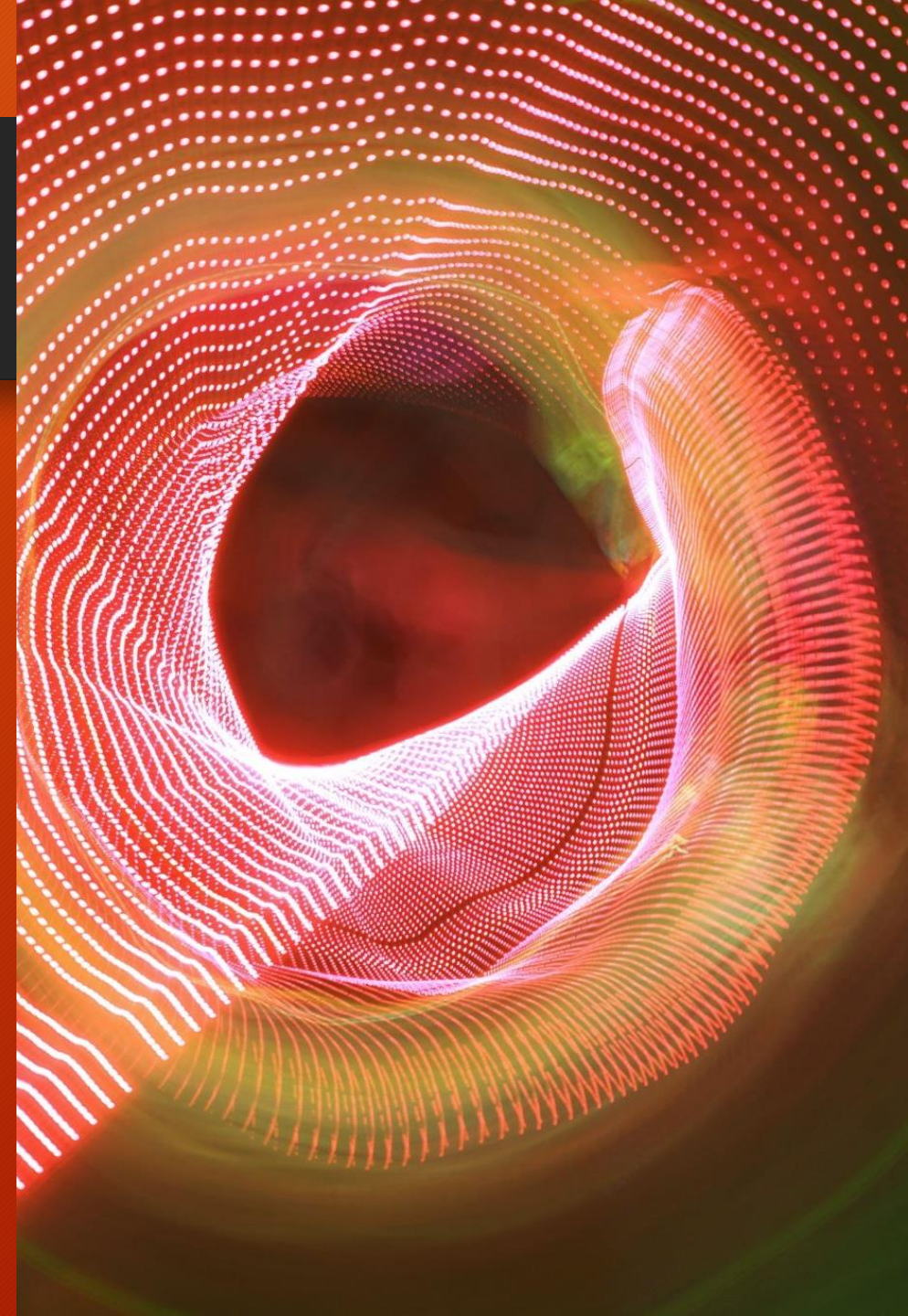
# Characteristics

Avoiding situations or environments with loud noises, bright lights, strong smells, or crowded spaces.

Covering ears or eyes in response to sensory stimuli.

Becoming distressed or anxious in sensory-rich environments.

Showing avoidance behaviours in response to certain textures, tastes, or smells.





# Purpose

Individuals with sensory avoiding behaviours may seek to:

- reduce sensory overload and anxiety
- or discomfort by minimizing exposure to aversive sensory stimuli.





# Sensory Sensitivity

- **Definition:** Sensory sensitivity refers to heightened responsiveness or reactivity to sensory stimuli. Individuals with sensory sensitivity may have a lower threshold for sensory input, leading to exaggerated or intense responses to sensory stimuli that others may perceive as mild or non-threatening.



# Characteristics

Reacting strongly to sensory stimuli, such as becoming overwhelmed by background noise, feeling discomfort from clothing tags, or being bothered by strong smells.

Displaying heightened emotional responses or meltdowns in response to sensory triggers.

Experiencing sensory overload or shutdown in overwhelming sensory environments.

Demonstrating difficulty filtering out irrelevant sensory information.





# Purpose

- Sensory sensitivity may serve as a protective mechanism, alerting individuals to potential threats or dangers in their environment. However, it can also lead to challenges in daily functioning and coping with sensory experiences.




# Assessment

- Quiz time!







# Unit 3-The Senses and Their Roles





# Early Signs of Sensory Processing Difficulties (Ages 0–5)

## 1. Tactile (Touch)

- Overreacts to touch (e.g. cries when hands or face are messy)
- Avoids certain textures (clothing, food, materials)
- Dislikes being cuddled or held unless on their own terms
- Over- or under-reacts to pain
- Distressed during grooming hair brushing, washing, nail cutting

## 2. Auditory (Hearing)

- Easily startled by sounds
- Covers ears in response to normal sounds (e.g. vacuum, hand dryers)
- Appears not to notice or respond to name being called
- Becomes upset in noisy environments (classrooms, supermarkets)

## 4. Olfactory/Gustatory (Smell & Taste)

- Strong aversion to certain smells (even subtle ones)
- Limited food preferences or very picky eater
- Smells objects or people excessively
- Avoids trying new foods or gags at the smell of food

## 5. Vestibular (Balance & Movement)

- Fearful of movement (e.g. swings, slides, stairs)
- Craves movement (spinning, rocking, jumping)
- Poor balance or frequent falls
- Avoids gross motor play (e.g. climbing, riding toys)

## 6. Proprioception (Body Awareness)

- Appears clumsy or uncoordinated
- Seeks deep pressure (tight hug, crashing, pushing)
- Uses too much or too little force (e.g. rough with toy or people)
- Difficulty with motor planning (e.g. imitating actions)



# Reasonable adjustments

- While we are talking through the sense, we will be looking at “what can we do to help?”
- The suggestions are reasonable adjustment
- Reasonable adjustments are small alterations that remove barriers to learning
- Every child in the UK education system are protected by law with reasonable adjustments
- They do not need or waiting for a diagnosis



# What does OFSTED say?

Many professionals feel the pressure to have a “Ofsted Ready” learning environment however what does OFSTED actually say?

In the 2021 inspection handbook, Ofsted outlined no specifics about what displays should look like in classrooms. They do however make a note about the environment pupils learn in, which displays influence:

Positive- Ofsted wants to see a ‘calm and orderly’ positive classroom environment that is centred entirely around the needs of the pupils in the class ‘as this is essential for pupils to be able to learn’.

Inclusive- The classroom environment should promote inclusion and be representative of all pupils irrespective of age, disability, gender reassignment, race, religion or belief, sex or sexual orientation’.



# Tactile processing

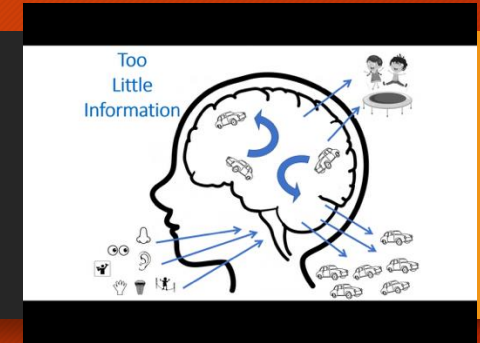
- The tactile system is responsible for processing touch information from the body
- The body sends tactile information to the somatosensory cortex through neural pathways to the spinal cord, the brain stem, and the thalamus
- The tactile system is extremely important in SPD. Many individuals with the disorder have tactile symptoms such as tactile defensiveness or under-responsivity to touch and pain. The touch system is one of the three foundational systems used in sensory integration treatment





# Signs of Too Little Tactile Input (Tactile Hyposensitivity)

- ✓ Craves constant touch, fidgets often
- ✓ Prefers tight or heavy clothing like hoodies
- ✓ Enjoys rough play that involves crashing, tackling
- ✓ Seems unaware of dirt, bruises, cuts, or temperature changes on skin
- ✓ Seeks out deep pressure (squeezes, bear hugs)
- ✓ Frequently touches or rubs objects
- ✓ Likes holding, or even mouthing, objects
- ✓ Overly focused on touching other people



## 4 Summary

Proprioceptive difficulties are not always obvious but can have a significant impact on:

- ✓ Movement and coordination
- ✓ Self-regulation or even mood, objects
- ✓ Overly focused on touching other people



# (TACTILE HYPERSENSITIVITY)



Strong reactions to light touch or unexpected contact



Avoids certain clothing, shoes, or fabrics



Resists grooming activities (e.g., hair brushing, face washing)



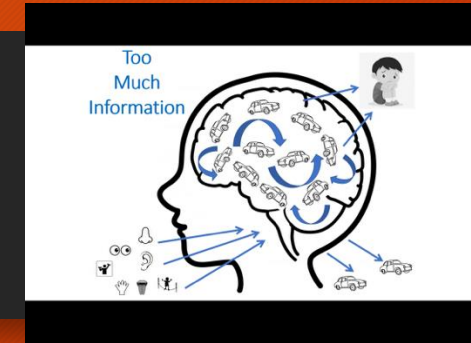
Dislikes getting hands messy or play like sand and finger-painting



Distressed by close proximity, e.g. crowds or hugs



Trouble maintaining eye contact (may



# What can we do?

**Tactile**

Allow for uniform  
to be relaxed

Allow pupils time  
to adjust uniform

Allow for complete  
adjustment on  
uniform such as  
leggings

Writing aids/grips

Use of tactile  
activities in lessons

Use of weighted  
blankets in the  
learning  
environment

Allow for tactile  
comforts in  
learning  
environment





# Here are some strategies to create such an environment:

**Provide a Variety of Textures:** Incorporate a variety of tactile textures throughout the environment, including smooth, rough, soft, and textured surfaces. Use materials such as wood, fabric, stone, or rubber to create tactile diversity and opportunities for sensory exploration.

**Offer Sensory Stations:** Create sensory stations or areas within the environment that provide opportunities for tactile exploration and stimulation. Offer bins or trays filled with sensory materials such as sand, rice, beans, or textured fabrics for individuals to touch and manipulate.

**Use Tactile Pathways or Trails:** Design tactile pathways or trails within the environment that incorporate textured surfaces such as gravel, grass, bark, or stepping stones. These pathways can provide opportunities for individuals to engage in barefoot walking or tactile exploration.

**Incorporate Sensory Gardens:** Create sensory gardens or outdoor spaces that feature a variety of tactile plants and elements such as flowers, herbs, grasses, and sensory pathways. Encourage individuals to touch, smell, and interact with the plants to engage their tactile senses.

**Offer Sensory Seating and Furniture:** Provide seating and furniture options that incorporate tactile elements such as cushions, bean bags, or textured upholstery. Offer seating with varying textures and firmness levels to accommodate individual preferences.

**Provide Sensory Tools and Equipment:** Offer sensory tools and equipment such as fidgets, textured balls, or tactile toys to support tactile exploration and regulation. These tools can provide opportunities for individuals to engage in tactile stimulation and promote sensory integration.

**Create Sensory Play Areas:** Designate areas within the environment for sensory play activities that incorporate tactile materials such as playdough, kinetic sand, or water beads. Provide opportunities for individuals to engage in messy play and tactile exploration in a controlled and supervised setting.

**Use Visual Supports and Labels:** Incorporate visual supports and labels to help individuals navigate the environment and understand the purpose of tactile materials and sensory stations. Use visual cues such as pictures, symbols, or colour coding to enhance accessibility and comprehension.

**Offer Sensory Integration Activities:** Encourage participation in sensory integration activities that incorporate tactile input, such as yoga, massage, or art therapy. These activities can help individuals regulate their sensory experiences and promote relaxation and well-being.

**Seek Feedback and Collaboration:** Regularly seek feedback from individuals and caregivers about their tactile sensory experiences and preferences. Collaborate with sensory specialists and occupational therapists to identify strategies and accommodations that promote a positive and inclusive tactile sensory environment.

By implementing these strategies, you can create a tactile sensory-friendly environment that accommodates individuals' tactile sensory needs and preferences, promotes sensory exploration and engagement, and enhances overall well-being and participation.

## Common Diagnoses & Conditions Impacted by Tactile Difficulties

### Global Developmental Delay -GDD

Mixed tactile responses—may show tactile defensiveness or low awareness  
Impacts engagement in play, dressing, and hygiene  
May delay independence in self-care routines

9

### Autism Spectrum Condition (ASC)

High sensitivity to tags, clothing textures, grooming (haircuts, tooth brushing)  
May refuse hugs or certain types of touch  
Alternatively, may seek deep pressure and tactile input  
Touch sensitivity can impact emotional regulation and behaviour

1

### Sensory Processing (SPD)

Core feature: tactile defensiveness or seeking  
Discomfort with messy play, washing hands, or being barefoot  
May overreact to minor bumps or touch  
Avoidance of specific textures (foods, fabrics, materials)

2

### ADHD

Increased restlessness may include tactile seeking (touching surfaces, fidgeting)  
Sensory sensitivities may lead to distractibility  
Difficulty filtering out irrelevant tactile input in busy environments

3

### Developmental Coordination Disorder (DCD) / Dyspraxia

May avoid tactile-rich activities like crafts or dressing independently  
Difficulties processing touch input can impact motor planning  
Trouble recognising tactile feedback (e.g., holding pencil, buttons)

4

### Down Syndrome

Often accompanied by low tone, which can affect tactile discrimination  
May seek touch input to support sensory awareness  
May present with sensory-seeking behaviours for regulation

8

### Obsessive-Compulsive Disorder (OCD)

Although not a sensory disorder, tactile triggers (e.g., sticky feeling, contamination fears) can lead to compulsions or avoidance  
May struggle with hygiene tasks due to texture sensitivities

7

### Trauma / Developmental Trauma

Tactile input can trigger past memories or fight/flight responses  
Children may react strongly to unexpected or gentle touch  
May avoid closeness or grooming, or overreact to physical proximity

6

### Fetal Alcohol Spectrum Disorders FASD

Hypersensitivity to textures, tags, or grooming routines  
May seek pressure or resist touch due to inconsistent body awareness  
Often display emotional outbursts linked to sensory triggers

5



# Shopping List

<https://www.bsensory.org/resources/tactile-environmental-adj/>

# Visual processing



- The primary visual area of the brain is the occipital lobe. Projections are received from the retina where different types of information are encoded
- Types of visual information include: colour, shape, orientation and motion. From the ventral stream information is processed to tell you what objects are
- People with SPD can often have hyper sensitivity or underactive processing of this information, with the brain either filtering out too much or too little information

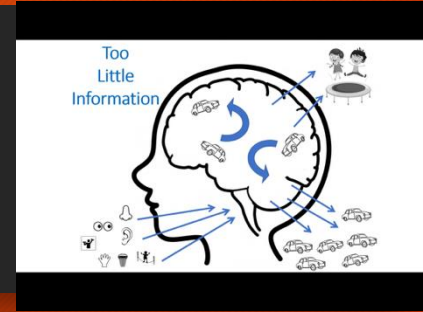


# Signs of Too Little VISUAL INFORMATION

## with Sensory Processing Difficulties

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- Poor eye contact, may look away during conversation
- Difficulty locating objects in plain view (visual scanning problems)
- Bumping into furniture, doorways, other people
- Writes with excessive pressure, often breaking pencils
- Difficulty copying from the board
- Positioning face close to books, screen, or paper when reading
- Loses place or skips lines while reading
- Clumsy, uncoordinated, often struggles in sports



# Signs of “Too Much” Visual Information



Covering, squinting or rubbing eyes



Easily distracted or visually jumping around



Trouble focusing in bright or busy environments



Avoiding eye contact



Difficulty keeping place when reading



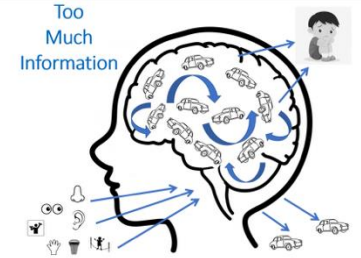
Aversion to screen time, board games, or puzzles



Dislike of fluorescent or flickering lights



**Note:** These behaviours may indicate sensory processing disorder (SPD) when persistent or disruptive.





What can  
you see?







A learning environment?





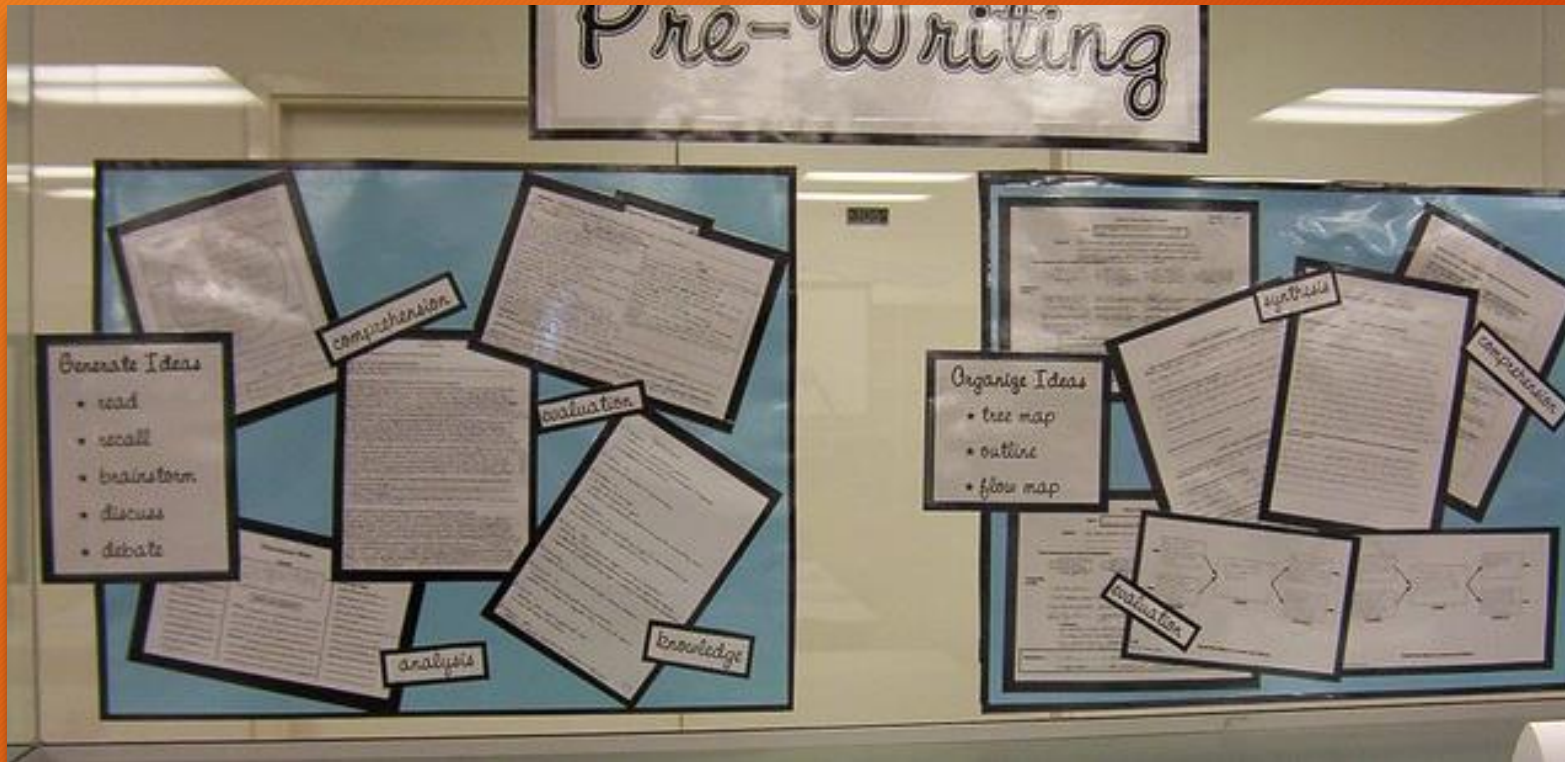


Too much Information

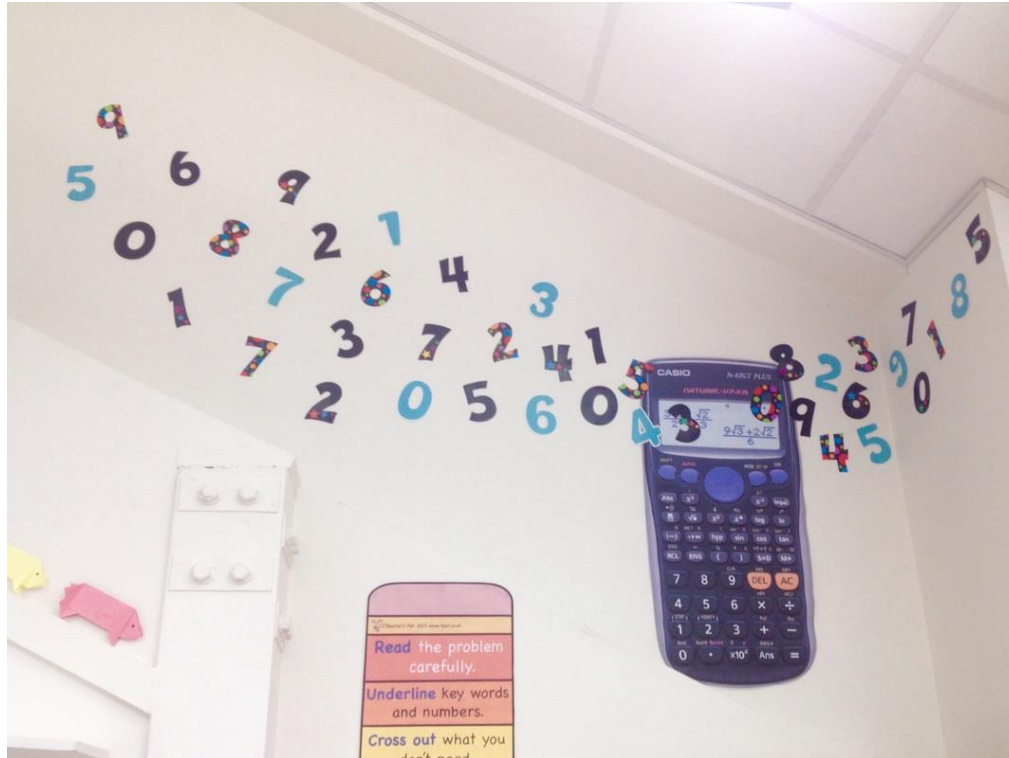


Too much colour





Too Shiny



Useful information?





...Why?





Is it necessary?



# What can we do?

## Visual

Reduce lighting in the classroom

Reduce use of smartboard

Reduce information on slideshows/worksheets (break it down) and reduce movement

Use of visual aids such as timetable, overlay and now/next

Reduce display board information and information in the classroom

Be conscious of clothing and accessories

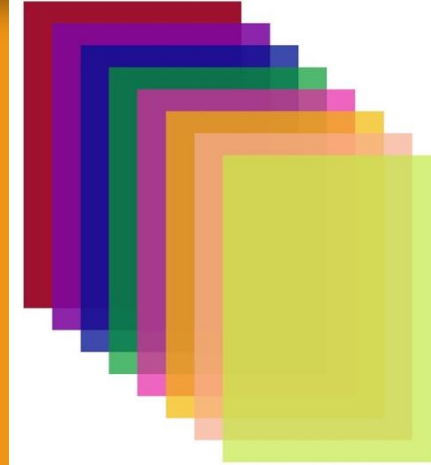
Sunglasses/ desk dividers

Use matt not gloss lamination

Colored or recycled paper for worksheets



New lower price  
**ÖVNING**  
Desk divider with compartments  
£9



# Environmental Adjustments

**Understanding Sensory Needs:** Recognise that each student may have different sensory needs. Some may be hypersensitive to visual stimuli, while others may seek out visual input.

**Flexible Seating Arrangements and desk dividers:** Allow for flexible seating arrangements to accommodate different sensory preferences. Use of desk dividers can reduce the amount of visual information from the classroom environment and organise stationary.

**Reduce Visual Clutter:** Minimise visual clutter in the classroom by keeping walls, bulletin boards, and displays clean and organised. Remove unnecessary decorations or distracting materials that may overwhelm students with sensory sensitivities.

**Use Calming Colours:** Choose calming and neutral colours for the walls and furniture to create a soothing environment. Soft blues, greens, and earth tones are often preferred, as they can help reduce visual overstimulation. Use of natural materials on display boards and reducing colour on titles and backing.

**Adjust Lighting:** Ensure that lighting is adjustable to accommodate students who are sensitive to bright or fluorescent lights. Use natural light whenever possible and consider adding LED strip lights or lower lighting.

**Visual Schedules and Supports:** Implement visual schedules and routines to provide predictability and structure for students. Be cautious with the amount of pictures, colours on picture, words and lamination- pictures should be minimal, paper should be coloured, and lamination should be matt not gloss.

**Minimise worksheet and Smart Board information:** Reduce information on worksheets, either by cutting them up or boxing the information. Reduce images and colours. Use of coloured/recycled paper or use of reading overlays to reduce the amount of white. When using Smart Boards- reduce information, movement (bullet points whizzing in) and use a board overlay or change the colour of PowerPoint presentations backgrounds to a pastel colour.

**Be mindful of clothing and accessories:** Reduce patterns and colours on clothing and try to aim to wear more neutral clothing. Lanyards should be plain and neutral as well.

**Dark Spaces and equipment:** Designate darker areas or sensory corners where students can retreat to when feeling overwhelmed. Use of sunglasses or anti-glare glasses for pupils.

**Promote Student Input:** Encourage students to provide input on classroom design and sensory accommodations. Foster a supportive environment where students feel comfortable expressing their needs and preferences.

**Regular Evaluation and Adjustment:** Regularly evaluate the effectiveness of sensory accommodations and make adjustments as needed based on feedback from students, parents, and staff. Flexibility and responsiveness are key to creating a truly inclusive and sensory-friendly classroom environment.



