

What is Sensory Processing Disorder?

Written by Monika Buerger, DC

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Sensory Processing Disorder (SPD) is a neurodevelopmental disorder resulting from the brain's inability to integrate everyday sensory information received from the five senses: touch, vision, sound, smell, and taste.

In addition to the commonly known five senses are two additional senses that are rarely heard of: the vestibular and proprioceptive systems. The vestibular system has functions located in the base of the brain (cerebellum), the upper part of the neck (cervical spine) and the inner ear. It is the "chief regulator" of all incoming sensory information and is considered the most important sensory system. The proprioceptive system is located throughout the spine as well as all other joints of the body. Dysfunction within the sensory integration system can lead to problems with learning, motor skills, behavior, and social and emotional development. It is estimated that as many as 1 in 20 children suffer from SPD.

Some children with SPD are hypersensitive: they feel bombarded by sensory information. These children may appear to be withdrawn socially because they avoid activities that make their brain feel "uncomfortable." On the other hand, children who are hyposensitive to sensory information may seek out intense sensory experiences in order to "feed" their brain. Complicating the diagnostic process are children who may have a mix of hypersensitive and hyposensitive sensory systems.

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CHIROPRACTIC FOR LIFE

October is National Sensory Awareness Month

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Some signs children may exhibit with Sensory Processing Disorder

Touch Children who have difficulties processing tactile sensory input may appear anxious, controlling, or aggressive. They may avoid or crave touch, dislike messy play such as finger painting, appear irritated by certain clothing (e.g. tags in shirts) or food textures, appear irritated when someone is in close proximity, often are very active or fidgets, have difficulty manipulating small objects, use their hands to explore objects, or often put objects in their mouth.

Smell These children may be susceptible to allergies, especially environmental allergies. They may exhibit an excessive need to smell toys, items, or people or they may not like new clothes, toys, or furniture because of the smell. Their behavior or health may deteriorate after cleaning house due to the toxic effect of the cleaning chemicals.

Taste Children who have trouble processing taste stimuli may be "icky eaters." They may also exhibit pica, the act of eating non-edible items such as chalk, crayons, dirt, etc.

Vision Children with sensory processing disorder of the visual system may have difficulty going down stairs, poor hand-eye coordination, pain, watering, or discomfort when required to perform visual work, frequent headaches or stomachaches after visual work at school, or difficulty copying. These children may be unable to read without losing place or aloud. They may also rub their eyes after use.



Author discussed in [Order Pathways to Family Wellness](#) magazine, Issue #19.