

## **SPRINTER TRAINING**

### **SPRINTER TESTING**

To properly plan your training program you must test sprinter candidates. This sprinter testing must be performed after the General Preparation mesocycle. Testing is not just for testing but also to evaluate the areas of weakness in each individual. There are four tests to determine workout concentrations for individuals.

#### **Test # 1 30 Meter Fly**

Find a 60-meter straightaway (track if possible). From a standing start, without blocks, runners sprint (100% effort) 60 meters. Coach will time runner from 20-meter mark to 50-meter mark. Use 1/100 seconds on stopwatch just for record purposes.

#### **Test # 2 Standing Long Jump**

If a long jump pit is available have runners stand at beginning of sand pit on runway. Spread feet shoulder width, swing arms, bend knees and jump (two foot takeoff) into pit. Measure distance for records. If a long jump pit is not available then jump in grass. Draw a line and record heel landing of all jumpers.

#### **Test # 3 and # 4 3 and 5 Bounds**

On the track or grass have runners stand behind line. When ready take 3 bounds (strides). Record distances. When all have completed 3 bounds repeat process for 5 bounds. Record both distances.

Test # 1 30 Meter fly tests the sprinters Vmax and peak velocity.

Test # 2 Standing Long Jump tests the sprinters power and initial thrust (blocks).

Test # 3 and Test # 4 3 & 5 Bounds tests the sprinters early acceleration.

To determine the levels of success create a model by testing a top or star runner.

## TRAINING BODY'S ENERGY SYSTEMS

When training sprinters workouts fall into four categories:

- 1.Speed/Power (0-60 meters)
- 2.Speed Endurance (60-150 meters)
- 3.Special Endurance I (150-300 meters)
- 4.Special Endurance II (300-600 meters)

When training speed (0-60 meters) you are training in the Anaerobic Alactic System (without oxygen and without lactate). These speed workouts train in the phosphate system where creatine phosphate is used to produce ATP for muscle contractions with no lactate build up.

Recovery when training in these systems is:

20 to 45 seconds = 50-60% system recovery

90 seconds = 80% system recovery

3 minutes = 100% system recovery

When training Speed Endurance, Special Endurance I, and Special Endurance II you are training in the Anaerobic Lactate System. Energy produced in this system produces lactic acid, which breaks down into lactate and hydrogen ions. These hydrogen ions stop or slow muscle contractions.

Recovery for this system is:

4 hours for 50-60% intensity workouts

24 hours for 80% intensity workouts

48 hours for 100% intensity workouts

Structure workouts around these recovery times and intensity levels.