

Toe Walking

What is Toe Walking?

Toe Walking occurs when children walk on the toes or balls of their feet.



There are several underlying reasons why children Toe walk:

- **Physical:** If children have a short Achilles tendon (the tendon which links the lower leg muscles to the heel bone), this can prevent their heel from touching the ground.
- **Neurological:** Some neurological conditions, such as Cerebral Palsy or Muscular Dystrophy can impact a child's posture, muscle tone and motor control.
- **Sensory:** Children may toe walk to place more pressure through a smaller surface area of the foot to gain extra tactile (touch) or proprioceptive (movement) sensory input. Conversely, children may toe walk because they are sensitive to the tactile (touch) feedback of the ground under their feet and are attempting to avoid or minimise this feedback. They may also avoid socks, shoes and even bare feet. For some toe-walkers, the vestibular system may not be giving the brain accurate information on body position and movement.
- **Visual:** Standing on one's toes changes the angle of vision and this can provide a better awareness of surroundings but also be indicative of visual motor difficulties.
- **Regulation:** Children may toe walk when they are particularly anxious or heightened, in an attempt to self-regulate or calm themselves down.
- **Habitual:** Children who continue to toe walk may do so due to habit and or because the muscles and tendons in their legs have tightened over time.

Consequences of Toe Walking

Consequently, toe walking can lead to pain in ankles, knees or hips; difficulty with squatting or climbing stairs; and decreased hip or core strength due to postural alignment issues.

Activities to Reduce Toe Walking

Extend Range of Motion:

- With the child sitting or lying back, grab one foot in your hand (knee straight) and stretch the Achilles heel cord. Hold for 1 minute.



- Grab a **wedge** and have the child stand or walk up the wedge/incline



10" x 10"



- Yoga poses such as child's pose and downward facing dog help to stretch the calf muscles



Do Animal Activities:

- Walk like a crab or bear with all fours on the ground.



Key Points

- Bottom up for level stomach as the child is able
- Feet under knees



Key Points

- Extend legs straight
- Head down

- Try and walk like a penguin, heels down and toes up. It may help to try and carry a small ball/plastic egg/small stuffed animal like a male penguin would carry an egg



- Try a game of leapfrog, jumping, **hopping**, squatting and then leaping forward.



Key Points

- Squat down like a frog
- Jump as high as you can
- Repeat this across the room

Strengthen Muscles:

- Pick up a washcloth or marbles with your toes.

- Balance a sock or **beanbag** on the foot.



- Sit on a **scooter** board or skate board and move the scooter across the floor using bare feet.



- Walk up a slide.



- Hold a chair pose against the wall.
- Run up a hill, stretching the tendon and muscle by keeping the toes pointed up.

Improve Balance:

- Balance on a **wobble board**.



- Walk across a balance beam, balance stones or floor spots.
- Stand on a **round air cushion** and balance.



Position the Feet:

- Wear high top shoes/rain boots/roller-skates and heavier shoes for better foot position.
- Place a wedge under the heel to encourage heel contact.
- Use inserts in shoes to promote good foot position

Increase Sensory Exposure:

- Tape squeakers on the bottom of the child's feet to encourage auditory feedback.
- If noise doesn't help, try wheeled shoes. Kids have to pick their toes up to roll.
- Encourage barefoot walking in the grass and sand. Indoors, try setting up an obstacle course with blankets of different textures.
- Make art using the feet with paint and paper.
- Use joint compression (hand held jumping) to wake up the ankles.
- Wear scuba flippers to walk heel to toe



- March and stomp to make the entire foot have contact with the ground

The idea behind these movement strategies is to develop the whole foot, intrinsic foot muscles and lengthen the heel cord. Be creative and playful too!