# Conditions & Diagnoses Linked to Visual Processing Difficulties

## Global Developmental Delay -GDD

May have delayed visual-motor integration  
Poor attention to visual details or tasks  
Difficulty interpreting or responding to visual cues

9

## Cerebral Visual Impairment (CVI)

Neurological vision disorder (brain-based, not eye-based)  
May not recognise familiar faces or objects  
Difficulty processing complex visual scenes or tracking moving targets

8

## Learning Disabilities- e.g., Dyslexia

Trouble with letter/word recognition, tracking across a page  
May reverse letters, lose place, or struggle with spacing  
Not an eyesight issue—linked to visual perception and processing

7

## Trauma / Developmental Trauma

Hyper-vigilance may cause increased visual scanning of the environment  
Difficulty with eye contact, facial recognition, or visual memory  
May become visually overwhelmed in busy or stimulating settings

6

## Fetal Alcohol Spectrum Disorders FASD

May have poor visual tracking and visual-motor integration  
Struggles with reading, writing, and spatial awareness  
Difficulty interpreting visual social cues

5

## Autism Spectrum Condition (ASC)

Hypersensitive to visual clutter, fluorescent lights, fast movement  
May avoid eye contact or visual stimuli  
Can misread body language or facial expressions  
Difficulty with visual filtering (e.g., overwhelmed by busy environments)

1

## Sensory Processing (SPD)

Can be over- or under-responsive to visual input  
Struggles with visual tracking, copying, or finding objects  
May lose place when reading or skip lines  
Sensitivity to light, contrast, or cluttered visual fields

2

## ADHD

Easily distracted by visual stimuli in the environment  
Difficulty maintaining visual attention on tasks  
May miss visual cues or struggle with visual organisation

3

## Developmental Coordination Disorder (DCD) / Dyspraxia

Visual-spatial difficulties (e.g., poor hand-eye coordination)  
Trouble copying patterns or following visual sequences  
May struggle with reading body language or understanding personal space

4

# Shopping List

- <https://www.bsensory.org/resources/visual-processing-environmental-adjustments/>



# Auditory processing



- The auditory system is responsible for hearing
- Specific sound frequencies can be mapped precisely onto the primary auditory cortex
- People who have SPD have filtering difficulties, sometimes allowing too much noise (often shown by people putting their hands over their ears) or too little (people can seem to be ignoring you) or be unable to categorise importance and priority of sounds meaning they focus on a background noise rather than the primary sound



# Signs of Too Little Auditory Input



Not responding to name



Ignoring verbal directions



Appearing disinterested in sounds

Monotone or flat speech



Difficulty recognizing familiar sounds

Making loud noises to self

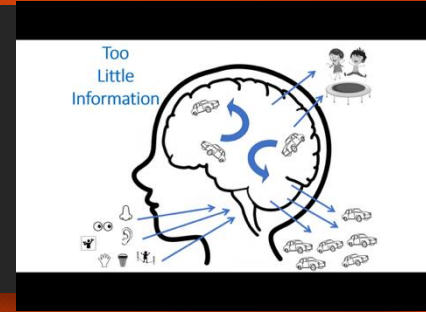


Seeking out noisy surroundings

Seeking out multi-step commands



Confusion with multi-step commands

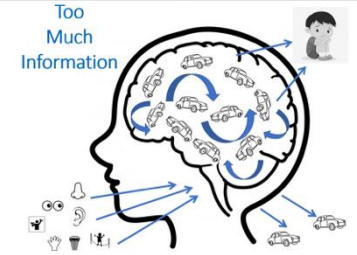


## 4: Signs of Too Little Auditory Input

- Not responsiveness to sounds or unexpected contact
- Avoidance of grooming activities
- Overreaction to light touch (e.g. brushing tightly)



# ! Signs of Too Much Auditory Input



- Clapping hands over ears at sounds
- Fear of specific noises (e.g., vacuum, toilet flush)
- Extreme reaction to loud or unexpected sounds
- Distractibility in noisy environments
- Difficulty following verbal directions
- Avoids noisy or crowded places
- Complains about humming lights or buzzing sounds
- Agitation or distress in noisy settings

# Ear defenders

- The NHS guidance says "*The continued use of ear defenders results in an increase in a child's auditory gain; which means that they become **MORE sensitive towards sounds.***"
- Auditory difficulties, in sensory processing, is something called **Hyperacusis**.
- We can never take away sound- there will always be sounds that we can't control, loud, sudden, different pitches
- The continued use is detrimental to the child.
- For the full NHS guidance, visit [www.bsensory.org](http://www.bsensory.org) (under "free")





Ear defenders should only really be used like an inhaler.

1. You would use your inhaler if your body is in crisis (asthma attack)- you would use the ear defenders if your body and mind are in crisis (full sensory overload)
2. You would use it if you are a little unwell - ear defenders maybe needed more if are a little unwell (the sensory processing system is often hyper stimulated during illness)
3. You would use your inhaler when you are doing some unusual to the every day (like before you play a game of rugby you may need a extra couple of puffs)- you would use the ear defenders if you are doing something unusual to the everyday (such as going to the train station for example)





# Conditions & Diagnoses Linked to Auditory Processing Difficulties

## Global Developmental Delay -GDD

Children with GDD may have immature or delayed auditory processing  
Difficulty interpreting or responding to verbal instructions  
May appear inattentive or delayed in reactions to sound cues

9

## Speech and Language Disorder

Children with delayed or disordered language may struggle to process spoken input clearly  
May not register or respond appropriately to verbal prompts  
Auditory overload can worsen expressive and receptive language struggles

8

## Auditory Processing Disorder (APD)

Specific condition impacting how the brain interprets sounds, not hearing ability  
Difficulties include:  
Mishearing words or similar-sounding sounds  
Trouble following verbal directions  
Asking for repetition often  
Common in school-aged children with academic challenges

7

## Trauma / Developmental Trauma

Hyper-vigilance may lead to over-responsiveness to noise  
Loud or sudden sounds can trigger fight/flight reactions  
Auditory sensitivity can be a result of a brain stuck in survival mode

6

## Fetal Alcohol Spectrum Disorders FASD

Often includes sensory processing differences, including auditory  
May have trouble:  
Regulating to noisy environments  
Filtering voice from background sound  
Tolerating certain pitches or tones

5

## Autism Spectrum Condition (ASC)

Often associated with sound sensitivity or auditory defensiveness  
May cover ears, avoid noisy environments, or show distress at specific sounds  
Can struggle with auditory filtering, making it hard to focus in noisy classrooms or busy settings

1

## Sensory Processing (SPD)

May be over-responsive (panic at fire alarms or hand dryers) or under-responsive (doesn't notice name being called)  
Can struggle with following verbal instructions, especially in busy environments  
Often linked to emotional dysregulation around sound triggers

2

## ADHD

May struggle with auditory attention and filtering due to distractibility  
Background noise may easily pull attention away  
Some children with ADHD use auditory-seeking behaviours (e.g., humming, making noise) to stay alert

3

## Anxiety Disorders

Heightened sensitivity to noise or tone of voice  
Sounds may trigger panic responses or overwhelm  
May avoid settings like assemblies, parties, or busy classrooms

4



# What can we do?



# Environmental Adjustments

**Reduce Noise Levels:** Minimise unnecessary background noise in the classroom to create a quieter environment that is conducive to learning. Consider using sound-absorbing materials such as carpets, curtains, or acoustic panels to dampen sound and reduce reverberation.

**Provide Quiet Areas:** Designate quiet areas or sensory corners where students can retreat to when they need a break from auditory stimulation. Ensure that these spaces are equipped with comfortable seating and calming sensory tools to help students regulate their auditory input.

**Use Visual Supports:** Incorporate visual supports such as visual schedules, visual instructions, and visual aids to supplement auditory information. Visual cues can help students better understand and process auditory information, especially for students with auditory processing difficulties.

**Use Clear and Concise Language:** Use clear and concise language when giving instructions or communicating with students. Break down complex information into smaller chunks and provide visual reinforcement whenever possible to enhance comprehension.

**Provide Headphones with music or sound of choice (Not noise cancelling headphones):** Noise-cancelling headphones or ear defenders for students who are sensitive to auditory stimuli, should not be encouraged. These are detrimental to the auditory processing and should only be used in sensory crisis. For more information on the NHS Guidelines on the use of ear defenders- please see the post "Ear Defenders Advice". Instead the use of headphones *with* sound allow people filter out background noise and focus on tasks without being overwhelmed by auditory distractions, but still having some auditory input.

**Implement Sound-Masking Devices:** Use sound-masking devices such as white noise machines or calming music to create a consistent background noise that can help mask distracting sounds and promote a more comfortable auditory environment.

**Flexible Seating Arrangements:** Provide flexible seating options that allow students to choose a seating arrangement that best suits their auditory needs. Offer seating choices such as bean bags, floor cushions, or wobble stools that allow students to adjust their position for optimal comfort and concentration.

**Use Classroom Management Strategies:** Implement classroom management strategies to minimise disruptive noise and promote respectful listening behaviours. Set clear expectations for noise levels and provide positive reinforcement for students who demonstrate good listening skills.

**Encourage Active Listening:** Encourage active listening skills by incorporating interactive and engaging activities that require students to listen attentively and respond thoughtfully. Use auditory cues such as chimes or bells to signal transitions between activities and capture students' attention.

**Collaborate with Parents and Specialists:** Work closely with parents, caregivers, and specialists such as speech-language pathologists or audiologists to identify students' auditory needs and develop individualized strategies and accommodations. Collaborate with these professionals to ensure consistency and continuity of support across home and school environments.



# Shopping List

- <https://www.bsensory.org/resources/auditory-processing-environmental-adjustments/>

# Gustatory / taste

- The sense of taste is very closely linked to the sense of smell
- It can be an overwhelming sense and one that an individual can really struggle with
- Overly sensitive children can avoid certain foods that other typical children eat and can be upset by certain tastes and smells
- Extreme versions of this can result in a diagnosis of Avoidant Restrictive Food Intake Disorder (ARFID) This condition is when children avoid and restrict food, not as part of a dieting regime but due to sensory needs. This is a diagnosable medical condition
- Children who are under sensitive can crave foods with strong tastes and smells





# Olfactory/smell

- Smell travels directly to the centre of the brain that controls our emotions, memory and learning
- Smell is closely linked to our sense of taste, think about how bland foods taste when we do not have a sense of smell (i.e. due to illness)
- Our brains are wired to respond appropriately to certain smells, for example 'I smell burning so I need to seek out what is happening' etc



# Common Gustatory Seeking Behaviours



## Licking or tasting non-food items

Sometimes mistaken for pica (if persistent.)



## Strong preference for spicy, sour, salty, or extremely sweet foods

Can be related to spricy, jouwrrlery, or inappropriate items regularly.



## Overeating or rapid eating

Preference for crunchy or chewy textures



## Enjoys extreme temperatures in food

Enjoys extreme temperatures in food



## Increased interest in oral motor toys or straws



## Seeking oral stimulation during focus-demanding tasks



## Common Signs of Olfactory Avoidance



## Increased interest in smallbased in or iburnuing



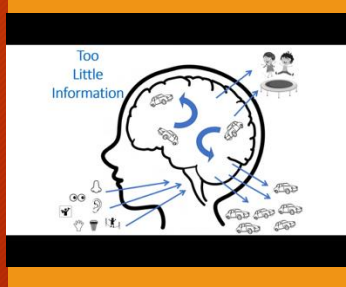


# Gustatory Avoidance

Individuals who are hypersensitive to taste may avoid certain flavours, textures, or food types.

Common signs include:

- ✓ **Extremely limited food repertoire**
  - May eat fewer than 10-15 foods.
  - Often relies on bland, predictable or colourless foods
- ✓ **Gagging or vomiting with certain tastes or textures**
  - Avoidance of mixed-texture foods
- ✓ **Refusal to try new foods (food neophobia)**
- ✓ **Sensitivity to temperature or texture**
- ✓ **Chewing and spitting out food**
  - Avoids brushing teeth or using mouthwash
- ✓ **Complaints about food tasting “too strong” or “burning”**
- ✓ **Emotional reactions to being near disliked foods**
- ✓ **Prefers highly familiar and predictable meals**



# COMMON OLFACTORY SEEKING BEHAVIOURS



May invade personal space to do so



Fascinated by perfumes, markers, soaps, candles, etc.



Strong urge to smell all food before eating



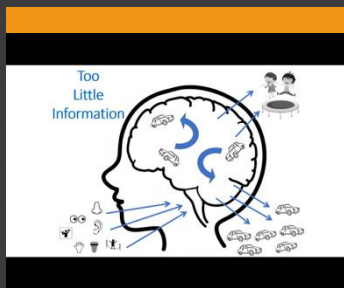
Chewing or mouthing objects for smell-related reasons



Increased interest in smell-based activities



Frequent comments or questions about smells





# Common Signs of Olfactory Avoidance



Covering nose or face



Avoiding certain places or rooms



Distress around food smells



Avoidance of people wearing perfumes or scented products



Hypervigilance to environmental smells



Sensory crisis triggered by unexpected scents



Refusal to use specific shampoos, soaps, toothpaste, or laundry detergent due to scent



May demand open windows, air fresheners removed or excessive ventilation



May ask questions like:



# What can we do?

Olfactory

Be conscious of  
your smell

Smells around  
the corridors

Smells in the  
classroom

Use of preferred  
smells (smell  
jars/smelly  
tissues)

Allow for  
lunchtime  
differentiation

Allow expository  
experiences





# Environmental Adjustments- Smell

**Minimise Strong Odors:** Reduce or eliminate sources of strong odours in the environment, such as cleaning chemicals, air fresheners, or perfumes. Opt for unscented or hypoallergenic cleaning products and avoid using strong-smelling air fresheners or scented candles.

**Ensure Good Ventilation:** Maintain good ventilation in the space to help dissipate odours and ensure fresh air circulation. Open windows when possible to allow natural airflow, and consider using air purifiers or ventilation systems to improve air quality.

**Use Neutral Scents:** If you choose to use scents in the environment, opt for neutral or mild fragrances that are unlikely to trigger sensitivities or discomfort in individuals with olfactory sensitivities. Consider using natural scents such as lavender, citrus, or eucalyptus, which are generally well-tolerated. These can be personalised by creating smelling jars or smelling tissues.

**Provide Scent-Free Zones:** Designate scent-free zones or areas where strong fragrances are prohibited to accommodate individuals with sensitivities or allergies to certain smells. Ensure that these areas are clearly marked and respected by all occupants of the space.

**Use Natural Materials:** Choose furnishings, fabrics, and materials that are made from natural, non-toxic materials and are less likely to emit strong odours or off-gas harmful chemicals. Avoid synthetic materials or products with strong chemical odours.

**Maintain Cleanliness:** Keep the environment clean and free from sources of unpleasant odours such as rubbish or food waste. Implement regular cleaning schedules and practices to ensure that the space remains fresh and odour-free.

**Incorporate Aromatherapy:** Consider incorporating aromatherapy techniques using essential oils or natural scents to create a calming and pleasant atmosphere. Use diffusers, aroma sticks or smelling tissues/jars to distribute subtle scents throughout the space, taking care to avoid overpowering fragrances.

**Provide Scent-Free Personal Care Products:** In shared spaces such as bathrooms, provide scent-free or hypoallergenic personal care products such as hand soap, shampoo, and lotion to accommodate individuals with sensitivities to fragrances.

**Respect Individual Preferences:** Be mindful of individual preferences and sensitivities to smell, and accommodate them whenever possible. Encourage open communication and respect the needs and comfort levels of all occupants of the space.

**Seek Feedback:** Regularly seek feedback from occupants of the environment to assess their comfort levels with the olfactory environment and make adjustments as needed. Encourage individuals to voice any concerns or suggestions for improving the olfactory sensory-friendliness of the space.

# Environmental Adjustments- Taste

**Offer Diverse and Nutritious Food Options:** Provide a variety of food options that cater to different tastes, dietary preferences, and nutritional needs. Offer a balance of healthy and flavourful choices, including fruits, vegetables, whole grains, proteins, and dairy or plant-based alternatives.

**Accommodate Dietary Restrictions and Preferences:** Be mindful of dietary restrictions, allergies, and cultural or religious dietary preferences when planning menus and food offerings. Offer alternatives and accommodations to ensure that all individuals can enjoy meals safely and comfortably.

**Promote Mindful Eating Practices:** Encourage mindful eating practices that emphasise savouring and enjoying food experiences. Provide opportunities for individuals to eat slowly, engage their senses, and appreciate the Flavors, textures, and aromas of their meals.

**Create a Welcoming Dining Environment:** Design dining spaces that are inviting, comfortable, and conducive to social interaction. Consider factors such as lighting, seating arrangements, and ambiance to create a pleasant and relaxing atmosphere for enjoying meals.

**Offer Pleasant Dining Settings:** Provide opportunities for individuals to dine in different settings, such as indoor dining areas, outdoor patios, or communal gathering spaces. Offer options for both quiet, intimate meals and lively, social dining experiences. Offer different seating options such as beanbags, wobble cushions or high tables.

**Cultivate a Positive Food Culture:** Foster a positive food culture that celebrates diversity, encourages exploration, and promotes eating habits. Offer educational opportunities, cooking classes, or food-related events to engage individuals and foster a sense of community around food.

**Allow for food preferences:** Offer food of choice before introducing food that is not of preference. ***Don't restrict the restricted-*** ensure that they have their "safe foods" but always offer (a small amount) of the other options available.

**Provide Opportunities for Culinary Exploration:** Offer opportunities for individuals to explore different cuisines, Flavors, and culinary traditions. Host themed meals, cultural events, or food tastings to introduce new foods and expand individuals' culinary horizons.

**Encourage Social Dining Experiences:** Facilitate social dining experiences that promote connection, conversation, and camaraderie. Provide communal dining tables, group meal options, or shared cooking experiences to encourage interaction and bonding over food.

**Seek Feedback and Adapt:** Regularly solicit feedback from individuals about their dining experiences and preferences. Use feedback to make adjustments and improvements to menus, food offerings, and dining practices to better meet the needs and preferences of individuals.



# Vestibular

- This sense is how the body handles movement. It is located in the inner ears
- This is probably the most fundamental of all our senses as it gives us physical and emotional security when moving in spaces, as our bodies automatically adjust to stop us falling
- The vestibular system reduces the confusion about conflicting visual information. If a young person hangs upside down then the vestibular sense confirms for the young person that their world hasn't turned upside down
- This sense can also stabilize the visual field, for example a rugby player can run at the same time as looking at the target of the goal posts







Spinning frequently  
and for long periods



Jumping constantly



May not  
respond to  
safety warnings



May stay on  
equipment  
longer than  
peers



Uses body  
in dynamic,  
unpredictable  
ways



Often seeks  
out toys that  
create movement  
or instability



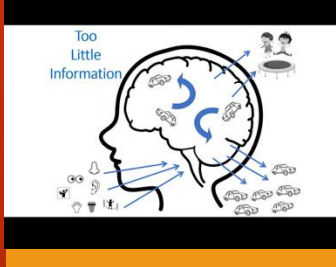
May stay on  
equipment  
longer than



Often seeks  
out toys that  
create movement



May use move-  
ment to  
concentrate or  
calm down





# Avoidance/Sensitivity Behaviours



Avoids swings, slides, or climbing equipment



Dislikes elevators, escalators, or lifts



Gets dizzy easily



Prefers sedentary play



Clings to adults or walls when walking



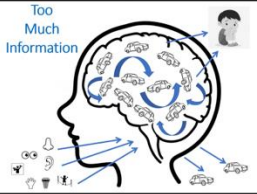
unwilling to tilt head back (e.g. for hair washing)



Unwilling to tilt head back (e.g.,



Exhibits motion sickness



## Global Developmental Delay -GDD

Children with GDD often have vestibular processing difficulties that impact gross motor skills, balance, and movement awareness.

10

## Cerebral Palsy-certain presentations

Some forms of CP impact postural control and balance, which are directly influenced by the vestibular system. Movement and stability may be affected by disrupted vestibular input.

9

## Down Syndrome

Often associated with low muscle tone (hypotonia), which can impact balance and vestibular processing. May present as delayed gross motor development or difficulty with vertical movement.

8

## Trauma / Developmental Trauma

Vestibular dysregulation may emerge as part of a broader sensory disconnect. Children may be fearful of movement-based activities or struggle with motion sensitivity.

7

## Fetal Alcohol Spectrum Disorders FASD

Children with FASD often display balance and coordination issues, poor postural control, and vestibular hypersensitivity or hyposensitivity

6

5

## Vertigo-related Conditions

Though more medically oriented, these can cause direct disruption to the vestibular system (e.g., labyrinthitis, Meniere's disease, vestibular neuritis). May present as dizziness, disorientation, or intolerance to motion.

# Conditions & Diagnoses Linked to Vestibular Difficulties

## Autism Spectrum Condition (ASC)

Many autistic individuals experience over- or under-responsiveness to vestibular input. May appear to be fearless of heights or movement (under-responsive), or fearful of swings, climbing, or sudden motion (over-responsive). Can co-occur with poor balance and coordination.

1

## Sensory Processing (SPD)

- Vestibular Subtype  
Some individuals crave spinning, jumping, or movement (vestibular-seeking), while others avoid it entirely. May show poor postural control, clumsiness, and dizziness sensitivity.

2

## ADHD

Children with ADHD may exhibit vestibular-seeking behaviours such as rocking, spinning, or bouncing to self-regulate or stay alert. May have difficulty staying still or maintaining posture due to vestibular under-responsiveness.

3

## Developmental Coordination Disorder (DCD) / Dyspraxia

Poor balance, frequent tripping, and difficulty with movement planning may stem from impaired vestibular processing. May avoid activities like bike riding or climbing.

4



# Proprioception

- This is a sub-conscious sense that gives us body awareness. It tells us where our arms and legs are in space without having to look at them
- Along with vestibular this sense allows us to keep a certain shape, such as sitting on a chair without falling
- It is the sense which makes us assess the amount of force needed to move things and can impact on how our muscles react to different stimuli
- Proprioception is thought to be the sense which can calm and override other systems so is a beneficial activity to do





# Common Proprioceptive Seeking Behaviours



## Physical Behaviours

- Crashing into furniture, floors, or people
- Jumping from high places or off furniture repetitively
- Running without clear purpose, especially into walls or boundaries
- Pushing or pulling objects even when not necessary
- Wrestling, roughhousing, or seeking tight hugs



## Touch and Pressure Behaviours

- Chewing on clothing, pencils, or non-food items (linked to oral proprioception)
- Preferring tight clothes, wrapping up in blankets, or squeezing into small spaces
- Leaning on walls, people or desks for prolonged periods



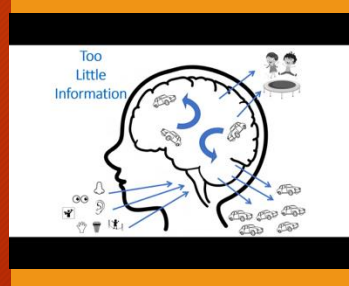
## Postural & Movement Behaviours

- Rocking or swaying when standing
- Bouncing while sitting (e.g. on chair edges or exercise balls)
- Standing instead of sitting at tables or desks
- Constant movement or fidgeting, even when trying to focus



## Coordination-Driven Seeking

- Engaging in heavy lifting (e.g. carrying bags, books, or weighted items)
- Preferring physical chores or playground activities involving resistance (climbing, monkey bars, digging)







# Common Proprioceptive Avoidance/Sensitivity Behaviours



## Avoidance of Movement-Based Tasks

Avoids climbing, lifting, carry'ng, or pushing/ggr tasks  
May refuse physical play, playground equipment, or RE activities  
Hesitant to participate in tasks requiring strength or resistance



## Sensitivity to Physical Touch or Pressure

Complains that clothes feel “tight” or “heavy”  
Dislikes tight hugs, rough play, or physical contact  
May become distressed by hair brushing, certain textures of clothing, or tight spaces



## Fear of Movement or Instability

Appears cautious or fearful with new moent activities  
Reluctant to jump, stretch, or engage in dynamic body movements  
May walk carefully, Keep feet close to the ground, or cling to surfaces for stability



## Postural Instability and Discomfort

Avoids sitting upright for long; may slump    
Avoids positions that require core strength (e.g.. sitting unsupported on the floor).  
Tires easily with physical tasks, showing avoidance as a coping strategy



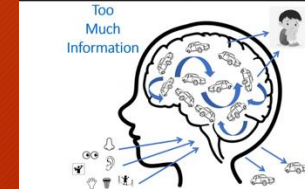
## Sensory Overload Triggers

Disoriented or anxious when nav/goating crowded or busy spaces  
Overwhelmed by multi-sensory environments requiring coordination

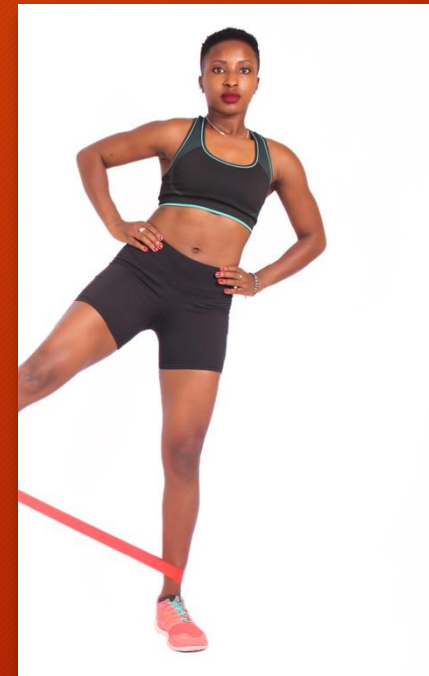
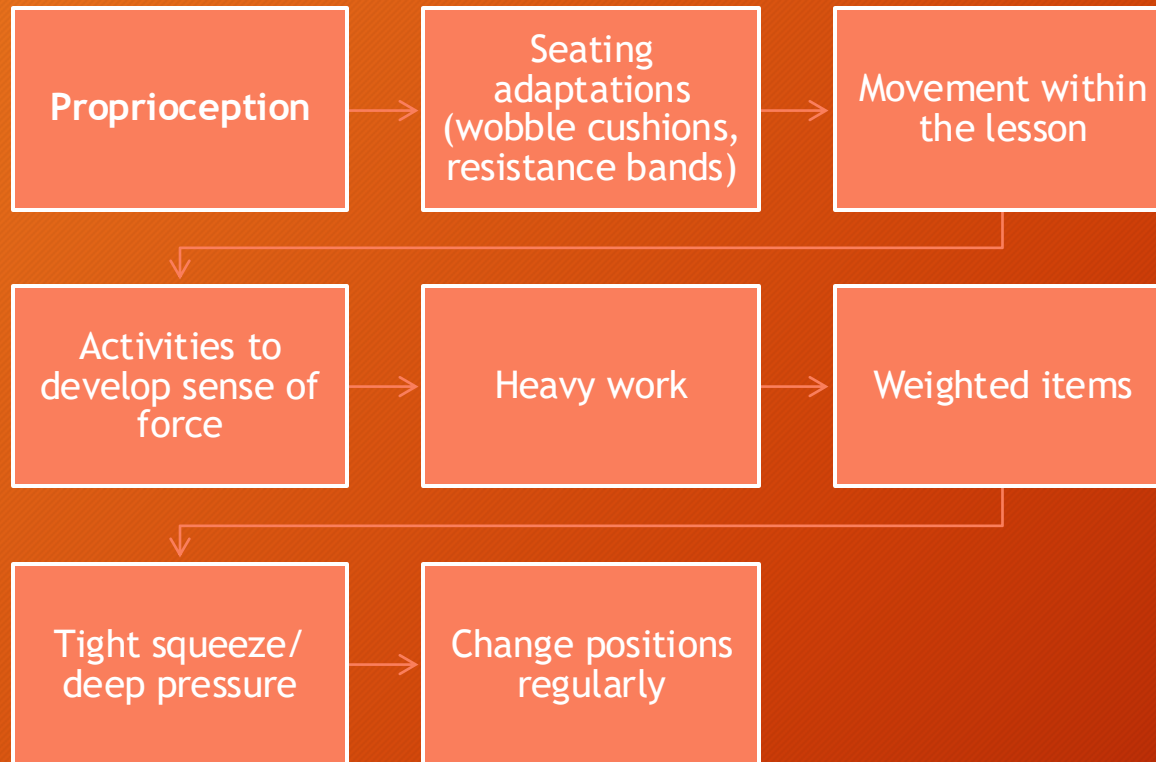


## Verbal Clues

May say. “I don’t like how that feels.” “(hat’s too nuch,” or “It’s too heavy”  
Expresses strong preferences for staying still or sedentary routines



# What can we do?





# Environmental Adjustments- Proprioception

**Provide Opportunities for Movement:** Incorporate opportunities for movement and physical activity throughout the environment. Offer designated areas for activities such as stretching, jumping, swinging, or climbing to help individuals regulate their proprioceptive input and satisfy their sensory needs.

**Use Sensory Equipment and Tools:** Provide sensory equipment and tools such as weighted blankets, therapy balls, or body socks to support proprioceptive input and regulation. These tools can help individuals increase body awareness and provide deep pressure input to promote calming and organization.

**Offer Flexible Seating Options:** Provide a variety of seating options that accommodate different sensory preferences and support proprioceptive input. Offer chairs, cushions, or bean bags that allow individuals to adjust their seating position and find comfortable seating arrangements that meet their sensory needs.

**Incorporate Heavy Work Activities:** Incorporate heavy work activities into daily routines to provide proprioceptive input and support sensory regulation. Activities such as pushing, pulling, lifting, or carrying heavy objects can help individuals regulate their arousal levels and improve attention and focus.

**Create Sensory Pathways or Trails:** Design sensory pathways or trails within the environment that incorporate tactile and proprioceptive elements such as textured surfaces, balance beams, or stepping stones. These pathways can provide opportunities for individuals to engage in sensory-motor activities and improve coordination and body awareness.

**Establish Sensory Zones:** Create designated sensory zones within the environment that provide opportunities for individuals to engage in sensory activities and self-regulation strategies. Offer sensory bins, tactile materials, or sensory walls that encourage exploration and provide proprioceptive input.

**Implement Sensory Break Areas:** Designate quiet, calming areas within the environment where individuals can take sensory breaks and engage in self-regulation activities. Provide sensory tools such as fidgets, stress balls, or sensory bottles to support individuals in managing sensory overload or dysregulation.

**Use Visual Supports and Schedules:** Incorporate visual supports and schedules to help individuals understand expectations and navigate the environment more effectively. Use visual cues such as visual schedules, visual timers, or picture symbols to provide structure and predictability.

**Provide Clear Spatial Organisation:** Ensure that the environment is well-organised and free from clutter to support individuals' spatial awareness and safety. Use clear signage, color-coded pathways, or visual markers to delineate different areas and promote spatial orientation.

**Promote Sensory Integration Activities:** Encourage participation in sensory integration activities, such as sensory circuits, that provide opportunities for individuals to engage in sensory exploration and integration. Offer activities such as yoga, meditation, or sensory play that promote body awareness, relaxation, and self-regulation.

