



Sensory Processing & Regulation

A Complete Guide for Parents and Caregivers

Understanding sensory needs and supporting emotional regulation at
home and beyond

FutureForAutism.org • Practical Guidance • Compassionate Support



Important Disclaimer

This guide is for educational purposes only and does not replace professional medical or therapeutic advice. If you have concerns about your child's development or sensory needs, please consult a qualified professional.

“

*"When we understand sensory input,
we understand behavior."*

Why This Guide Matters

- ✓ **Sensory differences are common**
Many autistic individuals process sensory information differently than neurotypical peers.
- ✓ **Reactions are not "bad behavior"**
What looks like defiance is often a physiological response to overwhelming or insufficient sensory input.
- ✓ **Understanding leads to regulation**
Identifying sensory needs is the first step toward improving emotional regulation and reducing anxiety.

This guide is designed to empower you with knowledge and practical strategies to support your child at home and beyond.

What Is Sensory Processing?



Input & Interpretation

Sensory processing is how the nervous system receives messages from the senses and turns them into appropriate motor and behavioral responses. Think of it as the brain's "intake filter."



Unique Thresholds

Just as we have different shoe sizes, every brain has unique thresholds for sensory input. Some need **more** stimulation to feel it (under-responsive), while others need **less** (over-responsive).



The Goal: Regulation

Effective processing leads to a "just-right" state of alertness. This regulated state is essential for attention, learning, and emotional connection.



Step 1

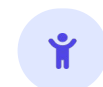
Sensory Input



The Nervous System

Processing & Filtering

"Is this safe? Important? Too much?"



Step 3

Behavioral Response

The 8 Sensory Systems



Visual

Sight

Likes dim lights or seeks bright colors/spinning objects. May be bothered by fluorescent lights.



Auditory

Sound

Covers ears at loud noises or seeks loud music/humming. Easily distracted by background noise.



Tactile

Touch

Avoids certain fabrics (tags/seams) or craves messy play and different textures.



Olfactory

Smell

Bothered by strong cooking scents/perfumes or seeks to smell objects and people.



Gustatory

Taste

Picky eater (texture/flavor) or licks/chews non-food items (pica) for input.



Vestibular

Balance & Movement

Loves spinning/swinging for long periods or fears feet leaving the ground (gravitational insecurity).



Proprioceptive

Body Awareness

Crashes into furniture, jumps, stomps, or seeks deep pressure (tight hugs, heavy blankets).



Interoceptive

Internal Signals

Challenges sensing hunger, thirst, bathroom needs, pain, or identifying emotions.

Sensory Seeking Behaviors



What It Looks Like

- **Constant Movement:** Spinning, jumping, pacing, or difficulty sitting still.
- **High Impact:** Crashing into furniture, stomping feet, or rough play.
- **Oral Seeking:** Chewing on clothes, pencils, or needing crunchy foods.
- **Auditory Seeking:** Making loud noises, humming, or turning volume up high.



Why It Happens

Under-Responsive

"The brain isn't registering normal levels of input, so it demands more intensity."



The Cup Analogy

Imagine a cup with a hole in the bottom. You have to keep pouring water (sensory input) just to keep it full (regulated).



What Helps



Safe Movement: Mini-trampoline, exercise ball, or obstacle courses.



Heavy Work: Pushing a laundry basket, carrying books, or wall push-ups.



Oral Tools: Chewelry, gum, water bottles with straw, or crunchy snacks.



Scheduled Breaks: Proactive movement breaks before the child needs to seek it.

Sensory Avoiding Behaviors



What It Looks Like

- **Covering Ears:** Hands over ears at sudden noises like vacuums, sirens, or hand dryers.
- **Tactile Sensitivity:** Refusing certain fabrics (jeans, wool), tags, or messy play (glue, sand).
- **Social Withdrawal:** Hiding under tables, avoiding crowded stores, or running from busy areas.
- **Picky Eating:** Avoiding foods based on texture (mushy, crunchy) or mixed textures.



Why It Happens

Over-Responsive

"The brain perceives ordinary input as intense, dangerous, or painful, triggering protection."



The Tiny Cup Analogy

Imagine a tiny espresso cup. It fills up instantly with just a few drops (sensory input) and quickly overflows (meltdown).



What Helps



Reduce Input: Noise-canceling headphones, sunglasses, or tag-free seamless clothing.



Offer Choices: "Do you want the soft shirt or the blue shirt?" helps regain control.



Quiet Spaces: A designated "hideout" or tent to decompress when overwhelmed.



