



Improving Performance with Power Bags

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Powerbags can be used for any kind of workout, from max strength to ballistic. They are only limited to your imagination and the 50k maximum. This workout can also be done using regular equipment such as free weights, but the release and throwing components are limited. Heavy medicine balls can also be used to limited effect.

The workout described below is geared toward the conversion to power phase of your training cycle.

Program parameters:

When: Pre Comp phase. The development of power must follow your max strength phase.

Transition: 4 week transition from max strength to conversion to power.

MXS:	3	2	1	0
POWER:	0	1	2	3

Duration: 4 to 6 weeks required to effectively recruit FT muscle fiber.

Sets: 3-6 sets **Reps:** 1-4 reps **Exercises:** 2-4 **RI:** 2-3 minutes *

Performance: Full explosion through movement.

Suggested exercises for throwers:

Power Cleans, Power Catch & Throw, Lateral Cleans, Bag throws. Snatch. These exercises will demonstrated during the learn by doing portion of the talk.

Coaching Points:

1. Must stop when speed drops
2. Must have good max strength phase prior to this cycle.
3. Only perform exercises that have a direct impact on event.
4. Rest between sets must be adhered to for best results.

Powerbag Video / DVD Series

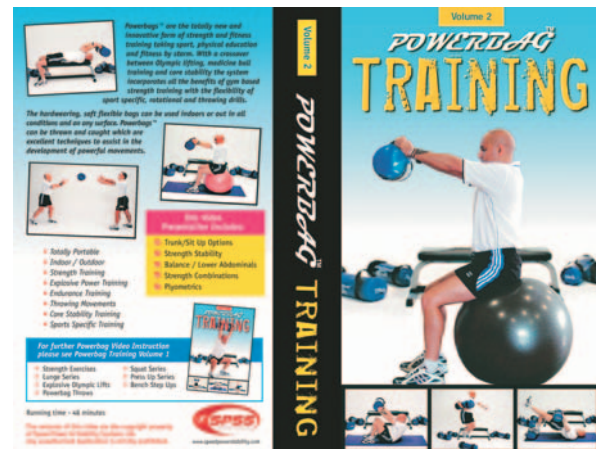
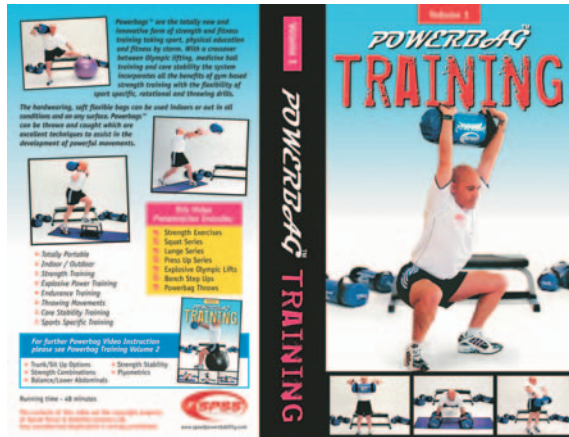
For more detailed Powerbag Exercise information and instruction please refer to the Powerbag Video / DVD Series

All you need to know about Powerbags!

Comprehensive professional instruction guaranteed to get the most out of your Powerbag training. With detailed exercise descriptions and progressions this world first instruction series is a must for teachers, coaches, trainers, therapists and athletes.

Powerbag™ Training
Volume 1 - Running Time 48
Minutes

- ✓ Strength Exercises
- ✓ Olympic Lifts
- ✓ Squat Series
- ✓ Bench Step Ups
- ✓ Lunge Series
- ✓ Powerbag Throws
- ✓ Press Up Series



Powerbag™ Training
Volume 2 - Running Time
46 Minutes Includes:

- ✓ Core Training
- ✓ Balance / Stability
- ✓ Strength Stability
- ✓ Plyometrics
- ✓ Strength Combinations



POWERBAG™



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TRAINING GUIDE

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What are Powerbags?

- Powerbags are a functional training system utilising soft weights 3-35 kg (6-120 lbs).
- Featuring wipe clean surfaces, webbing handles, foam lined for comfort, inner sack to contain weight.
- With a crossover between resistance training, medicine ball training and core stability the system incorporates all the benefits of gym based strength training with the flexibility of sport specific, rotational and throwing drills.
- All major muscle groups can be conditioned for general strength endurance progressing through to high intensity explosive power development.

Where can they be used?

Powerbags are suitable for use indoor or out on any surface and in any conditions.

Key Powerbag™ Features

Powerbag™ provides an excellent tool for helping achieve your training goals, whether you are a high level athlete or sports-person, a recreational sports-person, in rehabilitation or you simply wish to achieve an increased level of general strength and fitness.

