

# Activities for Children Who Walk on Their Toes

Compiled by: Elizabeth Beazley PT, DPT, Megan Geno PT, DPT, Thasia LaDuca SPT, and Karen Nolan PT,MS ,PCS

## What is Toe-Walking?

Toe walking is when a child (or an adult) remains on their toes throughout all the phases of gait. They will land on their toe and push off on their toe without the heel of the foot ever touching the ground. Some reasons for toe walking are listed below.

## Types of Toe-Walking:

**Idiopathic:** Idiopathic toe-walking is a term used to describe the condition in which children walk with a toe-toe gait pattern in the absence of any known cause. It has been referred to as habitual toe-walking.

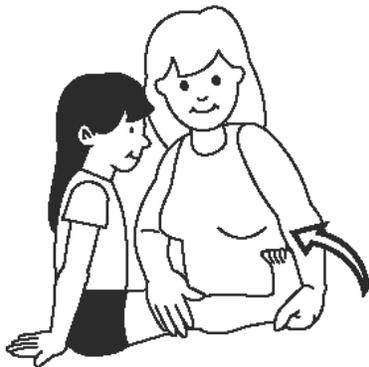
**Autism Spectrum Disorder (ASD) / Sensory Seeking:** Some children may toe-walk secondary to needing a certain type of sensory stimulation that is present when they are walking on their toes. There is no shortening or spasticity found in the calf muscles, the reason is just purely sensory.

**Cerebral Palsy (CP):** Children who have mild CP may toe-walk because their calf muscle(s) (gastrocnemius) are affected by the CP and are spastic. The spasticity causes the calf muscles to continuously contract and pull the foot so that the child is pointing their toes in sitting or is up on their toes in standing. Over time if the spasticity is not regulated or reduced the muscle may get used to being in this shortened position and become tight and harder to move out of the toe pointed position.

\* This handout is focused on providing activities for children who toe-walk as a result of mild CP or calf muscle shortening/tightening. The following activities are directed for the use of these children, in order to stretch and strengthen their muscles routinely.

## Static/Passive Stretches:

### Manual Calf Stretch



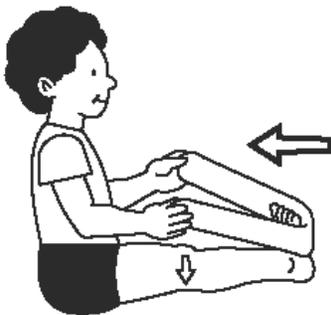
Have the child sit comfortably with his/her knee straight. Place your hand between the sitting surface and child's heel so you are cupping the heel in your hand, placing your forearm, lengthwise, along the bottom of the child's foot. Slowly place pressure on the foot with your arm so that the toes point up and back towards the child's body. Hold this stretch for 30 seconds and repeat 2 times.

## Wall Stretch



Place your hands on a wall and point both of your feet at the wall. One foot is behind the other as pictured above. Bend the front leg and lean into the wall while keeping the back leg straight. Make sure to keep both heels down on the floor during the stretch. Hold the stretch for 30 seconds and repeat 2 times.

## Towel / Long Sit Stretch



Sit comfortably on the floor with both legs straight out in front. Wrap a towel around both feet so that it is on the lower half of the “nook” of your foot. Hold on to the towel at both ends. Pull the towel towards you while pushing your knees flat into the floor and keeping your back straight. Hold the stretch for 30 seconds and repeat 2 times.

## Heel Drop Stretch



Stand on a step or a curb and place one foot half way on the step. Let the heel drop while the middle part of the foot remains in contact with the step. Keep the leg of the ‘dropped heel’ straight. Hold the stretch for 30 sec and repeat 2 times.

## Active Stretches and Strengthening:

### Squat Play



Encourage the child to squat during play activities. It is important to help the child keep his/her heels on the floor in order to stretch the calf muscles. Sometimes performing activities on a low table will encourage squatting.



Squatting can also be encouraged by sitting on a small ball (basketball, playground ball, etc) while keeping both heels down on the ground. The child can practice standing up and sitting down on the ball while keeping his/her heels down.

### Bear Walk



This activity takes some coordination, but is fun to use in pretend play and with active children. Start on the floor with your hips up in the air and both of your feet and hands in contact with the floor. As shown above, bend one knee and bring that leg forward underneath your chest. After the leg is under your chest, allow your back leg to remain straight behind you with your toe in contact with the ground and try to push your heel towards the floor. After holding this for a few seconds, walk your hands forward and bring the back leg forward and under your chest. Creep along the floor like this allowing time for the back leg to stretch.

## Scooter Races



Make strengthening your child's ankles fun! Scooter races on a smooth surface are a great way to make your child stronger. Have the child sit on the scooter and use their heels of their feet to propel themselves forward.

## Heel Walking



Incorporating heel walking into your child's day can be an excellent way to strengthen their ankles. Have the child walk, keeping their toes pointed in the air, and solely utilizing their heels. Some ways to make it part of the day include heel walking to dinner, heel walking during play time, heel walking to and from the car, etc.

## Yoga: Child's Pose / Downward Facing Dog



These popular yoga poses help to stretch the calf muscles. Start kneeling on a mat or on the floor. Place your hands and forearms down flat in front of you and lower your forehead to the ground (this is Child's Pose). Push through your arms up into the Downward Facing Dog pose so that your hips are in the air and your arms and legs remain straight. Keep your head down and push down with your heels until you feel the stretch in the calf muscles. Hold each pose for 30 sec and repeat 2 times. Children Yoga videos and instruction can be found in the area and would be a great addition to an exercise routine.