

# DISCOVER PROPRIOCEPTION A “HIDDEN” SENSE<sup>©</sup>

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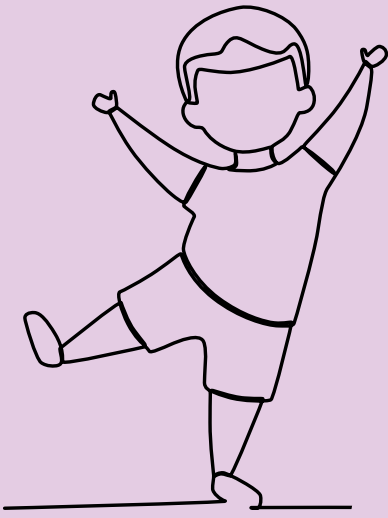
**M**ost children learn that we have five senses: sight, sound, taste, touch and smell. However, there are other very important senses not included on this list. Awareness of our body position or “proprioception” is one of these.

Because we do not usually teach children about this sense or think about how much we all use it, most people are not aware of it. This creates an additional challenge when the sense is not working well. If we’re not even aware of it, it’s hard to understand problems related to it. Just as our eyes and ears send information about what we see and hear to the brain, parts of our muscles and joints sense the position of our body and send these messages to the brain as well. We depend on this information to know exactly where our body parts are and to plan our movements. When our proprioceptive sense works well, we make continual, automatic adjustments in our positions. This sense helps us to stay and to move into optimal positions for everyday activities such as sitting in a chair to do paperwork; holding utensils such as a pen or a fork

in the right way; judging how to maneuver through an aisle so that we don’t run into or knock down things; knowing how far to stand away from people so we’re not too close or too far; planning how much pressure to exert so we don’t break a pencil lead or a toy; and changing actions that were not successful, such as the throw of a ball that was off target or a dive that turns into a belly flop.

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Since proprioception helps us with such basic functions, a problem in this system can cause a great deal of trouble. Often, an individual must pay attention to things that should happen automatically. A child may also need to use vision to compensate and “figure out” how to make adjustments. This can take a lot of energy. A child with these difficulties may feel clumsy, frustrated, and even fearful in some situations. For example, it may be very scary to walk downstairs if you’re not sure where your feet are. The proprioceptive system is activated through push/pull type activities, jumping and activities that involve weight and deep pressure. This kind of sensation is often calming and may be helpful to a child who becomes easily disorganized.



# Help your child be more aware of body position

**The following are some examples of proprioceptive-type activities.** They may be useful in helping children be more aware of body position and to feel calmer and more organized:

- 1** Have children help with “heavy work” activities like carrying in the groceries, carrying the laundry basket, pulling bags of leaves, taking out garbage cans and pulling weeds.
- 2** Play “backpacking” by placing bags of beans or rice in a child-size backpack. Pretend to be climbing mountains and jumping off rocks at the park or in the backyard.
- 3** Make a “sandwich” out of your child between the couch cushions. Gently add pressure as you pretend to put on “pickles”, “cheese”, “lettuce”, etc. (be sure to leave the child’s head exposed).
- 4** Have children close their eyes and “feel” where their legs, hands, arms, etc. are. Ask if they are up or down. See if the child can get into different positions without looking, such as rolling into a ball, touching their nose, making a circle with arms, hands or feet, making an “X” with arms and legs, etc.
- 5** Some children will especially enjoy the sensation of holding onto a bar and feeling the stretch of hanging and swinging their body from it. A pull-up bar installed in a doorway can be a simple way to offer this activity to a child at home.
- 6** Give the child extra proprioceptive input when they are learning a new skill. For example, wearing a light-weight cuff when a child is trying to throw a ball may give a little extra feedback about the position of their arm. Other examples include practicing letters, shapes, or numbers by making them in clay or another firm mixture; placing your hands on the child’s hips or shoulders and providing gentle pressure when the child is learning a new motor skill such as climbing upstairs or skating; and moving the child through an action and providing gentle resistance to body movements so the child can “feel” it more easily.
- 7** Provide gentle but firm massage if your child enjoys this. Try rubbing arms and legs to help “wake up”, applying gentle pressure to the shoulders and head for calming, or massaging hands before trying a new or difficult fine motor task.



**These are just a few ideas. Use common sense and don’t apply too much pressure or ask a child to push, carry or pull something that’s too heavy. Experiment and find out what seems to help your child the most.**

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