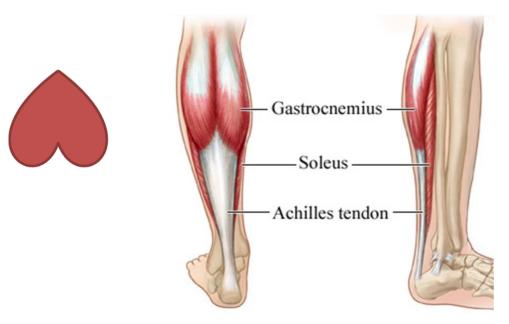
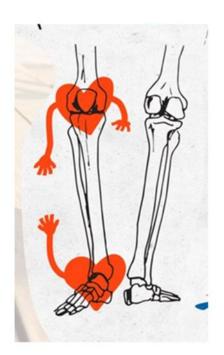




Where is your second heart?







Pump your second heart?

The soleus muscle, is a long lower leg muscle deep in the back next to the tibia and fibula lower leg bones. It is often called our second heart because it functions to propel venous blood and lymph back to the heart from lower limbs.

WALKING is the Best way to pump









We are born to heal



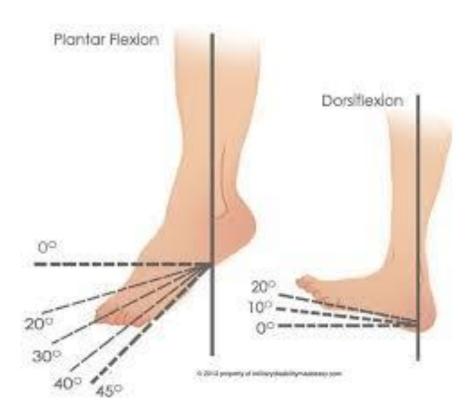


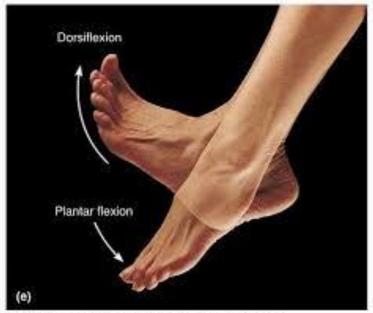
- ➤ Pumping your Second Heart (Soleus Muscle)
- Dynamic Hip Opener (Increases Balance)
- Soleus Stretch (isolates, stretches, strengthens & lengthens)
- > Arch Push Ups



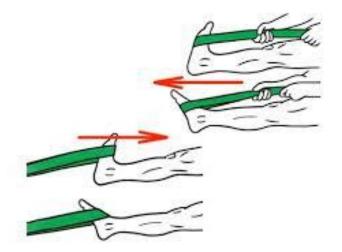


Pump slowly 10x morning, noon, night





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Pumping your 2nd







Bent Knee Calf Raises

- Hold onto back of chair & Stand with feet hip distance apart
- 2. Bend Knees slightly and raise back of feet (ankles) off of the ground (Plantar flex ankle at least 45°) to tippy toe
- 3. Lower feet to ground
- 4. Repeat







Soleus Stretch

(isolates, stretches, strengthens and lengthens)

- 1. Stand in front of chair and holding onto seat of chair take a step back
- 2. Bend both knees slightly and Stay in position by trying to keep heels on the ground with the rear leg bending more.
- 3. Hold 3-4 slow breaths
- 4. Repeat other side

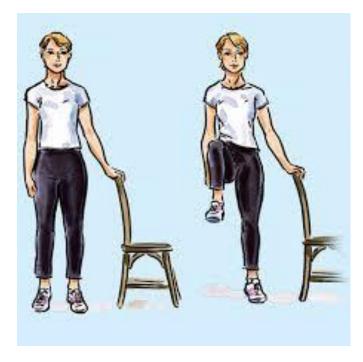


GENTLY

Dynamic Hip Opener

- Stand with feet hip distance apart beside a chair/support
- 2. Pour weight down leg closest to support
- 3. Gently raise other knee as high as possible in front of you into a comfortable flex (loose/bent)
- 4. Open bent leg away from center
- 5. Raise the outside of ankle towards ceiling
- 6. Push bent leg towards back
- 7. Bring bent knee back around front to meet other knee
- 8. Lower foot to ground
- 9. Repeat other side











