

## THE 100 SPRINT

There is no set build for a sprinter, who can be of any size or shape.

The athlete should however possess **good overall strength** as well as the **ability for quick fluid movement** and a **short reaction time**.

Because the 100 is an **anaerobic event**, the oxygen **demand** of the muscles is so **high** that it **surpasses** the athlete's **cardiovascular system** to supply an **adequate** amount of **oxygen** to the muscles. This means that when the race is over the athlete will be in **"oxygen debt"** and will be **gasping for air**.

In order that an athlete is prepared for this **overdrawn oxygen supply**, there should be a training programme of **anaerobic endurance conditioning**, as well as **sprint drills** to develop **power**, **good technique** and **fast reactions**.

The **overall concept** that the athlete must grasp is that **maximum sprinting effort** must be carried out whilst **staying as relaxed as possible**. This is the aim of all the training that the athlete undertakes in the summer and in the winter months.

## WARM UP

Before each training session or competition the athlete must carry out a **full warm up**. If the athlete has two or more races per meeting, then an **abbreviated** warm up may be arranged for the second and subsequent races.

The **warm up** should be carried out in **comfortable flat shoes**. Initially a slow easy relaxed jog should be **'enjoyed'**. This may be 800, 1200 or a 1600, depending on the athlete's level of fitness. **A full range of exercises** should be completed, **easing out and stretching all the main body parts** ( neck, shoulders, upper body, hips, upper leg, lower leg and ankles).

Now we are ready to carry out our **sprint drills**. These have **interesting titles** like "High knee marching with extension of lower leg" "High knee skipping with lower leg extensions" "High knee running with lower leg extensions" "Seat kicks" "Sprint arm action" and "Distance hopping bounding" etc. etc. **We can work on these FUN drills when we have gained a reasonable level of fitness**. The athlete will select their own **personal sprint drills** and work them into their own warm up routine.

Now is the time to **spike up** and run a few **rolling sprints** to almost complete the warm up. There should be about **4 runs** -each **slightly faster** than the one before. The **final one** should be nearly **max effort**. **Starting blocks** should now be set up and a few sprint starts completed to ensure that you have about **8 minutes rest** before **race time**. During this **relaxed timeout** the athlete may like to lay down with feet higher than the head, always being ready to lightly exercise prior to the call to the starters orders.

The alignment of the blocks is important. They should be pointed at the point where the athlete intends to intersect with the inside bend line, perhaps 5 metres from the staggered startline. It is now time for a **relaxed timeout**. The athlete may like to lay down with feet higher than the head, always being ready to lightly exercise prior to the call to the starters orders.

### **THE STARTING POSITION**

I will use the terms **medium start** and **bullet start**. You will find that the perfect starting position is yours alone, not one out of a text book. Practise and refine your starting position until you are happy with what you have achieved. The front block should be about 45° and the rear block should be as steep as you can handle.

Because the 200 is invariably started on the bend, the athlete will need to carefully position the blocks to ensure that contact with the inside lane line is made ASAP, but not immediately.. This means **angling the blocks** in the middle of the lane to point at the inside line some five metres ahead of the staggered start line.

**On your marks** position for the **medium start** is where the rear knee is positioned against the other leg instep: the hands are some distance in front, and behind the actual start line. The athlete should then **rock** forward allowing the arms to **swing** forward of their own accord to the ground so that the fingers /thumb fall to the ground where they are comfortable.. Arms should be **shoulder width apart**, and the shoulders should be **ahead** of the hands. This will give an approximation to the correct position. The head is **not** thrown back, but positioned naturally, the eyes should be directed at a point on the track **just ahead** of the start line. The breathing should be **regularly steady**.