Gentle Transitions: Warnings before loud events and "exit strategies" for outings.

What Is Regulation?

"The ability to adjust energy levels to match the situation"

Fight / Flight / Freeze

Survival Mode

Overwhelmed. Cannot process language or learn. Needs safety and reduction of input immediately.

Alert / Agitated

Caution Mode

Silly, wiggly, anxious, or irritable. Starting to lose control. Needs co-regulation support now.

Calm / Connected

Learning Mode

Ready to learn, play, and connect. Body feels "just right."



Meltdown vs. Tantrum

Meltdown

- ✗ **Involuntary:** Total loss of control (Neural hijack)
- ✗ **Cause:** Sensory overload or inability to cope
- ✗ **Response:** Needs safety, quiet, and time

Tantrum

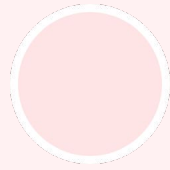
- ✓ **Goal-Oriented:** "I want that cookie"
- ✓ **Control:** Watches for reaction, stops if goal met
- ✓ **Response:** Needs boundaries and consistency



The Secret Weapon: Co-Regulation

"Your calm helps them calm." Children cannot regulate alone when overwhelmed. They need to "borrow" your calm nervous system to come back down to the green zone.

Sensory Overload vs. Tantrum



Sensory Overload

A Neurological Response



Loss of Control

The "thinking brain" goes offline. The child physically cannot stop the behavior.



Not Goal-Oriented

Behavior continues even if demands are removed or rewards offered. It's about distress, not desire.



Needs: Safety & Quiet

Reduce input immediately. Offer deep pressure, silence, or a dark room. Less talk, more calm.

VS



Tantrum

A Behavioral Strategy



Goal-Oriented

Happens to get something (a toy, attention) or avoid something (homework, bedtime).



Maintains Control

Child watches for reaction. Behavior often stops abruptly when the goal is met.



Needs: Boundaries

Acknowledge feelings but hold the limit. Do not give in to the demand. Consistency is key.

Calming Strategies



Deep Pressure

Firm hugs, "squishing" with pillows, weighted blankets, or burrito rolls helps organize the nervous system.



Quiet Corner

A designated low-stimulation zone. Use dim lighting, a tent, or sunglasses to reduce visual input.



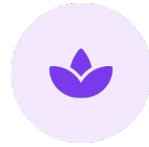
Slow Breathing

Blowing bubbles, using pinwheels, or "smelling the flower, blowing out the candle" engages the calm response.



Rhythmic Motion

Slow, linear rocking in a chair or swinging back and forth. Avoid fast spinning which alerts the brain.



Soothing Sensory

Warm baths, touching soft textures (fleece, fur), or listening to slow tempo classical music.

Alerting Strategies



Active Muscle

Jumping jacks, wall push-ups, or using a scooter board. Heavy work wakes up the muscles and brain.



Fast Movement

A fast walk, running up stairs, or a quick 2-minute dance party to rapidly increase heart rate.



Sensory Splash

Splashing cold water on the face, crunching on ice, or smelling stimulating citrus scents like lemon.



High Intensity

Listening to upbeat music with a strong beat, rhythmic clapping, or turning on brighter lights.



Quick Games

Short, fun movement games like "Simon Says" or an obstacle course to engage focus and reaction time.

Create a Calm-Down Space

1



Choose Area

Find a quiet, low-traffic spot. A corner, closet floor, or pop-up tent works well. It should feel contained.

★ **Tip:** Use beanbags or pillows to define the boundary visibly.

2



Soft Lighting

Reduce visual noise. Use dimmable lamps, fairy lights, or cover fluorescent lights. Avoid harsh glare.

★ **Tip:** Keep a pair of sunglasses in the space for quick relief.

3



Sensory Tools

Stock with calming items: weighted lap pad, fidgets, noise-canceling headphones, and a visual timer.

★ **Tip:** Keep tools in a specific basket that stays in the zone.

4



Gentle Rules

This is a safe space, not a timeout corner. Create a visual menu of choices: "Read," "Squeeze," "Breathe."

★ **Tip:** Practice going there when your child is already calm.

Plan Sensory Breaks

✓ When to Schedule



Before Transitions

Movement helps the brain switch gears (e.g., leaving house, starting homework).



After School

Crucial for releasing "restraint collapse" after holding it together all day.



During Long Tasks

Every 15–20 minutes during seated activities or waiting.

🔧 Tips for Success



Short & Frequent

3–5 minutes is often enough. Consistency matters more than duration.