Powerbag™ is already being used by some of the top sports-people in the world in their conditioning programs. High-level sports-people have chosen to use Powerbag™ as part of their training because of the superb levels of functional training that are achievable with Powerbag™ and because of the massive levels of adaptability offered through training with different weight Powerbags.

The first thing you notice with Powerbag™ when comparing it to other resistance training systems is that it is soft! The purpose of this manual is to explore why Powerbag™ is different to other training systems, and in many cases why the advantages that Powerbag has over other systems is due to its soft construction.

- Instability in Powerbag construction and flexible handles. It is this inherent instability in the construction of Powerbag that makes them more difficult to lift than traditional weights.
- Lower weights; typically users will lift only 40-50% of what they

are capable of lifting with Olympic weights.

- Inherent instability in the construction of Powerbag encourages stabilising muscles to be switched on during training.
- Inherent instability of Powerbag makes the lift more complex, encourages the development of increased levels of coordinated movements during training.
- Inherent instability of Powerbag makes lifting harder, thus lighter weights can be used in the training environment and more emphasis can be placed on achieving movement quality.

High level of safety

- Soft construction of Powerbag reduces likelihood of impact injuries.
- Short length of Powerbag reduces likelihood of rotational injuries.
- Lower weights used with Powerbag

Many sports-people quite rightly now use Olympic lifting movements to increase their basic power. However many sporting movements are complex and unlike Olympic lifts not simply linear. Functional training would suggest that at least some 'Power-training' movements should be produced in planes that also reflect the specific demands of the sport. In effect this means that at least a proportion of resistance training movements should also contain rotational and diagonal movements.

Rotational movements may be difficult or even dangerous to perform with traditional 'hard' or Olympic weights. The positioning of the loading at the ends of the bar can lead to high levels of angular momentum being created which can be hazardous to the spine. The design of Powerbag with its short length and even weight distribution, means that far lower levels of angular momentum are created when rotational movements are produced, reducing injury risk.

Injury risk from rotational forces can be reduced still further by the release of Powerbag at the end of the movement into a throw (an option that is not usually available with metal weights).

Similarly diagonal movements can be dangerous to other gym users due to the danger of impact. Although impact can still occur with Powerbag, injury risk is much reduced due to the soft construction



Powerbag Fundamentals

General

- Powerbag exercises may be dynamic, static, or a combination of both.
- Exercises may be selected to isolate muscle groups, or integrate muscle groups making the exercise more functional.
- Powerbags add to your ability to prescribe exercise and add variety and intensity to training programmes. They can make training fun and dynamic which assists with exercise compliance.
- Powerbag exercises promote the development of a strong torso providing a stable platform around which the limbs can move efficiently.
- A variety in intensity of training can be achieved simply by manipulating the weight of the bag and/or the velocity of the movement.
- Because of the large number of possibilities of combinations of exercises and exercise variations, it's relatively simple to create training sessions that are continually challenging, different enough to be interesting, and effective enough to guarantee continual fitness improvement.
- Powerbags can closely replicate the movement patterns in sport through utilising multi-plane movements, and simulate the actual speed of movement that occurs in sport. This is called "Specificity in Training" and cannot generally be achieved through conventional weight training.
- Activating joint stabilisers strengthens the ability of the lever to exert force as it is working from a stable position.
- Powerbag exercises can be included as part of another session or as a stand-alone session. This is dependant on the available training time, training situation (team session, school physed, experience of the participants, personal training session etc).

Load, Repetition, & Bag Weight

- Intensity can be controlled through the length of the set, weight of the bag, and speed of movement. For specific explosive movements it is important to maintain good form.

Speed of Movement

- An increase in velocity of a Powerbag exercise will result in an increase in intensity.
- The faster the requirement of the movement pattern in the sport the faster the exercise should be performed.

- Beginners should master the mechanics of the exercise first using slower speeds before progressing to faster explosive motions.
- The faster the speed of the exercise the greater the involvement of the nervous system and the more recovery time is required between sets.

Exercises

Plyometrics

Training jumping or other dynamic movements under resistance is a great way of increasing the ability of the performer to produce these movements explosively. The soft construction of Powerbag makes it an ideal tool for jumping and other dynamic exercises.

- Ankle Springs
- Half Crouch Jumps
- Repetitive Jumps
- Lateral Jumps



General Strength Training

Powerbags can replicate all basic strength training exercises usually performed with Barbells and weights. Take the gym to the field and complete all gym based exercises anywhere at anytime. Here is a small selection.





