# Sensory Processing Tips and Strategies

WHAT ARE THE SENSES? The five senses commonly heard about include sight (eyes), hearing (ears), taste (gustatory), smell (olfactory), and touch (skin). However there are also two other senses; the vestibular sense (information about movement and head position) and the proprioceptive sense (information about our body parts/body awareness).

WHAT IS SENSORY PROCESSING? As a child grows and begins to explore their surroundings they learn to firstly notice/register information from their senses, then process it and then respond appropriately. This is called Sensory Processing. This might include noticing and then processing the sound of the alarm clock going off in the morning and proceeding to wake up and get out of bed; or noticing and then processing the temperature and feeling of water on our bodies when having a hot shower and adjusting the temperature or force of the water as needed.

Oftentimes we complete everyday tasks without any difficulty processing information received from our senses. For young children sometimes this information can become muddled, might appear too intense or the information is slow to be noticed/registered. These children frequently present to Occupational Therapy when the difficulties begin to have a negative impact on their participation in every-day tasks.

#### TYPES OF SENSORY PROCESSING DIFFICULTIES: OVER-RESPONSIVE AND UNDER-RESPONSIVE

Children that present with difficulties processing information from their senses might appear over-responsive and/or under-responsive to certain types of sensory input. Over-responsive means that they are quick to notice information received from their senses or are highly aware. A little might seem like a lot to a child that is overresponsive. Under-responsive means that they do not notice and process information received from the senses as well. They often seek extra sensory input or they might need support from others to register sensory input. It is important to note that children can present differently. Some can be overresponsive to touch and avoid wearing tight clothes but they might also be underresponsive to movement and appear to be always in the go.

#### **OVER-RESPONSIVE TO SENSORY INPUT**

- Can be sensory sensitive
- Can be sensory defensive/sensory avoider

#### **Sensory Sensitive:**

Child registers information from the senses intensely but does not remove themselves from the situation. May appear easily distracted by noise, light, touch.

#### **Sensory Avoider:**

Child registers information from the senses intensely and actively avoids experiences. May avoid touch, situations with a lot going on, loud noises, textures of foods.

## **UNDER-RESPONSIVE TO SENSORY INPUT**

- Can be sensory seeker/Always on the go
- Can be slow to register sensory information/ lethargic/fatigue easily, bump into things easily

#### **Sensory Seeker:**

May appear always on the go, may chew and bite non-food items, may enjoy crashing, jumping, likely has difficulty sitting still.

#### Slow to register sensory input:

May have low arousal, fatigues easily, may appear slow to react and respond to information in their environment, can appear clumsy, may appear to bump into objects.

Whether your child is over-responsive and/or under-responsive to sensory input the primary goal is to support them to get through their day and develop an appropriate response to the information they receive.





The following strategies are commonly recommended in Occupational Therapy to help children with sensory processing difficulties to continue to function and participate in everyday activities of living.

# **GENERAL STRATEGIES**

### **ACTIVITIES CAN BE ALERTING OR CALMING:**

- Alerting activities include running, jumping, hopping, skipping, or use of a trampoline.
- Calming activities are those that are regarded as heavy work. Heavy work activities involve pushing, pulling, carrying and activities where your child needs to weight bear through their hands or legs such as tug of war or carrying a bundle of books to a table.
- A combination of both types of activities are of benefit to include in your child's day.

## **HEAVY WORK ACTIVITIES:**

Heavy work activities can be calming for a child that is over-responsive to sensory input, they can help refocus a child that is underresponsive/sensory seeking or can help increase body awareness for a child that is slow to register information from their senses. Heavy work activities involve pushing, pulling, lifting, carrying and weight bearing using their own body.

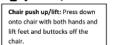
- Place chairs on the desk or unstack/stack chairs at the beginning/end of the school day.
- Carry books in a box to be issued out at each school desk.
- Wall presses/pushes x10.
- Chair push ups/ lifts x10.
- Chair dips x10.
- Hand press x 10 seconds.
- Tug of war-pulling.
- Row row your boat game.
- Animal Walks-Donkey kicks, bear walk, inchworm, seal, wheelbarrow walking.
- Pushing hands together for ten seconds.
- Roll over therapy ball on tummy, walk forward, weight bearing on hands.