# Conditions & Diagnoses Linked to Proprioceptive Difficulties

## Global Developmental Delay -GDD

Children with GDD often experience delays across multiple areas, including sensory integration. Proprioception difficulties may manifest as delayed motor milestones or unsafe physical behaviours.

9

## Cerebral Palsy-certain presentations

Proprioceptive feedback may be altered due to motor and muscle tone irregularities. Can result in challenges with movement control and body awareness.

8

## Down Syndrome

Often associated with low muscle tone (hypotonia) and difficulty with joint and limb awareness, affecting movement and posture. Proprioceptive input may need to be strengthened through targeted activities.

7

## Trauma / Developmental Trauma

Early trauma can disrupt the connection between the brain and body. Children may become disconnected from internal body cues, including where their body is in space (proprioception), and how it moves.

6

## Fetal Alcohol Spectrum Disorders FASD

Sensory processing issues, including poor proprioceptive awareness, are common. May present as clumsiness, poor motor planning, and inconsistent movement control.

5

## Autism Spectrum Condition (ASC)

Many autistic individuals experience altered sensory processing, including proprioception. They may crave deep pressure, seek intense movement, or appear unaware of their own body in space. Can also co-occur with coordination difficulties and dyspraxia.

1

## Sensory Processing (SPD)

In this subtype, individuals may be under-responsive (need more input to feel grounded) or seek excessive input(e.g., jumping, pushing, hugging tightly). Poor awareness of where body parts are without looking.

2

## ADHD

Children and adults with ADHD often show proprioceptive-seeking behaviours like constant movement, fidgeting, or crashing into things. These actions often serve as self-regulation strategies.

3

## Developmental Coordination Disorder (DCD) / Dyspraxia

Proprioceptive challenges are central to this condition. Individuals may have poor body awareness, struggle with motor planning, and need visual cues for body positioning. Difficulty with both gross and fine motor tasks is common.

4



# Shopping List

- <https://www.bsensory.org/resources/proprioception-processing-environmental-adjustments/>

# Interoception

Wants and needs

## Interoception

### *The Eighth Sense*

In Sensory Processing Disorder the interoceptive Sense can wreak havoc on a child's wellbeing and mental as well as physical health





# INTEROCEPTION

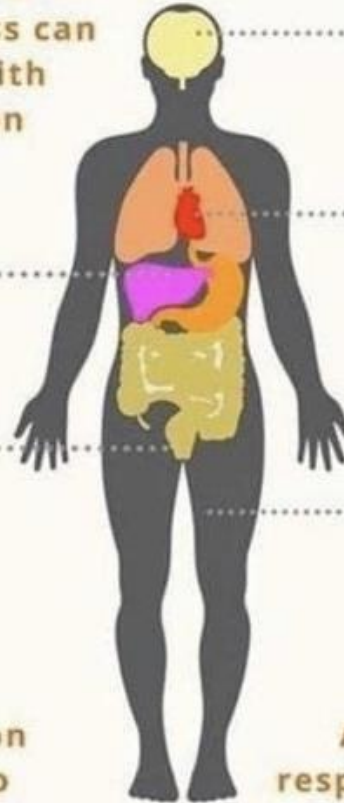
THE EIGHTH SENSE: KNOWING WHAT IS GOING ON INSIDE YOUR BODY

**Evidence suggests poor interoception awareness can lead to difficulties with emotional regulation**

Overeating or forgetting to eat, not feeling thirsty or feeling thirsty too frequently

Not feeling the urge to urinate or feeling an intense urge to urinate frequently

**Disrupted interoception awareness can lead to autistic meltdowns**



Inability to recognize signs of getting tired or fatigue

Not noticing increased heart or breathing rate or noticing it to the point it becomes distracting or overwhelming

Unusually high tolerance or sensitivity to pain, may not notice if cold or overheated

**A person can be over-responsive to one particular internal signal and under-responsive to another**

# Conditions & Diagnoses Linked to Interoceptive Difficulties

**Global Developmental Delay -GDD**  
Delays in multiple developmental domains may include interoceptive awareness  
Challenges can manifest in:  
Toilet training  
Emotional self-awareness  
Physical regulation (e.g., sleep, hunger, fatigue)

10

## Anxiety Disorders

Heightened interoceptive sensitivity may contribute to:  
Panic attacks (interpreting bodily changes like heart rate as danger)  
Over-monitoring of physical sensations (e.g., heartbeat, breathing)  
May also avoid internal awareness due to fear of what they'll feel

9

## Alexithymia

Often overlaps with ASC, ADHD, and mood disorders  
Involves difficulty identifying and describing internal emotional states  
Strongly tied to interoceptive processing deficits

8

## Trauma / Developmental Trauma

Trauma survivors may become disconnected from internal cues due to survival responses  
Fight/flight/freeze states can dull or heighten interoception  
May not register pain, hunger, or stress clearly  
Can lead to difficulty recognising emotional states and bodily needs

7

## Eating Disorders (e.g., ARFID, Anorexia, Bulimia)

Individuals may misinterpret or ignore internal hunger/fullness cues  
Trauma or control-related behaviors may contribute to blunted interoception  
Can also result from altered neurological feedback systems

6

5

## Depression

May experience blunted interoceptive awareness, such as:  
Not noticing hunger, sleep needs, or pain  
General numbness or detachment from body and feelings

4

## Developmental Coordination Disorder (DCD) / Dyspraxia

Delays in multiple developmental domains may include interoceptive awareness  
Challenges can manifest in:  
Toilet training  
Emotional self-awareness  
Physical regulation (e.g., sleep, hunger, fatigue)

3

## ADHD

Interoceptive awareness may be disrupted due to attentional shifts or sensory modulation difficulties may-  
Forget to eat or use the toilet  
Not notice fatigue or physical discomfort until it becomes extreme  
Struggle with emotional awareness and self-regulation

2

## Sensory Processing (SPD)

Individuals may have under- or over-responsiveness to internal body signals  
May:  
Have challenges with toileting (late training, accidents)  
Struggle with hunger/fullness cues or thirst regulation  
Appear emotionally dysregulated without understanding why

1

## Autism Spectrum Condition (ASC)

Many autistic individuals experience atypical interoception, such as:  
Not noticing when they're hungry, full, hot/cold, or in pain  
Difficulty identifying emotions (linked to alexithymia)  
May appear "unbothered" by injuries or temperature extremes



# Interoception

- The interoceptive system has special nerve receptors which are located throughout our bodies including the internal organs, bones, muscles and skin. These receptors send information to the brain
- The brain interprets this information and uses it to tell us how we feel. The interoceptive system helps our bodies stay in a state of optimal balance, which is known as **homeostasis**
- People with good interoceptive processing skills can respond quickly to the input. They receive and maintain their body in a state of balance. For example, when they feel cold, they put on a jumper and when they feel dehydrated, they have a drink to restore the balance in their bodies
- In addition to controlling all these sensory inputs, the Interoceptive system is also responsible for helping us to control our emotions. For example, if you can feel yourself getting tense from anger, you know to slow down and take a few deep breaths. Being able to read your own physical signs and emotional states, directly impacts our ability to read another person's physical and emotional state
- People who struggle with the interoceptive sense may have trouble knowing when they feel hungry, full, hot, cold, or thirsty
- For children with sensory processing issues, the brain may have trouble making sense of that information. They may not be able to tell when they're feeling pain or when their bladder is full. An itch may feel like pain or pain may feel ticklish.
- People may also struggle with recognizing emotions because of this- for instance, may not "feel" fear because they don't recognize that their muscles are tense, their breathing is shallow, and their heart is racing.



The interoceptive sense plays a crucial role in arousal regulation within the body. Arousal refers to a state of physiological and psychological activation, often associated with increased alertness, vigilance, and readiness to respond to stimuli. Interoception involves the perception of internal bodily states, such as heart rate, respiration, and hormonal fluctuations, which contribute to arousal.

- 1. Detection of Physiological Changes:** Interoceptive receptors throughout the body constantly monitor internal physiological processes, including heart rate, blood pressure, and respiration. These receptors send signals to the brain, particularly the insular cortex, which plays a central role in interoceptive processing.
- 2. Integration and Interpretation:** The brain integrates information from interoceptive signals with other sensory inputs and cognitive processes. This integration helps in interpreting the significance of physiological changes within the context of the individual's current environment and emotional state.
- 3. Arousal Response:** When the brain detects significant changes in internal physiological states, it can trigger an arousal response. For example, an increase in heart rate and respiration might signal a need for increased alertness and readiness for action. This arousal response prepares the body to respond to potential threats or challenges in the environment.
- 4. Emotional Experience:** Interoceptive signals also contribute to emotional experiences. For instance, sensations such as increased heart rate and sweating might accompany feelings of excitement or fear. These bodily sensations help individuals recognize and label their emotional states, influencing subjective experiences of arousal.
- 5. Regulation and Modulation:** The interoceptive sense is involved in regulating arousal levels to maintain optimal physiological and psychological functioning. Through processes such as biofeedback and mindfulness practices, individuals can learn to modulate their arousal responses by attending to and regulating their internal physiological states.



## Interoceptive difficulties and sexual arousal

The interoceptive sense plays a crucial role in detecting, interpreting, and regulating internal physiological states during sexual arousal. It contributes to the sensory, emotional, and psychological aspects of the sexual experience and is essential for healthy sexual functioning.

If person has a difficulty in processing the unreceptive information, this may cause someone to feel arousal at times when it is not suitable

### Physiological Changes:

Sexual arousal involves a variety of physiological changes in the body, such as increased heart rate, blood flow to the genitals, and changes in respiration. Interoceptive receptors throughout the body detect these changes and send signals to the brain, particularly to areas involved in interoceptive processing, such as the insular cortex.

### Integration with Sensory Input:

Interoceptive signals are integrated with sensory input from the genitals, as well as with emotional and cognitive processes related to sexuality. This integration helps in interpreting the significance of physiological changes in the context of sexual stimuli and desire.

### Arousal Response:

Interoceptive signals contribute to the arousal response during sexual stimulation. Increased blood flow to the genitals and heightened sensations in erogenous zones are detected by interoceptive receptors, leading to further arousal and sexual pleasure.

### Emotional and Psychological Experience:

Interoceptive signals also influence the emotional and psychological experience of sexual arousal. Sensations such as increased heart rate and heightened sensitivity in erogenous areas contribute to feelings of excitement, desire, and pleasure.

### Regulation and Modulation:

The interoceptive sense is involved in regulating and modulating sexual arousal levels. Individuals may learn to attend to and regulate their internal physiological states during sexual activity, enhancing their ability to experience and control arousal.

### Connection to Sexual Dysfunction:

Disruptions in the interoceptive sense can contribute to sexual dysfunction. For example, individuals with conditions such as erectile dysfunction or anorgasmia may have difficulty perceiving and responding to internal physiological cues associated with arousal.

# Senses and Integration

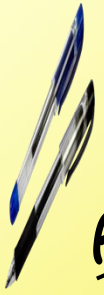




# Assessment

- Quiz time!





Activity

# A day in the life of...

*Can you write down all the senses that the girl in the video is having difficulty with*





# Assessment

- What does she struggle with and what sense is that?



# What senses did she struggle with?

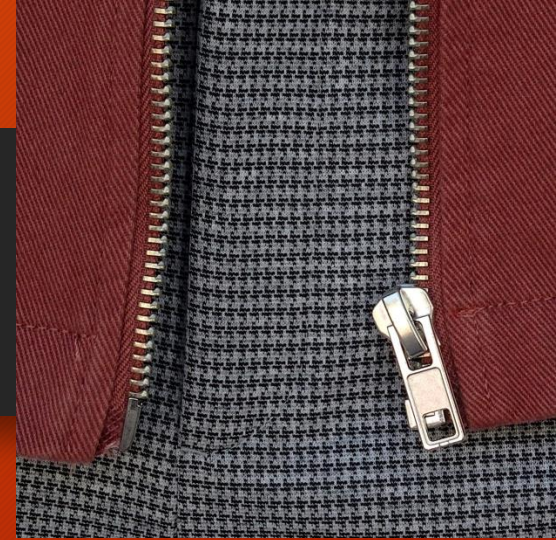
- Tactile- Textures of clothes - only likes soft clothes without tags (tactile)
- Tactile and Olfactory- Food textures and tastes- only likes plain toast and doesn't like small seeds in strawberries (gustatory)
- Auditory and visual- Sound and movement - cannot concentrate in the class
- Auditory and Olfactory- Sounds and smells - the lunchroom causing anxiety and smells making her feel physically sick
- Auditory- Sounds - little brother crying causing distractions for homework
- Proprioception, Interception, Auditory, Visual, Tactile- Settling down to sleep - cannot get comfortable in bed and mind is too busy to sleep
- Proprioception, Vestibular, Interception, Tactile, Auditory, Visual, Smell, Taste - doing up the zipper





# “Pop your coat on and zip it up”

- How many senses does this use?
- Tactile- the feel of the zip- sharp, cold, bumpy. The feel of the coat
- Auditory- the sound of the zip
- Visual- the look of the zip- is it shiny
- Proprioception- how hard to hold the zip and how much force to use to pull it up
- Vestibular- Looking down, balancing, coordinating the hands and eyes
- Interoceptive- does she feel the cold? Or does she over heat?
- Olfactory- the smell of the zip- metal smells and you can taste blood/copper in your mouth



To zip up a  
zipper it  
takes all 8  
senses

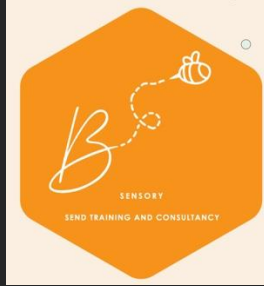






SPD with individual diagnosis/ difficulties

# SPD and Trauma



- **Trauma** can have a significant impact on sensory processing, and many individuals who have experienced trauma may develop **sensory processing difficulties** as part of their response.
- Trauma can affect how the brain interprets sensory information, making the individual more sensitive to sensory input or, in some cases, less aware of it. This connection between trauma and sensory processing challenges can lead to difficulties in daily life, relationships, and emotional regulation.





# Over-Responsiveness (Hypersensitivity)



- **Sound:** Hypervigilance may lead to extreme sensitivity to sounds, causing distress at even normal volume levels (e.g., sudden loud noises triggering a fight-or-flight response).
- **Touch:** Trauma can make individuals overly sensitive to touch. Even gentle physical contact may feel invasive or painful, particularly if the trauma involved physical harm.
- **Visual:** Trauma survivors may become overwhelmed by visually stimulating environments (e.g., bright lights, fast movements), which can evoke a sense of chaos or disorientation.
- **Smell and Taste:** Certain smells or tastes associated with the traumatic event can evoke intense negative emotions or flashbacks.

# Under-Responsiveness (Hyposensitivity)



- **Body Awareness:** Trauma can cause people to become disconnected from their own bodies, leading to a decreased awareness of physical sensations such as hunger, thirst, or temperature.
- **Movement:** Some trauma survivors may crave intense physical activity (e.g., running, jumping) to "wake up" their bodies or feel grounded.
- **Pain:** Decreased sensitivity to pain can occur, making individuals less aware of injuries or discomfort.



# Trauma-Informed Sensory Support



- A **trauma-informed approach** is essential when supporting individuals with both trauma and sensory processing difficulties. This includes:
- **Creating a Safe Environment:** Reduce sensory triggers and provide safe spaces where individuals can retreat if overwhelmed.
- **Personalized Sensory Strategies:** Incorporate sensory tools (e.g., weighted blankets, noise-cancelling headphones) and activities that help regulate sensory input.
- **Gradual Exposure:** Introduce sensory stimuli slowly and in a controlled way to help individuals feel more comfortable with sensory input over time.
- **Emotional Support:** Combine sensory strategies with emotional and psychological support, such as therapy, to address both sensory and trauma-related issues.

# Key Sensory Processing Challenges in Tourette Syndrome



## 1. Premonitory Urges and Sensory Tics:

1. A hallmark of Tourette Syndrome is the **premonitory urge** that often precedes tics. This urge is a sensory experience that builds up in intensity until a tic is performed to relieve it.
2. These urges are typically described as an uncomfortable sensation (e.g., itchiness, pressure, or tension) that is only relieved temporarily by the tic, leading to repetitive behaviour's.

## 2. Sensory Triggers for Tics:

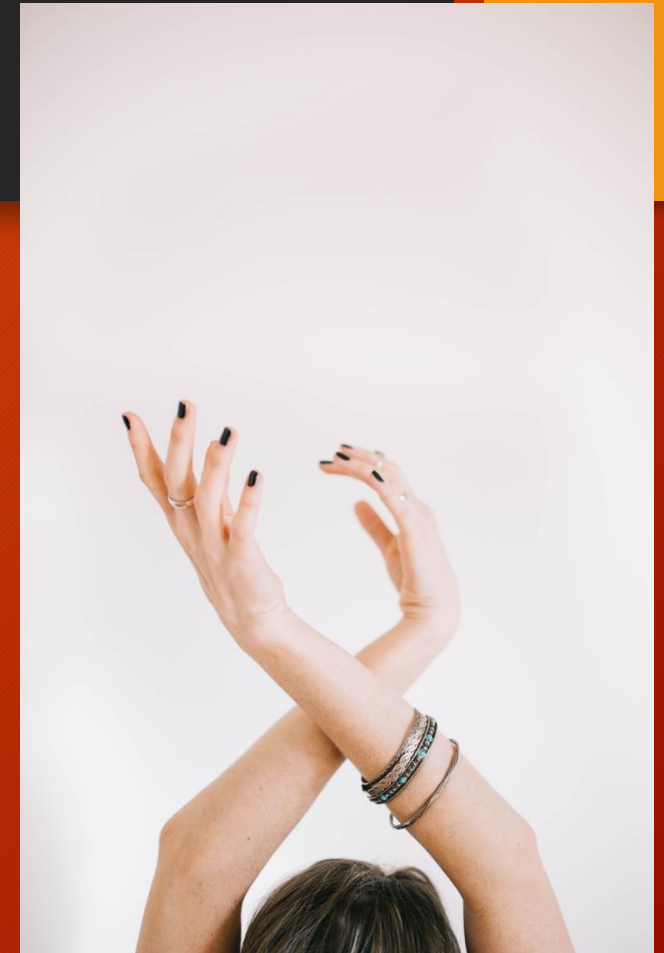
1. Certain sensory inputs can **trigger tics** in individuals with TS. For example, a specific sound or touch might provoke a vocal or motor tic.
2. Sensory-rich environments (e.g., loud, crowded places) can increase tic frequency and intensity due to sensory overload.

## 3. Sensory Overload:

1. People with TS are often prone to **sensory overload**, which can make tics worse and lead to emotional distress or frustration.
2. Over-responsiveness to sensory inputs like bright lights, noise, or certain textures can make it hard for individuals to concentrate, learn, or interact in social situations.

## 4. Proprioceptive and Motor Issues:

1. Difficulties with **proprioception** (awareness of body position in space) may lead to clumsiness and coordination issues, making motor tics more prominent or harder to control.
2. Some individuals with TS may also have trouble sensing where their body is in relation to other objects or people, leading to accidents or discomfort in social settings.





# Assessment

- Quiz time!





# Unit 4-Sensory Profiling




# What is Sensory Profiling?

- It is not a diagnostic tool, it is a baseline
- Sensory profiling allows us to highlight what sense a child is struggling with
- We can then do targeted plans for sensory interventions to meet that child's sensory need
- It also allows us to make reasonable adjustments to support that child
- By repeating sensory profiling regularly, it allows you to not only adapt sensory planning but also allows us to see progression

# Sense Path Demo



Welcome Back!

 Previously used the app on Making Sense or BSensory?  
Your login details are the same for Sense Path.

[Forgot Password?](#)

Login

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Don't have an account yet? [Sign Up](#)





# Sense Path Practice

Complete a profile

# Unit 5- Sensory diet





# What is a sensory diet/lifestyle?

A sensory diet is very similar to a food diet, but involves our senses

Instead of a balanced diet of protein, carbohydrates, vegetables, oils, vitamins, etc.; it is a balanced diet of touch, movement, visual input, auditory input, olfactory input and oral input

Just like a food diet, individuals may struggle processing one or more particular sense. Therefore encouraging and exposing the individual to a varied sensory diet, can improve the processing of that sense



# How to plan a sensory diet

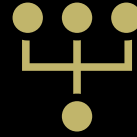
You can either use the resources provided to plan your own sensory diet

Or use the Sense Path App

If you are planning yourself, there's 3 simple rules...



# The Rules



1. In an ideal world, sensory diets should be done 12-16 minutes daily- however, if you manage to do sensory diets twice a week for 10 minutes, this is fine - something is better than nothing!



2. Make sure you put an activity in for ALL the senses in this time



3. But you have MORE activities for the sense that has been highlighted as the one or two that child is struggling with

## TACTILE SENSORY DIET ACTIVITIES:

- ☐ Finger Paint
- ☐ Craft projects (with wet glue, feathers, etc.)
- ☐ Foam Soap or Shaving Cream
- ☐ Sand play
- ☐ Foam
- ☐ Relax in a bean bag chair
- ☐ Cornstarch and water mixture
- ☐ Play dough or clay
- ☐ Swaddle/Bear Hugs
- ☐ Skin massage with or without lotion
- ☐ Pop bubbles with fingers
- ☐ Cook with an adult (touching food)
- ☐ Bake with an adult (rolling or kneading dough with hands)
- ☐ Crawl through a tunnel
- ☐ Sensory bin with dry rice, beans, corn, lentils, or other materials
- ☐ Get inside a sleeping bag
- ☐ Jump in a pile of leaves
- ☐ Walk bare foot in sand, grass, or leaves
- ☐ Water Play
- ☐ Touch and feel books
- ☐ Relax in a soft, fluffy, warm blanket (from the clothes dryer)
- ☐ Draw or print on a sand tray
- ☐ Play in sink or tub of water
- ☐ Creep or crawl over textured surfaces
- ☐ Use a rechargeable/battery operated toothbrush that vibrates
- ☐ Use a hand massager
- ☐ Heavy rub down with towel
- ☐ Vibrating pen
- ☐ Kinetic Sand
- ☐ Brushing Protocol
- ☐ Joint Compressions
- ☐ Jump on crash pad
- ☐ Weighted Blank
- ☐ Weighted Vest
- ☐ Weighted Lap Pad
- ☐ Make a "Sandwich" or "Burrito" = Roll child up in a blanket keeping face and head exposed. Firmly, yet gently roll a ball on child's legs and back. Or, press with your hands.

## OLFACTORY SENSORY DIET ACTIVITIES:

- ☐ Use scented markers and crayons
- ☐ Use herbs and spices in craft projects
- ☐ Smell essential oils:
  - Calming: Vanilla and Lavender may be calming
  - Alerting: Peppermint and Citrus may be alerting
- ☐ Diffuser Oils Bracelet or Necklace
- ☐ Smell flowers
- ☐ Blindfold smelling game
- ☐ Use flavored lip balms
- ☐ Scratch and Sniff stickers
- ☐ Scented Bubbles
- ☐ Scented dough
- ☐ Scented lotions

## VISUAL SENSORY DIET ACTIVITIES:

- ☐ Hoberman Sphere = collapsing and expanding
- ☐ Kaleidoscope
- ☐ Finger Lights
- ☐ Glow Sticks
- ☐ Liquid Timer
- ☐ Lava Lamp, Mobiles, Bubble Lamps
- ☐ Fish Tank
- ☐ Light Projector
- ☐ Sensory Bottles or Jars
- ☐ Play "I Spy"
- ☐ Play "flashlight tag"
- ☐ Mazes, Dot-to-Dot
- ☐ Light Table
- ☐ Bubbles
- ☐ Colored Light Bulbs
- ☐ High Quality Sunglasses for outdoors
- ☐ Tinted Lenses for indoors if sensitive to glare
- ☐ Wide brim Hat or Visor
- ☐ Leave out 5-10 toys at a time to avoid visual overload
- ☐ Reconsider complicated prints and patterns on clothing, walls, etc.
- ☐ Avoid fluorescent bulbs
- ☐ "Safe Space" with minimal visuals
- ☐ Dim lights for calming and relaxation

## GUSTATORY SENSORY DIET ACTIVITIES:

\* Some of these textures will present a choking hazard for some children.  
 \* Only offer textures that a child can safely bite, chew, and swallow.  
 \* Be aware of food allergies and diet restrictions. Only offer food that can be safely consumed.

- ☐ Explore textures- smooth, lumpy, crunchy, chewy
- ☐ Explore tastes- sweet, sour, salty, spicy, bitter
- ☐ Explore temperature- warm, cool, cold
- ☐ Chew Gum
- ☐ Suck on an orange
- ☐ Lick or suck on a lemon
- ☐ Lick a lollipop
- ☐ Crunch on a cold pickle
- ☐ Crunch on a pretzel
- ☐ Suck apple sauce through a straw
- ☐ Suck a milkshake through a narrow straw
- ☐ Use cookie cutters to make cheese slice creations and eat
- ☐ Make funny shaped sandwiches and eat
- ☐ Use flavored lip balms
- ☐ Scratch and Sniff stickers
- ☐ Popsicles

## AUDITORY SENSORY DIET ACTIVITIES:

- ☐ Singing
- ☐ Blow whistles
- ☐ Play a kazoo
- ☐ Listening to music
- ☐ Bang a drum
- ☐ Musical Instruments: rhythms sticks, tambourine, piano, bells, cymbals, triangle, etc.
- ☐ Play sound Bingo game
- ☐ Listen and Name – identify things by sound only
- ☐ Rain Stick
- ☐ Sound Machine
- ☐ Noise Cancelling Headphones
- ☐ White noise machine
- ☐ Listen to Nature (beach, rain, etc.)
- ☐ Aquarium
- ☐ Water Fountain
- ☐ BOP it
- ☐ Sound Puzzles
- ☐ Quiet Retreat



# PROPRIOCEPTION

THE SENSE THAT HELPS A CHILD WITH BODY AWARENESS IS KNOWN AS PROPRIOCEPTION.



Intact proprioception allows a child to determine his/her body's position in space and regulate the direction and amount of force to use when moving. This sense is detected through sensory receptors in the joints and muscles.

The proprioceptive sense is stimulated when a child experiences pressure or moves his/her limbs to push, pull, lift or hang. While engaging in activities that offer proprioceptive input, a child may also show improved attention and a more regulated arousal level. This is beneficial for learning, playing, socializing, and completing daily tasks.

These activities may help calm a given child, or may alert or energize a child. Each child is unique.

Gently encourage your child to participate; never force or coerce him/her. Consult with your child's therapist for specific recommendations regarding which activities are suitable for his/her age and individual needs.

## PROPRIOCEPTION SENSORY DIET ACTIVITIES:

- ☐ Make a "Sandwich" or "Burrito" = Roll child up in a blanket keeping face and head exposed. Firmly, yet gently roll a ball on child's legs and back. Or, press with your hands.
- ☐ Pull a wagon or heavy objects
- ☐ Push a wagon or heavy objects
- ☐ Carry heavy objects
- ☐ Wear a weighted back pack (filled with toys or books)
- ☐ Jump up and down on the floor
- ☐ Trampoline
- ☐ Play jump rope
- ☐ Use a child size hammer - golf tees into firm foam
- ☐ Wall push-ups, floor push-ups, or chair push-ups
- ☐ Bear hugs
- ☐ Climb under sofa cushions
- ☐ Hang from monkey bars
- ☐ Play hopscotch
- ☐ Vacuum
- ☐ Sweep
- ☐ Put heavy groceries away
- ☐ Shovel snow, dirt, sand, etc.
- ☐ Use play dough, kinetic sand, or clay-roll, pound and knead
- ☐ Rake leaves
- ☐ Climb on playground equipment
- ☐ Hike up a hill
- ☐ Play tug of war
- ☐ Eat crunchy food or ice chips
- ☐ Walk backwards
- ☐ Make & throw snowballs
- ☐ Play catch with a weighted/heavy ball
- ☐ Move furniture
- ☐ Fall into a bean bag chair
- ☐ Swim
- ☐ Practice Animal Walks (crab, bear, snake, etc.)
- ☐ Wheel-barrow walk
- ☐ Use your arms to roll a large ball up and down the wall
- ☐ Bite on a chewy
- ☐ Use therapy putty for hands
- ☐ March in place
- ☐ Yoga Poses
- ☐ Weighted Blanket
- ☐ Wear a weighted and/or pressure vest
- ☐ Stacking Chairs
- ☐ Resistance/Exercise Bands
- ☐ Jumping Jacks
- ☐ Foot Fidgets (Stretchy Bands across chair legs)

# VESTIBULAR

THE VESTIBULAR SENSE DETECTS MOVEMENT THROUGH SENSORY RECEPTORS IN THE INNER EAR.



This sense tells a child when he/she is moving, and the direction and speed of that movement. Vestibular activities and input help children develop their posture, balance, and coordination. This sense provides us with gravitational security; the feeling that we can maintain a position without falling. When we move our heads, fluid in our inner ears moves and shifts, providing information about the position of our body and head in space.

Difficulty with vestibular processing can result in a child who needs to move constantly to feel satisfied or a child who is fearful of movement because it makes them feel insecure or unbalanced. It can also result in difficulty coordinating and planning motor tasks.

