

Push-up

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Targeted Muscles: Pectoralis major, anterior deltoids, triceps

Starting Position: Begin on the floor with the hands slightly wider than shoulder-width apart. Place toes or knees onto floor, depending on the level of resistance needed. Keep the back straight and torso supported by engaging the abdominals throughout the exercise.



Action: Press the body up to the point just prior to locked elbows. Pause, then lower until elbows are at approximately a 90-degree angle.



Variations:

For deconditioned participants: wall push-ups

Incline: hands on a bench or step

Decline: feet on a bench or exercise ball

Keeping the elbows close to the body emphasizes the anterior deltoid and triceps

Equipment Variation: Chess press with elastic resistance.



Squat

Squat

Targeted Muscles: Gluteals, hamstrings, quadriceps

Starting Position: Stand erect with a neutral spine and feet shoulder-width apart.



Action: Slowly lower the body, with the hips moving back as if sitting in a chair. Maintain the weight directly over the heels or mid-foot. Lower to approximately 90 degrees of knee flexion. Pause, then slowly return to the starting position. If lumbar curvature cannot be maintained, lower less than 90 degrees.



Common Errors:

Error: Lowering beyond 90 degrees of flexion

Correction: Slowly lower the body and stop before the upper leg becomes parallel with the floor.

Error: Forward lean with heel lift

Correction: Keep the weight over the back portion of the foot rather than the toes; raise the arms to shoulder height to counterbalance.

Variation: One leg at a time

Equipment Variation:

Elastic resistance secured onto a straight bar

Backward Lunge

Backward Lunge

Targeted Muscles: Gluteals, hamstrings, quadriceps

Starting Position: Stand erect with a neutral spine and feet shoulder-width apart.



Action: Take a long step backward landing on the ball of the foot and bend the rear knee to a fencer's lunge position; lower to approximately 90 degrees of knee flexion. Pause, then return to the starting position. Maintain neutral spine throughout the movement. Repeat with the other leg.



Common Errors:

Error: Dropping the head and shoulders forward

Correction: Keep the chest lifted over the top of the hips and look straight ahead with neck in neutral position.

Error: Lowering beyond 90 degrees of flexion

Correction: Slowly lower the body and stop before the upper leg becomes parallel with the floor.

Error: Forward trunk lean with heel lift of lead leg

Correction: Keep the weight over the back portion of the foot rather than the toes; raise the arms to shoulder height to counterbalance.

Variations:

Side lunge



Front lunge



Walking lunge

Equipment Variations:

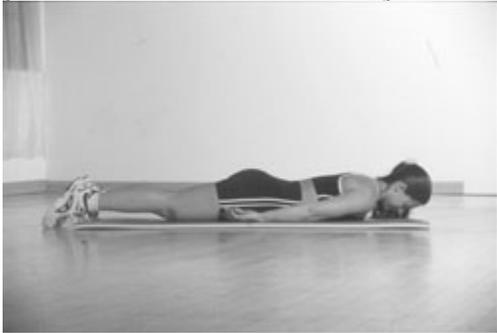
Light hand or wrist weights

Weighted vest

Back Extension

Back Extension

Lie face down with your arms by your sides, palms facing up and legs extended and relaxed. Hold your head up slightly or rest your forehead on the floor. Relax your shoulders into the floor, but keep your abdominals tight.



Contract the gluteals and use your lower back muscles to slowly lift your shoulders and chest off the floor.



Lower and repeat.

Bench Dip

Bench Dip

Targeted Muscle: Triceps

Starting Position: Sit on a bench and grip the front edge with hands shoulder-width apart. Extend the legs straight in front of the body with the heels on the floor. Move forward until the hips are off the bench.



Action: Slowly lower the hips toward the floor, then press up to full arm extension without locking the elbows.



Common Errors:

Error: Descending too deeply

Correction: Descend only until the upper arm is parallel to the floor; this protects the anterior shoulder capsule.

Error: Lowering too fast

Correction: Slowly count to four while lowering the body.

Error: Shoulders internally rotating and rounding forward during descent

Correction: Slightly retract the scapulae to keep the anterior shoulder girdle in good neutral alignment.

Error: Elbows flared outward

Correction: Keep elbows angled rearward.

Error: Hips move increasingly farther away from the edge of the bench

Correction: Position the legs so the hips can remain very close to the bench throughout the movement.

Variations:

Begin with bent knees with the feet directly beneath the knees to reduce workload.

Place a weight securely on the upper-thigh area to increase workload.

Equipment Variation: Feet can be placed on a second bench. This increases intensity by increasing the effects of gravity and overall workload.

Abdominal Curl

Abdominal Curl

Targeted Muscle: Rectus abdominis

Starting Position: Lie supine with one knee bent with the foot flat on the floor and the other leg extended. Cross your arms over the chest or place them, unclasped, behind the head with the elbows out to the side. Maintain neutral alignment in the cervical spine.



Action: Engage the abdominals and exhale while curling up. Initiate the movement by gently flexing the cervical spine by dropping the chin slightly. Next, activate the abdominals by raising the shoulders and upper back off the floor toward the pelvis. Contract at the top of the movement. Pause, then slowly return to the starting position.



