

Training for Javelin



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Javelin throwers must be

- Athletic & agile
- Good at learning skills
- Powerful (strong **and** fast)
- Flexible
- Competitive

So, training sessions for developing athletes will include

- Static and dynamic mobility work
- Drills which enhance javelin skills
- Javelin throwing
- Strength development (general jumping, general throwing and weights)
- A cool down

Training sessions for mature athletes will be more frequent and specialized, with separate sessions devoted to drills, javelin throwing, general throwing, general strength, specific strength, power development, preceded by the appropriate warm up and mobility work.



Javelin Weight

	Boys	Girls
Peewee	400g	400g
Bantam	400g	400g
Midget	600g	600g
Youth	700g	600g
Junior	800g	600g
Senior	800g	600g

Equipment and Basic Rules for Javelin

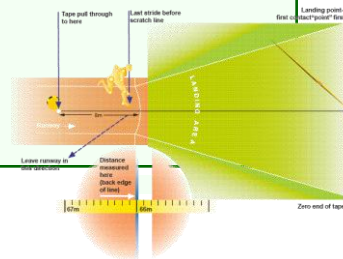
Javelins were normally made from steel or aluminum although since 1996, carbon fiber javelins have been allowed. They consist of 3 parts – head, shaft and cord.

All implements are subject to various checks before competition to ensure that they comply with minimum weights and measurements (length and diameter etc.).

Javelin throwers wear shoes or boots (which support the ankles) with spikes on the sole including 4 spikes in the heel.

The javelin must be thrown over the shoulder and not slung.

The javelin is thrown from a straight run up area into a marked throwing sector (see picture). The javelin must be thrown from behind the “scratch line” and the thrower must not leave the runway until the javelin has landed.



Adapted from IAAF

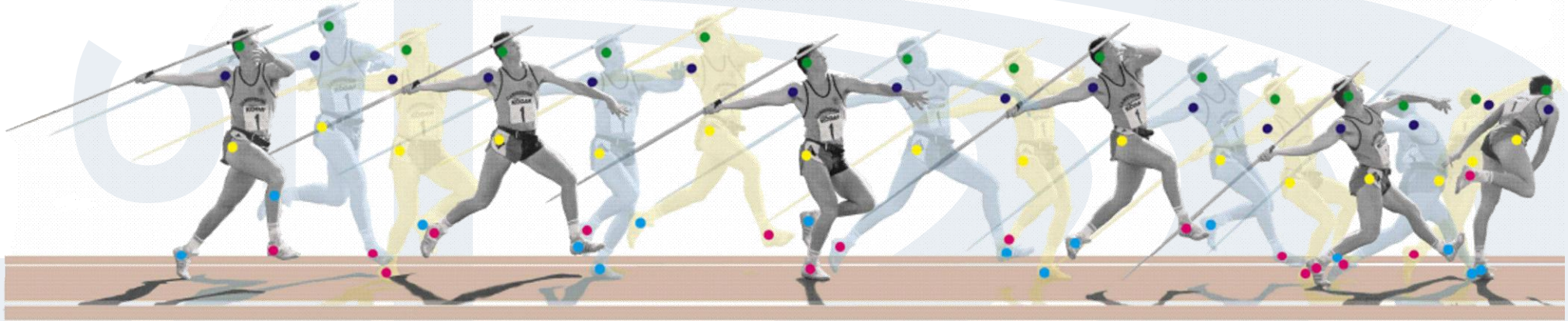
Javelin

Javelin Basics

The javelin thrower requires athleticism and the ability to transfer momentum from the run up to the implement at release. Developing “rhythm” and “feel” during the throw as well as being fast and dynamic are essential. The roots of javelin throwing are in classical Greece and the ancient Olympic Games. Many other cultures used spear throwing in hunting and warfare and throwing the spear for distance may well have featured as a popular pastime, however it was certainly the Greeks who developed the javelin into a recognized sport. In the ancient Olympics, javelin was the 3rd event of the all crown the winner; points for style were also awarded. Techniques have changed over time. The ancient Greeks made use of a 40cm strap wound round the centre of the javelin, leaving 2 finger loops. The Greek or orthodox style of throwing evolved into modern times with the javelin being held around the middle. There have also been freestyle events whereby the javelin could be held anywhere and could be thrown in any manner (including hammer style!) Lemming, the Swedish champion at the time, preferred the orthodox style and out-threw them all!



