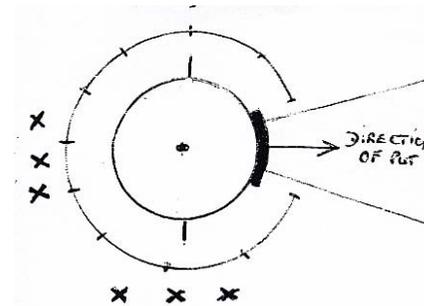
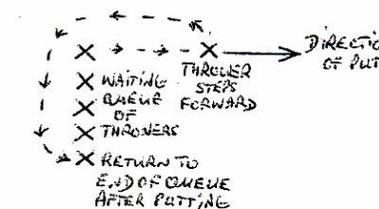


SAFETY

As shot putting can be both a linear (O'Brien style) and a rotational event, care should be taken, the shot can slip off the fingers if the hold is incorrect or control is lost during the putting action



While observing or waiting to put, stand at the rear of the circle, opposite to the direction of the put, if hammer cage is available observing from the side, outside and away from the netting is safe too.



When a group is involved, form a queue in a straight line, the athlete putting the shot steps forward, checks landing area and surrounds and performs the put. After completing the put, the athlete goes back to the end of the queue to observe other

athletes putting the shot one at a time in the same direction! When everyone in the group has finished their individual put, "all retrieve" their shots, together, at the same time. Not putting, throwing or rolling but carrying their shot back.

WATCH OUT FOR LEFT HANDERS!!

Distance markers, lines or targets can be used for motivational purposes.

Do not allow athletes to put or throw the shot to each other or catch it in flight.

Discourage athletes from stopping rolling shot with foot or hand

Remind athletes about checking landing area and surrounds before putting the shot.

Encourage athletes to wear flat shoes and have a towel handy

Make young athletes aware of the rules by gradually introducing them during training. Most importantly remind them about the rules before competitions.

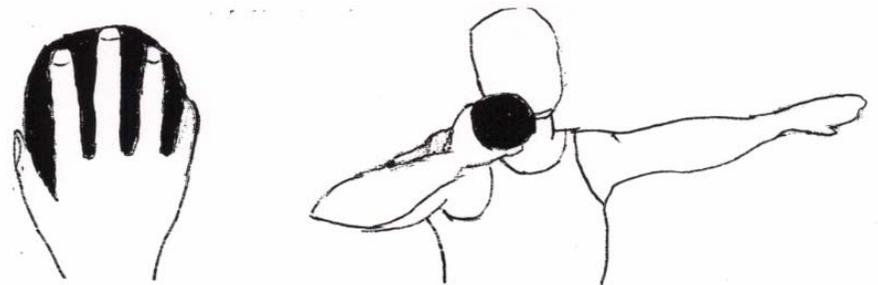
SOME IMPORTANT RULES

- (i) Athlete should commence put from a stationary position within the circle. Athlete is allowed to touch inside of circle rim and stop board, but not top of circle rim and stop board or outside of circle during a trial
- (ii) With one hand only, shot must be put from close proximity of the neck or the chin, hand shall not drop below this position or be taken behind the line of the shoulders.

- (iii) A trial may be interrupted once only. Athlete may lay the shot down inside or outside the circle, may leave the circle with first contact behind the extension of a line through the centre of the circle.
- (iv) Do not leave the circle till shot has landed in the sector. On sector line is out.
- (v) After completion of a trial athlete should leave the circle, behind the extension of a line through the centre of the circle.

HOLD

Shot should rest at the base of the fingers, but not on the palm. The three middle fingers are evenly spread, with the thumb and little finger supporting the shot on either side. In preparation for putting the shot, shot is placed under the chin and against the neck, with elbow of the throwing arm nearly level with the shoulder and pointing away from the body.



The correct hold can be achieved by picking up the shot from the other hand or the ground.

SOME FAMILIARISATION DRILLS FOR HANDLING SHOT:

- (i) Flipping shot between fingers of both hands, fingers stiff close together and pointing upwards.
- (ii) Moving shot around waist, around legs basketball style, from hand to hand.
- (iii) From upright standing position, arm hanging by side holding shot, release the shot and try to catch it with the same hand before the shot hits the ground. **DO NOT DROP SHOT ON YOUR TOES!!**
- (iv) Rolling shot along ground at a target (like lawn bowls) or for distance

EXERCISE TO STRENGTHEN FINGERS AND WRIST;

- (i) Leaning on a wall with thumb and fingertips of both hands. Palms not touching wall, fingers close together, lean towards wall, lowering fingers till base of fingers touch the wall, then stiffen fingers and wrist to push away from the wall.
- (ii) Using Heavier shot
- (iii) Medicine ball finger and wrists flips
- (i) Holding shot, twist wrist or bend up and down

Leg circles

Lying on back, do small circles with raised straight legs together or one leg at a time
- 10 each leg clockwise anti clockwise.

