



Purpose:

Designed to improve the strength and function of the:

- 1. Shoulder Flexors Anterior Deltoid & Biceps Brachii long head, Coracobrachialis, Pectoralis Major – upper Fibres
- 2. Shoulder Extensors Posterior Deltoid & Triceps Brachii long head, Latissimus Dorsi, Teres Minor, Teres Major, Infraspinatus
- 3. Shoulder External Rotators Infraspinatus, Teres Minor, Posterior Deltoid
- 4. Shoulder Abductors Supraspinatus, Middle Deltoid, Pectoralis Major (above 90°)

Maintenance of glenohumeral (shoulder) joint health and movement. Maintenance of strength of rotator cuff.

NOTE: All exercises provide a workout for the wrists and hands as the finger and wrist flexors and extensors are required to both maintain a firm grip on Powerspin® and ensure that correct form is maintained during the actual workout itself. It is the additional movements that recruit and target the other muscles.

Useful For:

A wide variety of sports people especially those for those **sports involving overhead movements**; Tennis, basketball, American football, softball, baseball, javelin, pole-vault, climbing, gymnastics, martial arts, swimming etc.

In the non-sporting arena, anyone involved in **manual work or overhead work** e.g. plumbers, painters, electricians, carpenters, plasterers etc.

Can be utilised as part of rehabilitation, recovery and maintenance following:

- Sub-acromial bursitis
- Shoulder Impingement syndrome
- (Recovery from) dislocated or sub-luxated shoulder
- Adhesive Capsulitis (Frozen Shoulder) *
- Supraspinatus (rotator cuff) strain
- Supraspinatus Tendinitis
- (Middle) Deltoid strain



Let's Begin

1

Grip Powerspin® firmly by the center bar and hold it by your hip, parallel to the ground with the arm extended fully down (figure 1). Adopt a comfortable stance with feet approximately shoulder width apart and knees relaxed.



figure 1 - Start position

2

Now, keeping your wrist firm, begin rotating the ball inside the tube by moving Powerspin® in wide, lazy circles with just your arm and accelerate up to a comfortable spin speed - if you don't know how, check out the **Getting Started** page on **Powerballs.com** for videos and instructions.

It is important that you spin ONLY with your arm and NOT your wrist, rotating the ball in the tube clockwise or anticlockwise as preferred.



Begin to slowly raise your arm outward to the side until it's fully extended at 90 degrees to the body as illustrated in figure 2.





figure 2. Ideal body and arm position – shoulder doing all the work

Keep the back straight; avoid rotating the trunk or hips and maintain the smooth spinning motion of the ball. This will particularly challenge the deltoid muscle and the rotator cuff muscles along with the stabilisers of the shoulder girdle, the rhomboids, trapezius and serratus anterior. In addition, abdominal and vertebral muscles are also targeted as they stabilise the trunk against the rotatory effect of Powerspin®.

As always, the difficulty level can be increased by increasing ball spin speed or by changing the orientation of the arm, moving it slightly upward, downward, forward and backward from the initial 90° starting position while maintaining the rotation of the ball.

NOTE: Please be aware that the faster you try to spin, the more co-ordination and strength you'll require to ensure that proper form is maintained at all times; the resistance generated by Powerspin® increases proportionately to the actual ball spin speed inside the tube and because that resistance is always on, the muscles (particularly biceps brachii & triceps) will tire out quickly, so pacing yourself properly is important in this exercise.



Recommended Guideline Programme

Initial Session:

3 X 30 seconds with a 1 minute break between each one. Use this session to establish the speed at which you are challenged but can still keep Powerspin's ball moving inside.

Progression:

Week 1: 3 X 30 seconds with a 1 minute break between each one on alternate days.

Week 2: 3 X 30 seconds with a 1 minute break between each one daily.

Week 3: 3 X 60 seconds with a 1 minute break between each one on alternate days.

Week 4: 3 X 60 seconds with a 1 minute break between each one daily.

Further progression can be achieved by increasing the frequency, the repetitions or spin speed and the duration.