These activities may help calm a given child, or may alert or energize a child. Each child is unique.

Gently encourage your child to participate; never force or coerce him/her. Consult with your child's therapist for specific recommendations regarding which activities are suitable for his/her age and individual needs.

## VESTIBULAR SENSORY DIET ACTIVITIES:

- ☐ Use a scooter board
- ☐ Swing on a hammock
- ☐ Swing on a tire swing
- ☐ Merry Go Round
- ☐ Trampoline
- ☐ Slides
- ☐ Rocking Chair
- ☐ Dance (wiggle, spin, sway, twirl, shake)
- ☐ Jumping jacks
- ☐ Animal Walks
- ☐ Sledding
- ☐ Skating
- ☐ Swimming
- ☐ Ride a bike or other wheeled vehicle
- ☐ Spin (sit n' spin)
- ☐ Therapy ball ("airplane")
- ☐ Roll on the floor or down a hill
- ☐ Roll along a wall while standing
- ☐ Roll in a barrel
- ☐ Ride a rocking horse
- ☐ Crawling or creeping
- ☐ Jumping over obstacles or rope
- ☐ Bounce or rock while on a ball
- ☐ Place an inflated cushion on chair for movement
- ☐ Hoppity Hop Ball
- ☐ Sit on T-Stool
- ☐ Somersault
- ☐ Hang upside down from playground equipment
- ☐ Play "Head, Shoulders, Knees and Toes"
- ☐ Cartwheels
- ☐ Scooter board on a ramp

#### Sensory integration therapy techniques - vestibular stimulation

Vestibular stimulation refers to the activation or modulation of the vestibular system, which is responsible for detecting changes in head position and movement, maintaining balance, and coordinating eye movements. The vestibular system consists of the vestibular organs located within the inner ear, including the semicircular canals and otolith organs, which detect rotational and linear acceleration, respectively.

Vestibular stimulation can be delivered through various sensory experiences and activities that involve movement, changes in body position, or exposure to gravity, such as:

**Rotational Movements:** Activities involving spinning, swinging, or rotating movements can provide vestibular stimulation. This includes activities such as swinging on a swing, spinning in a chair, or participating in rotational vestibular stimulation therapy exercises.



**Linear Movements:** Activities that involve linear acceleration or changes in body position can stimulate the otolith organs of the vestibular system. Examples include walking, running, jumping, or riding in a vehicle.



**Tilting and Tipping Movements:** Activities that involve tilting or tipping the head or body can stimulate the vestibular system and promote balance and spatial orientation. This includes activities such as leaning over, bending forward, or performing head movements.



**Balance Challenges:** Activities that challenge balance and postural control, such as standing on one leg, walking on uneven surfaces, or using balance boards or stability balls, can provide vestibular stimulation while also enhancing proprioception and motor coordination.



# Sensory Diet in School example- visual and auditory

Time	Activity	Duration	Description
0:00 - 1:00	Deep Breathing	1 minute	Begin with deep breathing exercises. Inhale deeply through your nose for a count of four, hold for a count of four, and exhale slowly through your mouth for a count of six.
1:00 - 4:00	Visual Sensory: Nature Walk	3 minutes	Engage in a brief nature walk if possible. Focus on the colours, shapes, and movements of the surroundings. If outdoors isn't possible, look at images of nature, such as landscapes or seascapes, and immerse yourself in their beauty.
4:00 - 7:00	Auditory Sensory: Music Meditation	3 minutes	Listen to calming music or nature sounds. Close your eyes and focus on the different instruments, melodies, and rhythms, allowing the music to soothe your mind and body.
7:00 - 9:00	Tactile Sensory: Texture Exploration	2 minutes	Explore different textures with your hands. Use items like soft fabric, rough sandpaper, smooth stones, or fluffy feathers. Pay attention to the sensations each texture evokes.
9:00 - 11:00	Olfactory Sensory: Aromatherapy	2 minutes	Engage in aromatherapy by inhaling calming scents like lavender, chamomile, or eucalyptus. Use essential oils, scented candles, or sachets to create a relaxing atmosphere.
11:00 - 13:00	Gustatory Sensory: Mindful Eating	2 minutes	Enjoy a small snack mindfully, paying attention to the taste, texture, and sensation of each bite. Choose something with contrasting Flavors and textures, like fruit and nuts.
13:00 - 15:00	Proprioceptive Sensory: Stretching	2 minutes	End the sensory diet with gentle stretching exercises. Focus on elongating the muscles and relieving any tension or tightness. Take slow, deep breaths as you stretch.

- Home sensory diet ideas

<u>Tactile (touch)</u>	<u>Movement (vestibular)</u>	<u>Oral motor</u>	<u>Heavy Work (proprioception)</u>	<u>Visual, auditory and olfactory</u>
<b>Silly putty</b>	<b>Run, jump, march, dance or walk</b>	<b>Eating crunchy food (carrots sticks , apples, pretzels)</b>	<b>Carry a full laundry basket</b>	<b>Play a musical instrument (even if you can't play one!)</b>
<b>Sand and water play</b>	<b>Climbing stairs</b>	<b>Blowing a whistle</b>	<b>Take out the rubbish</b>	<b>Bang on pots and pans</b>
<b>Squishy textures</b>	<b>Ride bike, scooter, or 3 wheeled scooters</b>	<b>Blowing bubbles</b>	<b>Pushing the shopping trolley</b>	<b>Wear sunglasses</b>
<b>Finger paint</b>	<b>Play catch</b>	<b>Brushing teeth with a vibrating toothbrush</b>	<b>Pushing the vacuum cleaner</b>	<b>Wear headphones</b>
<b>Shaving foam</b>	<b>Swing on a swing</b>	<b>Blowing bubbles in water or blowing a ping pong ball on water with a straw</b>	<b>Work with a therapy ball</b>	<b>Listen to your favorite music</b>
<b>Play-dough</b>	<b>Hop up and down</b>	<b>Eat sour or spicy snacks</b>	<b>Carry the shopping or wear a weighted rucksack</b>	<b>Look at picture books</b>
<b>Foam, slime and magic sand</b>	<b>Push-ups</b>	<b>Use s straw to drink thick liquid (Milkshake)</b>	<b>Move and re-arrange books and toys</b>	<b>Lower or brighten lights or adjust blinds</b>
<b>Kneading bread or pizza dough</b>	<b>Climb and slide</b>	<b>Apply scented lip balm</b>	<b>Rake leaves or dig</b>	<b>Use calming sensory visual or auditory bottles</b>
<b>Massage hands and arms</b>	<b>Bouncing on a therapy ball</b>	<b>Use a chew toy</b>	<b>Knead bread or play-dough</b>	<b>Turn on white noise (white noise machine, fan, vacuum)</b>
<b>Writing with a vibrating pen</b>	<b>Jumping jacks or snow angels</b>	<b>Chew on a gummy snack</b>	<b>Yoga</b>	<b>Sniff scented tissues or lip balm</b>



# Sensory throughout the day

Time of Day	Activity	Duration	Description
Morning	Wake-Up Routine	5-10 minutes	Engage in stretching, deep breathing, and gentle movement. Incorporate natural light exposure, uplifting music, and a nourishing breakfast with various textures and Flavors.
Throughout the Day	Sensory Breaks	5-10 minutes	Schedule regular breaks to prevent sensory overload. Offer tactile, visual, auditory, proprioceptive, and vestibular stimulation through various activities tailored to individual needs and preferences.
Sensory Integration	Structured Activities	10-20 minutes	Plan activities with a therapist to address specific sensory challenges. Activities may include sensory walks, cooking or baking, arts and crafts, or sensory-friendly exercises.
Evening	Relaxation Routine	10-20 minutes	Wind down with gentle stretching, deep breathing, and mindfulness meditation. Create a sensory-friendly sleep environment using blackout curtains, white noise machines, and aromatherapy with calming scents.

Integrating sensory activities into daily routines and curriculum can greatly benefit students with sensory processing difficulties, as well as promote engagement and learning for all students. Here are some ways to incorporate sensory activities into daily routines and curriculum:

### Morning Meetings or Circle Time:

Start the day with a sensory-based greeting, such as a handshake, high-five, or fist bump.

Incorporate sensory-friendly materials like sensory balls or fidget toys during circle time.

Lead calming breathing exercises or stretches to help students regulate their bodies and minds for the day ahead.

### Transitions Between Activities:

Use sensory cues or signals to indicate transitions between activities, such as a chime or gentle music.

Provide sensory breaks between tasks to help students reset and refocus. This could include a short movement activity, deep breathing exercises, or a sensory exploration station.

### Literacy and Language Arts:

Integrate sensory-rich storytelling by using props, puppets, or sensory books with textured pages or interactive features.

Encourage students to act out stories or participate in dramatic play to engage multiple sensory modalities.

Use multisensory approaches to teach phonics and sight words, such as tracing letters in sand or shaving cream, or using tactile letter cards.

### Mathematics:

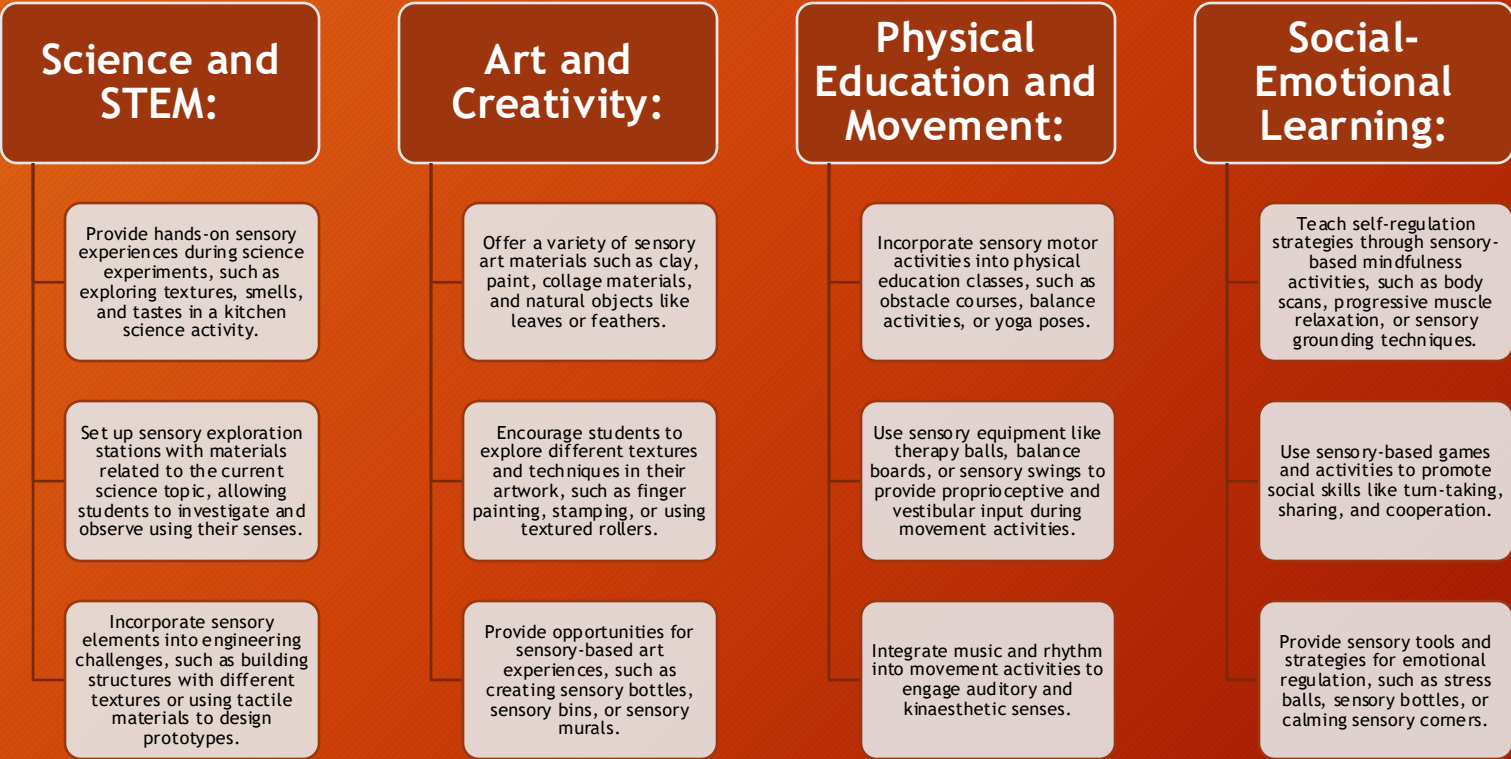
Use manipulatives and tactile materials like counting beads, blocks, or playdough to explore mathematical concepts.


Incorporate movement into math activities by having students hop, jump, or skip while counting or solving equations.

Create sensory-based math games or puzzles that engage students' senses while reinforcing mathematical skills.



By integrating sensory activities into daily routines and curriculum, educators can create a supportive and inclusive learning environment that addresses the diverse sensory needs of all students while promoting engagement, learning, and overall well-being.





### Torch Projectors


#### Equipment




- Torches
- Sharpie

#### Instructions

- On the lens of torches, using a sharpie, colour in different colours to represent the planets (red Jupiter, green earth, etc.) and/or using a black sharpie shade in space shapes (stars, half moons, etc.)
- Turn off the lights and make the room dark enough to project the touches
- Using the touches create a space sky  
OR
- Draw different shapes/animals/letters on the lenses and project to create a scene or a word

#### Senses

Visual	
--------	---







### Remembrance Sensory Lesson Plan



Create the scene of Flanders' Field by following the activities below  
Read each part of the poem with the activity

#### Instructions

In Flanders' fields the poppies blow  
Between the crosses, row on row,  
That mark our place: and in the sky  
The larks, still bravely singing, fly  
Scarce heard amid the guns below.  
We are the dead. Short days ago  
We lived, felt dawn, saw sunset glow,  
Loved and were loved, and now we lie  
In Flanders' fields.  
Take up our quarrel with the foe;  
To you from failing hands we throw  
The torch; be yours to hold it high,  
If ye break faith with us who die  
We shall not sleep, though poppies grow  
In Flanders' Fields.

#### Senses

Auditory	
Visual	
Olfactory	
Touch	
Proprioception	
Vestibular	

# BSensory Lesson Planning

By joining BSensory you will be able to access Lesson Plans and activity ideas

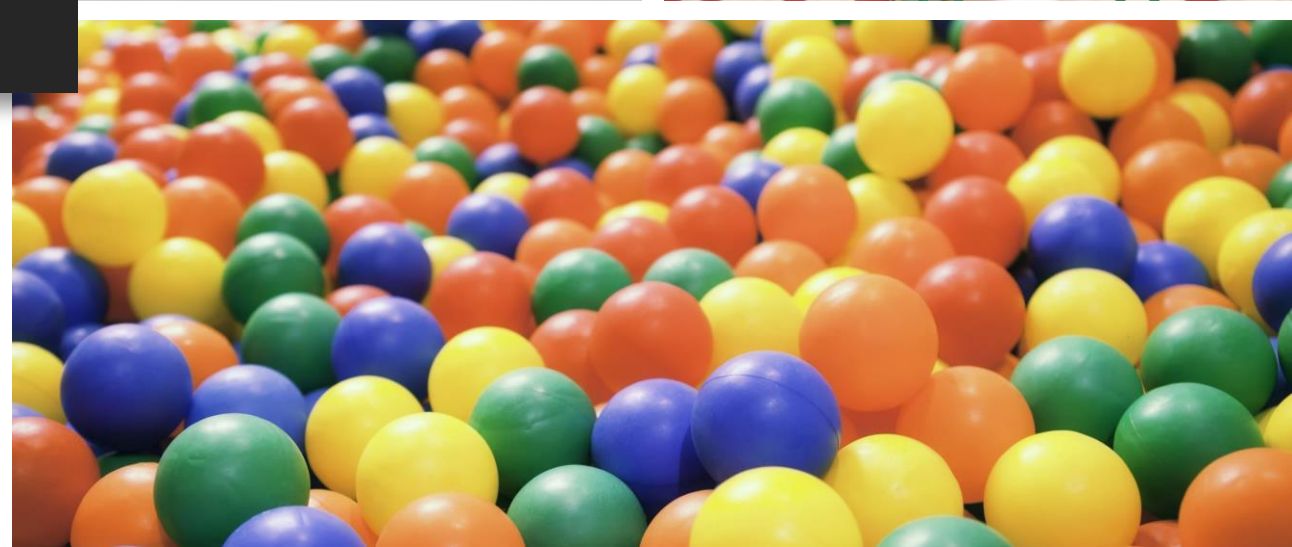
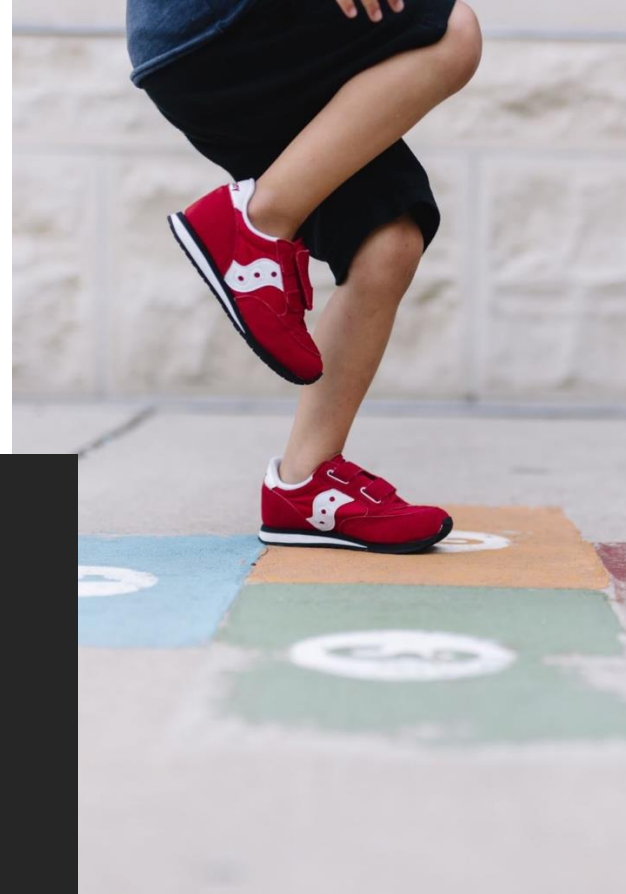


# Unit 6- Sensory Circuits



# Sensory circuits: An introduction

- A sensory circuit is a short and snappy sensory motor skill programme that helps to set children up for a school day or to help self-regulate them
- The circuit also encourages the development of the child's sensory processing skills. Many children can benefit from attending a Sensory Circuit, even for a short period of time.

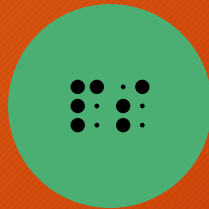




# Sensory Circuits: A Background



OUR UNDERSTANDING OF SENSORY INTEGRATION WAS INITIALLY DEVELOPED IN THE LATE 60S AND 70S BY JEAN AYRES, AN OCCUPATIONAL THERAPIST AND PSYCHOLOGIST WITH AN UNDERSTANDING OF NEUROSCIENCE, WORKING IN THE UNITED STATES OF AMERICA



JEAN AYRES WAS INTERESTED IN EXPLAINING HOW DIFFICULTIES WITH RECEIVING AND PROCESSING SENSORY INFORMATION FROM ONE'S BODY AND ENVIRONMENT, COULD RELATE TO DIFFICULTIES AT SCHOOL OR USING ONE'S BODY TO ENGAGE IN EVERYDAY LIFE



JEAN AYRES DEVELOPED A THEORY ABOUT WHAT HAPPENS WHEN SENSORY INTEGRATION DOES NOT DEVELOP WELL. SHE DEVELOPED A WAY OF ASSESSING THESE DIFFICULTIES AND A WAY OF TREATING THEM. SHE CARRIED OUT RESEARCH TO FURTHER DEVELOP AND UNDERSTAND SENSORY INTEGRATION AND SHE TREATED MANY CHILDREN WITH SENSORY INTEGRATION DIFFICULTIES



SINCE THEN A NUMBER OF OCCUPATIONAL THERAPISTS HAVE CONTINUED HER WORK. WITH NEW BRAIN IMAGING TECHNIQUES, MUCH OF WHAT AYRES POSTULATED HAS BEEN SUPPORTED



# 3 stages of A sensory circuit

- Alert - repetitive actions such as up and down and side to side
- Organizing - processing many inputs all at once and mainly includes co-ordination and balance
- Calming - to end the circuit in a calm and controlled manner





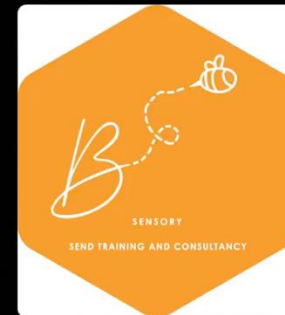
# What order do we do Sensory circuits in?

- Why do we do the 'alerting' section first?
- It triggers the body and the mind to wake it up and be ready
- The activities are very short and focused and gets the child in the right mindset for the next part of the circuit
- The organization section makes the child use two senses at once, making the brain concentrate and building the ability to process more than one thing at the same time. This is why it's the longest part of the circuit"
- The calming section is last as you simply, "don't want them bouncing off the walls before going to their next lesson!"



# Sensory Circuit Example

## Sensory Circuit With BSensory







# Sense Path Sensory Circuit Programs

Discover Sensory Circuits

# Sensory circuit ideas



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## Sensory Circuit Ideas

Alerting	Organising	Calming
Running on the spot	Balance on a beam	Curl up in a ball
Kick like a donkey	Throwing and catching games	Gentle rocking (on a gym ball or rocking chair)
Hop like a frog	Balance on one leg like a flamingo	Quiet tent/den
Crawling through tunnels	Log roll	Yoga
Scoot board	Commando Crawl	Gentle bouncing
Push-Ups or Wall Push-Ups	Passing the weighted balls	Beanbag squeezes
Use two fingers on both sides of the spine, give a light upward stroke 3-5 times.	Scooter board on belly and bottom (wall push-offs) 10+ reps	Light touch/hard touch (depending on the child) – have the student brush a feather over their <u>arms</u> , <u>or</u> squeeze their arms with their hands for deep <u>pressure</u> .
Upbeat music with a strong beat	Balance along a line	Wall push
Fast movement	Blowing bubbles	Sensory bottle
<u>Arrhythmical</u> swinging	Blowing a ping pong ball (with an end or target)	Sensory light
Walking stilts or cans	Wobble boards	Meditation



Bouncing on a therapy ball	Heavy work (gives input to muscles and joints and causes fatigue)	Rocking slowly over a ball on the belly
Running (relay races, obstacle courses, etc)	Wall pushes with hands and feet.	Turning off the lights
Skipping	Obstacle course	Swinging in a large circle with the child facing an adult (no spinning)
Going outside	Putting up/down chairs	Laying under a heavy blanket
Jumping on a <u>mini-trampoline</u>	Crawling through tunnels	Soft, calming music
Swinging	Wheelbarrow walking	Use of body sock/ <u>lycra</u> material to wrap the child in
Vibrations on the arms, hands or back	Jumping on trampoline	Hand fidgets (such as play dough, <u>Wikki Stix</u> ®, Thera-putty, etc.)
Controlled spinning (no more than 10 repetitions at a time – do not do this if there is any known heart condition or seizure history)	Popcorn jumps (jumping from a squat position and then landing back in a squat position)	Heavy work (moving furniture, a stack of heavy books, pulling a weighted backpack/rolling cart)
Heavy work activities (moving a stack of books, re-arranging chairs, etc)	Resistance Bands	Use two fingers on both sides of the spine to give firm downward strokes 3-5 times
Jumping Jacks	Sitting on “move and sit” therapy ball during <u>classroom</u> activities	Laying on the floor while an adult rolls a ball over top of the child giving some deep pressure.



# Activity- Create a sensory circuit for Billy

- Using the sheets in your sensory circuit pack, design a sensory circuit for Billy.

*“Billy is 8 years old and has been diagnosed with ASC and ADHD. On Billy’s EHCP, one of his targets is to be able to stay seated in a lesson for 15 minutes. On Billy’s sensory profiling, he mainly scored highest on vestibular and proprioception. Billy is currently under the SALT team, as his speech is very unclear.*

*It is the first day back after half term, and Billy has a cold task to complete in his English lesson. Billy has arrived at school and is flitting between tables in the dinner hall in breakfast club and banging the cups with a spoon. Billy has 30 minutes before registration and his English assessment. ”*

Sensory needs:		Needs targets:	
<input type="checkbox"/> Vestibular	<input type="checkbox"/> Communication	<input type="checkbox"/> Special aware	
<input type="checkbox"/> Proprioception	<input type="checkbox"/> Team work	<input type="checkbox"/> Oral strength	
<input type="checkbox"/> Auditory	<input type="checkbox"/> Balance	<input type="checkbox"/> Fine motor	
<input type="checkbox"/> Olfactory	<input type="checkbox"/> Relationship building	<input type="checkbox"/> Gross motor	
<input type="checkbox"/> Touch	<input type="checkbox"/> Body Awareness	<input type="checkbox"/> Concentration	
<input type="checkbox"/> Taste			
<input type="checkbox"/> Visual			
<input type="checkbox"/> Introspection			

Organising (10 Min)	Calming (3-5 min)
<b>Activity:</b>	<b>Activity:</b>
<b>Activity:</b>	<b>Activity:</b>
<b>Activity:</b>	<b>Activity:</b>
<b>Activity:</b>	<b>Activity:</b>

Date: 05/05/21

Time: 8.20

Group/class: Billy McDonald

Leader: Beth

Looking at Billy's need to concentrate, the fact he is a sensory seeker and how active he is being, I have decided to dedicate more time in the calming section than the alerting section and rather than 2 mins on each station, a short sharp 1 mins but repeating the circuit twice

Alerting (3-5 min)	Organizing (10 Min) 2x circuit (1 min per station)	Calming (3-5 min)
Activity: Bouncing on the therapy ball 1 min	Activity: Walk on the balance beam 1 min	Activity: Bean bag squeeze 1 min
Activity: Jumping Jacks 1 min	Activity: Crawl through the tunnel 1 min	Activity: Sensory bottle 1 min
Activity: Running on the spot 1 min	Activity: Arm stretch using resistance band 1 min	Activity: Rolling ball over his belly 2 mins
Activity:	Activity: Log Roll 1 min	Activity: Calming music whilst helping move the furniture away 2 mins
Activity:	Activity: Passing a weighted ball 1 min	Activity:

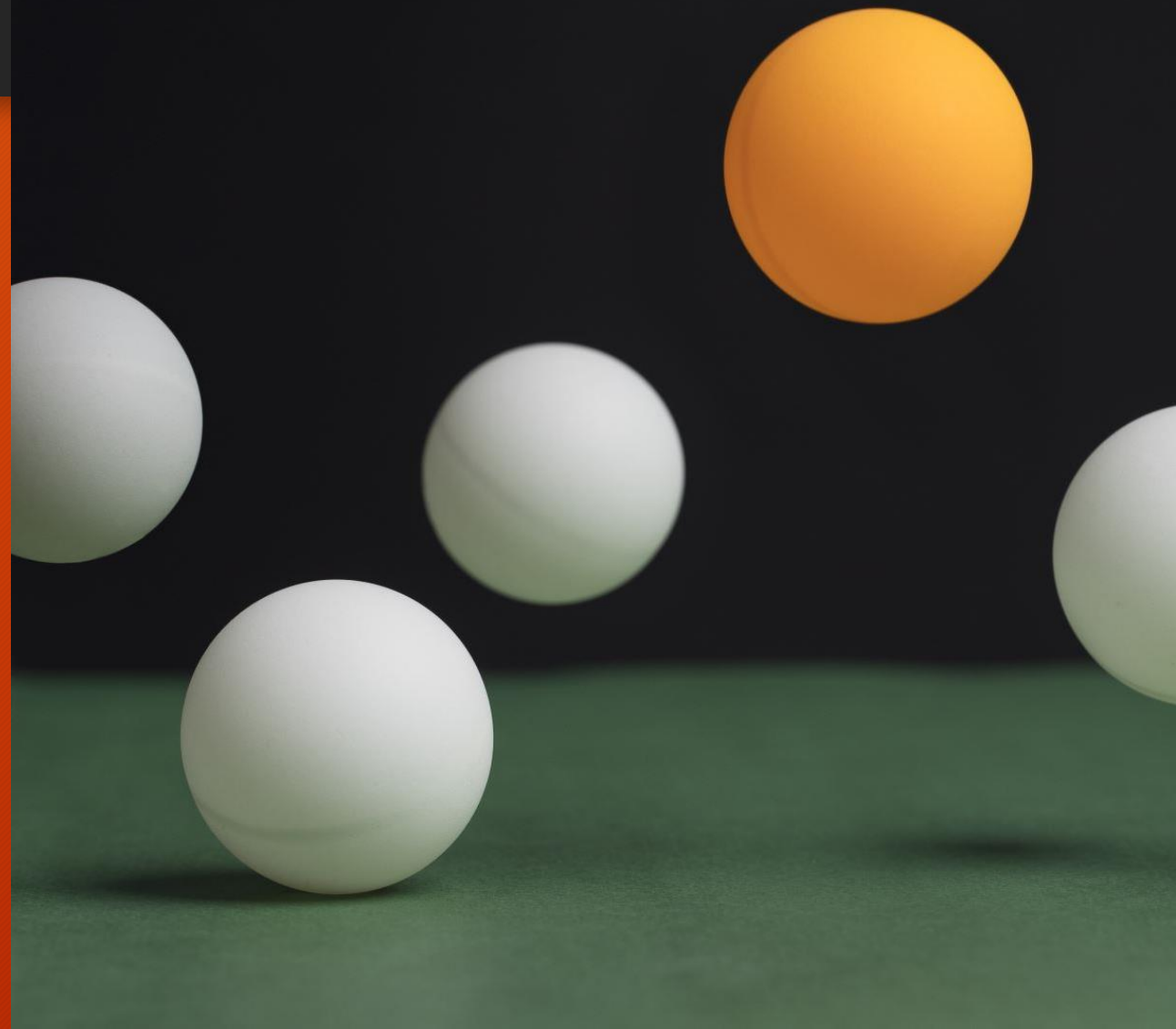


# Interoception and sensory circuits

- With Interoception being one of the hardest senses to give therapy for improvement, it is very hard to put in activities specifically for this
- Rather than making a specific station; analyzing before and after the session, as well as constant reminders throughout the session and the school day, will aid the recognition of body sensations
- For instance, before the session you may choose to take a photo and discuss what they look like, putting their hands on their chest to feel the breathing rate and heart rate, both the child and adult can then discuss and “use an amazing adjective”. You can then repeat the process after the session, comparing the photos and the amazing adjectives. Throughout the session you can remind the pupil “you are breathing quicker now” “you have gone red now” “your bladder may feel funny because you are jumping”
- With the therapy being so specific to this sense, as a practitioner this is all you can do. The individual will need specialist inputs from OT's.
- *But as a 'Sensory Needs' Practitioner you can keep a record of events and refer to the OT service*



# Unit 7-Sensory Action Plans





# Good Practice in the Learning Environment

Positive- Ofsted wants to see a 'calm and orderly' positive classroom environment that is centred entirely around the needs of the pupils in the class 'as this is essential for pupils to be able to learn'.