Match the Goal

Is the child sluggish? Use alerting. Is the child hyper? Use calming.

Sample Sensory Rhythm

Daily Routine

Morning



Wake Up Body & Brain

🏃 Wall push-ups + Crunchy toast

Alerting

3:30



After-School Reset

🍏 Sour snack + 10 min playground

Regulating

7:30



Bedtime Wind-Down

🛁 Warm bath + Deep pressure (burrito roll)

Calming

Remember: Every child's rhythm is different. Adjust based on your child's energy levels.

Home Support



Clothing Choices

- ✓ **Go Tagless:** Cut tags or buy printed-label clothing to prevent neck irritation.
- ✓ **Fabric Matters:** Choose soft cotton or bamboo; wash new clothes multiple times to soften.
- ✓ **Seamless Socks:** Turn socks inside out or buy seamless brands to avoid toe-seam battles.
- ✓ **Choice-Led Dressing:** Offer two acceptable options to build autonomy and reduce battles.



Noise Management

- ✓ **Headphones:** Keep noise-canceling headphones accessible for loud appliances (vacuum, blender).
- ✓ **White Noise:** Use fans or machines to mask startling background sounds during sleep or focus time.
- ✓ **Quiet Mealtimes:** Turn off TV/music while eating to help focus on eating and reduce overwhelm.
- ✓ **Sound Dampening:** Add rugs, curtains, or tennis balls on chair legs to reduce echo and scraping.



Visuals & Routines

- ✓ **Picture Schedules:** Use a simple visual timeline for morning and bedtime steps.
- ✓ **Visual Timers:** Use analog clocks or "Time Timers" showing red disappearing to make time concrete.
- ✓ **First / Then:** Use a board showing "First [Hard Task], Then [Preferred Activity]".
- ✓ **Preview Changes:** Talk through schedule changes in advance to reduce anxiety.



Sensory Corner

- ✓ **Sensory Bins:** Keep a bin of rice, dry beans, or water beads for calming tactile play.
- ✓ **Crash Pad:** Use a pile of pillows, bean bag, or mattress on the floor for safe jumping/crashing.
- ✓ **Swing / Hammock:** Install an indoor swing or hammock for regulating vestibular input.
- ✓ **Heavy Work:** Include chores like carrying laundry baskets or pushing a vacuum.

School & Community Support



Partner with Teachers

- ✓ **Share the Profile:** Provide a one-page summary of triggers and calmiers at the start of the year.
- ✓ **Agree on Cues:** Establish a non-verbal signal for when your child needs a break.
- ✓ **Regular Check-ins:** Schedule brief monthly emails to track sensory wins and challenges.
- ✓ **Team Approach:** Frame requests as "helping him learn" rather than "special treatment."



Helpful Tools

- ✓ **Chewable Jewelry:** Provide safe chew necklaces for oral sensory seeking during class.
- ✓ **Fidgets with Rules:** Allow silent fidgets (putty, stress balls) with clear "tools not toys" rules.
- ✓ **Visual Timers:** Use timers on the desk so the child can see how much time is left.
- ✓ **Weighted Lap Pad:** Use during circle time or seat work to provide calming input.



Key Accommodations

- ✓ **Seating:** Request a seat away from doors, windows, or high-traffic areas to reduce distraction.
- ✓ **Headphones:** Allow noise-canceling headphones during independent work or assemblies.
- ✓ **Movement Passes:** Permit scheduled walks to the water fountain or delivering notes.
- ✓ **Visual Clutter:** Ask for a clear desk policy or use a privacy divider during tests.



Advocacy Scripts

- ✓ **Reframing:** "He isn't trying to be difficult; he is overwhelmed by the noise right now."
- ✓ **Requesting Space:** "She needs a quiet moment to reset her nervous system."
- ✓ **Problem Solving:** "Can we try a different way to participate in the assembly?"
- ✓ **Self-Advocacy:** Teach your child: "It's too loud, I need my headphones please."

Public Outings: Survival Plan

1



The Prep

- ✓ **Preview Visuals:** Show photos of the location or a social story about what to expect.
- ✓ **Pack Go-Bag:** Essentials only—headphones, safe snacks, fidgets, sunglasses.
- ✓ **Timing:** Go during off-peak hours (early morning or mid-week) for less noise.

2



The Outing

- ✓ **Visual Plan:** Bring a mini-checklist or checklist app so they see "how much longer".
- ✓ **Reduce Input:** Use noise-canceling headphones or a hat/hoodie proactively.
- ✓ **Take Breaks:** Find a quiet corner or step outside every 20-30 minutes.