**On your marks** for the **bullet start** is the same as above except that the **feet are placed closer together**, the front foot being **further** from the line than in the medium start

Now we have decided on the appropriate starting position there needs to be a process **to get into the blocks**. for the serious **on your marks** situation. Over a number of years I have found this little dance move to be particularly effective--When the starter **gives the command**, the athlete should **pitter patter** with **small fast strides** to a position just in front of the start line. Then **wind** the body backwards into the blocks, **flicking** the legs out and **coiling** the body into a **good block position** ready for the next command..On the starter's "**SET**", the athlete **rocks** further forward over the hands, at the same time **raising** the hips **without** any jerky movement. The **rear leg** will not **completely straighten**, and the **hips** will be very slightly **higher** than the **shoulders**. The **rear leg** is kept relaxed, and the athletes weight is **equally supported** by **arms and legs**..Both feet are **firmly** in contact with the blocks. The athlete's **back and head** form a **straight line** and the **vision is forward** and towards the ground.

### THE GUN

At the sound of the starters gun the athlete should aim at **running away** off the blocks, working the arms **vigorously** to **counterbalance** the **explosion** of the legs. The body will be **inclined forward** for some eight metres, then the athlete will assume a more **upright** stance, so that by **40 metres** the athlete is **thoroughly upright** and **going for it**. **Leaning** into the bend will become natural the more one practices the first 75 metres of the 200.

### THE PICK UP

As soon as the gun has exploded and the sprinter is in **full flight** every effort must be made to reach **maximum speed** as **soon** as possible. The arms will be working **extensively** and the **knee lift** will be increasing as the athlete **leans into the bend**. The **transition** from the starting position to sprinting speed is almost complete.

### FULL SPEED AHEAD

Once the sprinter is **moving at speed**, she/he must continue working the arms. The **faster** the arms are moved the **faster** the legs will follow. The forward movement of the arm should see the hand reach **shoulder height**, and should be carried back a short distance behind the **hip** in the **backward swing**. With the **arm** action maintained at a **high level**, the sprinter must aim at **maximum speed** of leg movement. The **knee lift** will be pronounced, and the feet should point straight down the middle of the lane. Obviously in reaching this state of **forward acceleration** there have been a few things to remember, but **most importantly** the concept of **relaxation** is essential. **RELAXATION AT SPEED IS ONE OF THE GREAT SECRETS** of the physical world.. **Tensing up** comes from **trying too hard**, and is like running with the brakes on – **futile and inefficient**..

### SPRINTERS ZEN

Whilst the 200 metre sprinter must to a certain extent **isolate** her/him self mentally from the rest of the race, and from the other competitors, the athlete must be **aware** of the **relative position** of the runners in the **staggered** lanes outside. **Discipline** must be exerted **not to react** to superhuman starts from other competitors. The maxim must be to **run one's own race**. The body should become a **focus** controlled by **the mind**, running at **top speed**, unaffected by outside influences. Your performance in your individual lane is your sole concern, **DO NOT be distracted** by anything or anybody outside your lane area. **Concentrate** on generating **as much speed as possible** over the **first 80 metres**, and then try running just as fast but **"coasting"** for a spell. As the bend **unwinds** there should be an attempt to **concentrate even more**( if that is possible) so that the **straight** is **"hit"** with an **explosion** of power. Of course the **illusion of increased speed** is just that – an illusion. Whilst we are trying very hard, we are decelerating in the latter half of the race, but trying to maintain a classic form – Not easy , eh?

### **THE FINISH**

Approaching the finish line the athlete will continue aiming at **rapid rate of leg action** and maintaining the **relaxation at speed** .(No head thrown back or heroic facial expressions.) Sprint **straight** through the finish to a point some 10 metres beyond the line, and decelerate gradually. If you are involved in a **close finish** then **thrust** both arms behind , and **drop the head chest** down towards the finish line. on the **penultimate** sprinting stride. It may well be that you will not be able to recover your **balance** after such a **manoeuvre**, but if you gain the decision who cares? A few bruises and track burns are surely a badge of track honour.?

### **REFLECTION**

Looking back over these notes I realize that I have gone into quite a lot of detail, and in so doing I may have turned off the younger athlete who has become lost in all the words. I hope this is not so, but if it is please come and see me and I will break these seemingly complex tasks down into more manageable bites so that sprinting progress can be made in an easier manner. Thankyou.

**Mike Marston**

