

MUSCLES PROJECT

Hamstrings

Common Name: Hamstrings

Scientific Name: the three posterior thigh muscles semitendinosus, biceps femoris, and semimembranosus

Semitendinosus Insertion—medial tibia surface

Semimembranosus Insertion—medial tibial condyle

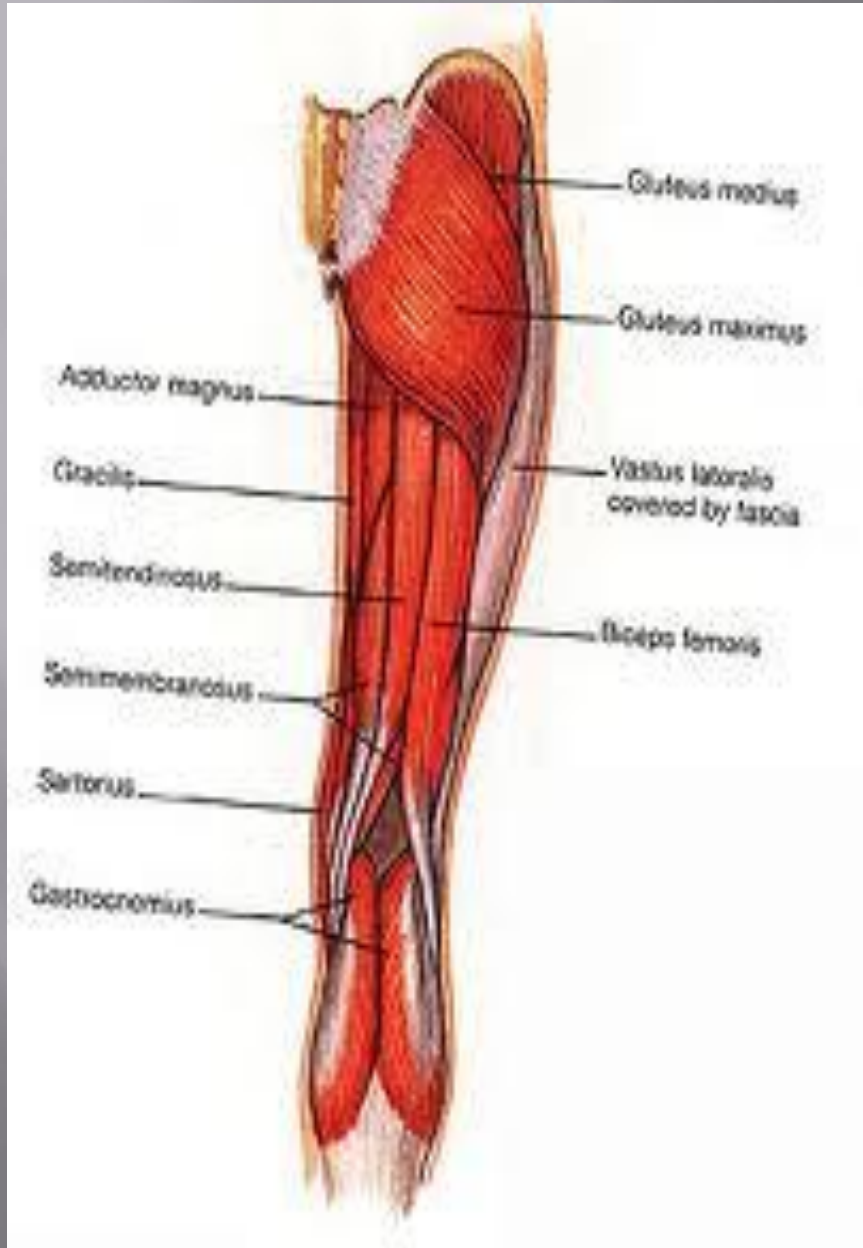
Biceps Femoris Insertion—lateral side of fibula head

Origin: ischial tuberosity

Function—knee flexion and hip extension

The hamstrings are the string-like tendons that make up the space behind the knee.

Ham refers to the fat and muscle, while *string* refers to the tendons.





Hamstring Stretches

Sit and Reach Stretch:

- sit on the floor with both legs out straight in front of you
 - extend your arms and reach forward as far as possible without bending your knee
 - hold the position for around 10 seconds, then relax
 - repeat this routine
- *This exercise can also be done with one leg.
- extend one leg out in front of you
 - bend your other leg at the knee
 - position your foot against the inner thigh of your opposite leg
 - extend your arms and reach forward as far as possible with out bending your knee
 - hold the position for around 10 seconds, then relax
 - repeat this routine with your other leg

Other Stretches:

- stand and cross your right foot in front of your left, or vice versa
- try to extend your arms as far as possible towards your feet without bending your knees
- Hold this position for around ten seconds, then relax
- switch legs and then repeat this routine

Cross-Leg Drop Stretch

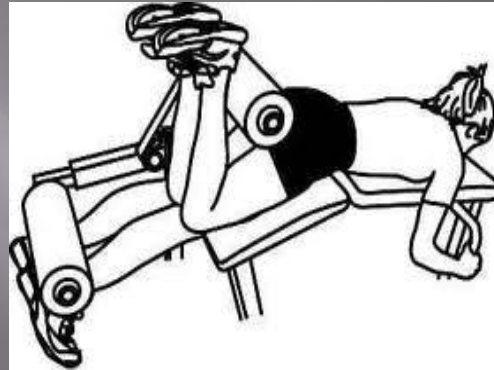


Strengthening the Hamstrings

Squats, curls, and other lower body exercises are used to develop and strengthen the hamstrings.

