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PHYSICAL TRAINING INSTRUCTORS MANUAL

Exercise No 51: Calf Raises (both legs)

Illustration



Objective	To raise the body onto toes using both calves.
Primary muscles	Gastrocnemius (lateral and medial heads)
Starting Position/ Command	Pole calf- raise, position ready.
Exercise Description	Stand with your back straight. Place the pole on your shoulder. Rise up as high as you can on your toes (plantarflexion) while keeping your knees extended. Return to starting position.
PTI Pointers	<p>To stretch the muscles correctly, be sure to rise up as high as possible on your toes as you perform every repetition.</p> <p>Keep the knees locked but not hyperextended.</p> <p>Try varying foot positions (parallel, toes in, and toes out) to work all angles of the gastrocnemius.</p> <p>Make sure you flex your foot completely as you perform every repetition.</p>

PHYSICAL TRAINING INSTRUCTORS MANUAL

Exercise No 52: Alt. Calf Raises

Illustration

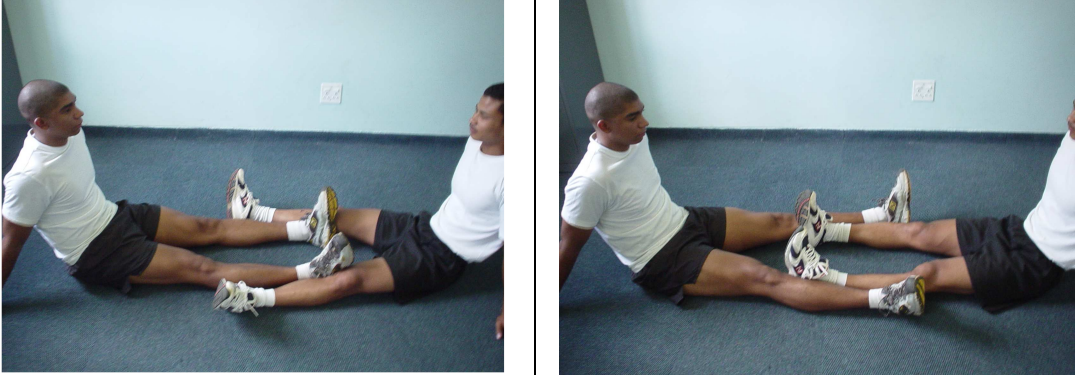


Objective	To raise the body onto toes using a single calf.
Primary muscles	Gastrocnemius (lateral and medial heads)
Starting Position/ Command	Pole alternative, calf raise, position ready.
Exercise Description	Stand on one foot, back straight. Place the pole on the shoulder. Rise up as high as you can on your toes (plantarflexion) keeping your knee extended or very slightly bent. Return to starting position.
PTI Pointers	<p>Make sure you flex your foot completely as you perform every repetition.</p> <p>Keep the knees locked but not hyperextended.</p> <p>Try varying foot positions (parallel, toes in, and toes out) to work all angles of the gastrocnemius.</p> <p>Make sure you flex your foot completely as you perform every repetition.</p>

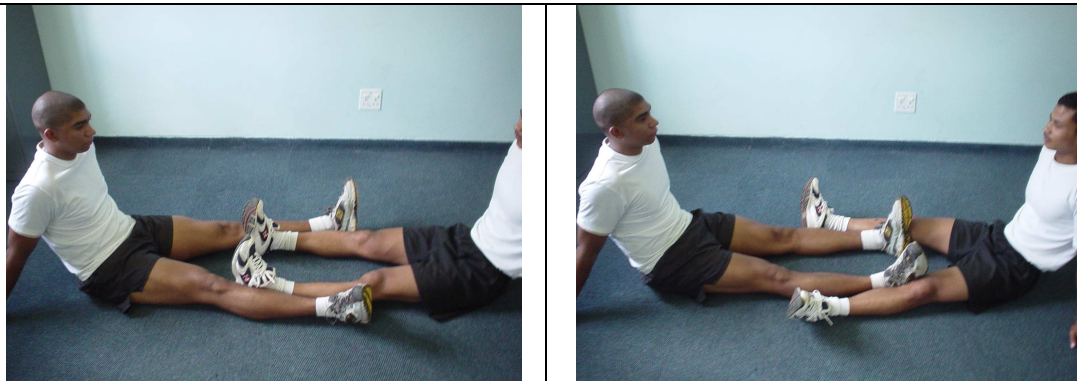
PHYSICAL TRAINING INSTRUCTORS MANUAL

Informal exercises to develop leg muscular strength and endurance

Body weight training exercises

Exercise No 53: Isometric V sit adduction (with partner)	
Illustration	
	
Objective	To push the partners' legs closed whilst the partner offers resistance.
Primary muscles	Adductor muscles. Partner uses abductor muscles.
Exercise Description	Both learners sit with legs straight in a 'V' sit position. The active learner places his/her feet on the outside of the learner's legs. On the instructors whistle the active learner activates his adductor muscles and pushes inwards as hard as possible whilst the passive learner resist this by activating his abductor muscles and pushes outwards. This isometric contraction should be held between 5-10 seconds depending on the fitness level of the learner.
PTI Pointers	Avoid ballistic movements and sudden force/contraction of the adductor. Abductor muscles.

PHYSICAL TRAINING INSTRUCTORS MANUAL

Exercise No 54: Isometric V Sit abduction (with partner)	
Illustration	
	
Objective	To push the partners legs open whilst the partner offers resistance.
Primary muscles	Abductor muscles. Partner uses adductor muscles.
Exercise Description	Both learners sit with legs straight in a 'V' sit position. The active learner places his/her feet on the inside of the learner's legs. On the instructors whistle the active learner activates his abductor muscles and pushes outwards as hard as possible whilst the passive learner resist this by activating his adductor muscles and pushes inwards. This isometric contraction should be held between 5-10 seconds depending on the fitness level of the learner.
PTI Pointers	Avoid ballistic movements and sudden force/contraction of the adductor. Abductor muscles.

PHYSICAL TRAINING INSTRUCTORS MANUAL



Exercise No 55: Forward Lunges on Step

Illustration



Objective	To lower the body toward the ground by stepping forward and flexing both knees and the hips.
Primary muscles	Hamstring, gluteus, quadriceps
Starting Position/ Command	Attention position, hands on the hips position ready.
Exercise Description	Stand with the feet six to eight inches apart. Take a large step forward onto a step of ± 30 cm or less. As you lunge forward, you put all of your weight on your leading leg. Return the leg to the starting position. Keep the trunk erect throughout the exercise by looking straight ahead and keeping the chest out. Alternate legs.
PTI Pointers	Keep the trunk erect throughout the exercise. Keep the chest out. Be sure to flex both knees. Ensure that the front knee does not go past the foot.

PHYSICAL TRAINING INSTRUCTORS MANUAL

Exercise No 56: Side Lunges on Step	
Illustration	
	
Objective	To lower the body toward the ground by stepping sideways and flexing both knees and the hips.
Primary muscles	Hamstring, gluteus, quadriceps and adductors.
Starting Position/ Command	Attention position, hands on the hips, position ready.
Exercise Description	Step directly to the right or left side, sinking into a squat position. Alternate between the left and right sides.
PTI Pointers	Keep the trunk erect throughout the exercise. Keep the chest out. Be sure to flex both knees. Ensure that the knees do not bend so deeply that they go past the front part of the feet.

Weight training (poles)

None

Weight training (poles and rope)

None