# Toe Walking Activities

Does your little one walk on their toes?
Have you heard 'they will just outgrow it'?
Do you wonder why they are doing it?

Well we have answers and activities for you!

These pages will give you exercises to support toe walkers.

We have also linked to videos with QR codes (they are also clickable)

Here is one to get you started on some background on toe walking!



# What Causes Toe Walking

- Musculoskeletal child has decreased range of motion at their ankle and aren't able to pull their toes up
  - Often the decreased range is caused because they aren't actively using their dorsiflexion because of decreased eccentric control
- Sensory child is either seeking increased sensory input or trying to avoid specific sensory input
  - If the underlying cause is sensory and the toe walking is not addressed it will cause decreased range of motion requiring the musculoskeletal causes to be addressed as well
- Neuromuscular child has a diagnosis that results in increased muscle tone causing the muscles that point the toes to over fire
  - While the underlying tone can only be changed with meds it is possible to strengthen the muscles to assist with a gait pattern that is not on the toes

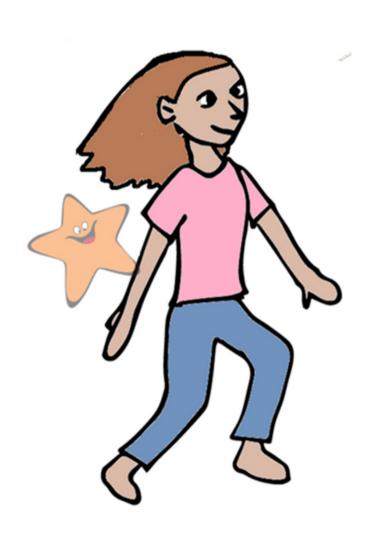
# Toe Walking

- Myth Busting: They will not grow out of this
- Toe walking is when a child does not hit at the heel when they first place their foot down while taking a step. This can look like:
  - They hit on their tip toes
  - They hit the front of their foot
  - They hit flat foot but with their weight shifted forward
- When is it a problem?
  - When they walk this way more than 50% of their day regardless of age or how long they've been walking
  - When they walk this way less than 50% of their day but they have been doing it for more than 3 months
  - Unable to stand with feet flat on the floor and their knees straight
- Why is it a problem?
  - It can result in permanent changes to the bone structure of the foot

## What Can We Do?

- These exercises are going to primarily focus on kids who have limitations in their range of motion and strength
- These kids often have weak muscles at their ankles as well as their hips and core
  - This in conjunction with their altered posture (standing on their toes) will impact their overall balance
- These kids often lack eccentric control specifically in their calves
  - Because of this they will go up on their toes to avoid having to move their leg/body weight over their foot while walking
- These exercises will focus on core strength, eccentric control, ankle strength, and balance
  - If you are wondering why we are working on calf strength when they are already up on their toes it is because their calf is actually weak!

# Toe Walking Exercises



- 1. Squats
- 2. Step Ups/Downs
- 3. Forward Lean
- 4. Weighted Scooter
- 5. Weighted Push
- 6. Animal Walks
- 7. Cannonball Kicks
- 8. Elevator
- 9. Wrecking Ball
- 10. Bridging
- 11. Obstacle Course
- 12. Heel Squishes
- 13. Heel Raises



# Squats

#### What this works on:

Eccentric control of the calf and quad

#### Instructions:

- Have the child stand on a wedge facing downhill
- Have them SLOWLY bend at their knees and hips and then stand back up
- Make sure head and trunk stay upright throughout the movement
- Make sure hips, knees, and ankles are aligned throughout the movement
- Repeat while making sure they maintain their form

#### **Motivators:**

- Any toy with multiple pieces such as a shape sorter or puzzle
- Whoopee cushion



# Squats

- As R1 (functional range) improves you can try these progressions while making sure their form is intact:
  - Perform squats on level ground
  - Perform squats on an unstable, flat surface such as a balance board or the flat side of a BOSU
  - Perform squats on an unstable, non-flat surface such as a pillow, balance disc, or the round side of a BOSU
  - Add weight to any of these variations

# Step Ups/Downs

#### What this works on:

- Eccentric control of the calf and quad
- Single leg balance/stability

#### Instructions:

- Find a step to use (start small 3-4 inches)
- Stand with both feet together on the step so the side of one foot is against the step edge (lateral step down)
- Slowly step down with the foot along the step edge and then bring it back up onto the step
- Do not crash down make sure the size of the step allows the child to step down with control and maintain hip, knee, and ankle alignment
- Repeat on other leg



# Step Ups/Downs

#### Motivators:

Whoopee cushion, bubble wrap, stomp rocket

- As R1 (functional range) improves you can try these progressions while making sure their form is intact:
  - Increase the step height
  - Turn so toes are on the front edge of the step and step down forward (start on the lower height again)

# Forward Lean

#### What this works on:

- Eccentric control of the calf
- Core Strength

#### Instructions:

- Have the child place their hands on an unstable support about chest high (bungee, swing, trapeze, yoga ball)
- Have them stand in a box (or some other method so their feet stay in the same spot)
- Have a target in front of them (hanging toy, foam roller standing on end)
- Have them slowly push the unstable support forward to knock the target while keeping their feet on the floor
- Slowly move back to upright