#### CONSIDER YOUR CHILD'S SURROUNDINGS/ENVIRONMENT:

- Are there too many toys in the bedroom that are a visual distraction when settling at bedtime?
- Does your child have a place that they can go to when they become overwhelmed, where they can feel calm and rested? For example a tent, a large bean bag to crawl under on sit on.
- Are they seated too close to the classroom door where they become easily distracted from noise in the school corridor? Are they seated close to the classroom toilet where they are easily distracted by those going in and out of the toilet throughout the school day?
- A junior or senior sized 'move n sit' cushion could be trialled on their class chair to offer an under-responsive/sensory seeker, who has difficulty remaining seated, movement whilst sitting.









INCLUDE SENSORY PLAY ACTIVITIES IN THEIR DAY: Sensory play helps an overresponsive/sensory sensitive child to explore new situations. Sensory play helps provide an under-responsive child/sensory seeker with the input they crave/seek.

- Messy play including finger painting, making shapes in shaving foam and flour paper mache.
- Arts and crafts including gluing/pasting, and working with a variety of textures such as card, cotton wool, crepe, paper.
- Sand bins/boxes.
- Ball pits.
- Gardening potting plants, digging for worms.
- Baking making dough.
- Playing barefoot in the grass or in sand box.
- Blowing bubbles, party blowers/whistle.
- Smelling games hide scented objects in bags and explore by smelling.
- Tea party, tasting sessions.
- Playground equipment offering various types of movement including trampoline, swings, and slides, and climbing wall.

# **STRATEGIES TO SUPPORT SPECIFIC SENSORY NEEDS**

# **OVER-RESPONSIVE:**

**Touch:** Tactile bins can be used with a child that is over-responsive/sensory sensitive or avoids touch. Applying deep pressure to their skin can also be calming and can help your child to be less aware of the light touch of certain textures/objects. Overall these children need CALMING , predictability, gradual desensitising.

- A tactile bin can be created using small storage boxes with a lid. They can be filled with sand, rice, cotton balls, porridge flakes, flour, water.
- Begin by encouraging them to place hands into a dry texture bin with either cotton balls, flour, rice, porridge flakes, or sand. Make it fun. Work on one texture at a time.
- + Hide objects in the bin for your child to find with eyes open and then eyes closed.
- If the child is reluctant to place hands into the texture allow them to drive a car through the rice or walk dolly over the sand.
- When a child can immediately jump into the bin with both hands and can tolerate buried hands introduce semi wet and then wet textures such as water/ ice, bath foam, washing up liquid-making bubbles, shaving cream, flour mixed with water, porridge/oatmeal flakes mixed with water, playdough or homemade dough, paper mache.
- Always have a bowl of water or hand towels nearby to allow the child to rinse off if required.
- When a child is comfortable touching various dry and wet textures with their hands they can be more willing to put new foods in their mouth when eating.
- Applying deep pressure or engaging in heavy work activities are also recommended when a child shows sensitivity to touch or being touched. To summarise heavy work/deep pressure is calming and makes your child less aware of the feeling of touch and in particular, light touch.
- For example your child might enjoy a bear hug/tight hug rather that a light hug. Your child might need you to apply deep pressure with your hands when washing their hair to make them less aware of the feeling of the water on their head. This could be in the form of a head massage prior to washing. You can brush their finger nails with a nailbrush before nail clipping which is a form of deep pressure and will make them less sensitive to the light touch/feel of the nail clippers approaching.



- Are there wet wipes available to trial if the toilet paper feels too hard?
- Can the dressing gown/bath robe be used if towels feel too hard on my skin?

#### **CLOTHING:**

- Remove tags if your child finds these uncomfortable.
- Work with the clothes your child can tolerate. This might include loose t-shirts.
- Consider seamless socks.
- Wear the school tracksuit if allowed when the uniform causes distress.

#### **TASTE & SMELLS:**

Your child may be reluctant to try foods, dislikes certain textures or avoids trying new foods.

- If your child is not yet comfortable touching dry or wet textures with their hands then they are less likely to be comfortable placing these textures in their mouth.
- Set up the tactile bins to help your child to become comfortable with how textures feel in their hands. Start with dry textures, move to semi wet and then wet.
- Make tasting new foods fun. Move tasting sessions away from meal time.
- Create a food chart of what I tried, what I liked about it, what I did not like, I'd like it more if it had a sauce, was baked or fried, had more salt.
- Try to slowly integrate the new foods tried at mealtimes.
- At mealtimes consider using a platter that is passed around the table and food is taken from this. This helps your child to become comfortable with the sight and smell of food as it is passed around the table.
- If you are concerned about your child's diet a referral can be made by your General Practitioner, Public Health Nurse or Therapist to a Dietician. A Dietician can look at your child's height, weight, body mass index and provide support and reassurance about the nutrients in their current diet and how to integrate new foods if required.
- If processing the taste of toothpaste is difficult, Is there flavour free/mint free toothpaste available at home to trial?
  Options can be discussed with your child's dentist.
- Engage in smelling games. What could it be? Eyes could be closed. Find a smell/essential oil that is liked by your child. Your child could have this nearby when they experience an unpleasant smell. Color with scented markers.