Caution:

Rehabilitation should be approached with care to avoid aggravating structures that are still recovering. Spin speed is determined by your personal strength and fitness level, as well as whether you're using Powerspin® to rehabilitate a pre-existing injury or to help build muscle strength. Consequently, the intensity and duration should be approached conservatively initially until you can establish what your muscles can tolerate.

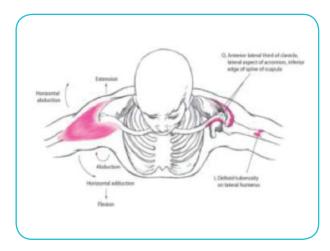
Similarly, the frequency of exercise may need to be modified from that outlined above to allow longer rest periods between exercise sessions. Further details regarding usage frequency, repetition and spin technique can be found on our website powerballs.com

Note: Some muscle fatigue is to be expected with this exercise much in the same way your muscles might react to a gym workout. However, if you experience pain, you should reduce the exercise frequency, repetitions or duration.

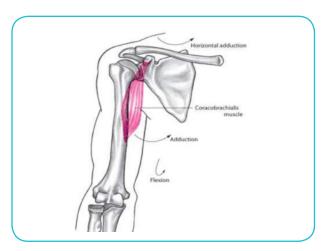
If the pain persists or increases, you should discontinue the exercise and consult a healthcare professional.



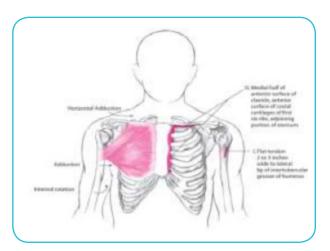
Muscles involved in this exercise



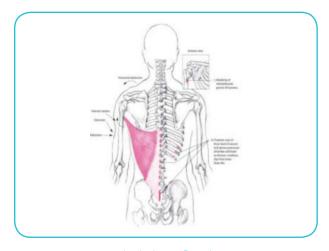
Deltoid



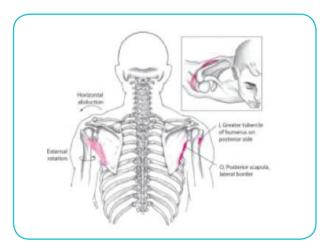
Coracobrachialis



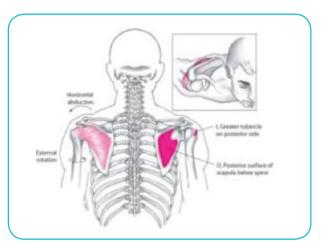
Pectoralis Major



Latissimus Dorsi

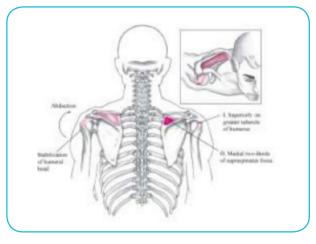


Teres Minor

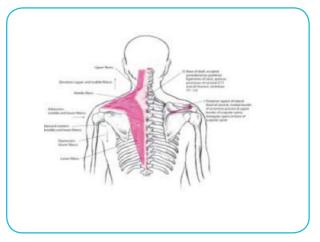


Infraspinatus









Trapezius

Remember

You are looking to achieve a smooth, progressive spin which will test your fingers by requiring them to grip Powerspin® firmly as the speed increases; if you have strong, injury-free hands and fingers, you may find that lower speeds aren't challenging the muscles sufficiently. Therefore simply increase the spin speed until you arrive at a point where there is gentle fatigue building in the tissue and you're having to work hard to maintain that firm grip around the handle to avoid dropping Powerspin®. Holding this state for 30 - 60 seconds will produce definite results.



Learn More

As always, progress is achieved by following a regular exercise programme, further details regarding usage frequency, repetition and spin technique can be found on our website powerballs.com.



Important

Should you experience any pain or discomfort when exercising with Powerspin® or in general, speak to your physio or qualified healthcare practitioner to get the best advice and support.