



**Sensory Processing Disorders-What is it and how to help!**  
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**What is Sensory Processing?**

*Sensory processing is the intake of information through our sensory receptors and the organization of this information within our central nervous system. The outcome of good sensory processing is adaptive function- the ability to learn from and act on one's environment.*

*When sensory processing breaks down a child's ability to understand and respond to their world in an effective way is diminished.*

- Over time, this disorder has been called "Sensory Integration Disorder", "Dysfunctional Sensory Integration"
- Sensory processing difficulties occur on a continuum; children's function is impacted based on their unique sensory processing abilities as well as their internal and external support strategies.
- This label is on its way to becoming an official diagnostic category- distinct, but often co-occurring with ADHD, autism, Asperger's syndrome.

**Review of the 7 sensory systems- The basis for sensory integration theory**

Hearing: receptors in ears

Vision: receptors in eyes

Smell: receptors in nose

Taste: receptors in mouth

Touch: receptors in the skin

- Protective: Alert child to danger
- Discriminative: provide information about quality of objects in his environment (hard, soft, sharp, dull)

Vestibular system: Movement sense

- Receptors in inner ear
- Provides information about where we are in space, if we are moving or if our environment is moving

Proprioception: body awareness

- Receptors in muscles and joints
- Provides information about where our body parts are and if they are moving

### **How Sensory Systems affect Arousal Levels**

Definition of Arousal- The brains “level of alertness” to its surrounding environment.

- Must be able to “match” the attention demands of the activity
- Must be able to shift and adapt based on changes in the activity
- Must be able to accommodate a varying degree of sensory stimulation within a given activity demand- this is sensory regulation.

“How does your Engines Run” analogy (Williams & Shellenberger, 1996)

- Low Arousal- easily distracted, lethargic, difficulty engaging in physical activity, flat affect
- High Arousal-Constantly ‘on the go’, easily distracted, seeking movement, risky behaviors
- “Just right” Arousal- Able to take in and respond to information in a timely manner

### **Signs of Sensory Processing Disorder Difficulties**

- Over or under responsive to touch, movement, sights, or sounds
- Easily distracted
- Difficulty in social or emotional situations
- Activity level is unusually high or unusually low
- Physical clumsiness or apparent carelessness
- Impulsive, lacking in self control
- Difficulty making transitions from one situation to another
- Inability to unwind or calm self
- Poor self concept
- GI issues
- Sleep disturbances
- Delays in speech, language, or motor skills
- Delays in academic achievement
- Struggles to complete self-care tasks