

11+ SHOULDER

Part I - Warm-up exercises*

<p>1-Run Relaxed walking or running. The speed can be progressively increased as warms. 5min</p> 	<p>2-Throw the Ball in the chest line Ask for help to a partner. With your both hands in front of the body, throw and catch the ball, first with your elbows flexed and then with your arms over your head. 1min</p> 	<p>3-Spinning movements with the hands Interlace the fingers and make spinning movements with the hands. 1min</p> 	<p>7A-Wrist flexores Position: Support the forearm, palm of the hand upward. Hold a weight. Exercise: Lower the weight as far as possible and then lift it up.</p> 	<p>7B-Wrist flexores Position: Support the forearm, palm of the hand upward. Hold heavier weight than the previous level. Exercise: Lower the weight as far as possible and then lift it up.</p> 	<p>7C-Wrist flexores Position: Support the forearm, palm of the hand upward. Hold heavier weight than the previous level. Exercise: Lower the weight as far as possible and then lift it up.</p> 
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Part II - Strength and balance of the shoulder, elbow, wrist and fingers muscle**

<p>1A-External Rotation Initial position: standing with the elbow flexed at 90° to the side Exercise: Rotate the arm to the side of the neutral.</p> 	<p>1B- External Rotation Initial position: standing with the elbow flexed at 90° and 45° abducted Exercise: Rotate the arm to the side of the neutral.</p> 	<p>1C- External Rotation Initial position: standing with the elbow flexed at 90° and 90° abducted Exercise: Rotate the arm to the side of the neutral.</p> 	<p>8A-Wrist extensors Position: Support the forearm, palm of the hand down. Hold a weight. Exercise: up weight as far as possible and then lift it up.</p> 	<p>8B-Wrist extensors Position: Support the forearm, palm of the hand down. Hold heavier weight than the previous level. Exercise: up weight as far as possible and then lift it up.</p> 	<p>8C-Wrist extensors Position: Support the forearm, palm of the hand down. Hold heavier weight than the previous level. Exercise: up weight as far as possible and then lift it up.</p> 
<p>2A-Internal Rotation Initial position: standing with the elbow flexed at 90° to the side Exercise: Rotate the arm from the neutral to the medial.</p> 	<p>2B- Internal Rotation Initial position: standing with the elbow flexed at 90° and 45° abducted Exercise: Rotate the arm from the neutral to medial.</p> 	<p>2C- Internal Rotation Initial position: standing with the elbow flexed at 90° and 90° abducted Exercise: Rotate the arm from the neutral to the medial.</p> 	<p>9A- Finger flexors Position: Supported forearm and palm of the hand down on an elastic. Exercise: Close the hand, pulling the elastic.</p> 	<p>9B- Finger flexors Position: Supported forearm and palm of the hand down on an elastic. Increase the resistance of the elastic. Exercise: Close the hand, pulling the elastic.</p> 	<p>9C- Finger flexors Position: Supported forearm and palm of the hand down on an elastic. Increase the resistance of the elastic. Exercise: Close the hand, pulling the elastic.</p> 
<p>3A- Scaption Raise the arm with external rotation in the scapular plane (30° in the frontal plane) to shoulder height. Hold a weight.</p> 	<p>3B- Scaption Raise the arm with external rotation in the scapular plane (30° in the frontal plane) to shoulder height. Hold heavier weight than the previous level.</p> 	<p>3C- Scaption Raise the arm with external rotation in the scapular plane (30° in the frontal plane) to shoulder height. Hold heavier weight than the previous level.</p> 	<p>10A- Finger extensors Position: Supported forearm and palm of the hand upward on an elastic. The other hand holds the elastic. Exercise: Open the hand, stretching the elastic.</p> 	<p>10B- Finger extensors Position: Supported forearm and palm of the hand upward on an elastic. The other hand holds the elastic. Increase the resistance of the elastic. Exercise: Open the hand, stretching the elastic.</p> 	<p>10C- Finger extensors Position: Supported forearm and palm of the hand upward on an elastic. The other hand holds the elastic. Increase the resistance of the elastic. Exercise: Open the hand, stretching the elastic.</p> 

Part III - Core stability and muscle control whit advanced exercises***

<p>4A-Push-up-plus In the prono position. The hands should be placed at a distance corresponding to the width of the shoulders Exercise: Rise the body and them lower the body, bringing your scapular</p> 	<p>4B- Push-up-plus In the same position. Place an ankle of 5 Kg on your back. Exercise: Rise the body and them lower the body, bringing your scapular.</p> 	<p>4C- Push-up-plus In the same position but on one foot. Place an ankle of more than 5 Kg on your back. Exercise: Rise the body and them lower the body, bringing your scapular.</p> 	<p>1-Jump and throw the ball over the head Ask for help to a partner. Jump and with the elbow extended and arm above the level of the head, throw and catch the ball. Exercise: Open the hand, stretching the elastic.</p> 	<p>2-Throw the ball over the head with an arm Ask for help to a partner. With the elbow extended and arm above the level of the head, throw and catch the ball with an arm.</p> 	<p>3-Throw the ball to the sides With the elbow extended, throw and catch the ball an arm at a time. Make the movement with the arm by the body's side and lift it up over the head.</p> 
<p>5A-Inferior and medium trapezius In the prono position, arms in 90° abduction. After changing the arms to 120° of abduction. Exercise: Hold a weight and bring the arm back slightly.</p> 	<p>5B- Inferior and medium trapezius In the prono position, arms in 90° abduction. After changing the arms to 120° of abduction. Exercise: Hold heavier weight than the previous level and bring the arm back slightly.</p> 	<p>5C- Inferior and medium trapezius In the prono position, arms in 90° abduction. After changing the arms to 120° of abduction. Exercise: Hold heavier weight than the previous level and bring the arm back slightly.</p> 	<p>4-Jump with your hands on the mini trampoline In prono position, firming yourself with the feet on the ground and the palms of the hands on the mini trampoline. "jump" with your hands, keeping the elbow straight.</p> 	<p>5 -Walking on hands Ask for a partner to hold your legs and, in prono position, "walk" using your hands. Move forward, backward and to the sides.</p> 	
<p>6A-Biceps Position: Arms at your sides, palm facing inwards. Hold a weight. Exercise: Bend your elbow, turning the palm upward.</p> 	<p>6B-Biceps Position: Arms at your sides, palm facing inwards. Hold heavier weight than the previous level. Exercise: Bend your elbow, turning the palm upward.</p> 	<p>6C-Biceps Position: Arms at your sides, palm facing inwards. Hold heavier weight than the previous level. Exercise: Bend your elbow, turning the palm upward.</p> 	<p>5- Plyometric external rotation Flexed elbow in 90° and flexed and abducted arm in 90°. Hold the elastic and make movements from neutral to lateral rotation quickly.</p> 		

*The part I should be done during 7 minutes. **The part II should be performed in 9-10 minutes at 3 set of 15 repetitions. Exercises should be change according to the tolerance of the athlete (to A for B and C exercises). ***The part III, the athlete must be do the exercises at high velocities with 5 or 6 sets of 15 to 20 repetitions, not exceeding 9-10 minutes.

Ejnisman B, Barbosa G, Andreoli CV, de Castro Pochini A, Lobo T, Zogaib R, Cohen M, Bizzini M, Dvorak J.
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