

200m SPRINTING, A.C. Robertson, SSAA Team Manager, Master Coach

History: The 200m was the original event in the Ancient Olympic Games. The race was a stadium's length, a 'stade', between two piles of stones, but don't underestimate the value of this. This original race in 776 BC allowed historians access to a crucial calendar by being held thereafter four yearly, an 'Olympiad', and gave the context into which all succeeding historical events could be placed.

Demands: The 200m is an extended sprint, far more demanding than the 100m with its mainly speed base. To the powerful start, drive, running technique, physical co-ordination and finishing ability of the 100m, the technique of running the curve, strategic distribution of energy, and more speed-endurance have to be added.

Background Training: Aerobic conditioning plays a greater part in the 200m, as does increased anaerobic training.

Aerobic Training Sessions: *Pulse below 160 beats per minute:* **Steady Runs**, 40 minute; **Fartlek**, 30minutes; **Interval Runs**, 200m @75% effort x 10, with a 100m walk between; 300m @ 75% effort x 6 with 200m walk between.

Anaerobic [Speed-endurance] Sessions: *Pulse 160+ bpm:* **Intervals**, 150m x 8 @ 85% effort, 90 seconds rest ; **Clocks**, 150,140,130,120, 110, 100, 110, 120,130,140,150m & 90% effort, 90 seconds rest; **Back to Backs** , 60m x 4 x 3 @ 95% effort , 20 seconds between reps, 60 seconds between sets.

Strategic Distribution of Energy in the Race: Most coaches agree that a 100% effort all the way has a deleterious effect on speed late in the race: a guideline for the distribution of energy could be:-

First 50m start & drive full out ; **50-100m**, turn your legs over very fast, staying as relaxed as possible; **100-150m**, use the centrifugal force generated on the bend to catapult out into the straight full out; **150-200m**, with fatigue setting in it's not advisable to attempt to increase cadence, so instead increase your stride length by a few extra centimetres when tiring. *Keep a note of your race split times at 100m to check your distribution: if your times are even, or the second 100m is faster, it's a sign that your speed endurance is good.*

Starting Techniques: 'Set' in the blocks as for a 100m start using the biomechanical principal of Mechanical Advantage i.e. set up as many right angles as possible at your joints, starting at your ankles [muscles pull most efficiently at an angle of 90 degrees to their attachment]: most athletes angle their blocks too high and lose this advantage right away. Check that the rear hip is also at right angles, but ask your coach not to judge the front knee's angle until the rear foot is beyond the start line. Look down between your knees at the blocks [to ensure your head is in line with your spine]; this allows you to come out into the drive head first, back flat, for the first phase of the race [like 'running up stairs']. For 200m the blocks are usually set wide in the lane and angled so you run at a tangent to the inside curve; this allows you to drive in a straight line. Some athletes simply follow the curve, of course.

Bend Running: Leaning into the curve is essential, because centrifugal force is throwing you outwards. To assist you in running close to your inside line, make your right arm action more vigorous than the left's, and punch it across your body slightly, elbow slightly wide, until you catapult out into the straight. The 200m is measured by surveyors 30cm out from each inside line, but in lane 1 only it's further, 45cm from the line. Running **on** the inside line leads to disqualification, a dismal result, but more so in a multi-events competition.

Finishing: Apart from marginally extending your stride to combat fatigue and loss of cadence, you'll be able to see where you're placed and act accordingly. Running a few metres through the line without dipping comes highly recommended – you just have to see poor finishing at World & Olympic Championships to see the wisdom of this, when athletes dip early, pike, and by definition lose the use of their legs for the final crucial strides. However, you need to be alert to closing athletes; consider concentrating on gathering yourself, without tension, for a final push through in the final three strides, leaning through the line on the final stride without diving.