# Forward Lean

### **Motivators:**

Points for hitting the target

- As they are able to hit the target with control
  - Move the target further away
  - Switch to an unstable support with less tension (a bungee has more tension/support than a trapeze)

# Weighted Scooter

### What this works on:

- Calf strength and power through an increased range
- Single leg balance/stability

#### Instructions:

- Fill a bucket with weighted items
- Attach it to the scooter with a string by looping it around the pole the handlebars are on
- Have the child place one foot on the scooter and push forward with the other foot
- Switch feet and repeat
- Make sure the child is able to stand up tall/straight on the leg on the scooter



# Weighted Scooter

#### **Motivators:**

- Play mail person, restaurant server, Santa
- Use a multi-piece toy like a shape sorter or puzzle

- Increase the weight
- Increase the distance/repetitions
- Switch from a 3-wheel scooter to a 2-wheel scooter

# Weighted Push

## What this works on:

- Calf strength and power through an increased range
- Core strength

#### Instructions:

- Fill a bucket with weighted items
- Have the child push it across a room

#### **Motivators:**

- Play mail person, restaurant server, Santa
- Use a multi-piece toy like a shape sorter or puzzle

- Increase the weight
- Increase the speed
- Increase the distance/repetitions



# Animal Walks

#### What this works on:

Core Strength

#### Instructions:

- Bear Walk walk on hands and feet
- Penguin Walk walk on knees
- Duck Walk get into a deep squat and walk/waddle forward
- Dog Walk crawl on hands and knees

#### **Motivators:**

Tell an animal adventure story to make it interesting

### Progression:

Increase the distance/repetitions



# Cannonball Kicks

#### What this works on:

• Core Strength

#### Instructions:

- Have the child lie on their back
- Bend the hips and knees to 90 degrees so their feet are flat and facing forward towards you
- Throw a yoga ball at their feet and have them use both feet to kick it back to you

#### **Motivators:**

- Give them points for each kick
- Pretend they are going to knock you over

## Progression:

• Increase the repetitions/distance



# Elevator

#### What this works on:

- Dorsiflexion strength (muscle used to lift the toes up in the air)
- Single leg\_balance/stability

#### Instructions:

- Place an item on the top of the child's foot
- Have them lift their foot up while making sure the item stays on
- Once they have lifted their foot they can grab the item and put it where it belongs

#### Motivators:

Puzzle pieces, bean bags, magnets, cars

- Increase the height they have to lift the foot
- Increase the weight of the object on the foot
- Stand on an unstable surface



# Wrecking Ball

## What this works on:

- Single leg balance/stability
- Dorsiflexion strength (muscle used to lift the toes up in the air)

#### Instructions:

- Place a bean bag or other small item on top of a cone (you could also build a tower with blocks)
- Have them stand facing the cone
- Kick the bean bag off of the cone without knocking the cone over

- Increase the height they have to lift the foot
- Make a tower of multiple pieces and have them only knock the top piece off
- Make the piece to knock off smaller so it requires more precision
- Stand on an unstable surface



# Bridging

### What this works on:

- Glut strength
- Core strength and stability

#### Instructions:

- Have the child lie on their back and bend their knees so their feet are flat on the ground
- Lift their bottom up in the air until they have made a straight line with their hips
- Slowly lower down

#### **Motivators:**

- Lower onto a stomp rocket or whoopee cushion
- Roll balls or cars under the 'bridge'



# Bridging

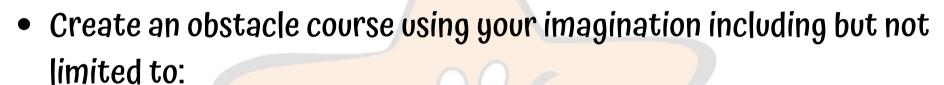
- Hold the bridge for increased time
- Increase repetitions
- Once their bottom is up alternate lifting one leg and then the other
- Have just one foot on the ground to lift their bottom up
- Repeat all options but with feet on an unstable surface

# Obstacle Course

### What this works on:

Overall balance and stability

#### Instructions:



- Stepping up/down/over
- Walking up/down ramps
- Walk across squishy or uneven surfaces
- Walk across/on narrow surfaces

#### **Motivators:**

Multi-piece toys such as shape sorters or puzzles

### Progression:

Add in dual tasking such as carrying items



# Heel Squishes

## What this works on:

• Dorsiflexion strength (muscle used to lift the toes up in the air)

#### Instructions:

- Place an item on the ground
- Have the child squish it using only their heel

#### Motivators:

- Play-dough
- Whoopee cushion
- Stomp rocket
- Bubbles
- Bubble wrap

## Progression:

 Start with child sitting and as they are better about lifting their toes you can progress to standing



# Heel Raises

### What this works on:

Calf strength

#### Instructions:

- Have the child stand with feet flat on the ground
- Raise up onto their toes so their heels lift off the ground
- Make sure child's knees are staying straight as they lift up

#### **Motivators:**

- Bubbles
- Squigz
- Spinners
- High fives

- Increase repetitions
- Use only one foot at a time