Inclusive- The classroom environment should promote inclusion and be representative of all pupils irrespective of age, disability, gender reassignment, race, religion or belief, sex or sexual orientation'.

# Sensory Action Plans

1

## Sensory Action Plan

Sensory Action Plan for [Individual's Name]  
Date: [Date of Plan Creation]

**Assessment Information**  
Assessment Date: [Date of Assessment]  
Assessor: [Name of Assessor]  
Assessment Tools Used: [List of assessment tools]  
Areas/senses identified with difficulties

+

Sense	Score
Visual	
Auditory	
Tactile	
Olfactory	
Proprioception	
Vestibular	

**Goals**

1. **Sensory Processing Goal:** [Specific goal related to sensory processing, e.g., Improve self-regulation skills during transitions.]

**Objective 1:**  
Action steps: [List specific interventions or strategies to achieve the objective.]  
Timeline: [Specify timeline for implementing the action steps.]

2. **Sensory Integration Goal:** [Specific goal related to sensory integration, e.g., Increase tolerance to tactile input.]

**Objective 1:**  
Action steps: [List specific interventions or strategies to achieve the objective.]  
Timeline: [Specify timeline for implementing the action steps.]

3. **Functional Goal:** [Specific goal related to functional skills, e.g., Improve participation in classroom activities.]

**Objective 1:**  
Action steps: [List specific interventions or strategies to achieve the objective.]  
Timeline: [Specify timeline for implementing the action steps.]

2

## Interventions and Strategies:

1. **Environmental Modifications:**  
[List changes to the individual's environment to support sensory needs, such as adjusting lighting, noise levels, seating arrangements, etc.]

•

2. **Sensory Diet:**  
[Outline a schedule of sensory activities and experiences tailored to the individual's sensory preferences and needs, including activities for regulation, stimulation, and relaxation.]

•

3. **Sensory Integration Therapy:**  
[Describe specific sensory integration activities or techniques to address sensory processing challenges, such as therapeutic brushing, swinging, deep pressure activities, etc.]

•

4. **Educational Support:**  
[Detail accommodations or modifications in educational settings to support the individual's sensory needs, such as preferential seating, sensory breaks, visual supports, etc.]

•

**Progress Monitoring:**

**Data Collection Method:** [Specify how progress will be monitored, e.g., daily logs, behaviour observations, sensory profiling etc.]

**Frequency of Monitoring:** [Specify how often progress will be monitored, e.g., weekly, biweekly, monthly, etc.]

**Review Dates:** [Schedule regular review dates to assess progress and adjust the action plan as needed.]

**Collaboration and Communication:**  
**Team Members Involved:** [List professionals and caregivers involved in implementing the action plan.]

**Communication Plan:** [Outline how information will be shared among team members, including meetings, progress reports, emails, etc.]

Sensory action plans can help to create a collaborative approach to support children's sensory needs.



# IDENTIFYING THE PROBLEM

1

**Sensory Action Plan**

**Problem solving tool**

**Problem**

**Contributing Factors**

**Things to try**

Visual	Auditory	Smell	
Taste	Touch	Proprioception	Vestibular

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

WWW.BSENSORY.ORG

TACTILE

# Assessment - Case Study 1: Emily

**Background:** Emily is a 6-year-old girl diagnosed with sensory processing disorder (SPD). She experiences difficulties with sensory modulation, particularly in the areas of tactile and auditory sensitivity.

## **Challenges:**

**Tactile Sensitivity:** Emily exhibits strong aversion to certain textures and clothing fabrics. She refuses to wear clothes with tags or seams and becomes distressed when exposed to certain textures, such as sand or grass.

**Auditory Sensitivity:** Emily is highly sensitive to loud noises and sudden sounds. She covers her ears or becomes agitated in noisy environments, such as the school cafeteria or gymnasium.

**Behavioural Challenges:** Emily's sensory sensitivities often lead to behavioural challenges, including sensory crisis points, and withdrawal from sensory-rich activities.





# How can you help Emily?



Create a Sensory Action Plan for Emily.

# What should be included in Emily's plan:

- Sensory Diet: Emily receives a personalised sensory diet.
- The sensory diet includes sensory activities and strategies to regulate her sensory system throughout the day, such as deep pressure input, tactile exploration, and auditory desensitisation techniques.
- Environmental Modifications: Emily's classroom is modified to create a sensory-friendly environment.
  - With soft lighting, minimal auditory distractions, and sensory-friendly seating options.
  - Teachers use visual schedules and cues to support Emily's understanding of routines and transitions.
- Individualised Support: Emily receives individualised support from a sensory needs practitioner to address her sensory needs. They collaborate with Emily's parents to implement sensory strategies at home and monitor her progress over time.



# Unit 8- Regulation





Teaching students self-regulation strategies for managing sensory overload is crucial for empowering them to effectively cope with overwhelming sensory experiences. Here are some strategies for teaching self-regulation skills:

**Identifying  
Triggers:**

**Body Awareness:**

**Self-Calming  
Techniques:**

**Sensory Breaks:**

**Environmental  
Modifications:**

**Sensory-Friendly  
Coping Tools**

**Social Support  
and  
Communication:.**

**Developing  
Coping Plans:**

**Reflection and  
Feedback:.**

**Modelling and  
Reinforcement:**

By teaching students self-regulation strategies for managing sensory overload, educators can empower them to effectively cope with overwhelming sensory experiences and navigate their environments with greater confidence and resilience. Consistent practice and support are essential for students to develop and strengthen these important life skills.



# Teaching students self-regulation strategies for managing sensory overload is crucial for empowering them to effectively cope with overwhelming sensory experiences. Here are some strategies for teaching self-regulation skills:

## Identifying Triggers:

- Help students identify their individual sensory triggers by exploring what types of sensory stimuli they find overwhelming or aversive. Encourage them to recognize signs of sensory overload, such as feeling overwhelmed, anxious, or agitated.

## Body Awareness:

- Teach students to recognize physical signs of stress or discomfort in their bodies, such as muscle tension, rapid breathing, or increased heart rate. Encourage mindfulness of body sensations and how they may be linked to sensory experiences.

## Self-Calming Techniques:

- Introduce a variety of self-calming techniques that students can use to regulate their sensory responses and reduce stress. These may include deep breathing exercises, progressive muscle relaxation, visualization techniques, or mindfulness practices.

## Sensory Breaks:

- Teach students to recognize when they need a sensory break and how to effectively use sensory tools and activities to regulate their sensory system. Encourage them to take short breaks to engage in calming sensory activities like deep pressure, movement, or sensory exploration.

## Environmental Modifications:

- Discuss strategies for modifying their environment to reduce sensory overload, such as adjusting lighting, reducing noise levels, or using headphones or earplugs to block out distracting sounds.

## Sensory-Friendly Coping Tools:

- Provide students with sensory-friendly coping tools and resources they can use to manage sensory overload, such as stress balls, fidget toys, weighted blankets, or sensory bottles. Teach them how to use these tools effectively in different situations.

## Social Support and Communication:

- Encourage students to seek support from trusted adults or peers when they are feeling overwhelmed by sensory stimuli. Teach them how to communicate their needs assertively and advocate for themselves in sensory-rich environments.

## Developing Coping Plans:

- Work with students to develop personalized coping plans or sensory toolkits that outline their preferred self-regulation strategies and resources for managing sensory overload. Encourage them to practice using these tools and strategies regularly.

## Reflection and Feedback:

- Encourage students to reflect on their experiences with sensory overload and the effectiveness of different self-regulation strategies. Provide opportunities for feedback and ongoing support to help them refine their coping skills over time.

## Modelling and Reinforcement:

- Model self-regulation techniques and coping strategies in the classroom, and reinforce positive efforts and progress towards self-regulation. Celebrate students' successes and efforts in managing sensory overload.

By teaching students self-regulation strategies for managing sensory overload, educators can empower them to effectively cope with overwhelming sensory experiences and navigate their environments with greater confidence and resilience. Consistent practice and support are essential for students to develop and strengthen these important life skills.

Role-playing scenarios can be an effective way for students to practice sensory regulation skills in a safe and supportive environment.

During these role-playing scenarios, encourage students to practice using self-regulation strategies such as deep breathing, mindfulness, sensory breaks, and seeking support from peers or adults.

Provide feedback and guidance as needed to reinforce positive coping skills and promote empathy and understanding towards classmates with sensory processing challenges.



# The Busy Cafeteria

Scenario: A student with sensory sensitivities is eating lunch in a crowded cafeteria with bright lights and strong smells. They start to feel overwhelmed and anxious.



Role-play: One student acts as the student with sensory sensitivities, expressing feelings of discomfort and anxiety. Another student acts as a supportive friend, offering to sit with them in a quieter area of the cafeteria, provide a distraction like a calming fidget toy, or help them practice deep breathing exercises to regulate their sensory system.



# The Noisy Classroom

Scenario: Two students are working on a group project in a classroom with noisy construction happening outside. One student starts to feel overwhelmed and distracted by the loud noise.

Role-play: One student acts as the overwhelmed student, expressing feelings of frustration and difficulty focusing. The other student acts as a supportive peer, offering suggestions for coping strategies such as using noise-cancelling headphones, taking deep breaths, or moving to a quieter area of the classroom.





# The Sensory Overload at Breaktime:

Scenario: During recess, a student with sensory sensitivities becomes overwhelmed by the loud noises, bright sunlight, and chaotic playground environment. They start to feel agitated and want to leave the playground.



Role-play: One student acts as the overwhelmed student, expressing feelings of overwhelm and distress. Another student acts as a supportive peer, offering to walk with them to a quieter area of the playground, provide a sensory tool like a stress ball or chewable necklace, or lead them through a guided relaxation exercise to help them calm down.





# The Sensory-Friendly School Trip

Scenario: Students are on a school trip to a museum with interactive exhibits. One student with sensory sensitivities starts to feel overwhelmed by the crowds and sensory stimuli.



Role-play: One student acts as the student with sensory sensitivities, expressing feelings of overwhelm and anxiety. Another student acts as a supportive chaperone or peer, offering to accompany them to a quieter area of the museum, provide a sensory break, or engage in calming activities like mindfulness exercises or grounding techniques to help them regulate their sensory system.





# Self-regulation techniques



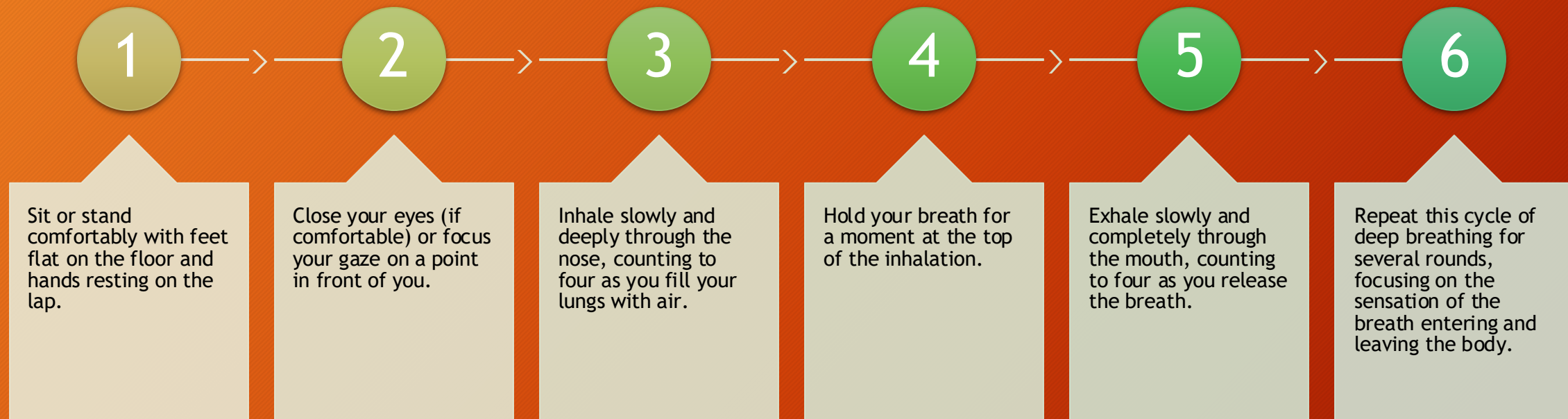
Breathing exercises



Mindfulness



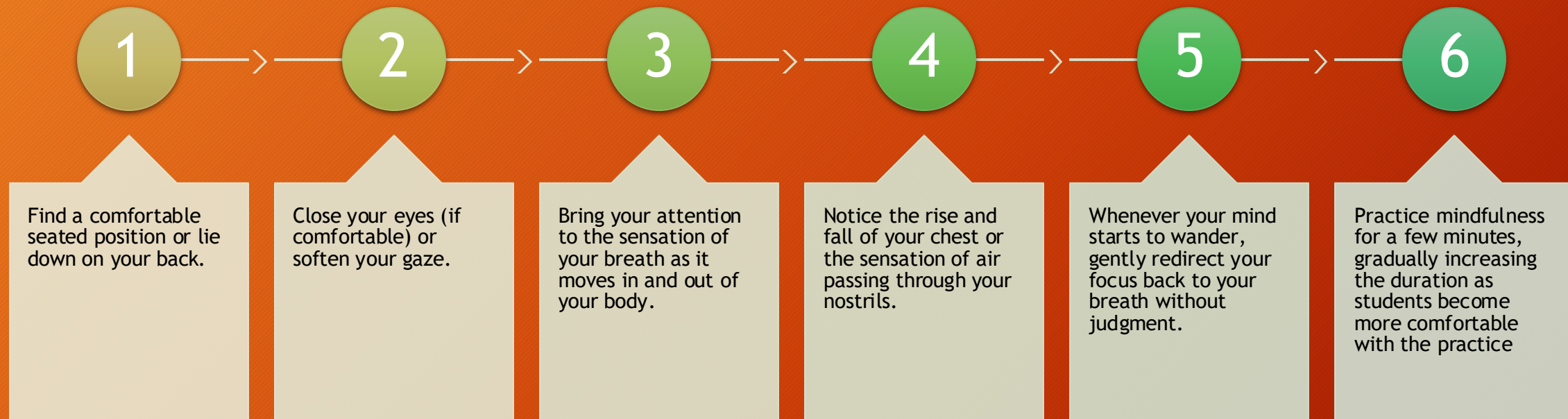
Sensory breaks



### Deep Breathing-

Deep breathing is a simple yet effective technique for calming the nervous system and reducing stress and anxiety. Teach students the following deep breathing exercise:





Mindfulness practices can help students cultivate present-moment awareness and promote relaxation and mental clarity. Teach students the following mindfulness exercise :

# Regulation activities are not rewards!

1

Sensory diets and sensory circuits are recommended sensory interventions that allow for regulation

2

Sensory intervention activities are NOT “rewards” and therefore should NEVER be taken away from the child for punishment

3

The activities are therapeutic and therefore unless there is a valid reason, these should remain in place



# Assessment

- Quiz time!



Unit 9-  
ARFID-  
Avoidance/Restrictive  
Food Intake Disorder



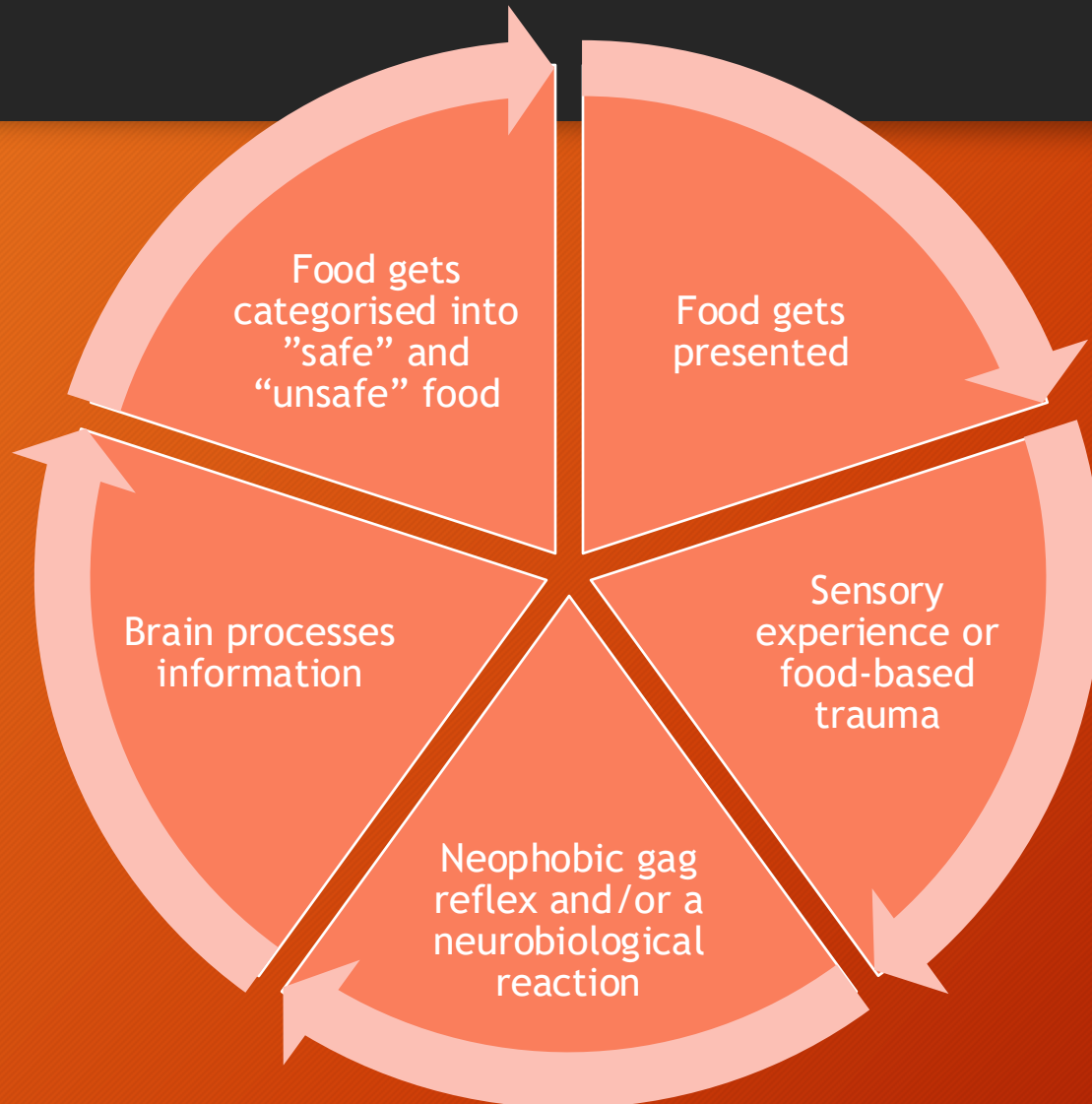


**“AVOIDANT RESTRICTIVE FOOD INTAKE DISORDER, MORE COMMONLY KNOWN AS ARFID, IS A CONDITION CHARACTERIZED BY THE PERSON AVOIDING CERTAIN FOODS OR TYPES OF FOOD, HAVING RESTRICTED INTAKE IN TERMS OF OVERALL AMOUNT EATEN, OR BOTH”**

**BEATEATINGDISORDERS.COM**



# The science





# THE STATS AND FACTS

There are very few studies on ARFID, partially in the UK

There are only two studies that looked at the prevalence of ARFID in nationally representative population that have taken place outside of the US

One of these studies came from Australia- where it found 1 in 300 adolescences and adults (aged 15 and over) had ARFID (Hey et al., 2017)

Another was from Taiwan, found the same figure 1 in 300 , in children aged 7-12 years, had ARFID (Chen et al., 2020)

Both studies stated that ARFID was just as common as anorexia nervosa- a eating disorder that is more widely recognised across the globe

1 in 3 people treated in anorexia clinics have ASC

# THE FACTS

- ARFID is a subconscious process
- It has "laws"
- These laws help to control the internal stress around food rather controlling the intake
- People with extreme ARFID can result in having feeding tubes/ eating supplements
- Someone with ARFID may want to eat a food- but internal thought process causes fear of new or around certain foods is overwhelming (food phobia)
- ARFID normally starts between the ages of 0-4





**Sensory factors**

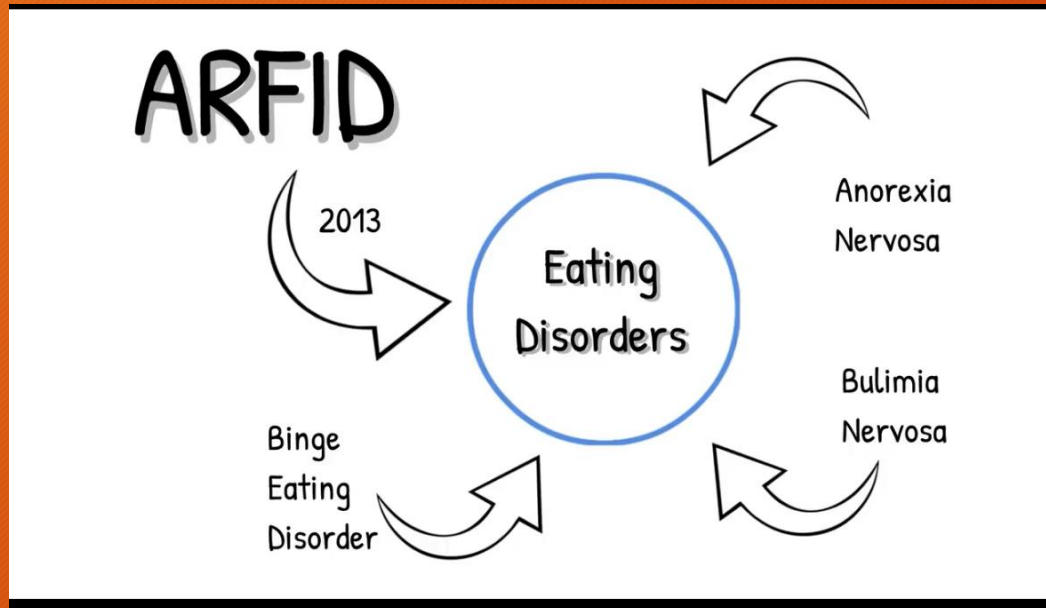
**ARFID**

**Fear of  
consequences**

**Lack of  
interest**

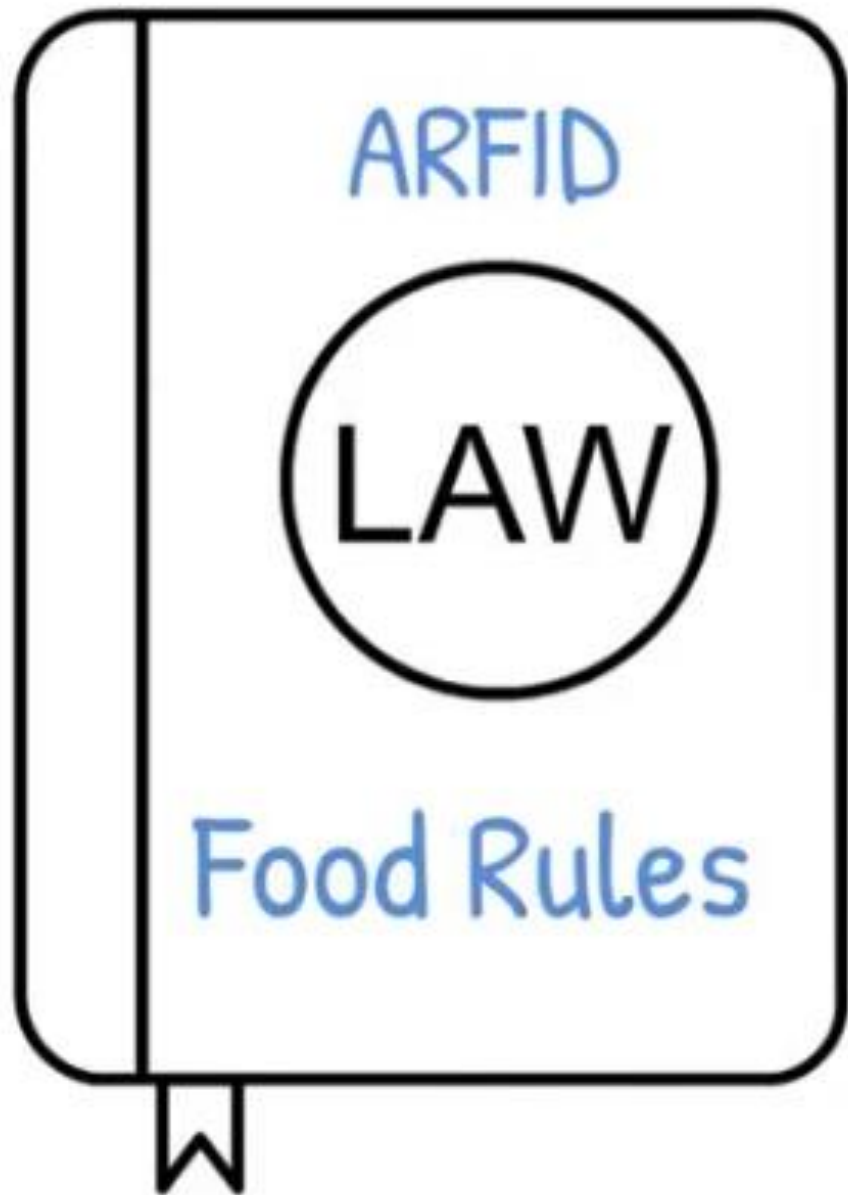
- ARFID manifests in response to discomfort
- during and/or following eating.
- Specifically, food restriction/avoidance is
- classified into three types:
- Sensory sensitivity (i.e., food texture)
- Lack of interest in food and/or eating
- (i.e., homeostatic abnormalities)
- Fear of aversive food consequences
- (i.e., gastrointestinal problems)

# Why is it classed as an eating disorder?



- ARFID is a relatively new eating disorder that looks very different from other eating disorders like anorexia and bulimia (In 2013, the disorder was included in the Diagnostic and Statistical Manual of Mental Disorders, DSM-5)
- An eating disorder is SPECIFICALLY eating disturbances which are motivated by the need to control weight and shape.
- The name was invented to give Americans access to funding for private treatment. So it is not a specific illness, mental health problem or disease, but eating restraint can make young people unhealthy.
- Children with ARFID aren't worried about how much they weigh, though they sometimes do lose too much weight. Instead, they have rigid and restricted eating habits for other reasons.
- In severe cases, restrictive eating can be devastating and can affect family and social life.