(more of a brain exercise)

- 1. sitting or standing
- 2. in or out of shoes
- 3. Repeat frequently



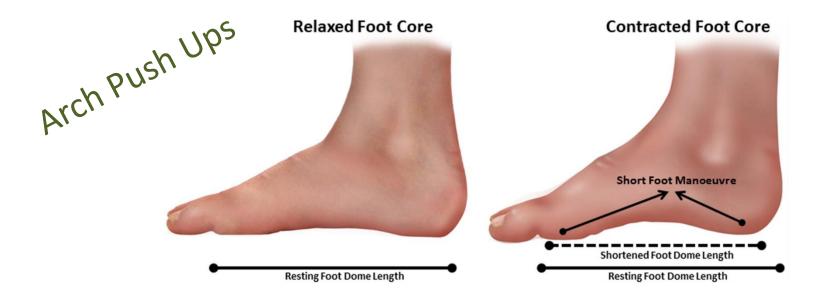


Go Slowly



40 sec.

https://www.youtube.com/watch?v=1nlpWluWrtM



- 1. Pull the metatarsal heads (balls of the toes) toward the heel, which shortens the length of the foot.
- 2. Hold
- 3. Relax
- 4. Repeat throughout the day

Keep at it. This is a brain exercise, which takes focused attention and time to develop. You may experience cramping which means you're doing the exercise correctly. Relax the foot muscles and try again or hold the foot until the cramping passes. These muscles aren't big and strong.





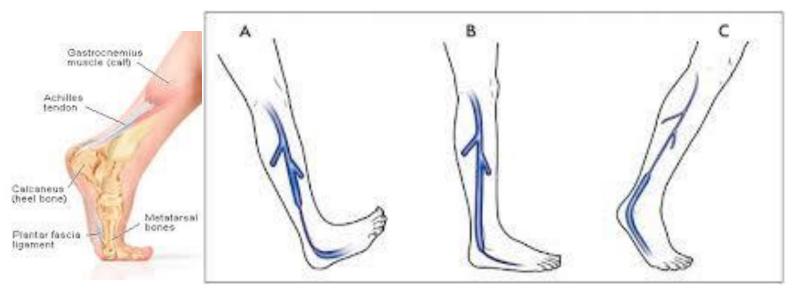
We are the pump

When you walk you contract (pump) your calf muscle which squeezes your veins, helping to push your blood back to your heart.

WALKING

- ↑ Endorphins
- ↓ Glaucoma
- Posture back & abdominal muscles Regulates Diabetes
- ↑ Balance
- Health
 Burns more fat than jogging?

The average person takes approximately 9,000 steps a day.



