

# INTEROCEPTION

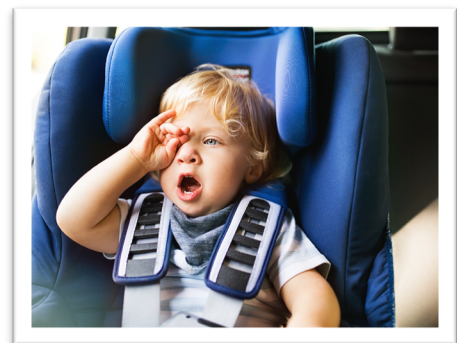


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Have you ever felt or even heard your stomach growling when you were hungry? What about feeling the urge to use the restroom? How about being so tired your eyes begin to feel heavy? All of these feelings are your body's way of letting you know what your current internal needs are. We rely on our senses and sensory systems to help us navigate the world around us. The system responsible for our internal needs is the 8<sup>th</sup> human sense called interoception.

When it comes to learning about the physical environment we live in, our body has an amazing way of using its sensory systems to react to our surroundings. Many of us are familiar with the typical five senses: taste, touch, smell, vision, and hearing; and while some of us may know about vestibular and proprioception, not many of us know about the 8<sup>th</sup> sense that also helps our bodies function. That's because we use interoception without even having to think about it! Consider this...we don't have to worry about whether or not our heart is beating, or if we are breathing in enough oxygen to sustain us. Interoception takes care of that for us! This sense gives us information of our internal organs (i.e. the heart, lungs, stomach, and skin) which helps regulate the vital functions of our body. Interoception is the sense that helps your brain understand what is going on inside. This is the sense that tells you are hungry/satiated, thirsty, hot/cold or need to use the restroom. Some examples of important information you might gain from this sense include:

- Pain
- Body temperature
- Muscle tension
- Itch
- Nausea
- Sleepiness



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## BODY STATES VS. EMOTIONAL STATES

Feelings that we experience within our bodies don't always correlate to a physical need such as hunger, thirst, or pain. Many times, we can *feel something* which is our emotional state. We all know how it feels to hit a speed bump in life and come out of it feeling angry, embarrassed, sad, or fearful. The emotional state we are feeling and the physical body state we experience are both equally important to interoception.

- **Body State** involves any of our basic functions and physical conditions like hunger, thirst, nausea, etc.
- **Emotion State** involves our mood and emotional conditions such as anger, embarrassment, sadness, happiness, etc.

When we feel these overwhelming feelings, we ultimately want to act on them, right?! No one wants to feel hungry and not be able to satiate it with food or have the urge to use the restroom without being able to relieve it. We wouldn't want to feel embarrassed or sad, then have no way to make those feelings dissipate. Our bodies have the ultimate goal of achieving **homeostasis**, reaching an optimal internal balance using the least amount of energy.

To achieve this optimal internal balance, we need to act upon the sensations we are feeling. If we are thirsty, we drink water. If we are feeling cold, we add more layers of clothing. This is how we **self-regulate**. Our interoception signals let us know that *something is off* and that we *need to do something*...leading us to self-regulation. For some children, self-regulation can be difficult and managing their emotions and behaviors can be a challenge. Difficulty with self-regulation is directly impacted by the patterns and responses of the sensory systems, including the interoception system.



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## WHAT CAN THIS LOOK LIKE?

If your child shows ***interoceptive overresponsivity***, your child might be “over-feeling” his/her internal sensations:

- Requesting frequent bathroom breaks
- Complains of aches, pains, or ailments
- Always seems hungry and/or thirsty
- States that their body “feels noisy”

If your child shows ***interoceptive underresponsivity***, your child might not recognize any internal body signals unless they are extreme or intense enough:

- Waits until the last minute to use the bathroom
- Never seems hungry and/or thirsty
- “All-or-none” emotions
- Unable to describe emotions with clarity
- Does not complain of symptoms if they have a health issue

If your child shows ***interoceptive discrimination difficulty***, your child may not be able to pinpoint what or how they are feeling:

- Does not know if they need to use the bathroom
- States they are hungry but when offered food will not eat
- Complains feeling sick, but cannot describe symptoms
- Acts angry or sad but will state “I’m okay”

## HOW CAN YOU HELP?

- Understand the underlying cause and develop awareness
- Help your child identify their emotions
  - ❖ Ex: “You are so excited!” or “You are feeling angry.”
- Recognize the subtle differences between similar emotions and help your child differentiate
  - ❖ Ex: Sleepiness is different than boredom or sadness
- Remember that teaching self-regulation can take a long time
- Help your child practice often
- Be patient!



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