Javelin Technique



The Approach

The Approach – ‘Front on’ running to accelerate the thrower and the javelin

- The javelin is grasped firmly but comfortably, and lies down the hand (rather than across).
- The palm faces up in the carry and the grip hand is relaxed.
- The javelin is held horizontally over the shoulder at head height.
- The thrower looks forward.
- The acceleration run (6-12 strides) is relaxed, controlled and rhythmic.

The Withdrawal

The Withdrawal and 5 stride rhythm – To position the thrower and javelin correctly for the delivery

- The withdrawal of the javelin starts on a left foot landing.
- Left shoulder faces the direction of throw.
- Throwing arm extends backwards during first and second stride.
- Throwing arm is at shoulder height or slightly higher after withdrawal.
- Tip of the javelin is close to the head, level with the eye.

The Delivery

The Delivery – To transfer velocity from the legs, trunk, shoulder, and arms to the javelin

- Right foot is placed at a natural angle to the direction of throw.
- Axes of the javelin, shoulder, and hip are parallel.
- Right knee and hip turn forwards actively.
- The throwing arm remains extended during the hip strike.
- The left foot is driven to the ground to stabilize the left side.
- The right hip drives forward against the left leg to bring the body into an arc position.
- The arm is pulled through last, with the elbow close to the head.

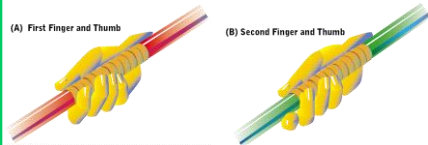
The Recovery

Recovery – To stop the forward momentum of the body and avoid fouling. A controlled recovery is a result of a ‘good’ throw. Uncontrolled recovery reflects a poor throwing action. Therefore a good delivery should be the main focus.

- Leave sufficient space between the braced left leg and the foul line for the recovery step.
- Legs are reversed quickly after the release.
- Right leg is bent.
- Upper body sinks down and left leg swings backwards.

The Grip

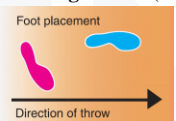
There are 2 principle grips used for throwing the javelin, both of which allow for good contact with the grip by the “control” part of the finger and thumb. The grips allow the fingers to be used to stabilize the javelin in the hand.



Teaching Progressions and Drills



Standing Throw (Right handed thrower)



- Stand side-on to direction of throw, with both feet in contact with the ground, weight over the right foot, right knee slightly flexed and left leg extended. Extend right arm fully at shoulder level with palm facing upwards. Left arm is long and across the body.
- Left arm remains fixed until after release to maintain side-on position and to allow the feet to remain “powerful”. Initiate throw by rotation of the right knee towards the direction of throw.
- Drive the right hip against the fixed left side.
- Finish the throw with arm extended forward and above the level of the head.
- Left foot remains fixed with body controlled and balanced behind the braced front leg.
- Throw from the legs. The standing throw should aim to mimic the position that the thrower will be in following a run up rather than being the position for throwing optimum distance from standing.



3 Stride throw

- Start with the right leg forward and the javelin withdrawn. Maintain the balance of the body over the right leg. Step onto the left foot and then run into the ‘impulse’ stride, with the feet landing quickly one after the other. Stay back with the balance over the right foot.
- The right leg lands with a slightly flexed knee and foot ready to strike immediately upon toe contact.
- The right flexed knee rotates forward. The left leg braces to block the right side and allow momentum to be transferred through the body into the arm and finally the javelin.
- Release high with elbow close to head.