Common Errors:

Error: Forward neck position

Correction: Imagine an orange tucked between the chin and neck and maintain this position throughout the exercise.

Error: Moving the elbows forward while curling up

Correction: Keep elbows out of vision and remain open through the chest and shoulders.

Error: Holding the breath

Correction: Emphasize exhaling during the exertion phase.

Variation: Change arm position and lever length to increase or decrease intensity

Equipment Variations:

Dumbbells or weight plate held on the chest

Decline with bench (advanced)

Feet up on a bench

Heel Raise

Heel Raise

Targeted Muscles: Gastrocnemius, soleus

Starting Position: Start with feet shoulder-width apart, knees slightly bent, and engage the abdominals to help support the lower back.



Action: Plantarflex up on the toes. Pause, then slowly lower to the starting position.



Variation: One foot at a time, hanging the heel of the working leg off the edge of a bench while the other leg maintains full contact with the bench.



Equipment Variations:

Dumbbells held at waist or shoulder level

Weighted bar held on top of the shoulders

Common Error:

Error: Leaning forward with the trunk while lifting the heels

Correction: Maintain a neutral spine by engaging the abdominals and stabilizing the spine, and not allowing the hips to move during the execution of the exercise.

Hip Extension

Hip Extension

Targeted Muscles: Gluteals, hamstrings

Starting Position: Lie in a prone position with arms folded and head resting on the arms so that a neutral spine can be maintained.



Action: Leading with the heel, slowly raise one leg up toward the ceiling. Pause, then slowly return to the starting position. Repeat with the other leg.



Common Errors:

Error: Lifting the head

Correction: Keep the head and neck aligned with the spine.

Error: Arching the lower back

Correction: Do not raise the exercising leg too high.

Variation: Prone on bench

Inner Thigh Lift

Inner Thigh Lift

Targeted Muscles: Hip adductors

Starting Position: Lie on the left side, and rest the head on the arm, keeping the neck in line with the rest of the spine. Hips and shoulders should face forward with the abdominals engaged to help stabilize the spine and pelvis. Straighten the lower leg, then bend and cross the upper leg over it.



Action: Slowly lift the lower leg through a full range of motion. Pause, then slowly return to the starting position. Repeat with the other leg.



Variations:

To decrease intensity, shorten the length of the lever by bending the knee of the leg being lifted.

Supine; flex both hips 90 degrees. From an adducted position, slowly abduct the thighs and return to the starting position.

Equipment Variation: Elastic resistance (standing or side-lying)

Common Errors:

Error: Allowing the hips to roll forward or backward while performing the exercise

Correction: Maintain a neutral pelvis by engaging the abdominals and stabilizing the pelvis, and not allowing it to move during the execution of the exercise.

Error: Allowing the thigh to externally rotate while lifting the leg

Correction: Keep the lower knee facing forward throughout the exercise.

Outer Thigh Lift

Outer Thigh Lift

Targeted Muscles: Hip abductors

Starting Position: Lie on the left side and rest the head on the arm, keeping the neck in line with the rest of the spine. Bend the left leg and engage the abdominals to help stabilize the spine and pelvis. Keep the right leg extended and toes pointed forward.



Action: Abduct the leg through a full range of motion. Pause, then slowly return to the starting position. Repeat with the other leg.



Variations:

Standing

To increase intensity, shorten the length of the lever by bending the knee of the leg being lifted.

Equipment Variation: Elastic resistance (standing or side-lying)

Common Errors:

Error: Allowing the hips to roll forward or backward while performing the exercise

Correction: Maintain a neutral pelvis by engaging the abdominals and stabilizing the pelvis, not allowing it to move during execution of the exercise.

Error: Allowing the thigh to externally rotate while lifting the leg

Correction: Keep the knee facing forward throughout the exercise.

Side Bridge

Side Bridge

Targeted Muscles: External and internal obliques

Lie on one side with knees bent 90 degrees. Support the upper body by keeping the elbow directly beneath the shoulder. Being careful not to let the top hip rotate forward, engage the abdominals and use the torso to lift the hips. Hold this position for 10 to 15 seconds, maintaining a neutral neck and spine position.



Common Errors:

Error: Dropping the hips

Correction: Slightly contract the gluteals and the abdominals to keep the body in good alignment.

Error: Twisting or tilting the head

Correction: Keep the head and neck aligned with the spine.

Variation: Extend the legs to increase the intensity.



Single-leg Reverse Curl

Single-leg Reverse Curl

Targeted Muscles: Rectus abdominis

Starting Position: Lie supine with one knee flexed and foot flat on the floor and the other hip flexed 90 degrees or more. Extend arms flat along body and maintain neutral alignment in the cervical spine.



Action: Lift the working knee and leg in an upward diagonal direction over the belly button. Pause, then slowly lower the leg to the starting position. Repeat with other leg.



Common Errors:

Error: Using hands or arms as leverage

Correction: Relax the arms, cross the arms over the chest, or turn the palms up.

Error: Holding the breath

Correction: Emphasize exhaling during the exertion phase.

Variation: Leg position: changing the angle of the hips or knees

Equipment Variation: Incline with bench (advanced)
