

INTEROCEPTION

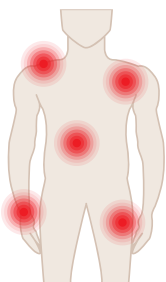
Recommendations

Interoception—the ability to sense internal body signals such as hunger, thirst, pain, or the need to use the toilet—is fundamental to self-regulation and emotional wellbeing. For many children who have experienced early trauma, interoceptive awareness can be disrupted, making it difficult for them to recognise and interpret their body's cues accurately.

Trauma, particularly in the early years, can impact brain development and the way sensory information is processed. Children who have lived through neglect, inconsistent caregiving, or high levels of stress may either have a blunted response to internal sensations (not feeling internal sensations until extreme) or experience heightened awareness, leading to discomfort and distress (interpreting mild sensations as pain or illness). This can contribute to difficulties with emotional regulation, anxiety, toileting, eating, and even classroom engagement.

PAIN & ILLNESS

- Limited response to injuries – May not react to cuts, bruises, or falls, appearing unaware of pain (under-responsive).
- Extreme reactions to minor discomfort – Overwhelmed by small bumps, scratches, or everyday sensations like clothing labels (over-responsive).
- Frequent unexplained complaints – Regularly reports pain (e.g., headaches, stomach aches) without a clear medical cause (over-responsive).
- Delayed reporting of injuries – Only mentions pain long after an injury occurs, sometimes when visible bruising appears (under-responsive).
- Difficulty describing pain levels – Struggles to identify where pain is, how strong it is, or whether it's improving or worsening.



TOILETING

- Frequent toileting accidents or waiting too long before going to the toilet
- Avoidance of toilet use, especially in school



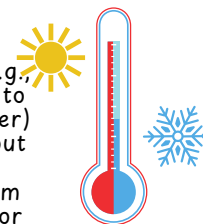
HUNGER & THIRST



- Forgetting to eat or drink unless prompted
- Eating very little or excessively at meal/snack times
- Complaining of feeling unwell instead of recognising hunger/thirst cues
- Extreme reactions to feeling full (e.g., distress or discomfort)

TEMPERATURE REGULATION

- Wearing inappropriate clothing for the weather (e.g., no coat in winter, refusing to take off a jumper in summer)
- Frequently complaining about feeling too hot or too cold
- Not noticing discomfort from tight shoes, itchy clothing, or other sensory irritants



SIGNS OF INTEROCEPTION CHALLENGES

EMOTIONS



- Struggles to identify emotions – Finds it hard to recognise feelings like anger, anxiety, or excitement until they become overwhelming.
- Sudden emotional outbursts – Appears calm one moment but then has a big reaction without apparent warning.
- Difficulty matching emotions to situations – May laugh when hurt, get angry when praised, or seem 'flat' in highly emotional moments.
- Poor self-regulation strategies – Finds it hard to use calming techniques because they don't notice rising stress levels until too late.
- Confusion between physical and emotional states – Misinterprets hunger as anxiety, tiredness as sadness, or excitement as fear.

ENERGY LEVELS

- Constantly on the go – Struggles to recognise when to slow down, leading to restlessness or overactivity.
- Frequent exhaustion but unaware – Appears tired but doesn't recognise the need for rest or breaks.
- Sudden energy crashes – Moves between hyperactivity and extreme fatigue without awareness.
- Difficulty winding down – Struggles to settle after active play or excitement.
- Inconsistent energy for tasks – Finds it hard to pace themselves, either rushing through work or losing focus due to low energy.