Lunges

Long step forwards, front leg bent back leg straight, long step sideways. Inside leg bent outside leg straight
- 5 each leg each way.

Scissor Jumps

Backwards and forwards
- 20 reps

Lateral Jumps

Out sideways and back
- 20 reps

Calf raises

Stand on edge of steps with toes of both feet, lift heels up and down
15 reps toes pointing outwards
15 reps toes pointing straight
15 reps toes pointing inwards

Weights can be introduced to 15 years and up but strictly supervised.

Arm step ups From push up position. Lift one hand onto chair followed by other hand. Do same back down to floor
- 10 reps

Sit Ups (with flex) Lying on back, arms straight by side, legs start straight bend knees. Lift shoulders. Reach with straight arms to touch ankles
- 20 reps

Hip rolls Lying on back, bend knees. Roll from side to side
- 20 reps

Leg Scissors Lying on back, legs straight. Lift up and down then across
- 10 each way

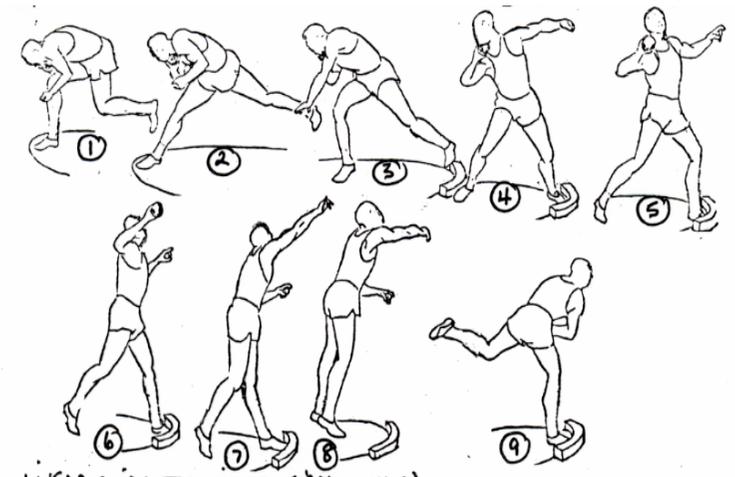
Leg step ups Step onto chair forwards followed by other leg and back down off chair
- 10 each leg.

Sit ups (legs on chair) Lying on back, lift shoulders with arms across chest
- 20 reps.

Triceps Hands on chair behind, lower buttocks to floor and lift up by extending arms back to starting position
- 20 reps.

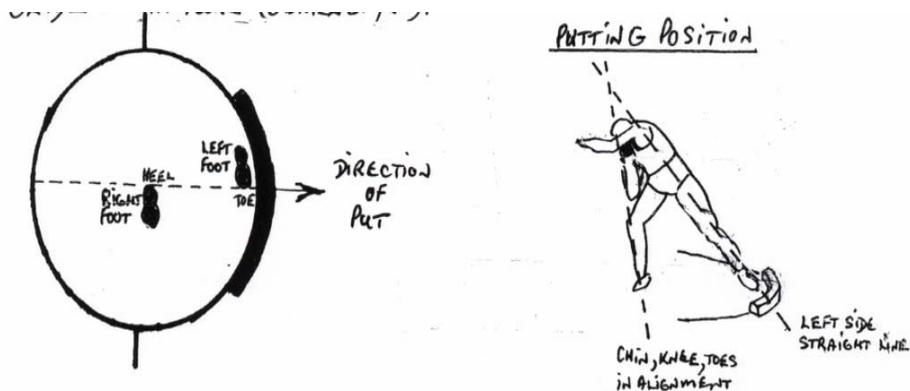
Shot is put with a “pushing action with one hand, from the shoulder in close proximity to the neck or the chin, at an angle of about 40 degrees. Emphasis is on control and speed of movement, through use of legs and trunk to achieve a good throwing position.

Introduce shot putting by showing a picture sequence, video or a demonstration by an experienced thrower, of the complete putting action. This will give the young athletes a mental image of shot putting.



