

# Sensory Integration

Sensory integration is the ability to receive sensory information from the environment, organize it, and respond appropriately. Information from the sensory receptors of touch, movement, gravity, vision, hearing, smell, pain, and temperature is filtered, sorted, and integrated meaningfully and automatically. This information is used to develop body awareness, postural control, balance, coordination, and motor planning for organized and purposeful movement. Effective sensory integration promotes the development of motor, emotional, and perceptual skills, which provide the foundation for more complex motor skill, completion of daily demands, and meaningful interpersonal relationships.

*How do occupational therapists intervene with children with sensory processing difficulties?*

Ayres Sensory Integration (ASI) is a theory and intervention designed to improve sensory integration in children. Dr. A. Jean Ayres established ASI in 1972 based on her training and work as an occupational therapist and educational psychologist, as well as her post doctoral work in neurology. An occupational therapist trained in ASI can identify specific types of sensory processing disruption through assessment and provide therapy accordingly. Therapy is child-centered, provides achievable challenges, and incorporates specific equipment to promote, balance, postural alignment, and coordination needed for motor planning. ASI provides graded amounts of sensory inputs to the child in order to activate and enhance the child's central nervous system organization. Developmentally appropriate activities are utilized, and the child's responses are carefully monitored. Through optimal exposure to sensory stimuli, ASI promotes adaptive responses and increased performance in social interaction, school, and daily routines.

**Sensory Integration is the ability to:**

*Receive sensory stimuli*

*Attribute meaning to that stimuli*



*Integrate that information with other sensory information*



*Integrate this data with prior sensory and motor experience*



*Produce an efficient adaptive response*

*Register the adaptive or motor response for future use*



LEVIN  
OCCUPATIONAL  
THERAPY

1217 Green Bay Road  
Wilmette, IL 60091  
(847) 251-1717  
[www.LevinOccupationalTherapy.com](http://www.LevinOccupationalTherapy.com)