- Food can't touch on the plate
- Must be the right color
- Must have a particular plate/bowl/cup/cutlery, etc.
- Must be a certain brand
- Must have been purchased from a certain shop
- Must be cooked a certain way
- No spots or blemishes

Food is everywhere, everyday.

Can you imagine having a phobia and being exposed to it numerous times a day?

PHOBIA = Extreme Fear



Scared



Avoid



Disinterest



Scared



Avoid



Disinterest







## Fussy Eating

Picky  
Heightened sensitivity at that age  
Stubborn  
Secondary gain  
Can be bribed, coerced

BUT... can eat food if they really want to,  
and generally grow out of the fussy phase.



## ARFID

Stressed, anxious  
Fearful, avoiding  
Gagging  
May want to eat, but just can't  
Can NOT be bribed, coerced

Would rather starve than  
attempt to eat non safe food.

# PICKY EATING?

## "Why does my child struggle with fruits and veggies?"

juicy



squishy



sweet



sour



The



same



every



time.







# ARFID and the SEN-sational food project

- This accredited one day course is designed to up-skill professionals working with and caregivers living with children and young adults displaying traits of ARFID (Avoidance/Restrictive Food Intake Disorder) and then to be able to deliver the Sense-sational food project.
  - **What the course covers -**
  - What is ARFID?
  - ARFID and lack of interest in food, trauma and food fear
  - Sensory and food
  - Homelife and ARFID
  - Reasonable adjustments
  - The SENSE-sational food project intro and assessments
  - Health and safety, Risk, Referral and Law
- 
- Booking - [www.bsensory.org](http://www.bsensory.org)





# Assessment

- Quiz time!



The background of the slide features a blurred photograph of a beach with waves in the distance. In the foreground, three small houses constructed from red and white LEGO bricks are visible. The houses are arranged in a row, with the largest one on the left and two smaller ones to its right. A solid black horizontal bar is positioned across the middle of the image, containing the text 'Unit 10- Sensory and home' in white. To the right of this bar, there is a solid orange rectangular area.

# Unit 10- Sensory and home

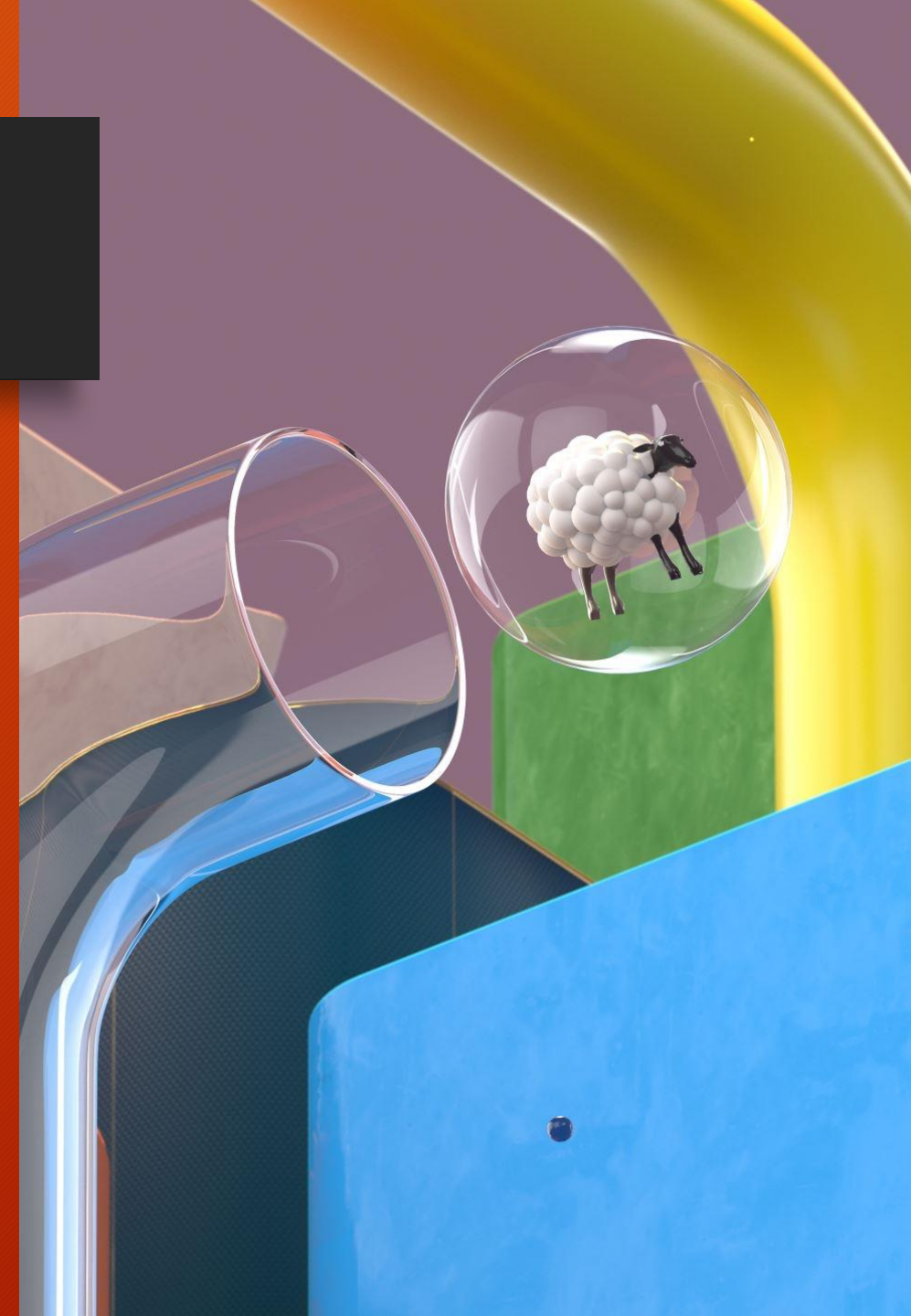


Collaboration with parents and caregivers is essential for understanding students' sensory needs and implementing effective strategies to support them. Here are some key strategies for fostering collaboration:



# Home environment and sensory

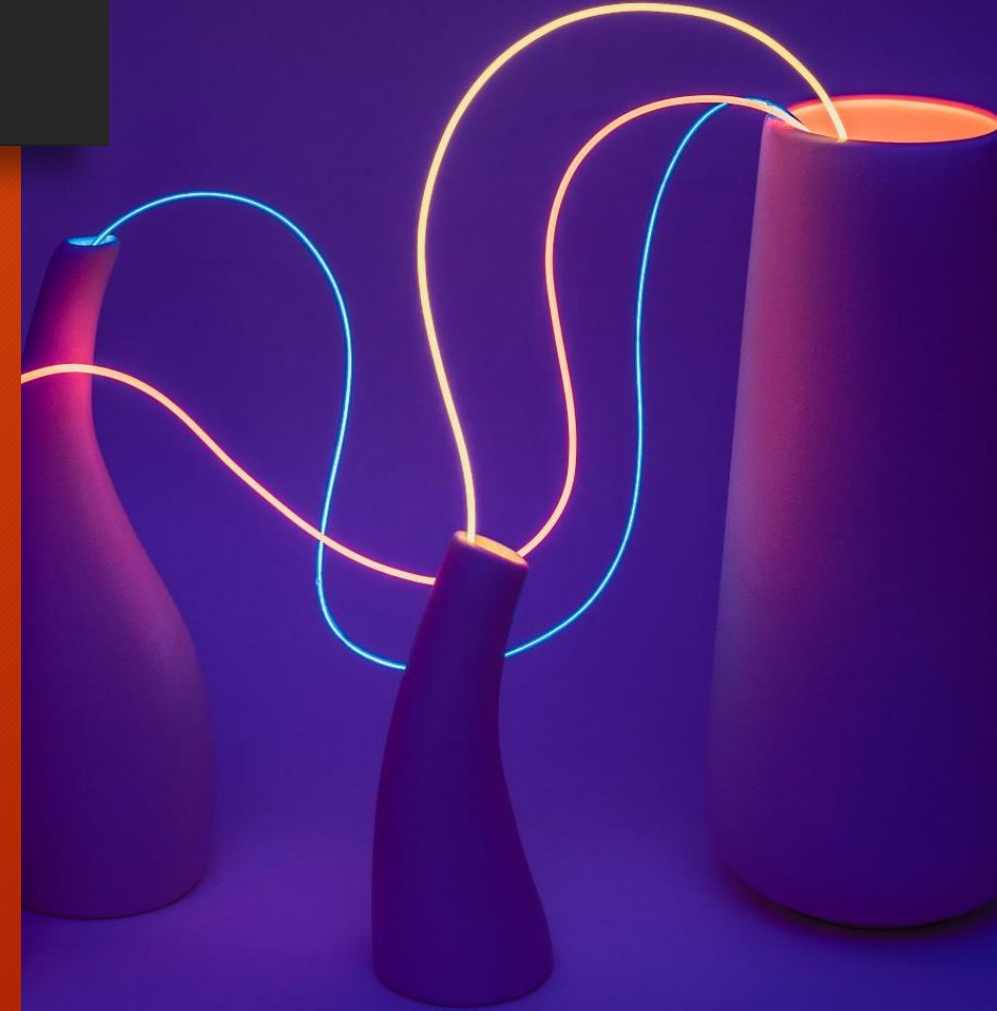
- Creating a sensory-friendly environment at home can greatly benefit individuals with sensory processing challenges by providing a calming and supportive space where they can feel comfortable and regulated.





# Sensory Management in the Home

1. Sensory Zones
2. Lighting
3. Colour Scheme
4. Organisation and Clutter Control
5. Noise Management
6. Sensory Tools and Equipment
7. Calming Scents
8. Sensory-Friendly Furniture



# Assessment

- Quiz time!







## Module 11: Ethical and Professional Considerations

# Ethical Considerations

- Ethical considerations in sensory intervention are crucial to ensure that practitioners provide effective, respectful, and responsible care to clients with sensory processing needs. Here are some specific ethical considerations relevant to sensory intervention:
- By adhering to these ethical considerations, sensory practitioners can promote the well-being, autonomy, and dignity of their clients while upholding the highest standards of professional conduct in their practice.







**Informed Consent:** Practitioners must ensure that clients (or their legal guardians) fully understand the nature, purpose, risks, and benefits of sensory interventions before providing consent. This includes explaining the potential outcomes of interventions, any potential discomfort or sensory overload that may occur, and the client's right to refuse or discontinue interventions at any time.



**Client Autonomy:** Respect for client autonomy is paramount in sensory intervention. Practitioners should empower clients to make informed decisions about their care, including the selection of sensory activities and interventions. Clients should be actively involved in the goal-setting process and have the opportunity to express their preferences and concerns.



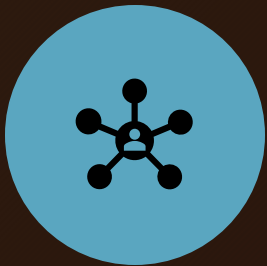
**Confidentiality:** Sensory practitioners must uphold strict confidentiality regarding client information and sensitive data obtained during assessments and interventions. Information about a client's sensory processing challenges, preferences, and progress should only be shared with authorized individuals involved in the client's care, and in accordance with applicable laws and regulations.



**Cultural Sensitivity:** Practitioners should recognize and respect the cultural, linguistic, and religious beliefs of clients and their families. Sensory interventions should be culturally sensitive and tailored to accommodate diverse cultural practices, values, and norms. Practitioners should be mindful of cultural differences in sensory processing and adapt interventions accordingly.



**Competence and Training:** Sensory practitioners have a professional responsibility to maintain competence in their practice and to seek appropriate training and supervision in sensory assessment and intervention techniques. Practitioners should only provide interventions within the scope of their training, expertise, and licensure, and refer clients to specialists when necessary.



**Boundaries and Professional Relationships:** Sensory practitioners must establish clear and appropriate boundaries in their relationships with clients and their families. This includes maintaining professional boundaries in interactions, avoiding dual relationships or conflicts of interest, and refraining from engaging in activities that could compromise the therapeutic relationship or the client's well-being.



**Avoiding Harm:** Practitioners should strive to do no harm and minimize the risk of negative outcomes associated with sensory interventions. This includes carefully monitoring clients for signs of distress, sensory overload, or adverse reactions during interventions and adjusting interventions accordingly. Practitioners should also be aware of potential physical, emotional, or psychological risks associated with certain sensory activities and use caution when implementing them.



**Ethical Decision-Making:** Practitioners should be prepared to navigate ethical dilemmas that may arise in the course of sensory intervention practice. This involves engaging in reflective practice, consulting with colleagues or supervisors, and adhering to ethical principles and professional standards in decision-making.



# Professional Code of Conduct

**Professional Integrity:** Sensory practitioners are expected to act with honesty, integrity, and accountability in their interactions with clients, colleagues, and the public.

**Client Welfare:** Practitioners must prioritize the well-being and best interests of their clients, ensuring that interventions are safe, effective, and tailored to individual needs.

**Confidentiality:** Sensory practitioners are required to maintain strict confidentiality regarding client information and respect the privacy rights of clients and their families.

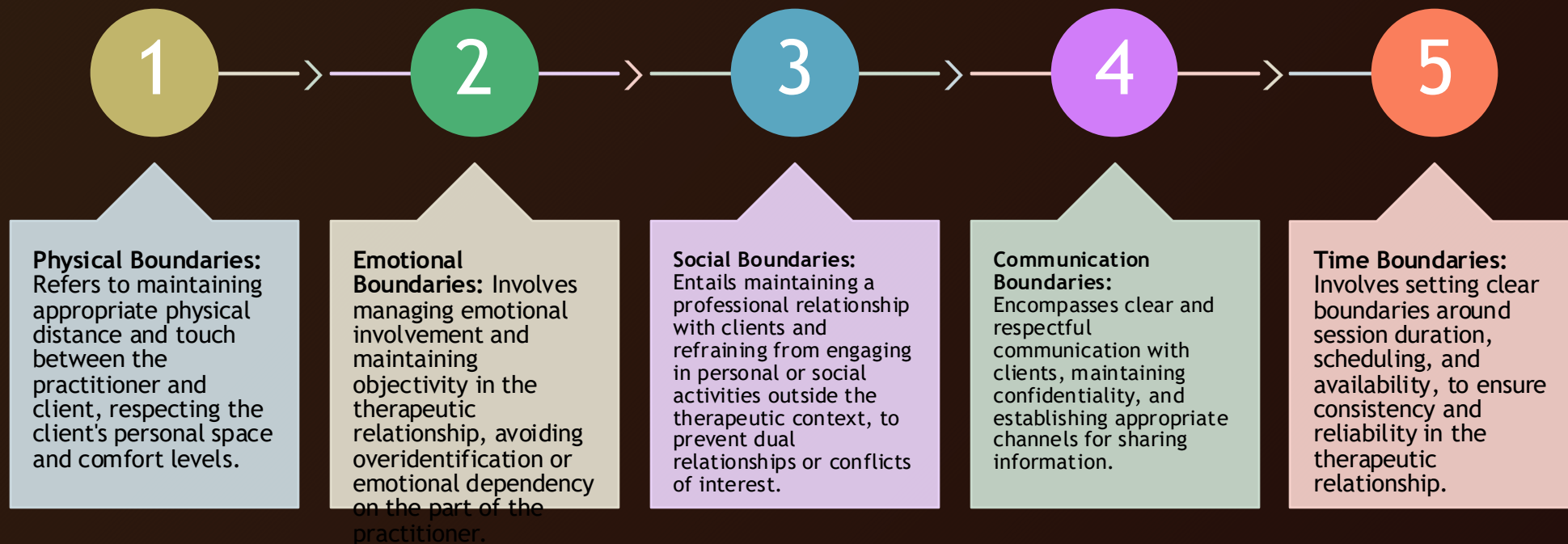
**Professional Competence:** Practitioners must continually strive to maintain and enhance their professional competence through ongoing education, training, and supervision.

**Cultural Competence:** Sensory practitioners should demonstrate cultural sensitivity and competence in their practice, recognizing and respecting the cultural, linguistic, and religious diversity of clients and their families.

**Professional Boundaries:** Practitioners are expected to establish and maintain appropriate boundaries in their relationships with clients, colleagues, and other professionals, avoiding conflicts of interest or dual relationships that could compromise the therapeutic relationship.

**Ethical Decision-Making:** Practitioners should be prepared to navigate ethical dilemmas that may arise in their practice, using ethical principles and professional judgment to guide their decision-making.

Professional boundaries in therapeutic relationships encompass various aspects of the practitioner-client relationship, including:





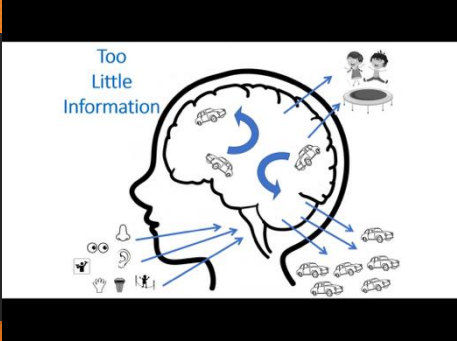
The background of the image features a series of concentric, wavy lines in shades of orange and red, creating a sunburst or ripple effect. A solid black horizontal bar is positioned across the middle of the image, containing the text "Information Booklet" in white. To the right of this bar, there is a solid orange rectangular area.

# Information Booklet

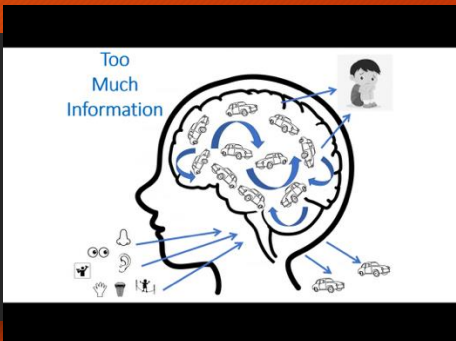
Associated Difficulty	Impact on Individuals with Sensory Processing Difficulties (SPD)
Autism Spectrum Disorder (ASD)	<ul style="list-style-type: none"> <li>- Sensory processing difficulties are a <b>core feature</b> of ASD.</li> <li>- Individuals may be hypersensitive or hyposensitive to sensory stimuli like noise, light, textures, or smells.</li> <li>- Sensory overload can lead to meltdowns or withdrawal, and may affect communication and social interactions.</li> </ul>
Attention Deficit Hyperactivity Disorder (ADHD)	<ul style="list-style-type: none"> <li>- Children and adults with <b>ADHD</b> often experience sensory processing difficulties, particularly with regulating sensory input (e.g., being distracted by noises or visual stimuli).</li> <li>- Hyperactivity or impulsivity may be driven by a need for sensory stimulation, and focusing can be harder in sensory-rich environments.</li> </ul>
Anxiety Disorders	<ul style="list-style-type: none"> <li>- Sensory processing difficulties can trigger or worsen <b>anxiety</b>, especially in overwhelming environments (e.g., noisy, crowded places).</li> <li>- The unpredictability of sensory stimuli can lead to anticipatory anxiety or avoidance of certain activities, places, or situations.</li> </ul>
Obsessive-Compulsive Disorder (OCD)	<ul style="list-style-type: none"> <li>- Individuals with <b>OCD</b> may have sensory-related compulsions or obsessions (e.g., needing to touch things in a particular way, aversion to certain textures or sensations).</li> <li>- Sensory issues can drive repetitive behaviour's and rituals aimed at reducing discomfort caused by sensory stimuli.</li> </ul>
Developmental Coordination Disorder (DCD)	<ul style="list-style-type: none"> <li>- Also known as <b>dyspraxia</b>, DCD involves difficulties with motor coordination, which are often linked to proprioceptive and vestibular sensory processing challenges.</li> <li>- Individuals may struggle with activities requiring balance, fine motor skills, or spatial awareness, contributing to clumsiness and difficulty with tasks like writing, dressing, or sports.</li> </ul>
Learning Disabilities	<ul style="list-style-type: none"> <li>- Sensory processing difficulties can make learning more challenging by creating distractions or making it harder to focus in typical classroom environments.</li> <li>- Children may struggle with visual processing (e.g., reading), auditory processing (e.g., following verbal instructions), or motor skills required for writing.</li> </ul>
Post-Traumatic Stress Disorder (PTSD)	<ul style="list-style-type: none"> <li>- Trauma can heighten sensitivity to sensory stimuli, leading to sensory processing difficulties. For instance, certain sounds, smells, or sights may trigger flashbacks or hyperarousal.</li> <li>- Individuals may develop a heightened fight-or-flight response, becoming easily startled or overwhelmed by sensory inputs.</li> </ul>
Tourette Syndrome (TS)	<ul style="list-style-type: none"> <li>- As noted previously, <b>premonitory urges</b> and sensory hypersensitivities can be prominent in TS.</li> <li>- Sensory inputs may trigger tics or intensify them, and individuals with TS may struggle to regulate sensory overload in stimulating environments.</li> </ul>
Sleep Disorders	<ul style="list-style-type: none"> <li>- Sensory processing difficulties can affect <b>sleep patterns</b>, making it harder to fall or stay asleep.</li> <li>- Hypersensitivity to sensory input (e.g., noise, light, texture of bedding) can contribute to insomnia or restless sleep.</li> </ul>
Feeding and Eating Disorders	<ul style="list-style-type: none"> <li>- Sensory processing difficulties can lead to <b>feeding issues</b>, especially in children.</li> <li>- Hypersensitivity to food textures, smells, or tastes can result in picky eating or food aversions.</li> <li>- These sensory sensitivities can sometimes be linked to eating disorders like <b>Avoidant/Restrictive Food Intake Disorder (ARFID)</b>.</li> </ul>
Depression	<ul style="list-style-type: none"> <li>- Chronic sensory overload or difficulty managing sensory inputs can contribute to feelings of <b>isolation</b>, frustration, or sadness.</li> <li>- Depression may develop in individuals who feel constantly overwhelmed by sensory inputs and unable to participate in typical daily activities.</li> </ul>
Panic Attacks	<ul style="list-style-type: none"> <li>- Sensory overload can be a trigger for <b>panic attacks</b>, particularly in environments where the individual feels trapped or unable to escape overwhelming stimuli.</li> <li>- A sudden, intense sensory experience (e.g., a loud sound or bright light) may cause a panic response.</li> </ul>
Chronic Fatigue or Exhaustion	<ul style="list-style-type: none"> <li>- The effort to constantly filter and manage sensory input can be physically and mentally exhausting, leading to <b>chronic fatigue</b> or burnout.</li> <li>- Individuals may need more rest or downtime to recover from sensory overload, and sensory processing difficulties may exacerbate existing fatigue-related conditions like <b>Chronic Fatigue Syndrome (CFS)</b> or <b>fibromyalgia</b>.</li> </ul>



Category	Difficulties
Over-Responsiveness (Hypersensitivity)	<ul style="list-style-type: none"> <li>- Overreaction to sensory input (e.g., loud sounds, bright lights, strong smells, certain textures)</li> <li>- Easily overwhelmed by sensory environments</li> </ul>
Under-Responsiveness (Hyposensitivity)	<ul style="list-style-type: none"> <li>- Lack of response to sensory input (e.g., not noticing sounds, touches, or pain)</li> <li>- Seeking intense sensory stimulation (e.g., loud noises, spinning)</li> </ul>
Difficulty with Sensory Discrimination	<ul style="list-style-type: none"> <li>- Struggles to distinguish between sensory inputs (e.g., background noise, touch differences)</li> <li>- Difficulty identifying objects by sight or touch</li> </ul>
Emotional and Behavioural Challenges	<ul style="list-style-type: none"> <li>- Anxiety, frustration, or meltdowns due to sensory overload</li> <li>- Sensory-seeking behaviour's (e.g., fidgeting, touching objects, making noise)</li> </ul>
Motor Skills and Coordination Difficulties	<ul style="list-style-type: none"> <li>- Poor balance and coordination</li> <li>- Difficulty with gross motor skills (e.g., running, climbing) and fine motor skills (e.g., writing, using utensils)</li> </ul>
Social and Communication Challenges	<ul style="list-style-type: none"> <li>- Social withdrawal to avoid sensory overload</li> <li>- Difficulty interpreting social cues (e.g., facial expressions, tone of voice)</li> </ul>
Difficulty with Transitions and Routines	<ul style="list-style-type: none"> <li>- Struggles with adapting to changes in routine or new environments</li> <li>- Emotional meltdowns or shutdowns in response to sensory overload</li> </ul>
Sleep Difficulties	<ul style="list-style-type: none"> <li>- Restlessness or trouble winding down due to sensory input (e.g., sensitivity to bed sheets, background noise)</li> </ul>
Difficulty with Self-Care	<ul style="list-style-type: none"> <li>- Avoidance of hygiene tasks (e.g., brushing teeth, bathing, cutting nails)</li> <li>- Picky eating due to texture or taste sensitivities</li> </ul>

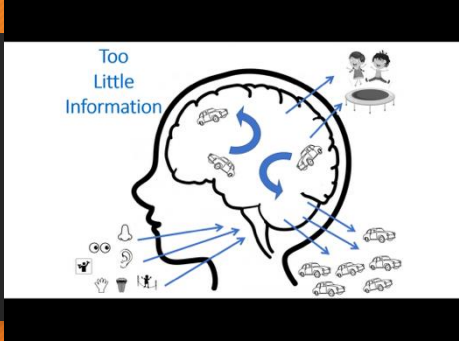


# Tactile-seeking

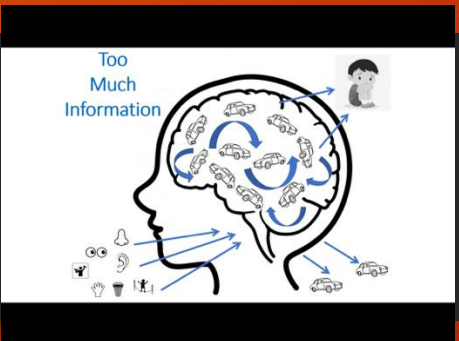


Characteristic	Description
Frequent Touching or Feeling Objects	Individuals often touch or feel objects, surfaces, or materials around them, using their hands to explore textures, shapes, and temperatures.
Preference for Tactile Activities	Tactile seekers show a strong preference for activities that involve tactile stimulation, such as playing with sensory materials, messy play, and hands-on crafts.
Exploration of Different Textures	They actively seek opportunities to explore a variety of textures, enjoying surfaces with different qualities like rough, smooth, soft, or bumpy.
Seeking Physical Contact	Tactile seekers may seek physical contact with others for tactile stimulation, enjoying hugs, cuddles, or hand-holding, and close proximity with loved ones.
Engagement in Self-Stimulatory Behaviours	They may engage in self-stimulatory behaviour's (e.g., rubbing, scratching, squeezing) to regulate sensory experiences and promote relaxation.
Preference for Certain Fabrics or Materials	Individuals may have a strong preference for specific fabrics or materials that provide tactile satisfaction, seeking comforting textures in clothing or bedding.
Craving for Sensory Input	Tactile seekers may crave sensory input and seek opportunities to satisfy their tactile needs, becoming restless when deprived of tactile stimulation.
Difficulty with Personal Space Boundaries	They may struggle with respecting personal space, often invading others' personal space in pursuit of tactile stimulation, sometimes disregarding social cues.
Preference for Messy Play	Tactile seekers enjoy messy play and tactile exploration activities (e.g., playing with mud, sand, water, slime, or playdough ) and the sensory experience of getting dirty.
Engagement in Fidgeting or Manipulative Behaviours	They may engage in fidgeting or manipulating objects in their environment to satisfy their tactile needs, constantly touching or playing with items around them.

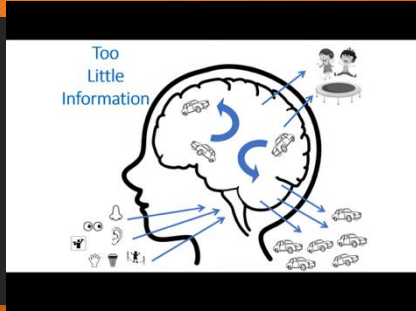




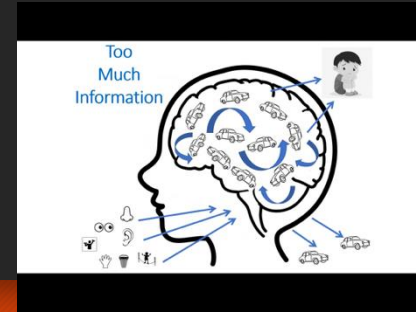
# Tactile-avoiding



Characteristic	Description
Avoidance of Certain Textures	Individuals may actively avoid touching or interacting with surfaces or materials they find unpleasant, expressing discomfort with rough, sticky, or abrasive textures.
Refusal to Wear Certain Clothing	Tactile avoiders may refuse to wear clothing or fabrics they find uncomfortable, preferring loose-fitting or soft materials to minimize tactile discomfort.
Sensitivity to Tags or Seams	They may be hypersensitive to tags, seams, or labels in clothing, finding them irritating; often cutting tags off or seeking tugless clothing to avoid discomfort.
Avoidance of Physical Contact	Tactile avoiders may shy away from physical contact (e.g., hugs, handshakes) and may experience discomfort or anxiety in situations where contact is expected.
Preference for Specific Touch Pressure	Individuals may prefer specific touch pressures, avoiding touch that feels too light or too firm, seeking gentle and reassuring contact while avoiding overwhelming pressure.
Withdrawal from Tactile Activities	They may withdraw from activities involving tactile stimulation, such as messy play or arts and crafts, to avoid touching or manipulating objects.
Limited Exploration of Environments	Tactile avoiders might avoid exploring new environments due to concerns about uncomfortable tactile stimuli, preferring familiar settings where they can control sensory input.
Preference for Cleanliness	They may have a strong preference for cleanliness, avoiding contact with objects perceived as dirty and feeling anxious in unclean environments.
Heightened Emotional Responses to Touch	Tactile avoiders may exhibit heightened emotional responses to touch, such as fear or distress, becoming upset when touched unexpectedly or when encountering aversive stimuli.
Difficulty with Self-Care Activities	They may struggle with self-care tasks like bathing or grooming, often expressing reluctance to engage in activities involving tactile sensations, affecting hygiene routines.