STANDING PUT

Same stance as putting position after a shift or glide. Start with feet comfortable distance apart, front left toe and rear right heel on line. Chin, right knee and toes of right foot in alignment, left side of body forms a straight line. This means body weight will be over bent rear right leg. Shoulders and head turn back to rear, opposite to direction of put. Chest "closed", left arm across chest, hips "open", parallel to direction of put. Putting action starts with the bent rear right leg rotating towards the front of the circle. Pivoting on the ball of the right foot, knee rotates "inwards", heel "outwards". Then extension of the right leg forces the right hip upwards and towards the stop board and braced left leg. Keeping left shoulder up, shot is released after punch of right shoulder followed by a fast strike of the arm, wrist and fingers. Reverse used to remain in circle and avoid fouling as in figures 4 to 9 for linear glide technique (O'Brien Style)



Leg strength through step ups, calf raises, single or double legged hopping, hurdle hopping can be introduced later. 15 years and up can be introduced to core lifts like snatch, cleans, squats and bench press. Initially with machines followed by free weights like dumbbells and barbells. Strict supervision required at all times.

STRENGTH TRAINING WITHOUT WEIGHTS

(all ages) - Takes about 20 mins

(can be done at home - twice a week or more)

- | | |
|-----------------------|--|
| Full squats | wide stance, thighs finish parallel to floor
- 20 repetitions |
| Sit Ups (with twists) | Lying on back, knees bent, hands behind head, lift shoulders to touch elbow on opposite knee
- 20 reps. |
| Push Ups | Feet on chair - 10 reps
Hands on chair - 10 reps |
| Knee Flex | Lying on back pull knees to chest then straighten legs keep feet off floor
- 10 reps |
| Hip extensions | Lying on stomach, arms and legs straight lift opposite leg and arm together
- 20 reps |

THROWING AND DRILLS

Aim at doing about 20, increasing to 30 throws per session including drills. Try to arrange non throwing drills to imitate next throwing drill between throws.

“Specific Strength” usually done with heavier implement. Not too heavy! Or other resistance while imitating various movements involved in shot putting.

GENERAL CONDITIONING

Maybe one session concentrate on agility, mobility and speed through various types of running, endurance, short sprints and starts. The other session multiple jumps like hopping, little bit of bounding and hurdling.

POWER EXERCISES

Would include single jumps for distance or height. Also include depth jumping and other dynamic plyometric exercises. How much depends on maturity and strength of athlete.

GENERAL STRENGTH

Start with exercises using own body weight as a resistance. Mainly on a variety of exercises for different parts of the body.

Push ups for shoulders

Finger and wrists flips off wall

Sit ups for abdominal

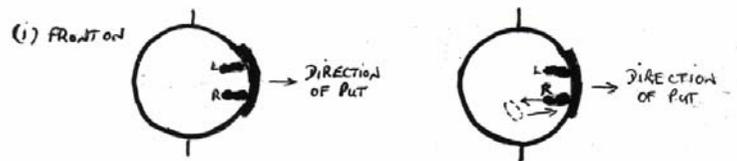
Trunk and back exercises

LINEAR GLIDE TECHNIQUE (O’Brien style)

1. Thrower drops down onto rear right leg, right foot pointing away from the stop board and back of the thrower facing towards the stop board. Left leg lifts and swings backward then forwards till left knee is near right knee
2. Rear right leg extends fully to begin glide, push off the right heel, left leg extends towards the stop board.
3. Right leg pulled quickly under body, staying “closed”. Left arm across chest, hips “open”, parallel to direction of put.
- 4 & 5 Rotating right leg extends, forcing the right hip up and forward towards the stop board. Body weight now shifts towards braced left leg.
- 6 Delivery action begins with punch of the right shoulder, followed by extension of arm, wrist and fingers. Keep left shoulder up.
- 7 The shot is released over the braced left leg with a reverse
- 8 & 9 When the shot is released, reverse is completed when right foot lands against the stop board enabling thrower to remain in the circle and avoid fouling

DRILLS FOR PUTTING ACTION

- (i) Front on – Stand with feet hip-width apart and toes of both feet against the stop board. Bend both knees and twist shoulders and head 90 degrees to right. Left arm folds across chest to complete windup. From this position the legs straighten, left arm swept to left bringing the right hip and shoulder in the direction of the Put. Keeping the right elbow away from the body. Push shot out and release.
- (ii) Front on with step back – start as front on. Step back with right foot. When body weight is over the right leg, push off. Right foot to bring right hip and shoulder towards stop board into putting position.



