

## **Core Strength and Postural Control**

Our 'core' muscles do not just refer to our abdominal muscles, they also include the muscles found in the lower back and shoulders, the internal and external obliques, the stomach muscles such as the rectus abdominis and diaphragm, and the gluteal muscles and hamstrings. Deep core muscles include the multifidus muscle and the pelvic floor muscles that are constantly working to stabilize these are the endurance muscles of the core. Core muscles are categorized as flexor muscles (those in the front) and extensor muscles (those in the back). The goal to achieve good core strength is to gain balance between the 2 muscle groups.

Children are best able to build strength by participating in unstructured, spontaneous play and, the more diverse and varied their play is, the better they can achieve the comprehensive and dynamic strengthening they need to be successful with everyday play, self-care, and gross motor skills. As they are having fun, kids will participate in a play activity indefinitely, and the longer they play, the more strengthening benefits they get! Kids build core strength (and overall body strength) by:

- Riding their bikes (fast, slow, up hills, down hills, in sitting and in standing)
- Climbing up ladders, slides, stairs, rocks, and trees
- Pumping on the swings at the playground
- Running (through the grass, snow, sand, or mud)
- Swimming, splashing, and treading water in the pool or at the beach -And much more!

Below are some 'quick core strengthening activities' that you can try at home. Many children compensate for weak core muscles by holding their breath during strenuous activities. Always be sure that your child is breathing while completing the exercises and games suggested! When children compensate by holding their breath, they are not reaping the full benefits of core strengthening activities. To encourage breathing, have the child count repetitions aloud, talk to you, or sing a song while they complete these activities.

## General Praxis Strategies for Everyday Use






**Plank**




- Have the child lie on their stomach on the floor with their hands under their shoulders and toes on the floor. On the count of 3, have them push up on their hands to straighten their arms and lift their body off the floor.
- Have the child try plank position on his forearms, with elbows resting on the floor. Can they move between the two positions, pushing from their elbows back up onto their hands? How many times can they move between the two positions?
- If plank position is too difficult, have the child try it with knees resting on the floor.
- Have the child try shifting into a side plank position, rolling from high plank onto one hand and the outside edge of the same foot, with the other arm raised to the sky.
- Make it a game! Have one child hold plank position while another child tries to roll or gently kick a ball under their body.



**Bridge**

- Have the child lie on their back with their knees bent and feet flat on the floor. Have them push through their feet and heels to raise their bottom up off the floor. Be sure that they are keep their head and shoulders on the ground.
- Have the child slowly lower down from a bridge position onto the floor and then slowly lift back up into bridge. Try counting to 3 as the child lifts and lowers.
- Put a stuffed animal or ball between the child's knees and have them squeeze while bridging.
- Make it a game! Try zooming some toy cars under the child's bridge. How many cars can you get under the bridge before it falls?
- Find a few small stuffed animals and "walk" them under the bridge. Tell the child not to squish the animals!

 <p><b>Superhero</b></p>	<ul style="list-style-type: none"> <li>• Have the child lie on their stomach on the floor and try to lift their arms and upper chest up off the floor in front of them like a flying super hero.</li> <li>• Challenge the child to lift their legs off the ground at the same time as their arms.</li> <li>• Place a stuffed animal on the child's back and see if they can complete this exercise with enough control to keep the animal from falling.</li> <li>• In superhero position, have the child reach up for you to hand them pieces of a puzzle or to place stickers as high as they can on the wall.</li> </ul>
 <p><b>Crab Walk</b></p>	<ul style="list-style-type: none"> <li>• Have the child sit on their bottom on the floor. Show them how to place their hands on the floor behind them and push up so their bottom is off the ground. Then, have them start walking like a crab!</li> <li>• Have the child crab walk on different surfaces for a different kind of challenge. Try inclines, declines, hard surfaces, soft surfaces, etc.)</li> <li>• Try a crab walk race where the child moves forward to touch a target and then backwards to the starting point.</li> <li>• Set up cones or pillows as obstacles and have the child crab walk between them.</li> <li>• Play a game in the crab walk position! Try Red Light, Green Light, Tag, or Football.</li> <li>• For extra work on core stability and body awareness, place a toy or stuffed animal on the child's belly and see if they can crab walk without it falling off.</li> <li>• Do a crab dance! See if the child can lift one hand up and hold it for 5 seconds, then try a foot!</li> </ul>
 <p><b>Crawl</b></p>	<ul style="list-style-type: none"> <li>• Have the child creep across the floor on their tummy using arms and legs to pull body forward. Try an obstacle course or crawling through a tunnel!</li> </ul>

 <p><b>Bear Walk</b></p>	<ul style="list-style-type: none"> <li>• Have the child walk like a bear. Can they walk like any other animals?</li> <li>• See how long the child can hold the pose on hands and feet. Can they hold it long enough for a friend to crawl underneath?</li> </ul>
 <p><b>All Fours</b></p>	<ul style="list-style-type: none"> <li>• Start with the child kneeling in all fours. Have them raise one arm out in front of them and the opposite leg back behind them. Then switch sides! Keep back flat and tummy pointed toward the ground.</li> <li>• Give the child a section of the floor to scrub squeaky clean or try doing a puzzle or playing a board game in this position for a change.</li> </ul>
 <p><b>Windmills</b></p>	<ul style="list-style-type: none"> <li>• Hold both arms horizontally to the side and begin to circle them making small circles and gradually getting larger. When the circles become large, circle 5 times in a clockwise direction and 5 times in an anticlockwise direction. Repeat 10 times.</li> </ul>
<p><b>Other Activities</b></p>	<ul style="list-style-type: none"> <li>• Swimming, Trampolining and Horse riding are all very good strengthening activities.</li> <li>• Climbing up a slide, climbing a tree, or climbing stairs on all fours.</li> <li>• Rolling down a hill. Or rolling on any surface at all!</li> <li>• Lifting something heavy, helping to bring groceries in from the car or take out the rubbish.</li> <li>• Pushing and pulling. Have the child push chairs out of the way, or push or pull a sibling or friend in a stroller or wagon.</li> <li>• Sweeping or mopping floors, raking leaves, or digging.</li> <li>• Playing tug of war.</li> <li>• Sitting on a gym ball to attend to tabletop activities will help to improve postural and core stability.</li> </ul>



Climb Tree



Rolling



Lifting



Plank



Bridge



Superhero



Push



Pull



Sweep



Crab Walk



Crawl



Bear Walk



Mop



Tug of War



Digging



All Fours



Windmills



Swimming



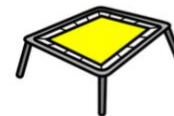
Gym Ball



Puzzle



Game



Trampoline



Horse Riding



Climb Slide