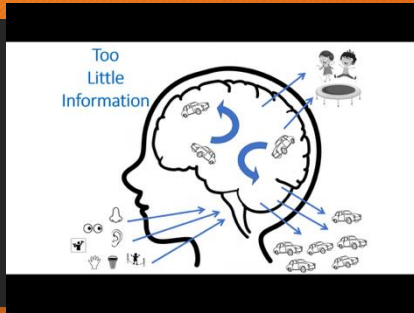


# Visual

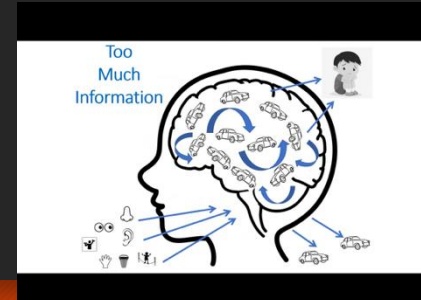


Characteristic	Description
Overstimulation	Students may become visibly overwhelmed or agitated by excessive visual stimuli, displaying fidgeting, covering their eyes, or attempting to retreat from the environment.
Difficulty Focusing	Too much visual information can hinder concentration on tasks, leading to distraction, difficulty maintaining eye contact, and a short attention span.
Heightened Anxiety	Excessive visual input can trigger anxiety or stress, evidenced by signs such as increased heart rate, shallow breathing, or nervous behaviour's like nail-biting or pacing.
Physical Discomfort	Students may experience discomfort, including headaches, eye strain, or fatigue, when exposed to bright lights or cluttered environments for extended periods.
Behavioural Changes	Look for changes in behaviours, such as irritability, restlessness, or mood swings, indicating struggles with overwhelming visual sensory input.
Avoidance Behaviours	Some students may seek to avoid environments with excessive visual stimuli, preferring quieter or less visually stimulating areas in the classroom or school.
Decreased Participation	Overwhelmed students may withdraw from or disengage in classroom activities, resulting in decreased participation and academic performance.
Sensory-Seeking Behaviours	Conversely, some students might engage in sensory-seeking behaviour's, such as excessive touching or exploring visual materials, or seeking out bright, visually stimulating objects.
Emotional Dysregulation	Overload from visual sensory information can disrupt emotional regulation, leading to outbursts, meltdowns, or emotional instability in some students.
Physical Symptoms	In severe cases, students may experience physical symptoms like nausea, dizziness, or sensory overload headaches due to exposure to overwhelming visual stimuli.



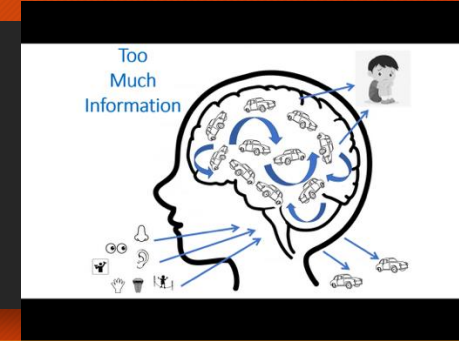
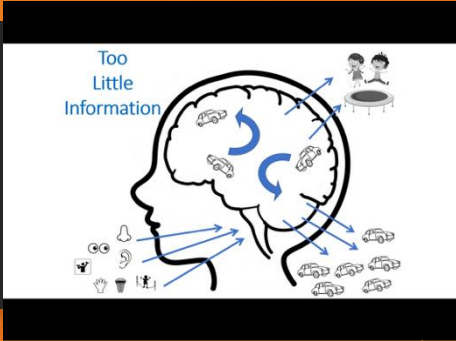


# Visual- Too Little



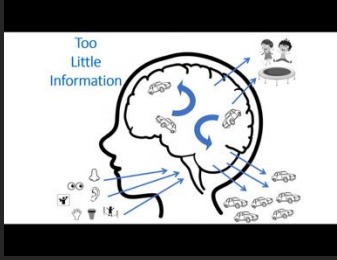
Characteristic	Description
Lack of Engagement	Students may appear disinterested or disengaged in classroom activities, showing minimal response to visual stimuli such as instructional materials or visual aids.
Difficulty Maintaining Attention	A lack of visual stimulation can lead to challenges in maintaining focus; students may seem easily distracted, struggle to follow lessons, or exhibit signs of daydreaming.
Limited Exploration	Students may show little curiosity or motivation to visually explore their environment, not actively seeking out visual information or demonstrating interest in displays.
Boredom	A visually under-stimulating environment can foster boredom or apathy, with students expressing a lack of enthusiasm for activities and appearing lethargic or unmotivated.
Slow Processing Speed	Insufficient visual input can slow processing speed, causing students to take longer to comprehend and respond to visual information; they may need extra time for instructions.
Limited Creativity and Imagination	Visual under stimulation can hinder creativity and imaginative thinking, making it difficult for students to generate ideas or engage in imaginative play or artistic expression.
Restlessness	Some students may become restless or fidgety due to a lack of visual stimulation, seeking alternative sensory input like tapping pencils, doodling, or daydreaming.
Difficulty with Visual Tasks	Students may struggle with visual tasks such as reading or interpreting information, showing poor visual tracking skills or challenges with visual-motor coordination.
Low Energy Levels	A visually under-stimulating environment can contribute to low energy and fatigue, causing students to appear sleepy, sluggish, or unenergetic during class.
Decreased Motivation	Students may demonstrate decreased motivation to participate in classroom activities or complete tasks, lacking initiative or enthusiasm in a visually under-stimulating environment.

# Auditory

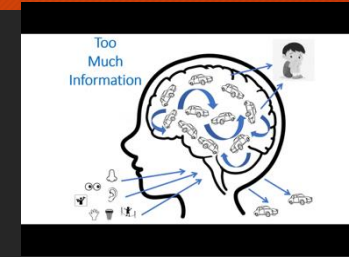


Characteristic	Description
<b>Hypersensitivity to Sound</b>	Individuals may be hypersensitive to sounds, experiencing them as overwhelming or painful. They may cover their ears or become distressed in response to everyday or sudden noises.
<b>Difficulty Filtering Background Noise</b>	They may struggle to filter out irrelevant background noise, making it hard to focus on important sounds, particularly in noisy environments like classrooms or crowded spaces.
<b>Overreaction to Loud Sounds</b>	Individuals may startle easily, become agitated, or display fight-or-flight responses to loud or unexpected noises, reacting more strongly than others.
<b>Delayed or Disorganized Language Development</b>	Auditory processing challenges can result in delayed or disorganized language development, making it difficult to understand spoken language or express oneself verbally.
<b>Auditory Seeking Behaviours</b>	Some individuals may seek intense auditory stimulation, engaging in behaviours like making loud noises, tapping, or humming to regulate their sensory experiences.
<b>Difficulty with Auditory Discrimination</b>	SPD may impair the ability to discriminate between sounds, leading to difficulty distinguishing between similar words, following conversations, or understanding speech in noise.
<b>Auditory Fatigue</b>	Prolonged exposure to auditory stimuli can cause cognitive overload or auditory fatigue, reducing attention, concentration, and tolerance for further sensory input.
<b>Avoidance of Noisy Environments</b>	Individuals may avoid noisy or overstimulating environments, preferring quiet, calm settings to prevent sensory overload and reduce anxiety or distress.
<b>Difficulty with Social Communication</b>	Auditory processing difficulties may impact social communication, making it challenging to engage in conversations, maintain eye contact, or interpret social cues.
<b>Emotional and Behavioural Challenges</b>	Auditory difficulties can lead to frustration, anxiety, or sensory overload, potentially causing meltdowns, withdrawal, or other coping behaviours in response to auditory stimuli.

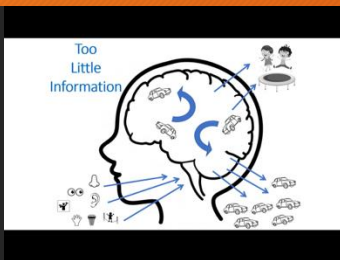




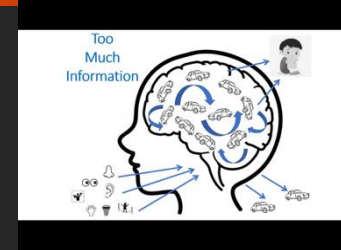
# Gustatory - Seeking



Characteristic	Description
Constantly Seeking New Flavors	Individuals may seek out diverse Flavors and foods, enjoying experimentation with different cuisines, spices, and ingredients for novel taste and texture experiences.
Preference for Intense Flavors	Gustatory seekers prefer bold and intense Flavors like spicy, sour, sweet, or bitter, and often enjoy foods with complex flavour profiles and unique taste combinations.
Craving for Sensory-rich Foods	They crave sensory-rich foods with varied textures and temperatures, enjoying sensations like crunchy, creamy, or chewy for a more intense gustatory experience.
Eating Excessively or Quickly	Gustatory seekers may eat large quantities of food rapidly in pursuit of sensory stimulation, particularly foods that provide strong taste sensations.
Preference for Spicy or Flavourful Foods	They often prefer spicy or highly flavourful foods, adding extra spices, seasonings, or condiments to enhance the intensity of the Flavors.
Engagement in Food-related Activities	Individuals may actively participate in cooking, baking, or exploring food markets and culinary events, enjoying the process of creating sensory-rich culinary experiences.
Eating Non-food Items	Some individuals may engage in seeking and mouthing non-food items like mud, sand, clothing, play dough, or even bodily fluids and excrement as part of their sensory-seeking behaviour's.
Participation in Food Challenges	Gustatory seekers may engage in food challenges or eating contests to experience extreme Flavors and push their sensory boundaries, enjoying the thrill of competition.
Not Recognizing the Feeling of Fullness	They may struggle with recognizing fullness due to difficulties with their interoceptive sense, leading to overeating, eating quickly, or eating frequently.
Heightened Sensitivity to Taste	Individuals may have heightened taste sensitivity, detecting subtle flavour nuances and savouring intricate flavour profiles that others may overlook.

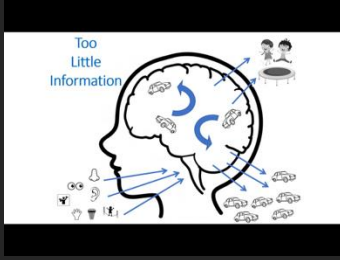


# Gustatory - Avoiding

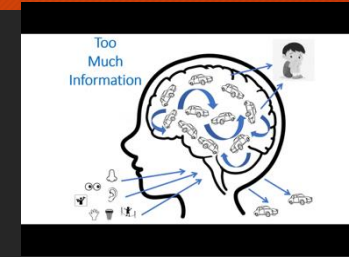


Characteristic	Description
Limited Food Choices	Individuals may stick to a narrow range of familiar foods, avoiding certain tastes, Flavors, or textures and showing resistance to trying new or unfamiliar foods.
"Picky Eating"	Exhibiting "picky" eating behaviour's, they may strongly prefer or avoid specific tastes, textures, or food groups. This could be related to ARFID (Avoidant Restrictive Food Intake Disorder).
Avoidance of Certain Foods or Ingredients	Individuals may refuse or avoid foods they find unappealing, expressing discomfort or disgust at the thought of consuming certain foods, ingredients, or combinations.
Reluctance to Try New Foods	They may express anxiety or apprehension about trying new foods or Flavors, even when encouraged, fearing unpleasant reactions or tastes.
Physical Discomfort or Nausea	Certain tastes or food odours may cause physical discomfort or nausea, leading to sensations of gagging or vomiting in response to specific foods.
Limited Social Dining Experiences	Due to aversions to specific tastes, they may avoid social dining, restaurants, or food-related activities. They may also take longer to eat, taking small bites or over-chewing food.
Rigid Eating Habits	Gustatory avoiders may develop rigid routines around eating, preparing their own meals, or eating alone to avoid aversive tastes or maintain control over their food choices.
Preference for Plain or Bland Foods	They may gravitate toward plain or bland foods with minimal seasoning, avoiding strong or complex Flavors, often sticking to "toddler diet" type foods.
Discomfort in Food-Related Situations	Food-related situations, such as dining out or social gatherings, may cause anxiety or discomfort. They may feel self-conscious about their eating preferences or limitations.
Impact on Nutritional Status	Limited dietary variety can lead to nutritional imbalances or deficiencies, potentially affecting overall health and well-being.

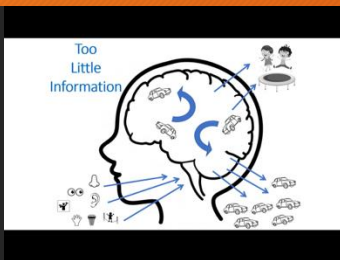




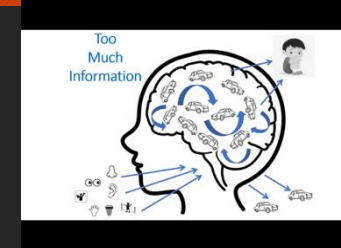
# Olfactory- Seeking



Characteristic	Description
Frequent Smelling	Individuals may frequently smell objects, surfaces, or substances, deeply inhaling to immerse themselves in different scents as a way of exploring their environment.
Interest in Aromatherapy	Olfactory seekers may enjoy using scented oils, candles, or diffusers for relaxation and mood enhancement, often exploring specific scents for therapeutic purposes.
Exploration of Natural Scents	They may actively seek out natural scents, such as flowers, plants, or outdoor environments, enjoying walks in nature or spending time in gardens to experience diverse aromas.
Enjoyment of Perfumes and Fragrances	Individuals may enjoy wearing and experimenting with perfumes or colognes, often having a collection of fragrances they use to enhance their personal scent experience.
Participation in Scent-related Activities	Olfactory seekers may engage in activities involving aromas, such as cooking, baking, wine tasting, or perfume-making, enjoying the creation and experience of different scents.
Interest in Scented Products	They may have a fascination with scented products, such as soaps, lotions, candles, or air fresheners, enjoying shopping for and exploring different scent options.
Seeking Out Food Aromas	Individuals may seek opportunities to experience strong food aromas, enjoying the process of cooking or baking foods with enticing smells or visiting aromatic restaurants.
Engagement in Scent-related Hobbies	They may participate in hobbies like gardening, perfumery, or wine tasting, exploring different scents and combinations, and learning about the ingredients behind them.
Use of Scented Personal Care Products	Individuals may use scented lotions, body washes, or shampoos to enhance their sensory experience, enjoying pleasant aromas throughout their daily routines.
Sharing and Discussing Scent Experiences	Olfactory seekers may enjoy discussing and sharing scent experiences with others, seeking to connect with those who share their interest in scents, fragrances, and aromas.



# Olfactory- Avoiding



Characteristic	Description
Physical Avoidance	Individuals may avoid places or environments where strong or unpleasant smells are present, such as crowded spaces, restaurants, or public transportation.
Avoidance of Certain Foods or Ingredients	Olfactory avoiders may refuse foods with strong or unfamiliar smells, opting for bland or neutral-flavoured options to avoid discomfort.
Discomfort or Anxiety in Scented Environments	Exposure to strong or unfamiliar smells may cause anxiety, nausea, headaches, or dizziness, leading to discomfort in scented environments.
Preference for Unscented or Fragrance-Free Products	They may prefer using unscented or fragrance-free personal care and household products to avoid strong smells, often seeking out hypoallergenic or scent-free options.
Limited Social Engagement	They may limit social activities where strong odours, such as food smells or perfumes, are present, avoiding settings like restaurants, bars, or social gatherings.
Avoidance of Perfumes and Fragrances	Olfactory avoiders may avoid wearing perfumes or scented products and may feel discomfort or irritation when exposed to others wearing strong fragrances.
Preference for Well-Ventilated Spaces	They prefer well-ventilated, open-air spaces with good airflow to avoid concentrated odours, often choosing outdoor environments.
Limited Exposure to Cooking Odors	They may avoid cooking or preparing foods with strong smells at home, opting for quick meals or those with less intense odours to keep their living space odour-free.
Use of Air Purifiers or Odor Neutralizers	Olfactory avoiders may use air purifiers, odour-neutralizing sprays, or other devices to minimize unpleasant smells and create a more comfortable environment.
Negative Emotional Responses to Smells	Exposure to certain odours may trigger negative emotions like disgust, frustration, or anxiety, with individuals going to great lengths to avoid specific unpleasant smells.



# Too Little - Vestibular

Characteristic	Description
Balance Issues	Difficulty maintaining balance, appearing unsteady on feet, frequent stumbling, or tendency to lean or sway while standing.
Dizziness or Vertigo	Sensations of dizziness or vertigo (spinning), feeling lightheaded or disoriented, especially with sudden head movements.
Motion Sickness	Increased susceptibility to motion sickness when traveling by car, boat, or airplane, leading to nausea, vomiting, sweating, or headaches.
Difficulty with Spatial Awareness	Trouble perceiving one's position in space, difficulty judging distances, and challenges navigating complex environments or coordinating movements with objects or people.
Poor Postural Control	Inability to maintain proper posture, resulting in slouching, stooping, or difficulty staying upright, particularly during extended periods of sitting or standing.
Gait Abnormalities	Walking with an unsteady or uneven gait, taking shorter steps, or displaying an irregular walking rhythm due to vestibular dysfunction.
Sensitivity to Visual Motion	Discomfort or difficulty focusing on moving objects, fast-paced visual stimuli (e.g., scrolling text, action scenes), or situations involving quick visual changes.
Visual Disturbances	Blurred vision, double vision, or trouble maintaining focus, especially during head movements or fast-paced visual activities.
Fatigue and Discomfort	Experiencing fatigue, discomfort, or unease after prolonged exposure to balance-related activities or sensory stimuli.
Anxiety or Avoidance Behaviours	Developing anxiety or avoidance of situations that aggravate symptoms (e.g., heights, fast-moving vehicles), as a coping mechanism for vestibular dysfunction.

# Too Much - Vestibular

Characteristic	Description
Hyperresponsiveness to Motion	Hypersensitivity to minor movements, altitude changes, or acceleration, leading to exaggerated sensations of dizziness, vertigo, or disorientation.
Motion Sickness	Increased susceptibility to motion sickness, with symptoms like nausea, dizziness, or feeling unwell during vehicle travel or amusement rides.
Exaggerated Response to Visual Motion	Discomfort or dizziness triggered by visual stimuli involving motion (e.g., scrolling text, rapid changes in scenery), leading to visual disturbances or disorientation.
Balance Challenges	Difficulty maintaining balance due to exaggerated postural adjustments, resulting in unsteady or erratic movements, despite heightened vestibular response.
Increased Sensitivity to Changes in Altitude	Heightened sensations of dizziness or vertigo when transitioning between different altitudes (e.g., stairs, elevators, airplanes), often causing light-headedness.
Discomfort in Crowded or Confined Spaces	Overwhelmed or claustrophobic feelings in crowded or enclosed spaces, leading to anxiety, agitation, or discomfort due to sensory overload.
Difficulty with Rapid Head Movements	Intense dizziness or vertigo triggered by quick or abrupt head movements, requiring individuals to move slowly or cautiously to avoid symptoms.
Sensory Avoidance Behaviours	Avoidance of activities, environments, or movements that provoke dizziness or discomfort, potentially limiting daily functioning and participation in activities.
Fatigue and Anxiety	Fatigue, anxiety, or stress resulting from the constant challenge of managing dizziness or vertigo, impacting emotional and physical well-being.
Impact on Quality of Life	Persistent vestibular overactivity can affect work, social life, and recreation, necessitating evaluation and treatment from healthcare professionals for symptom relief.



# Proprioception

Characteristic	Description
Poor Spatial Awareness	Difficulty judging body position in space, leading to bumping into objects or misjudging distances when reaching for objects.
Clumsiness and Lack of Coordination	Challenges with coordination in walking, running, or sports, resulting in unsteady or awkward movements.
Difficulty with Balance and Stability	Struggles to maintain balance, particularly on one foot or uneven surfaces, with a tendency to sway or lose balance easily.
Difficulty with Fine Motor Skills	Impaired control over fine motor tasks, such as handwriting, tying shoelaces, or using utensils, due to challenges with finger and hand precision.
Grip Strength Issues	Trouble modulating grip strength, leading to either dropping objects or applying too much force.
Delayed Motor Milestones	Delays in reaching motor milestones like crawling, walking, or climbing, requiring additional support for motor skill development.
Difficulty with Body Awareness	Limited awareness of body position and movement, affecting tasks such as dressing, grooming, or moving through crowded spaces.
Sensitivity to Touch or Pressure	Hypersensitivity or hyposensitivity to touch or pressure, leading to either seeking or avoiding certain tactile sensations.
Difficulty Modulating Movement Speed	Problems controlling movement speed and force, resulting in actions that are either too fast or too slow.
Fatigue and Muscle Weakness	Muscle fatigue and weakness from inefficient movement patterns and compensatory strategies used to navigate the environment.
Difficulty Following Instructions	Challenges in following verbal or written instructions that require coordinated movements or understanding spatial orientation.
Frequent Accidents or Injuries	Increased risk of accidents or injuries, such as falls or collisions, due to misjudgement of spatial relationships and uncoordinated movements.

Aspect	Impact of Trauma on Sensory Processing
Hyperarousal (Increased Sensitivity)	Trauma often leads to a <b>hyper aroused nervous system</b> , causing heightened awareness and sensitivity to sensory stimuli. Individuals may experience: <ul style="list-style-type: none"><li>- Overreacting to sensory input (e.g., loud noises, sudden movements, touch)</li><li>- Feeling overwhelmed in noisy or crowded environments</li><li>- Increased startle response to unexpected stimuli, like loud sounds or bright lights</li></ul>
Hypo arousal (Decreased Sensitivity)	In some cases, trauma can cause individuals to become <b>under-responsive</b> to sensory input. This may manifest as: <ul style="list-style-type: none"><li>- Numbness or lack of awareness of sensory information</li><li>- Seeking intense sensory input (e.g., pressure, noise) to feel grounded or alert</li><li>- Difficulty recognizing physical sensations, such as pain or temperature changes</li></ul>
Sensory Avoidance	Trauma survivors may develop an aversion to certain sensory experiences that remind them of the traumatic event. This can lead to: <ul style="list-style-type: none"><li>- Avoidance of environments or activities with specific sensory triggers (e.g., loud voices, certain smells, or crowded spaces)</li><li>- Heightened emotional responses (e.g., panic, anger) when exposed to these sensory triggers</li></ul>
Sensory Seeking	To regulate emotions and feel more in control, individuals with trauma histories may engage in <b>sensory-seeking behaviour's</b> , such as: <ul style="list-style-type: none"><li>- Craving strong sensory inputs (e.g., weighted blankets, physical activity, or loud music)</li><li>- Using repetitive behaviour's (e.g., fidgeting, rocking) to calm the nervous system</li></ul>
Flashbacks and Sensory Triggers	Trauma often leaves individuals vulnerable to <b>sensory triggers</b> that can cause flashbacks or re-experiencing of the traumatic event. Examples include: <ul style="list-style-type: none"><li>- Sounds, smells, or physical sensations associated with the trauma (e.g., a certain scent, a particular sound, or the feel of a specific texture)</li><li>- Visceral reactions (e.g., nausea, dizziness, or panic) when exposed to these sensory cues</li></ul>
Emotional Dysregulation	Trauma impacts the ability to <b>regulate emotions</b> , and this can be closely tied to sensory overload: <ul style="list-style-type: none"><li>- Sensory overload (e.g., too much noise, visual clutter) can trigger emotional outbursts, shutdowns, or dissociation</li><li>- Difficulty calming down after sensory overwhelm, leading to longer recovery times</li></ul>
Body Awareness and Safety	Trauma survivors often experience a <b>disconnection from their bodies</b> , leading to difficulties with proprioception and interoception: <ul style="list-style-type: none"><li>- Struggling to feel "grounded" or aware of where their body is in space</li><li>- Difficulty interpreting internal sensations like hunger, thirst, or pain, leading to neglect of basic self-care</li></ul>
Sleep Difficulties	Trauma can contribute to sleep disturbances, often exacerbated by <b>sensory sensitivities</b> : <ul style="list-style-type: none"><li>- Difficulty sleeping due to sensory sensitivities (e.g., discomfort with bed textures, sensitivity to noise)</li><li>- Hypervigilance (always being on alert) can make it hard to relax or feel safe enough to sleep</li></ul>



Aspect of Sensory Processing	How Foetal Alcohol Syndrome (FAS) Affects Sensory Processing
Over-Responsiveness (Hypersensitivity)	<ul style="list-style-type: none"> <li>- Children with FAS may be overly sensitive to sensory stimuli, reacting strongly to things others find tolerable.</li> <li>- Examples include: heightened sensitivity to loud sounds, bright lights, strong smells, or certain textures.</li> <li>- These reactions can lead to anxiety, meltdowns, or avoidance of specific environments (e.g., crowded or noisy places).</li> </ul>
Under-Responsiveness (Hyposensitivity)	<ul style="list-style-type: none"> <li>- In some cases, children with FAS may show reduced responses to sensory input.</li> <li>- They may not notice pain or discomfort, or may not respond to touch, sound, or visual stimuli as expected.</li> <li>- This can result in seeking intense sensory input (e.g., craving movement, rough play, or loud noises).</li> </ul>
Sensory-Seeking Behaviours	<ul style="list-style-type: none"> <li>- Some children with FAS may engage in sensory-seeking behaviour's to self-regulate or "wake up" their under-responsive sensory system.</li> <li>- Examples include: spinning, rocking, touching everything, or making loud sounds to stimulate their senses.</li> <li>- These behaviour's are often a way to achieve sensory input that helps them feel more grounded.</li> </ul>
Difficulty with Sensory Discrimination	<ul style="list-style-type: none"> <li>- Children with FAS may struggle to <b>distinguish</b> between different sensory inputs.</li> <li>- This could manifest as difficulty telling where sounds are coming from, identifying textures by touch, or distinguishing between similar visual patterns.</li> <li>- It may also be challenging for them to process sensory information in environments with too much stimulation (e.g., noisy classrooms, cluttered spaces).</li> </ul>
Motor Skills and Coordination	<ul style="list-style-type: none"> <li>- <b>Gross motor skills</b> (e.g., running, jumping) and <b>fine motor skills</b> (e.g., writing, buttoning clothes) can be delayed or poorly coordinated in children with FAS.</li> <li>- These motor difficulties are often tied to challenges in proprioception (awareness of body position) and vestibular processing (balance and movement).</li> <li>- They may appear clumsy, bump into things, or struggle with tasks requiring precise hand-eye coordination.</li> </ul>
Emotional and Behavioural Dysregulation	<ul style="list-style-type: none"> <li>- Children with FAS often experience difficulty regulating their emotions, especially in response to sensory overload.</li> <li>- <b>Sensory overload</b> (e.g., too much noise, strong smells) can lead to meltdowns, anxiety, frustration, or withdrawal.</li> <li>- Difficulty calming down after sensory overload may result in long recovery times and emotional distress.</li> </ul>
Hyperactivity and Impulsivity	<ul style="list-style-type: none"> <li>- FAS is often linked to <b>hyperactivity</b> and <b>impulsivity</b>, which can be exacerbated by sensory processing difficulties.</li> <li>- Children may become overstimulated by their environment, leading to excessive movement, difficulty focusing, and impulsive behaviour's like touching objects or interrupting others.</li> </ul>
Sleep Difficulties	<ul style="list-style-type: none"> <li>- Sensory processing difficulties can contribute to <b>sleep problems</b>, which are common in children with FAS.</li> <li>- These may include sensitivity to light, sounds, or textures (e.g., bed sheets) that make it hard to fall asleep or stay asleep.</li> <li>- Hyperarousal due to sensory sensitivities can result in restlessness or difficulty winding down before bedtime.</li> </ul>
Difficulty with Self-Care	<ul style="list-style-type: none"> <li>- Children with FAS may struggle with sensory-related self-care tasks such as: brushing teeth (sensitivity to the toothbrush or toothpaste), bathing (temperature, water pressure), or wearing certain types of clothing (tags, fabric textures).</li> <li>- Picky eating is also common, often driven by aversions to certain food textures, smells, or Flavors.</li> </ul>