- (iii) Heavier shot – not too heavy, not too much. Slows down putting action
- (iv) Lighter shot – to improve speed of putting action

Sample session (10-14 year olds)

Warm up 15 minutes

Throwing and drills 20-35 minutes

General conditioning 5 – 10 minutes

General strength exercises 10-15 minutes

Warm Down 10-15 minutes.

Sample session (15 years and up)

Warm up 15-25 minutes

Throwing and drills (include specific strength) 35 – 45 minutes

General conditioning 10 minutes

Power exercises 5 – 10 minutes

General strength 10 – 15 minutes

Warm Down 10 – 15 minutes

WARM UP or WARM DOWN

- (i) Easy jog and stretching
- (ii) Doing a continuous series of sprint and hurdle drills followed by stretching
- (iii) Playing ball games like soccer, touch football. Aussie rules or basket ball followed by stretching
- (iv) Running games including relays, shuttle runs backwards, forwards, sideways, in and out, around and many others, followed by stretching
- (v) If gym is available, skipping, exercise bike or a circuit if exercises for upper body, trunk and legs. Followed by stretching
- (vi) Exercises with shot, should be done before throwing it

STANCE AT START

Feet more than shoulder – width apart, knees bent, shoulders level and parallel to ground. Left arm extended out and up to aid balance. Keep knees apart with body weight between legs.

TURN

Drive off left leg. Place right foot in centre of circle and under body continue pivoting on ball of right foot till left foot is grounded.

DELIVERY

From double support, power position, extension of the right leg lifts trunk and shot against bracing left leg. Thrower must be ready to drive the right hip and start arm strike before hip shifts to left leg. “Hit it early” that is, start delivery before left leg braces.

REVERSE

Used to achieve a high delivery position and avoid fouling, right foot brought to front of circle and left foot back anticlockwise to centre of circle. Similar to reverse in glide technique but greater emphasis on rotation.

Rotational drills similar to those in discus can be used to teach the rotational technique

TRAINING

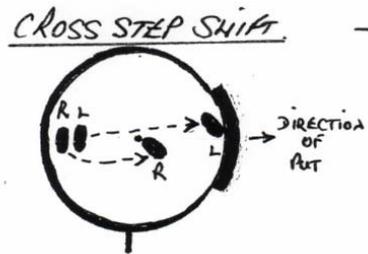
Recommend twice a week for 10-14 year olds (1-1 ½ duration)

At least three times a week for 15 years and up (1 ½ - 2 duration)

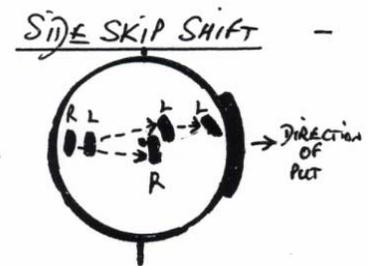
- (v) Height Putting – over high jump bar, tree branch or top of cage netting emphasise use of legs!
- (vi) Basic throwing movements with medicine ball: two handed overhead backwards, under arm forward (caber toss). Both from low squat position and keeping back straight. Two hand overhead forwards, keep elbows high, legs bent and slight lean backwards at hips.
- (vii) Partner stands in front of athlete in standing put position. Throws the medicine ball shoulder height to athlete. Athlete catches ball winds up and then unwinds to push ball up and out or without reverse to return ball to partner.
- (viii) Reverse Drill – Double leg jumps 180° up and down steps, grass slope or along a line in both directions. Anticlockwise and clockwise
- (ix) Thrower stands on a chair or box. Back towards direction of throw, holding medicine ball with both hands if necessary near neck and chin. As thrower drops off chair in direction of throw, twist 90 degrees anticlockwise, landing on bent legs and hips now parallel to direction of throw. React from the ground by extension of the legs, jumping upwards and doing a 180 degree reverse to push ball up and out.

LINEAR GLIDE TECHNIQUE (O'Brien Style)

Introduce with;



Stand at rear of the circle with hips and shoulders parallel to putting direction. Lean onto left leg. Pick up right foot and cross over left foot. As right foot lands, lift and push left foot behind right foot towards the stop board. Now body weight should be over the bent rear right leg. Putting action begins as soon as left foot is in contact with the circle and stop board.



Stand at rear of the circle with hip and shoulders parallel to putting direction. Lean on bent rear right leg. Move left foot just beyond centre of the circle. As the right foot moves towards the left foot, the left foot is pushed towards the stop board. Body-weight is still over bent rear right leg. Putting action begins as soon as the left foot is in contact with the circle and stop board.