INTEROCEPTION HACKS



Strategies for children who are over-responsive to internal signals



Emotional Supports



- Body Mapping – Use visual charts to help children locate and name where they feel emotions in their body (e.g., “butterflies in tummy” for anxiety).
- Regulation Breaks – Offer short movement-based breaks to shift focus from intense emotions (e.g., wall pushes, deep pressure activities).
- Co-Regulation Strategies – Model self-regulation techniques (e.g., slow breathing, grounding techniques) and guide the child through them.
- Labelling and validating emotions – Helping children name their feelings so they can connect them to their bodily sensations
- Predictable Routines – Provide structured transitions and clear expectations to reduce emotional overwhelm.
- Virtual School Rotherham has a resource “My Emotions Cards” which can support with identifying and recognising emotions



Voice of the child Questions to ask

- “What does your tummy feel like right now?”
- “When you run around at playtime, how does your body feel?”
- “Can you feel your heart beating right now? What does it feel like?”
- “When you feel worried or upset, where do you notice it in your body?”
- “How does your body feel when you really need the toilet?”
- “What does tired feel like in your body?”



Hunger



- Scheduled Eating Times – Offer predictable snack and mealtime routines so the child knows when food is coming.
- Protein-Rich Snacks – Provide protein or complex carbs (e.g., cheese, nuts, oat bars) to support longer-lasting satiety.
- Distraction Techniques – Engage in activities that shift focus from hunger cues, such as sensory-based fidgets or movement breaks.
- Hydration First – Encourage drinking water before meals to differentiate thirst from hunger.
- Visual Food Timers – Use visual countdowns or first-then charts to reassure children when their next meal/snack will be.



Pain/ Illness



- Check-Ins & Validation – Acknowledge discomfort, no matter how minor, while helping the child assess if the sensation needs action (e.g., “Let’s take a deep breath and see if it changes”).
- Sensory-Based Coping Tools – Offer cold packs, soft fabrics, or weighted objects to help refocus sensory attention.
- Pain Scale Tools – Use visuals (e.g., ‘How big is my pain?’ charts) to help the child gauge intensity and respond appropriately.
- Mind-Body Techniques – Teach guided relaxation or breathing exercises to reduce pain-related hyperfocus.
- Gentle Distraction – Redirect attention with engaging but soothing activities (e.g., story time, playdough, calming music).



General Strategies



- Interoception Check-Ins – Use visual supports (e.g., ‘How does my body feel?’ posters) to build awareness of different bodily signals.
- Body Awareness Activities – Engage in yoga, stretching, or heavy work to help differentiate body signals.
- Mindful Scanning – Teach children to scan their bodies and notice sensations without judgment (e.g., “Is my tummy full or empty?”).
- Interoception Awareness activities - Engage in activities that draw attention to the body and encourage the child to notice and label how this feels for them
- Use stories and resources to explore body sensations - See resources for child-friendly books on interoception



INTEROCEPTION SNACKS

Strategies for children who struggle to identify internal signals



Regulate to
LEARN



Toileting Reminders



- **Scheduled Toilet Breaks:** Encourage regular, scheduled toilet breaks throughout the day (e.g., every 1-2 hours). This helps children develop a routine and become more aware of their body's needs.
- **Use Visual Cues:** Create visual reminders (e.g., charts, pictures) that indicate when it's time to go to the toilet. Place these reminders in areas where the child spends time, like the classroom or play area.
- **Discreet whole class reminders:** Prompt all children to recognise whether they need to use the toilet, remind children to do this during transitions or intervals e.g.; before playtime, after playtime, before lunch, after lunch.
- **Check-in Questions:** Use simple check-in questions at regular intervals, such as "How does your tummy feel?" or "Do you need to use the toilet?" This encourages the child to think about their internal signals.
- **Use Timer Apps:** Introduce a timer or app that reminds children to check in with their bodies at regular intervals. This can help them pause and assess their need to go to the toilet. Children's smart watches can be useful as a discreet reminder.
- **Create a Comfortable Environment:** Ensure that the toilet area is comfortable and accessible. Sometimes children may hesitate to go due to fear or discomfort. Creating a positive toilet environment can encourage them to use it more regularly.



