

Toe walking (idiopathic) Home program

What is idiopathic toe walking?

Children usually learn to walk at about 1 year of age. As they practice walking, they often try different foot positions, such as walking on tiptoes. By age 2, most children have learned to walk steadily, with their feet flat on the ground.

Idiopathic (id-ee-o-**path**-ik) toe walking is the habit of tiptoe walking with no clear reason for it. (“Idiopathic” means unknown cause.) Often a child with this condition **can** stand with the feet flat on the floor, and can even walk with flat feet when asked to do so. But left on their own, they walk on their toes. After the age of 18 months, a child who walks on the toes most of the time should be seen by a pediatrician to assess the reason.

What causes toe walking?

Some types of toe walking have a known cause. Children with cerebral palsy may toe walk because of muscle stiffness and trouble controlling body movement. Children with muscular dystrophy may have muscle weakness that leads to toe walking.

We do not yet know the exact cause of idiopathic toe walking, but it can be influenced by several factors.

- tactile processing (response to touch sensations)
- proprioceptive processing (sensing our body’s position in space)
- vestibular processing (maintaining balance)
- motor control (control of specific body movements)
- how long and flexible the leg and foot muscles are

Is it a problem?

Sometimes. Toe walking can lead to muscle tightness that makes it hard to wear shoes, stand with a flat foot, squat, maintain balance, or hop on one foot.

Toe walking can also occur in children with autism, asthma, and speech and language or developmental delays.

How can I help my child?

A physical therapy home program is an important part of your child’s treatment plan. These activities encourage your child to walk on the feet instead of on the toes; they also improve balance and body control.

This home program should be used only under the guidance of a physical therapist.

Tactile (touch) activities

These activities can help your child become more comfortable with various kinds of touch on the feet.

- Foot and leg massage: Use firm, deep pressure.
- Tactile walk: Have your child “stomp” over various textures such as packing peanuts, bubble wrap, and sand.

Proprioceptive activities (positioning)

The proprioceptive system helps us know our body’s position in space. The signals given from our muscles, joints, ligaments, and tendons tell us where each body part is and how it is moving.

- Have your child jump with two feet, one foot, forwards, sideways, and diagonally.
- Jump up and down from a variety of heights, such as 6, 12, and 18 inches.
- Jump rope.
- Push or pull heavy objects.

Vestibular activities (balance shifting)

The vestibular system is the balance center, located in the inner ear and activated by movement or by changing head position. This helps us know where “up” is. As you try these motion activities, watch your child carefully to prevent bumps and falls. Make sure your child is in control and is able to stop.

- Swing
- Merry-go-round
- Seesaw
- Hippity-hop® ball
- Somersaults

Motor control activities

These activities improve your child’s control of specific body movements: which muscles to move, which way, how fast, and how forcefully.

- Take baby steps forward and backward. Look down and watch your feet while you are taking steps.
- Practice controlling foot muscles by making “mouse houses.” Stand with weight spread evenly across the feet. Then raise up the arch muscles on the inside edge of the feet, creating more space under the feet—room for a mouse. Keep the weight spread evenly: the feet should not roll in toward the middle.
- Walk fast / slow.
- Play “Red light, green light” game.
- Walk heavily / lightly.
- Rock forward / backward on rocker board.
- Rock side to side on rocker board.
- Heel walking
- Duck walking (weight on inside edge of feet)
- Penguin walking (weight on outside edge of feet)
- Practice squatting while holding a playground-size ball with two hands in front of your abdomen (belly). Use slow, controlled motion. Knees should stay apart, over the feet.
- Practice sitting down and getting up from benches of various heights. Knees should stay apart over the feet.
- Practice stepping and shifting weight in different directions: forward, diagonally, left, right, back.

Balance activities

These activities improve skills at balancing while shifting weight.

- Balance on one foot.
- Walk on a line.
- Walk on a balance beam, sideways and forwards.
- Stand on a pillow or cushion and play catch.
- Kick a stationary ball.
- Kick a rolling ball.

Stretching activities

This improves the length and flexibility of the calf muscles (back of the lower leg).

- Standing calf stretch on wedge: First make a low ramp by placing a 1- to 2-inch book under one end of a short board, such as a kitchen cutting board. The board should slope down toward the wall. Have your child stand on the board with heels against the wall, so the calf muscles feel a gentle pull. Hold for _____ . Repeat _____ times a day.

Strengthening activities

These activities strengthen the small muscles that move the feet in various directions.

- Start in a sitting or lying position. Using both feet, hold a small ball or other object between the arches of the feet. Then bring the object up to the hands.
- Pick up marbles or pebbles with the toes.
- Draw letters of alphabet in air with the toes

Turn pages of a book with the foot and toes.

Use feet and toes to roll Play-Doh® into a ball or log shape.

Special instructions

Questions?

This home program is to be used only under the guidance of a physical therapist. If you have any problems with this home program, or any questions, please call your physical therapist in the Developmental and Rehabilitation Services Department.

Therapist signature

Date

Phone

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