Piggy Back Relay – Athletes carry another athlete on their back for 10m. Change over to return to start to allow the next pair to do the same

ROTATIONAL TECHNIQUE

Advantages

- Range of force application increased, velocity of shot also increased
- Depends less on body weight
- Longer contact with shot beyond stop board

Disadvantages

- Weaker power position due to excessive rotation (spinning)
- Difficulty in grounding left foot will affect release of the shot
- Difficulty in keeping shot against neck due to centrifugal force
- Balance more difficult to maintain

HOLD

Shot is pressed against the neck beneath back portion of the jaw and kept in place with a slight inward pressure of the hand. Note that the shot is placed a bit further back on the neck than in the glide technique. Placement may vary due to flexibility in keeping elbow up.

SOME FUN COMPETITIONS

Throws Heptathlon - with shot or medicine ball. All two handed

- Throws include:
1. Backward overhead
 2. Forward overhead
 3. Underarm forward
 4. Seated chest push
 5. Standing Discus style
 6. Standing shot put style
 7. Standing hammer style (Over shoulder)

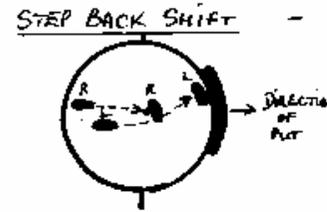
Winner is determined by total distance or athlete scoring least points according to placing's in each throw.

Golf – Putting shot into hoops placed around ground. Athlete lading shot in hoop with least number of puts wins.

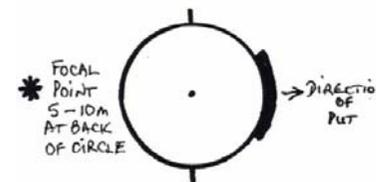
Marathon – Putting shot around track. Least number of puts around or furthest combined distance after 20 puts wins.

Hopping – Hop 10 metres on one leg, 10 metres back on the other leg. Individual races or relay teams can be used. Also include backward hopping.

Caterpillar Hop – Number of athletes in a straight line. Athlete behind holds hips of athlete in front. Now do double legged hops without breaking line or falling over. More difficult if athlete behind holds ankle of one leg of athlete in front. Now hop as a Team to finish without breaking line or falling over



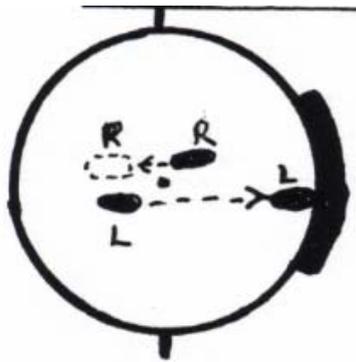
Stand at rear of the circle with back towards putting direction. Left foot slightly behind the right, with body weight on the left leg, lift the right foot and step backwards. As the right foot lands near centre of the circle. The left foot is pulled through and pushed towards the stop board. Putting action begins as soon as the left foot is in contact with the circle and stop board.



For all three shifts wind up position should be maintained till both feet are in the final position, as in standing put. Have a focal point behind circle to be watched till shift is finished.

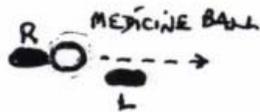
SOME DRILLS FOR SHIFT OR GLIDE ACTION

(i)



scissor jumps – Start near centre of circle, with back towards stop board. The left foot slightly in front of right. Then the left foot is pulled backwards towards the stop board as fast as possible! At the same time the right foot is moved forwards or towards rear of the circle in a scissor movement to land under the body. Finishing in a wide split putting position. Return to original stance with a relaxed reverse scissor jump. Repeat continuously.

(i)



Medicine ball rear right leg pulls – start leaning on right heel in front of left foot as far as comfortable. With medicine ball directly behind heel of right foot. Pull the ball past the left foot. For motivational purposes measure distance ball rolls or how accurate athlete can be

(i)



Medicine ball left leg push – Start left foot slightly in front of right foot. Medicine ball next to right foot and directly behind left heel. Push medicine ball with a fast long extension of the left leg. Keep body weight over right leg to finish in the putting position. Once again can be measured for distance or done for accuracy.

(ii)

Uphill shifts or glides – Continuous shifts or glides uphill. Emphasise extension of bent rear right leg to keep body moving uphill.

(ii)

Downhill shifts or glides – Continuous shifts or glides downhill. Emphasise quick placement of left foot behind and keeping body weight over rear right leg to maintain balance.