Temperature



- Support children in noticing how temperature feels on their body using controlled, playful exposures: eg: Have them dip hands in warm then cold water, compare feelings, and draw or describe.
- Use ice cubes or cool packs for brief body awareness moments ("Where did it feel cold?").
- Use daily routines to build checking habits. Before outdoor transitions, ask: "How does your body feel? Hot, cold, or just right?"
- Have a "temperature check" station with mirrors, visuals, and questions like: Are your hands cold or warm? Do you want to take off a layer or keep it on? Are you sweating or shivering?
- Children who don't recognise their temperature might struggle with managing clothing independently. Teach 'layering logic': Use visual cards showing what clothes are helpful in hot, cold, or mixed weather. Practice changing layers in a non-rushed, supported way—especially in transitions.
- Make temperature-awareness a part of the group routine: "Let's all feel our skin—do we need a jumper today?" Adults can model body awareness aloud: "My neck feels sweaty; I think I'll take my scarf off."
- Use stories or visual cards to show: How bodies might feel in the cold or heat, What you can do to stay comfortable (e.g., drink water, take off jumper, put on coat)

My Emotions Cards



Supporting care-experienced children to recognise emotions internally is a vital part of helping them develop lifelong emotional regulation skills. Many of our children have experienced early adversity or developmental trauma, which can impact their ability to notice, understand, and express their emotions. By helping them tune into the internal body signals linked to different emotions, we lay the foundation for better self-awareness, communication, and regulation. The My Emotions Cards cover 14 key emotions and have been designed to support children in identifying how these emotions feel inside their bodies—an essential first step before they can choose effective regulation strategies. This resource is available for schools supporting Rotherham care-experienced children and can be accessed by contacting virtualschool@rotherham.gov.uk.



Thirst / Hydration



- **Scheduled Drink Breaks:** Establish regular, scheduled times for drink breaks throughout the day, regardless of whether the child expresses thirst. This can help them develop a routine of hydration.
- **Visual Reminders:** Use visual cues, such as pictures or charts, to remind children to drink water. Place these reminders in visible locations, such as on their desk or near their water bottle. Allow water bottle on desk within visual eyeline. Use hydration charts on the back of toilet doors so children can monitor their urine colour.
- **Use a Timer:** Set a timer to remind the child to take a drink at regular intervals. This can serve as a prompt to check in with their body and assess their thirst levels.
- **Create a Water-Tracking Chart:** Implement a chart to track daily water intake. Children can colour in or mark off each time they drink water, helping them visualise their hydration habits.
- **Role Modelling:** Model good hydration habits by drinking water regularly in front of the child. Discuss the importance of staying hydrated and how you recognise your own thirst.
- **Interactive Water Bottles:** Provide water bottles with built-in reminders or that change colour when it's time to drink, making hydration more engaging and visually appealing.
- **Connect Hydration to Activities:** Link drinking water to specific activities, such as taking a sip after each transition or when completing a task, reinforcing the connection between activities and hydration.



Energy Levels



- Start by building emotional and interoceptive literacy around energy states.
- **Use Visual Supports:** Create an "Energy Meter" or "Body Battery" scale (e.g., blue = low/tired, yellow = wired, green = just right).
- **Model Descriptive Phrases:** "I notice my eyes are heavy—that's a tired clue."
- For children who struggle to tune in, use external cues and routines to guide their body and brain toward rest—even if they don't feel tired. Visual bedtime schedule (bath, dim lights, book, soft music, cuddle) Use the same structure nightly, even if sleep doesn't come easily
- **Calm Body Activities:** Warm bath with lavender, Weighted blanket or warm wheat bag, Deep pressure massage, lotion rub, or "body burrito" in a blanket, Breathing games (e.g., smell the flower, blow the candle)
- Use a "Time for Rest" card—even if child doesn't say they're tired
- Sensory chaining cues like a "night-time playlist" or "wind-down" sound timer, sleepy smells as part of the routine
- Even if they can't recognise tiredness, you can build association and expectation. Allow non-stimulating quiet time (e.g., reading, colouring, cuddling) Say: "We're giving our body a chance to see if it wants to sleep" Encourage lying still and noticing body sensations without pressure to fall asleep
- Use metaphors children can relate to: "Your body is like a phone—it needs to charge to play again tomorrow."

INTEROCEPTION RESOURCES

Books to support children in learning & identifying their internal signals