3



The Recovery

- ✓ **Schedule Calm:** Plan zero demands immediately after returning home.
- ✓ **Debrief Gently:** Later, ask "What was hard?" and "What was fun?"
- ✓ **Celebrate Wins:** Acknowledge the effort it took to regulate, even if it wasn't perfect.



Have an Exit Strategy

It is okay to leave early. Establish a family **code word** (e.g., "Pineapple") that signals immediate departure with no questions asked. Knowing there is an escape route reduces anxiety for everyone.

Sensory Profile Worksheet



Instructions: For each sensory system, check the patterns you observe most often in your child. You may check multiple boxes if behavior varies. Use the notes section for specific triggers.



Visual

(Sight)



Over-responsive



Under-responsive



Seeking (Craving)



Avoiding (Hiding)



Unsure / Variable

Notes:



Auditory

(Sound)



Over-responsive



Under-responsive



Seeking (Craving)



Avoiding (Hiding)



Unsure / Variable

Notes:



Tactile

(Touch)



Over-responsive



Under-responsive



Seeking (Craving)



Avoiding (Hiding)



Unsure / Variable

Notes:

Sensory Profile Worksheet



Instructions: Continue observing your child's reactions to smells, tastes, and movement. Check the patterns that appear most frequently.



Olfactory

(Smell)



Over-responsive



Under-responsive



Seeking (Craving)



Avoiding (Hiding)



Unsure / Variable

Notes:



Gustatory

(Taste)



Over-responsive



Under-responsive



Seeking (Craving)



Avoiding (Hiding)



Unsure / Variable

Notes:



Vestibular

(Movement)



Over-responsive



Under-responsive



Seeking (Craving)



Avoiding (Hiding)



Unsure / Variable

Notes:

Sensory Profile Worksheet



Proprioceptive

(Body Awareness)

☐ Over-responsive

☐ Under-responsive

☐ Seeking (Crash/Jump)

☐ Avoiding (Movement)

☐ Unsure / Variable

Notes:



Interoceptive

(Internal Signals)

☐ Over-responsive

☐ Under-responsive

☐ Seeking (Sensations)

☐ Avoiding (Sensations)

☐ Unsure / Variable

Notes:



Top Triggers I Notice



What Helps Most

When to Seek Professional Support



When to Consider an Evaluation

If sensory challenges are limiting your child's world, it might be time to ask for help.



Impacts Daily Life

Struggles with essential tasks like eating, sleeping, dressing, or toileting due to sensory sensitivities.



Limited Participation

Avoiding school, playgrounds, or family gatherings because the environment is too overwhelming.



Safety Concerns

High seek behavior like running away, climbing dangerously, or lack of awareness of pain/danger.



Emotional Distress

Frequent, intense meltdowns that take a long time to recover from.



Common Support Paths



Occupational Therapy (OT)

OT isn't just about "jobs." For kids, their job is playing and learning. An OT assesses sensory profiles and builds functional skills for independence.



Sensory Integration (SI)

A specific approach often used within OT. It involves active, physical play designed to help the brain process and organize sensory input more effectively.



Start by talking to your pediatrician or school support team.



Trust Your Instincts

"You know your child best. If something feels harder than it should be, seeking answers is an act of love, not a sign of failure."



You've Got This.

Parenting a child with sensory needs is a journey of discovery, patience, and profound love. Remember that progress isn't always linear, and every small win is a victory worth celebrating.



You are not alone



Progress is gradual



Focus on Connection

Relationship is the foundation of regulation.



Celebrate Strengths

Sensory sensitivity often comes with deep empathy and creativity.



Care for Yourself

You can't pour from an empty cup. Your calm is their calm.

Full Disclaimer

This guide is designed for educational and informational purposes only. The content provided herein is not intended to be a substitute for professional medical advice, diagnosis, or therapeutic intervention. Always seek the advice of your physician, occupational therapist, or other qualified health provider with any questions you may have regarding a medical condition or sensory processing challenges.

Reliance on any information provided in this guide is solely at your own risk. Every child is unique, and strategies that work for one may not work for another. We recommend consulting with a professional to tailor supports to your child's specific needs.

Copyright & Usage

© 2026 FutureForAutism.org. All rights reserved.

This material may be printed for personal use or for educational use within a single classroom or therapy setting. Reproduction for commercial purposes, mass distribution, or modification of the content without express written permission is prohibited.

The "Sensory Processing & Regulation" guide and associated worksheets are intellectual property of FutureForAutism.org.