Squat Series

Vary bag carrying position to adjust the load and core stability requirements. Options:-

- ✓ Shoulders
 - ✓ Bear Hug
 - ✓ Curl Grip-Front Squat
 - ✓ Out in Front
 - ✓ Above Head Linear
 - ✓ Under One Arm
 - ✓ Rotating
 - ✓ Above Head Lateral
- Squat
 - Single Leg Squat
 - Double Bag Squat



Push Up Series

- Single Bag Linear
- Single Bag Lateral
- Two Bags Linear
- Single Bag Walk Across
- Progress to Power Across



Lunges Series

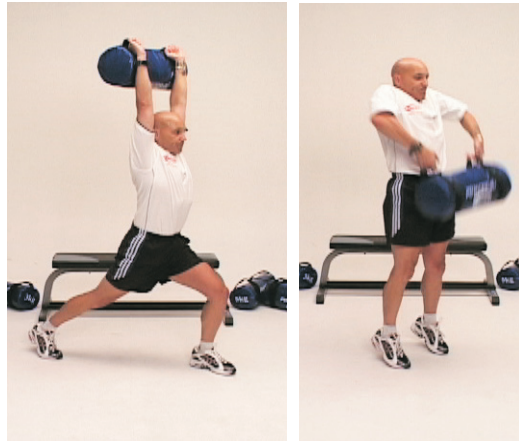
Vary bag carrying positions from:-

- ✓ Shoulders
 - ✓ Bear Hug
 - ✓ Curl Grip
 - ✓ Out in Front
 - ✓ Above Head Lateral
 - ✓ Above Head Linear
 - ✓ Under One Arm
 - ✓ Rotating
- Lunge
 - Walking Lunge
 - Side Lunge
 - Lunge with rotation



Explosive Power Development - Olympic lifting Movements

The benefits of Olympic lifting movements are well recognised. Total body complex power movements require a high level of intramuscular co-ordination and nervous system recruitment which has a greater carryover to force production. Olympic lifting movements are produced in one plane; therefore they exist as linear movements. Contrast Olympic lifting with many sporting movements that are not simply linear but include multidirectional movement and the lack of functionality of Olympic lifting becomes apparent. Powerbags allow the trainer to add multidirectional and rotational components to Olympic style movements for to maximise training gains.



• Push Jerk • Power Clean

Powerbag Throws

If you are involved in a sport where there is a follow through in the movement and you wish to resistance train for that sport, there is a lot of good evidence that throwing weights may form a valuable part of your training program. Powerbag™ allows these ballistic type movements to be reflected in training. This type of training with traditional weights may be difficult to achieve, throwing metal weights around a gym is simply not practical and although medicine ball weights tend to max out at around 15kg.

Powerbag™ are ideally suited to such throwing motions

- Front Push Throw
 - o Standing
 - o Kneeling
- Overhead Throw
 - o Standing
 - o Kneeling
- Underhand Throw
 - o Standing
 - o Kneeling



Core / Trunk

- Weighted Crunch
 - o Chest
 - o Overhead
- Chest Throw
(One or two person options)





Running Drills

The Powerbag can create excellent overload for general and specific endurance activities combining strength, stability and resisted running. Simply vary the bag carrying position and distances run to manipulate difficulty levels and training intensity. These activities are well suited to teamwork and relay drills.

Bag Carrying Positions:-

- ✓ Shoulders
- ✓ Bear Hug
- ✓ Curl Grip
- ✓ Out in Front
- ✓ Above Head Lateral
- ✓ Above Head Linear
- ✓ Under One Arm
- ✓ Rotating

- Skipping - Bag on shoulders
- Walk / Run Series -High Knee Run
 - o Bag out in front and knees up to bag.
 - o Bag above Head Lateral
 - o Bag above Head Linear
 - o Curl Grip
 - o Rotating
 - o Under one Arm
 - o Dual partner carry



Group Circuit

- 4-5 in groups.
- Three cones set up. One at the start another 7-8 m away and a final cone 20m away.
- The first person completes the circuit whilst his teammates are resting.
- Perform an exercise at the first starting cone.
- Once completed perform a movement or throwing based activity to move the person and bag to next cone 7-8m away.
- Perform another in place activity on that cone and repeat a different moving or throwing drills back to the start.
- Repeat 3-4 xs and complete 6-8 movements or throwing exercises and 6-8 in place movements.
- To finish run up to the 20m cone and back with the bag in different carry positions. I.e. out in front knees touching the bag, above the head, across shoulder, under one arm.

Example Exercises:

- Squat with bag above head x 10
- Slow deep Moving lunge with bag above head to cone 7-m away.
- Power Press ups on the bag (any option) x 10
- Front push throw back to start cone.
- Crunch with press x 10
- Standing long jump to cone. Bag on shoulders. Will be 5-7 jumps
- Upright Row x 15
- Kneeling overhead back toss to start cone
- Lateral bag jumps over the Pbag x 15.
- Finish by running to the top 20m cone and back with varying runs and carries.