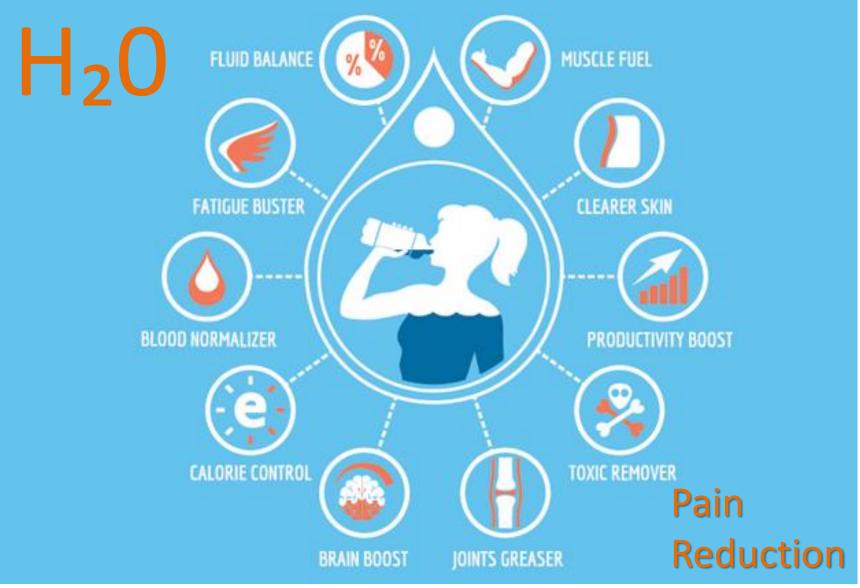
Walking = Synchronized leg pumps

Dorsiflexion, weight bearing, and plantar flexion lead to

- A. Distal calf pump emptying
- B. Foot emptying & then
- C. Upper calf emptying

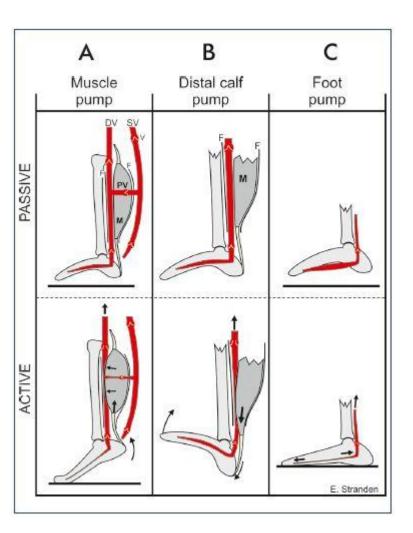


BENEFITS OF STAYING HYDRATED



Mechanism of action for the distal calf pump – your 2nd





A

Muscles (M) are unsheathed by common fascia (F) & veins within the same compartment. Contraction of the calf M, as in plantar flexion of the ankle joint during Walking expels blood into proximal collecting vein.

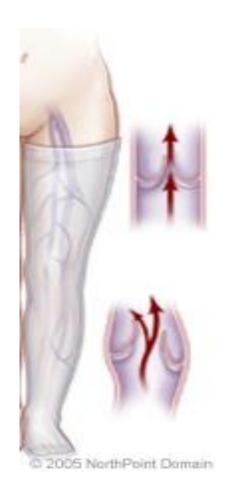
During (passive) relaxation (top left), blood drains from superficial veins (SV) into deep veins (DV) in addition to arterial inflow; preparing for subsequent ejection.

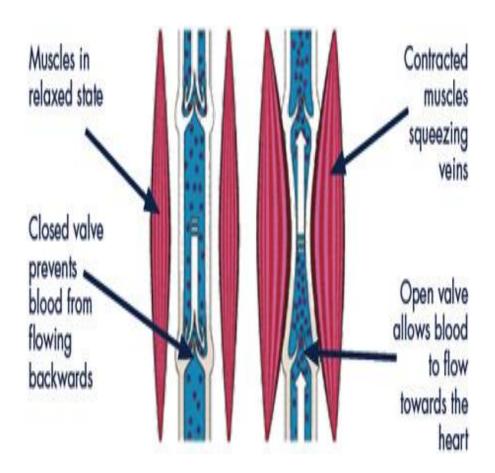
B

Distal calf pump: upon dorsiflexion of the ankle (passive or active), the bulk of the calf M descends within the F to expel blood in the distal veins like a piston.

C

The venous foot pump: upon weight bearing, the tarso-metatarsal joints are extended and the tarsal arch Is lengthens & flattens stretching foot veins, causing veins to eject content of blood.





Vein valves act as trapdoors that open & close with each muscle contraction to prevent the backflow of blood.







The human foot is a masterpiece of engineering and a work of art

Leonardo da Vinci









Dedicated to Dad, 1929 - 2016







walkonfootcare.com