#### **SOUND:**

- Can you prepare your child for loud noises and sounds that are approaching such as the hoover/vacuum cleaner?
- For example: Tom I am going to be using the hoover here, it might get a bit noisy, let's bring your toy into another room while I hoover. Mary we are going to be going into the public toilets and the hand dryers might be a little noisy, but we can put our hands over our ears if they sound too loud.
- Are there headphones, ear muffs, ear defenders available to use during times of loud noise? These could be used in times of public gatherings where the noise is too much for your child to process all at once.
- Listen to sounds of the wind, rain, birds, waves through headphones to get familiar with new sounds.

#### LIGHT:

- Reduce clutter.
- Dim lights. Consider coloured light bulbs.
- Introduce new colours through clothing and toys.
- Keep sunglasses in the car.
- Move the child's desk away from direct sunlight or move seats in class.





## **UNDER-RESPONSIVE:**

#### **SEEKING MOVEMENT:**

- Create more opportunities for alerting and heavy work activities throughout the day to reduce the amount of time the child attempts to seek this movement on their own.
- An alerting activity could be followed with a heavy work activity to help your child to become calm and re-focused for table top work or before returning to class after yard time.

•

- A wind-down routine may be needed at bedtime that includes heavy work activities.
- Screen time should be reduced when bedtime is approaching.
- Your child may benefit from a heavier blanket being placed on their bed to help them to relax and calm when settling.
- A weighted bean bag/cushion could be placed on their lap when sitting to complete homework.
- A junior or senior sized 'move in sit' cushion could be placed on their chair. This will provide them with the movement they seek whilst sitting. These can be purchased online.

**FIDGETING/TOUCH:** Your child might enjoy touching everything and this might distract them from focusing on school work or tasks that need to be completed.

- Consider providing them with a feely object or attach a feely keyring to the zip of their pencil case.
- Provide them with more opportunities to touch in their day using tactile bins, sand bins/boxes, baking, messy play and arts and crafts.

**BITING AND CHEWING:** Include more opportunities for blowing, sucking, chewing, crunching in their day. These provide more sensory input than licking.

- Blowing bubbles, blowing cotton balls with a straw.
- Placing a straw in their glass routinely at mealtimes or using a water bottle with straw throughout the day.
- Encourage use of a vibratory toothbrush.
- Foods to include in lunch box that are crunchy, chewy e.g. dried fruit, roll/bagel, granola bars, carrot slices, apple.
- Blowing a whistle e.g. at a football game if the referee.
- If your child continues to chew on non-food items at home or in class, consider providing your child with a 'ChewEase' pencil top or chewy bracelet. These can be purchased online.

#### Remind your child that

"When you feel like chewing use your chewy bracelet instead of chewing on your pencils, crayons or the sleeve of your jumper".

**LETHARGIC/ SLOW TO GET GOING:** This child might appear lethargic, fatigue easily and appear not to register touch, sight, sound as well as they should. They may bump into things easily.

- Including more alerting activities/movement breaks prior to a task that requires attention and concentration if they appear lethargic or sleepy.
- Engage in a heavy work activity before an activity that requires coordination to help wake up the muscles around their joints.
- Your child could place a water bottle on their desk and take regular sips throughout the day to keep alert.
- Your child may benefit from a fidget toy to keep them alert and active.
- A junior or senior sized 'move in sit' cushion could be placed on their chair to offer movement whilst sitting which will help them to remain alert. These can be purchased online.
- Use a multisensory approach to learning, increase colour contrast, use highlighters, raise your voice, use repetition.
- Consider bright lights for study areas.
- Colour coding and more use of colours can help with organisation and attention to detail.

These are just some of the strategies used in Occupational Therapy to support children with sensory processing difficulties.

Further advice and ideas specific to your child's needs can be discussed upon meeting with your Occupational Therapist.



Cork & Kerry Primary Care Paediatric Occupational Therapy Departments

