

Proprioception and Body Awareness



Our proprioceptive system is one of our senses. It uses information from our muscles and joints to let us know where our body is within our environment. For example, you should be able to close your eyes and touch the tip of your nose. It also allows us to know how much force you're using during activities for example writing without breaking the end of your pencil. Difficulties might include appearing clumsy when moving around or using too much force and breaking toys unintentionally.

Participating in extra proprioceptive activities has a regulating effect on our sensory system, allowing our bodies to organise itself for useful activity. It can also help to calm a distractable and over alert child as well as increase alertness in an under alert child, which prepares them for other activities.

It is also useful to incorporate body awareness activities to make a child aware of their own body, body parts, how they move and feel and what they are called.

The following activities are designed to give extra proprioceptive input and to encourage an increase in their body awareness.

You can incorporate proprioceptive input and body awareness throughout their day by: -

- Adding weight to their clothes such as placing beanbags into their jacket pockets or placing heavy toys and a full water bottle into their backpack makes their muscles work harder. At school they can be a "teacher's helper" by carrying or putting away books or other heavy objects.
- Wearing tight stretchy clothing (e.g., a tight Lycra long sleeved top and leggings or sports base layers) can help to give children extra proprioceptive input and help them to feel their body movements more easily.



Body awareness information adapted from our colleagues : NHS Greater Glasgow & Clyde – KIDS
(www.nhsggc.org.uk/KIDS)

- During activities such as climbing or balancing, place your hands on your child's hips or shoulders and provide gentle pressure, or gentle resistance to give extra proprioceptive input and help them to feel their body movements more easily.



- Encourage your child to play or work above shoulder height, e.g., easel or blackboard, throwing and catching heavy balls (e.g., a large gym ball or a basketball).
- Provide a long mirror for your child to dress in front of and play “body awareness” games in front of. For example, ask them to name and touch different parts of their body, front and back whilst looking in the mirror to visually reinforce the physical feedback of touch. Increase difficulty by touching different parts of their body and ask them to touch the same part whilst looking in the mirror.
- Give them short movement breaks when working on their homework or whilst playing board games etc. Children with poor proprioception tend to fidget and move a lot to give themselves the extra sensory input they need. Try a stress ball to squeeze and fiddle with while doing quiet activities like their homework or watching TV. Or you could try a weighted cushion on their lap.
- Encourage leisure activities such as trampolining, cycling, walking, swimming, horse riding, tennis, squash and cricket.
- Adventure playgrounds also provide lots of fun opportunities for proprioception input for all the family through equipment that encourage hanging, climbing, jumping, bouncing or pushing with both arms and legs.

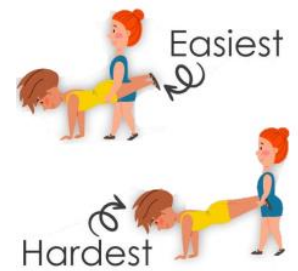
Activity ideas

- Create obstacle courses in the house. Get the children involved in designing these and carrying the objects around as this will also help to activate their muscles and joints. They could try sliding under blankets, climbing over chairs, stepping across cushions on the floor.
- Create obstacle courses in the garden. You can use any equipment and objects you have and think of ways to go around, under, over them safely. Or mark out a chalk path that includes jumping, hopping, walking along a narrow path, tiptoe walking.

Body awareness information adapted from our colleagues : NHS Greater Glasgow & Clyde – KIDS
(www.nhsqac.org.uk/KIDS)

NHS Borders Children and Young People's Occupational Therapy Service

- Work in pairs for wheelbarrow walks. Once they improve you can add obstacles they have to go around or increase the distance. You could even have a race if there are a few people. Ask your child to lie on their stomach, support their legs and ask them to walk with their hands. Make sure they keep their hands pointing forwards whilst they walk. If this is too tricky, start by supporting your child at the hips and slowly progressing down their legs.



- Mini workout circuits. You could include wall push ups, squats, chair dips, half plank or plank, commando crawling, star jumps and box press ups.
- Household chores that involve lifting such as carrying the laundry basket and washing the car using big arm movements.
- Animal walks are fun for younger children. Here are some ideas to get you started.



Bear – Ask your child to go on all fours, keeping arms and legs as straight as possible with a flat back. Ask them to move their left hand/left foot at the same time then move right hand/right foot at the same time.



Crab – Ask your child sit on their bottom, with knees bent and hands flat on the floor beside or slightly behind their bottom. Ask them to lift their bottom off the floor and walk forwards, backwards and sideways like a crab!



Frog – Ask your child to crouch down, bend their knees and put their hands on the floor. Ask them to do some “frog hops” by stretching their arms in front of them and hopping their feet in between them.

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- Many craft activities provide resistance and thus increased proprioceptive input. Examples are, cutting or tearing heavy paper or card; making texture

rubbings, e.g., tree bark, coins, etc., drawing with paper over a textured surface such as corrugated card; ceramics and clay modelling; squeezing and pinching playdough.

- Sing action songs that involve touching and moving your body such as “If you're happy and you know it”, “Head, shoulders, knees and toes”.
- Play Simon Says asking them to move or touch various parts of their body for example: - touch your elbows, shoulder blades or wiggle your toes.
- Crinkle a sheet of paper into a ball using one hand only, then swap hands.



- Draw or dig in wet sand with hands or feet. Build sandcastles or dig for buried toys.

Body awareness information adapted from our colleagues : NHS Greater Glasgow & Clyde – KIDS
(www.nhsaqc.org.uk/KIDS)

Further resources:

For more resources to help with developing skills or for further helpful tips and tricks, please visit our website or lookout for our Facebook posts.

www.nhsborders.scot.nhs.uk/cypot

www.facebook.com/CYPOTNHSBorders

Our sensory motor playlist on YouTube will demonstrate some of these activities.



If you would like more information on proprioception, please watch our mini-series of sensory integration.

[Sensory Integration Mini Series - YouTube.](#)