Squats:

- stand straight up with your arms extended out in front of you
- bend your knees while keeping your upper body straight
- raise yourself back up
- repeat this multiple times



Leg Curls:

- uses exercise equipment
- isolates the use of the hamstrings
- involves flexing the lower leg against resistance

1. Lie facedown on the bench.
2. Adjust the pads and weights so that you can do multiple lifts and properly strengthen your hamstrings.
3. Hold on to the support handles (as shown in the picture above), and lift the pads upwards as far as it will go.
4. Lower your legs with control.
5. Repeat steps 3. and 4.

Tibialis Anterior

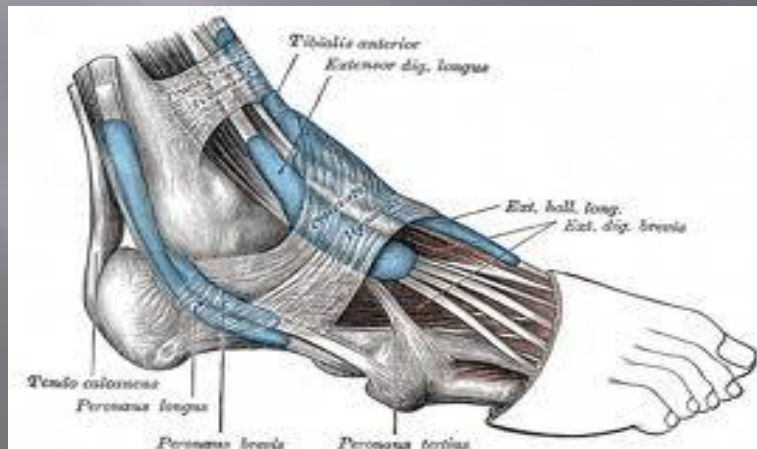
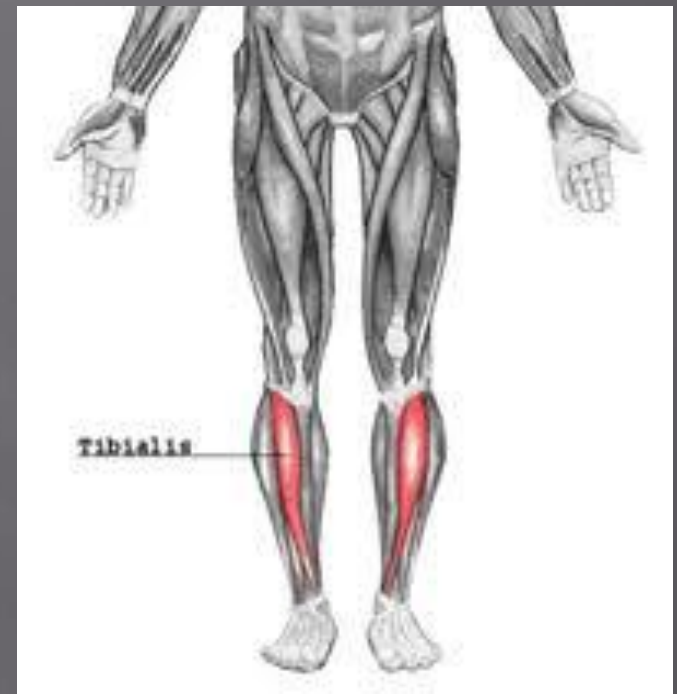
Common Name: tibia, shin

Scientific Name: musculus tibialis anterior

Function-flexion of the foot and ankle

This muscle is located near the skin in the lower part of your leg.

Insertion-medial and under surface of the medial cuneiform bone and the base of the first metatarsal bone



The tibialis anterior originates from the upper lateral surface of the tibia and the lateral tibial condyle.

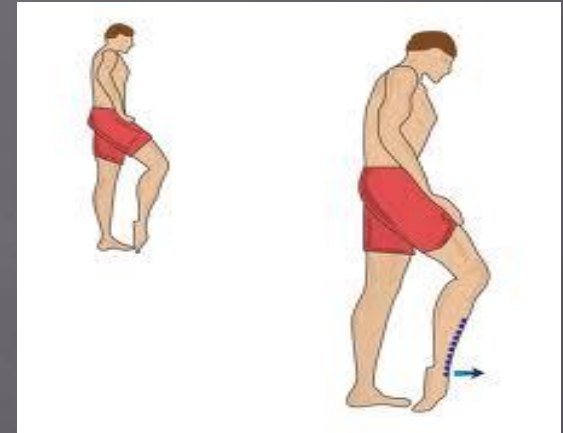
TIBIALIS ANTERIOR EXERCISES



Running, walking, and other active sports such as tennis and soccer help strengthen the tibialis anterior.

Toe Raises (Strengthening) :

- sit in a chair with both feet flat down on the floor
- lift your toes as high as you can while still keeping the heels of your feet on the ground
- tense your muscles and make sure you can feel the stretch in the front of your foot
- hold this position for 10 seconds then relax and repeat



Standing Shin Stretch:

- stand up straight
- have your toes touch the ground (as shown in the depiction above)
- bend your leg so that your ankle is facing the ground
- push until you feel the stretch, then hold for 10 seconds
- alternate legs and repeat the routine

Bibliography

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