Aspect of Sensory Processing	Impact of Tourette Syndrome (TS) on Sensory Processing
Premonitory Sensory Urges	<ul style="list-style-type: none"> <li>- One of the most common sensory experiences in TS is the <b>premonitory urge</b>, a sensation that builds up in certain body parts and feels uncomfortable until a tic is performed.</li> <li>- This sensation is often described as itching, tension, pressure, or tingling, and is a sensory signal that precedes a tic. The urge typically feels stronger until the tic is released, providing temporary relief.</li> </ul>
Over-Responsiveness (Hypersensitivity)	<ul style="list-style-type: none"> <li>- Individuals with TS may be hypersensitive to sensory input, reacting strongly to things like loud noises, certain textures, or bright lights.</li> <li>- This can lead to anxiety or discomfort in sensory-rich environments, causing agitation or even triggering tics.</li> <li>- For example, sensory overload in busy environments (e.g., crowded classrooms) can make tics worse.</li> </ul>
Under-Responsiveness (Hyposensitivity)	<ul style="list-style-type: none"> <li>- Some individuals with TS may have reduced awareness of certain sensory stimuli, leading them to seek more intense sensory input (e.g., moving, touching objects).</li> <li>- This sensory-seeking behaviour may overlap with motor tics, as both are responses to a need for more sensory stimulation.</li> <li>- In these cases, children may fidget, make loud noises, or engage in other sensory-seeking actions.</li> </ul>
Tic-Induced Sensory Sensitivities	<ul style="list-style-type: none"> <li>- The repetitive nature of tics can lead to increased sensitivity in areas of the body affected by tics. For example, a repetitive facial tic might make the skin around the face more sensitive to touch.</li> <li>- This sensitivity can create a feedback loop where the discomfort caused by the tic increases the frequency or intensity of the tic.</li> </ul>
Sensory-Seeking Behaviours	<ul style="list-style-type: none"> <li>- Many individuals with TS engage in <b>sensory-seeking behaviour's</b> (e.g., rocking, touching objects, or making loud noises) to self-regulate their sensory system.</li> <li>- These behaviour's can help them cope with sensory under-responsiveness or premonitory urges. For instance, rubbing certain textures might provide relief from a premonitory urge.</li> </ul>
Difficulty with Sensory Discrimination	<ul style="list-style-type: none"> <li>- People with TS may struggle to distinguish between different sensory inputs, such as separating background noise from important sounds or identifying tactile sensations.</li> <li>- This can make certain environments (e.g., classrooms, busy public spaces) overwhelming and contribute to concentration difficulties or heightened anxiety.</li> </ul>
Emotional and Behavioural Dysregulation	<ul style="list-style-type: none"> <li>- Sensory processing difficulties in TS often exacerbate emotional regulation issues. For example, sensory overload (e.g., too much noise, strong smells) can lead to emotional outbursts or frustration.</li> <li>- Increased emotional stress can make tics more frequent or intense, creating a cycle of sensory overload and tic escalation.</li> </ul>
Motor Coordination and Proprioception	<ul style="list-style-type: none"> <li>- TS is often associated with <b>motor coordination issues</b>, and sensory processing difficulties may contribute to this.</li> <li>- Individuals with TS may have a poor sense of body awareness (proprioception), leading to clumsiness, difficulty judging distances, or poor posture.</li> <li>- These proprioceptive challenges can exacerbate motor tics, making it difficult to maintain control over movements.</li> </ul>
Attention and Focus	<ul style="list-style-type: none"> <li>- Sensory processing difficulties can interfere with the ability to <b>focus</b> on tasks, especially in environments with competing sensory inputs (e.g., noisy or visually stimulating classrooms).</li> <li>- Difficulty filtering out irrelevant sensory information can lead to distractibility and may worsen tics when the individual feels overwhelmed.</li> </ul>
Social Challenges	<ul style="list-style-type: none"> <li>- Sensory sensitivities, along with visible tics, can create social challenges. For example, a child with TS may avoid social situations where sensory overload is likely to trigger tics or discomfort.</li> <li>- Difficulty interpreting social cues, like tone of voice or body language, may be compounded by sensory processing difficulties.</li> </ul>



Area	Support Strategies
Managing Premonitory Urges	<ul style="list-style-type: none"> <li>- Teach the individual to recognize and describe the sensory cues that precede tics (premonitory urges).</li> <li>- Introduce sensory strategies like deep pressure or specific textures to alleviate these urges.</li> </ul>
Sensory Breaks and Calming Strategies	<ul style="list-style-type: none"> <li>- Create a <b>sensory-friendly environment</b> where the person can retreat if they become overwhelmed (e.g., quiet spaces, dim lighting).</li> <li>- Incorporate sensory breaks throughout the day, allowing time to decompress from sensory overload (e.g., using headphones, fidget toys).</li> </ul>
Tic Management Strategies	<ul style="list-style-type: none"> <li>- Work with professionals (e.g., occupational therapists) to develop a <b>tic management plan</b> that includes sensory tools and strategies (e.g., weighted blankets, sensory swings).</li> <li>- Use <b>Habit Reversal Therapy (HRT)</b> or <b>Comprehensive Behavioural Intervention for Tics (CBIT)</b>, which can help individuals become more aware of their tics and sensory urges and develop competing responses.</li> </ul>
Reducing Sensory Overload	<ul style="list-style-type: none"> <li>- Minimize sensory triggers by reducing noise, light, and clutter in the environment.</li> <li>- Use noise-cancelling headphones or soft lighting to help the individual stay calm in overstimulating settings.</li> </ul>
Supporting Focus and Attention	<ul style="list-style-type: none"> <li>- Provide sensory supports (e.g., visual schedules, quiet workspaces) to reduce distractions and help with focus, especially in classroom or work environments.</li> <li>- Allow the use of fidget toys, weighted vests, or other sensory tools that can help maintain focus and reduce tics.</li> </ul>
Emotional Regulation Support	<ul style="list-style-type: none"> <li>- Use <b>emotional regulation strategies</b>, such as deep breathing, mindfulness, or grounding techniques, to help manage stress or frustration from sensory overload.</li> <li>- Encourage self-awareness of sensory triggers and emotional responses to prevent escalation.</li> </ul>
Motor Skill Development	<ul style="list-style-type: none"> <li>- Work with an occupational or physical therapist to improve <b>proprioception</b> and <b>motor coordination</b> through targeted exercises.</li> <li>- Engage in activities that promote body awareness and control, such as yoga or swimming.</li> </ul>
Social Skills and Peer Education	<ul style="list-style-type: none"> <li>- Educate peers, teachers, and family members about TS and sensory processing difficulties to foster understanding and reduce stigma.</li> <li>- Provide social skills training to help the individual navigate social situations that might be challenging due to sensory sensitivities or tics.</li> </ul>

Sensory System	Effect of Sensory Processing Disorder (SPD)	Impact on Individuals with Dyspraxia
Proprioception (Body Awareness)	<ul style="list-style-type: none"><li>- Difficulty sensing body position, leading to clumsiness or poor posture</li><li>- Struggles to judge the force needed for tasks (e.g., gripping, pushing)</li></ul>	<ul style="list-style-type: none"><li>- Increased clumsiness (e.g., bumping into objects, tripping)</li><li>- Poor motor planning and coordination (e.g., handwriting difficulties, balance issues)</li></ul>
Vestibular (Balance and Movement)	<ul style="list-style-type: none"><li>- Over- or under-responsiveness to movement</li><li>- Difficulty with balance or spatial orientation</li></ul>	<ul style="list-style-type: none"><li>- Struggles with balance-related tasks (e.g., climbing stairs, riding a bike)</li><li>- Fear of activities that involve heights or fast movements</li></ul>
Tactile (Touch)	<ul style="list-style-type: none"><li>- Hypersensitivity: Discomfort with certain textures (e.g., clothes, surfaces)</li><li>- Hyposensitivity: Lack of awareness of touch, leading to delayed reactions</li></ul>	<ul style="list-style-type: none"><li>- Avoidance of activities involving messy play or specific materials</li><li>- Difficulty with fine motor tasks (e.g., buttoning, tying shoelaces) due to poor tactile feedback</li></ul>
Auditory (Hearing)	<ul style="list-style-type: none"><li>- Sensitivity to sounds: Difficulty tolerating loud or background noises</li><li>- Hyposensitivity: Struggles to hear or process verbal instructions</li></ul>	<ul style="list-style-type: none"><li>- Overwhelm in noisy environments (e.g., school, playground)</li><li>- Difficulty following verbal instructions, especially in group settings</li></ul>
Visual (Sight)	<ul style="list-style-type: none"><li>- Sensitivity to bright lights or busy environments</li><li>- Difficulty with visual tracking and processing</li></ul>	<ul style="list-style-type: none"><li>- Trouble with tasks that require eye-hand coordination (e.g., reading, writing)</li><li>- Poor spatial awareness, leading to difficulty judging distances</li></ul>
Taste/Smell	<ul style="list-style-type: none"><li>- Over- or under-sensitivity to certain smells or tastes</li><li>- Strong reactions to certain foods or environments</li></ul>	<ul style="list-style-type: none"><li>- Picky eating due to strong taste or smell aversions</li><li>- Difficulty tolerating environments with strong odours (e.g., cafeterias, kitchens)</li></ul>
Interoception (Internal Body Signals)	<ul style="list-style-type: none"><li>- Difficulty recognizing internal signals (e.g., hunger, thirst, need for the bathroom)</li></ul>	<ul style="list-style-type: none"><li>- Struggles with self-care tasks like eating on time or using the bathroom appropriately</li><li>- Difficulty understanding fatigue or illness cues, impacting physical coordination</li></ul>



Visual	Auditory	Proprioception	Taste	Smell	Tactile
Reduce lighting in the classroom	Reduce use of ear defenders	Seating adaptations (wobble cushions, resistance bands)	Don't put time limits on eating	Be conscious of your smell	Allow for uniform to be relaxed
Reduce use of smartboard	Allow for aids such as headphones with pupil's choice of sound/music or desk boards	Movement within the lesson	Allow pupils to eat in a quiet, safe space	Smells around the corridors	Allow pupils time to adjust uniform
Reduce information on slideshows/worksheets (break it down) and reduce movement	Quite time for transitions	Activities to develop sense of force	Don't be the restrictors- allow pupils to have the opportunity to try new foods	Smells in the classroom	Allow for complete adjustment on uniform such as leggings
Use of visual aids such as timetable, overlay and now/next	Quiet space	Heavy work	Be aware of smells on you	Use of preferred smells (smell jars/smelly tissues)	Writing aids/grips
Reduce display board information and information in the classroom	Be conscious and mindful of noise	Weighted items	Diffusers or smelly tissues	Allow for lunchtime differentiation	Use of tactile activities in lessons
Be conscious of clothing and accessories	Relaxing music	Tight squeeze/ deep pressure	Be aware of smells in your environment and timings	Allow expository experiences	Use of weighted blankets in the learning environment
Sunglasses/ desk dividers	Reduce your voice and have quiet breaks in the lesson	Change positions regularly	Remember- the smell is the most overlooked sense		Allow for tactile comforts in learning environment

Designing classrooms and learning spaces that accommodate sensory needs is essential for creating inclusive environments where all students can thrive. Here are some strategies for designing such spaces:

### Flexible Seating Options:

Provide a variety of seating options to accommodate different sensory preferences and needs. This may include bean bag chairs, floor cushions, rocking chairs, wobble stools, or standing desks. Allow students to choose the seating option that best suits their sensory needs and promotes focus and comfort.

### Adjustable Lighting:

Ensure classrooms have adjustable lighting options to control brightness and minimize glare. Use natural light whenever possible and incorporate soft, diffused lighting to create a calming atmosphere. Consider installing dimmer switches or using lamps with adjustable brightness levels.

### Sensory-Friendly Materials:

Choose classroom materials and furniture with sensory-friendly features. Opt for soft, non-abrasive fabrics for chairs and cushions, and avoid materials with strong odours or textures that may be aversive to some students. Use non-toxic and hypoallergenic materials whenever possible.

### Quiet Areas:

Designate quiet areas within the classroom where students can retreat to when they need a break from sensory stimuli or require a quiet space to focus. Provide comfortable seating, noise-cancelling headphones, and calming sensory tools such as stress balls or fidget toys in these areas.

### Visual Supports:

Incorporate visual supports throughout the classroom to help students navigate the environment and understand expectations. Use visual schedules, visual timers, and visual cues to support organization, transitions, and communication. Use color-coded labels and signage to differentiate areas of the classroom and create visual anchors for students.



By implementing these strategies, educators can create inclusive classrooms and learning spaces that accommodate the sensory needs of all students, promoting engagement, comfort, and academic success.

### **Calming Sensory Elements:**

Integrate calming sensory elements into the classroom environment to promote relaxation and stress reduction. Consider adding soft rugs or mats, calming music or nature sounds, and aromatherapy diffusers with calming scents like lavender or chamomile. Create cozy reading nooks or quiet corners where students can relax and unwind.

### **Movement Breaks and Physical Activities:**

Incorporate movement breaks and physical activities into the daily routine to provide sensory input and promote regulation. Encourage students to participate in short movement breaks, stretching exercises, or sensory-motor activities like yoga or tai chi throughout the day.

### **Collaboration with Occupational Therapists:**

Consult with occupational therapists and other specialists to ensure that classroom design and accommodations effectively meet the sensory needs of all students. Collaborate on developing individualized sensory plans and implementing sensory strategies that support student success.

### **Organised and Clutter-Free Spaces:**

Keep the classroom environment organized and clutter-free to reduce sensory overload and promote a sense of calm. Use storage bins, shelves, and labelled containers to keep materials and supplies neatly organized. Minimize visual distractions by decluttering walls and bulletin boards.

## Home/School Good Sensory Practice

<b>Open Communication Channels:</b>	Establish open and ongoing communication channels with parents and caregivers to exchange information about students' sensory preferences, sensitivities, and challenges. Encourage parents to share their observations and insights about their child's sensory experiences at home.	<b>Home-School Communication Journals:</b>	Establish home-school communication journals or notebooks to facilitate ongoing communication between parents and educators regarding students' sensory experiences and progress. Encourage parents to share daily observations, concerns, and successes related to their child's sensory needs.
<b>Family Questionnaires and Surveys:</b>	Distribute questionnaires or surveys to parents and caregivers to gather information about their child's sensory preferences, sensitivities, and behaviour's in different environments. Use this information to gain a comprehensive understanding of the student's sensory profile and tailor interventions accordingly.	<b>Parent Education and Training:</b>	Provide parents and caregivers with education and training on sensory processing and integration principles, strategies, and resources. Offer workshops, webinars, or informational sessions to empower parents to better understand their child's sensory needs and advocate for appropriate supports and accommodations.
<b>Parent Interviews and Meetings:</b>	Conduct individual interviews or meetings with parents and caregivers to discuss their child's sensory needs and develop collaborative goals and strategies. Listen attentively to their concerns, preferences, and priorities, and involve them in decision-making processes regarding sensory supports and accommodations.	<b>Collaborative Goal Setting: .</b>	Collaborate with parents and caregivers to set meaningful and achievable goals related to supporting their child's sensory needs. Ensure that goals are specific, measurable, attainable, relevant, and time-bound (SMART), and regularly review progress and adjust strategies as needed
<b>Sensory Profiles:</b>	Collect comprehensive sensory profiles and histories for each student, including information about their sensory preferences, sensitivities, strengths, and challenges. Collaborate with parents and caregivers and complete a home sensory profile if needed	<b>Shared Resources and Recommendations:</b>	Share sensory resources, tools, and recommendations with parents and caregivers to promote consistency and continuity of support across home and school settings. Provide guidance on creating sensory-friendly environments at home and integrating sensory activities into daily routines.
<b>Regular Check-Ins and Progress Updates:</b>	Schedule regular check-ins and progress updates with parents and caregivers to discuss their child's sensory needs, interventions, and progress. Keep parents informed about their child's sensory experiences and any changes in sensory preferences or sensitivities over time.		



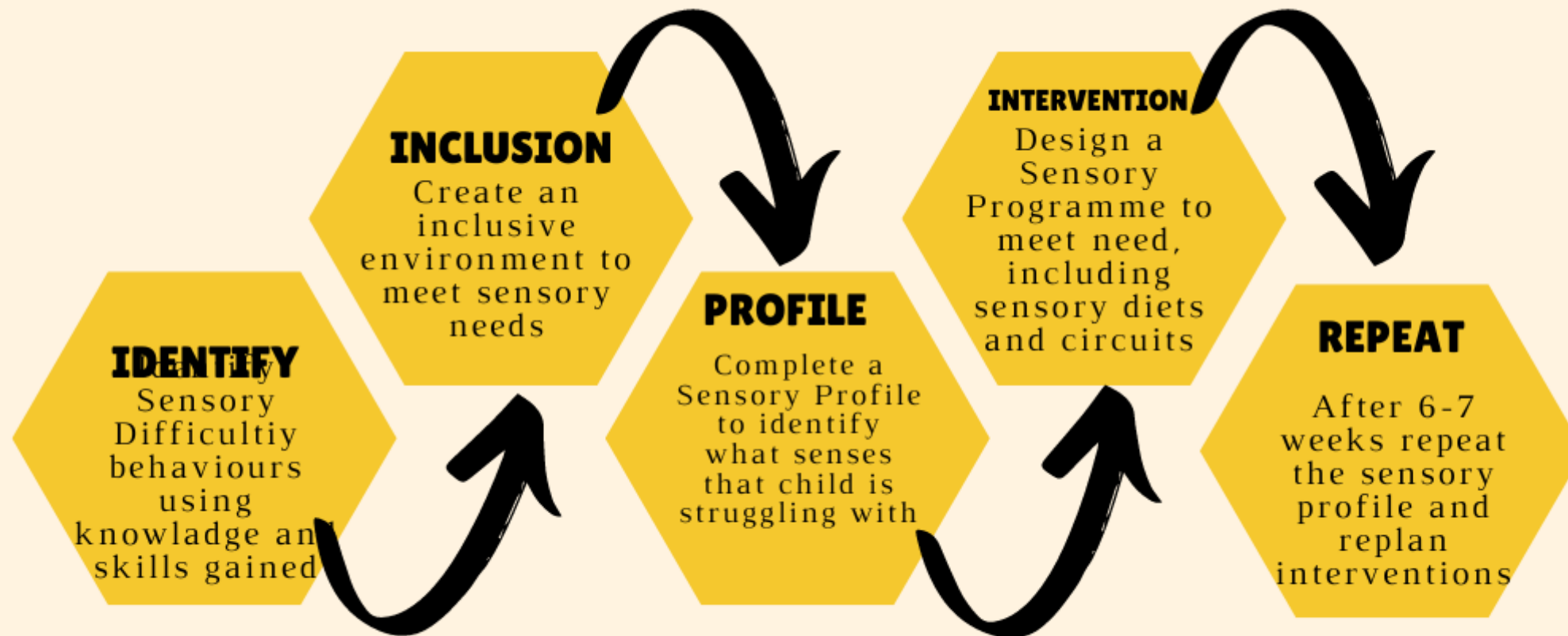
Sensory Zones	Designate specific areas or zones within the home for different sensory activities and needs. For example, create a quiet sensory retreat with soft lighting, comfortable seating, and calming sensory tools for relaxation. Design a sensory play area with tactile materials, fidget toys, and sensory bins for exploration and creative play.
Lighting	Use adjustable lighting options to control brightness and create a soothing atmosphere. Incorporate natural light whenever possible and minimize harsh fluorescent lighting. Consider adding dimmer switches or using lamps with warm, soft lighting to reduce glare and create a calming ambiance
Colour Scheme	Choose calming and neutral colours for walls, furniture, and decor to create a visually soothing environment. Avoid overly stimulating or bright colours that may be overwhelming for individuals with sensory sensitivities. Incorporate soft textures and natural materials for added comfort.
Organisation and Clutter Control	Keep the home environment organized and clutter-free to reduce sensory overload and promote a sense of calm. Use storage bins, shelves, and labelled containers to maintain order and minimize visual distractions. Create designated spaces for belongings to reduce sensory overwhelm.
Noise Management	Minimize unnecessary noise and create a quiet environment by using sound-absorbing materials such as rugs, curtains, and upholstered furniture. Use headphones with music or white noise machines to block out distracting sounds and promote relaxation, especially during bedtime or study time.
Sensory Tools and Equipment	Provide access to sensory tools and equipment that support individual sensory needs and preferences. This may include weighted blankets or vests, sensory swings or hammocks, fidget toys, stress balls, chewable necklaces, and tactile mats. Keep these items readily available in designated sensory areas.
Calming Scents	Use aromatherapy diffusers or scented candles with calming essential oils such as lavender, chamomile, or eucalyptus to create a relaxing olfactory environment. Be mindful of individuals' sensitivities to strong smells and opt for mild, natural scents
Sensory-Friendly Furniture	Choose sensory-friendly furniture with soft, comfortable upholstery and supportive seating options. Consider ergonomic chairs, bean bag chairs, rocking chairs, or floor cushions that provide sensory input and promote relaxation.

# Unit 12- In summary

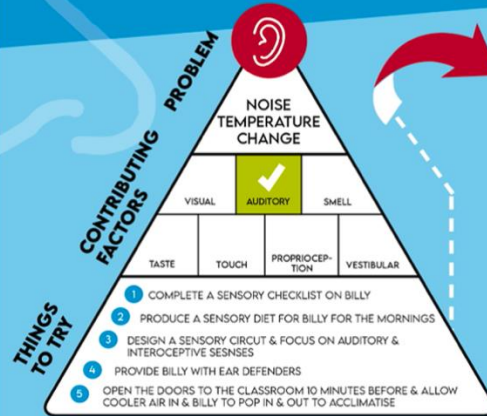




# What does good sensory look like?



# BILLY'S SENSORY INTERVENTIONS



First of all we completed a problem solving triangle to help us highlight situations and assess the sensory needs

Then we completed a sensory checklist to create a sensory profile

	VISUAL	AUDITORY	TACTILE	SMELL/TASTE	BODY AWARENESS	VESTIBULAR/BALANCE
10						
9						
8						
7						
6						
5						
4						
3						
2						
1						

NAME: \_\_\_\_\_

BETTER +  
THE SAME  
WORSE -

OVER EXCITED ANXIOUS SLEEPY ANGRY CALM

DATE	TIME	I'M FEELING: (CIRCLE THE FACES THAT MATCHES HOW YOU FEEL)	I TRIED: (WRITE NAME OF ACTIVITY)	AFTER THE ACTIVITY I FELT: (CIRCLE ALL THAT APPLY)	THAT ACTUALLY MADE ME FEEL: (CIRCLE ONE ANSWER)

We ask Billy to complete a feedback form, and these are done throughout

Then we created a sensory circuit for Billy

ALERTING (3-5 MIN)	ORGANISING (10 MIN; 2X CIRCUIT (1 MIN PER STATION))	CALMING (3-5 MIN)
ACTIVITY: BOUNCING ON THE THERAPY BALL 1 MIN	ACTIVITY: WALK ON THE BALANCE BEAM 1 MIN	ACTIVITY: BEAN BAG SQUEEZE 1 MIN
ACTIVITY: JUMPING JACKS 1 MIN	ACTIVITY: CRAWL THROUGH THE TUNNEL 1 MIN	ACTIVITY: SENSORY BOTTLE 1 MIN
ACTIVITY: RUNNING ON THE SPOT 1 MIN	ACTIVITY: ARM STRETCH USING RESISTANCE BAND 1 MIN	ACTIVITY: ROLLING BALL OVER HIS BELLY 2 MINS
ACTIVITY:	ACTIVITY: LOG ROLL 1 MIN	ACTIVITY: CALMING MUSIC WHILST HELDING HOPE THE FURNITURE AWAY 2 MINS
ACTIVITY:	ACTIVITY: PASSING A WEIGHTED BALL 1 MIN	ACTIVITY:

TIME	ACTIVITY
8:20AM	BREAKFAST - CRUNCHY CEREAL WITH COLD MILK
8:25AM	DRINK A THICK SMOOTHIE THROUGH A STRAW
8:30AM	BOUNCING ON THE THERAPY BALL
8:35AM	KNEADING PLAY-DOUGH
8:40AM	BOUNCE ON A THERAPY BALL
8:45AM	
8:50AM	HAND MASSAGE

As well as a sensory diet for Billy to complete in the morning

	VISUAL	AUDITORY	TACTILE	SMELL/TASTE	BODY AWARENESS	VESTIBULAR/BALANCE
10						
9						
8						
7						
6						
5						
4						
3						
2						
1						

After a period of time, we re-do the sensory profile and feedback forms so we can compare date and see where gaps have been closed and plan the next steps







[illegible]







































































# Child-led Feedback!

- It is important you also get child-led feedback before starting sensory circuits and at regular intervals throughout the child's program


Name: \_\_\_\_\_

Better +  
 The same ●  
 Worse -

 Overexcited  
 Anxious  
 Sleepy  
 Angry

Date	Time	I'm feeling: (circle the face that matches how you feel)	I tried: (write name of activity)	After the activity I felt: (circle all that apply)	That activity made me feel (circle one)
		    		    	+ ●
		    		    	+ ●
		    		    	+ ●
		    		    	+ ●
		    		    	+ ●
		    		    	+ ●
		    		    	+ ●

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# Risk assessments and safety

- As these activities involve practical activities and various equipment, it is important that **you follow your own setting's health and safety procedures**, which consider the use of apparatus. Usually in the same way a PE lesson happens
- Identify the hazard and if it's a low/medium or high risk for the children using each piece of equipment and the adults supporting the child(ren).
- Ensure the risk assessment details the precautions which are taken to reduce each identified risk
- Ensure the risk assessment is updated whenever there is a change (new child or new equipment) and share risk assessment with appropriate member of SLT or Health and Safety Officer




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**Risk Assessment**

Severity	Disaster	High	Medium	Minimal
Probability				
Regularly	Critical	Critical	High	Medium
Probable	Critical	High	Medium	Medium
Occasional	Critical	High	Medium	Low
Rarely	High	Medium	Medium	
Improbable	Medium			

# Blank Risk Assessments are available

1



## 'Sensory Needs' Intervention Risk Assessment

*N.B, Please use in accordance with your own setting's Health and Safety policy and ensure you have a first aid kit within a close proximity of delivering this intervention due it practical nature. \*\*\* edit as you wish\*\*\**

**Key: L ~ low M ~medium H ~high**

School:  
Session  
Date  
Completed by:

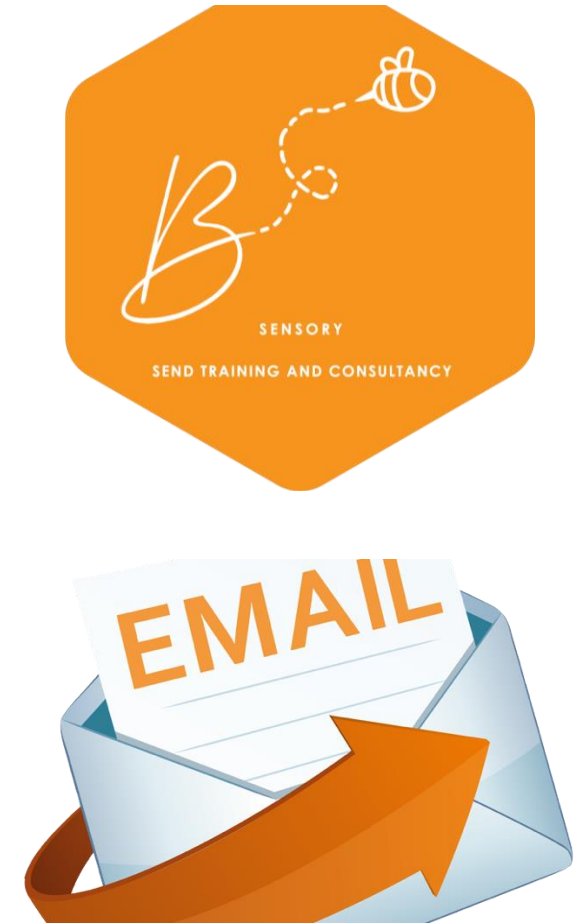
Apparatus	Potential Hazard	Risk	Who does the risk effect?	What can we to reduce the risk?	New Risk rating

SENSORY



# Next steps...

- [contact@bsensory.org](mailto:contact@bsensory.org)
- Sign up to [www.bsensory.org](http://www.bsensory.org)
- Please give feedback on the feedback form
- Follow on Facebook and Instagram
- For consultancy complete a enquiry form



Any  
questions?

QUESTIONS

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# CERTIFICATE

Of Completion

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This is to certify that the above candidate  
has completed the Advanced Sensory Needs  
Practitioner Training with BSensory Training



DATE:

*B. Kitchen*

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BETH KITCHEN

*Managing Director BSensory.org*