



# Exercises to meet the mobility demands of the tennis serve

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# Key points

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- **Focusing on what is required in trophy position, cocking, acceleration and deceleration phases of the serve**
  - Tossing arm needs full overhead reach
  - Hitting shoulder needs full overhead and rotational ROM
  - Thoracic mobility of the trunk
  - Ankle dorsiflexion to get shins forward
  - Strong quadriceps

# Exercises to improve overhead shoulder reach

## Lat foam rolling

- **Setup**
- Begin on your side with your bottom arm straight and a wrapped foam roller resting under the side of your ribcage.
- **Movement**
- Gently roll the side of your body over the foam roll. Perform 3 rounds of 30 seconds daily
- **Tip**
- You can adjust the pressure by changing how much of your body weight is resting on the roll.



## Table slides

- **Setup**
- Begin sitting facing a table or counter top with both hands resting flat on a towel.
- **Movement**
- Slowly lean forward to slide your hands and towel across the table. Return to the starting position and repeat. Perform 3 rounds of 30 seconds daily
- **Tip**
- Try to avoid shrugging your shoulder during the exercise and make sure your hand stays on the table



# Exercises to improve shoulder ER

## Foam roll pec stretch

- **Setup**
- Begin lying with your knees bent and a foam roll positioned vertically along the middle of your back, hands resting on your stomach.
- **Movement**
- Slowly move your arms straight out to your sides, then hold for 30 seconds and repeat 3x. Perform 3 rounds of 30 seconds daily
- **Tip**
- Make sure your back is laying flat against the foam roll.



## Doorway pec stretch

- **Setup**
- Begin in a standing upright position in the center of a doorway.
- **Movement**
- With your elbows bent, place your forearms on the sides of the doorway at a 90 degree angle from your sides, then take a small step forward until you feel a stretch in the front of your shoulders. Hold this position. Perform 3 rounds of 30 seconds daily
- **Tip**
- Make sure to maintain a gentle stretch and do not shrug your shoulders during the exercise.



# Exercises to improve shoulder internal rotation

## Sleeper stretch

- **Setup**
- Begin by lying on your side with your bottom arm bent upward at a 90 degree angle.
- **Movement**
- With your other arm, apply a gentle downward pressure until you feel a stretch in your shoulder. Perform 3 rounds of 30 seconds daily
- **Tip**
- Avoid any pinching sensation during this stretch



## Horizontal crossover stretch

- **Setup**
- Begin in a standing upright position next to a wall.
- **Movement**
- Lift your arm in front of your body and rest your shoulder on the wall, then grasp your elbow from above and gently pull it across your chest until you feel a stretch in the back of your shoulder and hold. Perform 3 rounds of 30 seconds daily
- **Tip**
- Make sure to keep your arm just below parallel with your shoulder.



# Trunk requirements

## Mobility exercise

- **Setup**
- Begin lying on your side with your bottom leg straight, your top leg bent at 90 a degree angle, and your arms straight on the ground together.
- **Movement**
- Slowly move your top arm away from your other arm, toward the floor on the other side, rotating your trunk at the same time. Perform 15 reps in each direction holding for 10 seconds each daily
- **Tip**
- Make sure to keep your top leg on the floor and only go as far as you can without arching your back.



## Strength and stability exercise

### Setup

- Begin in a half kneeling position, holding one end of a resistance band that is anchored to the side opposite your forward leg.

### Movement

- Pull your arms diagonally up to your other side in a lifting motion, without rotating your trunk or bending your elbows. Slowly return to the starting position and repeat. Perform 2 sets of 10 repetitions (three days per week)

### Tip

- Make sure to maintain your balance, activate your core muscles as you pull up, and do not shrug your shoulders during the exercise.



# Ankle mobility

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- **Setup**
- Begin in a half-kneeling position, with a strap wrapped around your front ankle. Trap the strap underneath your opposite knee. Move your front foot forward until you feel tension in the strap.
- **Movement**
- Using your body rather than your ankle muscles, slowly shift your weight forward over your knee until you feel a gentle stretch in the front of your ankle or calf. Perform 20 reps daily on each ankle
- **Tip**
- Make sure to keep tension on the band throughout the exercise, and keep your heel on the ground throughout the motion.



# Quadriceps and calf strengthening

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- **Setup**
- Begin in a standing upright position in front of a wall. Lean back into a squat against the wall with your knees bending to between 60 and 90 degrees depending on your strength and comfort.
- **Movement**
- After performing 5 squats hold the bottom of the fifth squat and lift your heels off the ground, and repeat 5 times. Then perform another 5 squats and again on the fifth squat lift your heels off the ground 5 times. Perform 3 sets of 10 of this exercise (2 to 3 days per week)
- **Tip**
- Make sure to keep your back flat against the wall during the exercise. If exercise is painful or too difficult due to any previous injuries or surgeries start with just up calf and quad strength through traditional means: leg presses, knee extensions, pain free squat/lunge patterns and calf raises.

