Developing 100-400m Sprinters

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What makes a good sprinter?

1. Proper Running Mechanics – Sprint Running Drills
2. Flexibility – Better Stride Length/Stride Frequency
3. Stable Core – Back, Stomach, Hip Flexors,
4. Endurance- A. General – Improve/Develop aerobic base B. Specific – Lactic/Aerobic
5. Strength- Weight room and running
6. Speed- Born With it, but you can develop speed

The Warm Up/ Cool Down

I believe a proper warm up and cool down are extremely vital to the well-being of a sprinter or any runner. Here is the warm up I would suggest, start at a slow tempo and then increase the speed as you go. Here is what my routine for my team:

First Lap: Slow Jog

Second/Third Lap: Running the straightway, each in a little faster

Then 4-5 Accelerations: Adjust the distance. Example 30m, 40m, 50m, 60m.

Once the running warm up section is completed, I would suggest 15-20 minutes of good stretching (Static/dynamic). Then I would start applying the running drills below:

Dynamic/static Stretching/ Running Drills:

1. Head Circles x10
2. Arm swings Front and Back 10/15times
3. Trunk Circles x 10
4. Ankle & Wrist Circles x10
5. Wave/Front Lunges 6 each leg x 2
6. Eagles/Scorpions x 8
7. Heel Walking
8. High knees Drills 15m
9. Stride for 20m x 2
10. Knee Circles x 6
11. Front Grabs(knee into chest)
12. Twist grabs(shin toward chest)

Fast Butt Kicks
A-skips
B-skips
C-skips

High Knees
Running High Knees
High Skips

Running Bounds

Straight Leg: Bound/ Shuffle

Fast Leg: Continuous, Alternative, and On Coach’s Command
Quick Skips

Kairoke

Accelerations from a 3pt start position: 30m, 60m, 90m

The importance of drills are critical for sprinters, even distance runners are doing running drills before the actual running workout. Doing drills has several benefits, but they must be done properly. First of all, these drills should improve the runner’s body mechanics and running efficiency. Also, these drills will be another way to loosen or warm up their body and muscles before the “real workout” takes place. I would suggest you make your athletes do all the drills twice, for a distance of 20 to 30 meters.

Then you can begin your daily running workout. The key is to design your workout schedule that is best for you and your team training cycles. The following is a list of workouts and their purpose. Also, I have given you samples training session depending on what part of the season you in going into:

100m/200m/400 Training Session Period
1. Pre-Season Training(10 weeks): Mid September to Mid November
   - Base Work/General Conditioning
     A. Long Runs – Usually slow, work on Endurance/ Aerobic Base
     B. Hills Running- 200m to 300m: Endurance/Knee Drive
     C. Bleachers- Endurance/Knee Drive/ Running Mechanics
     D. 500-1000m, Over distance training – Endurance(Focus on the 400m)
     E. Running Drills/Hurdle Mobility Drills- Working on core stability and mechanics and form
     F. Slow 200m’s – Tempo Endurance
     G. 250m to 350m- Speed Endurance

2. Early Season Training(10 weeks): Late November to Late January
   - General Conditioning/ Track Training/ Reload Periods
     A. Slow/Middle 200m’s – Tempo Endurance
     B. 250m to 350m – Speed Endurance
     C. Block Starts – Block Mechanics/ Reaction
     D. Sprint Build-Ups – Technique/ Turnover/Form
     E. Short Hills 60m to 150m – Endurance/Knee Drive/ Running Form
     F. Short Speed Work – Aerobic(short rest) or Anaerobic(long rest)
     G. Running Drills/Hurdle Mobility Drills- Working on mechanics and form

3. Mid Season Training(10 weeks): February to Early April
   - Track Training/ Reload Periods
     A. Middle/Fast 200m’s – Tempo Endurance
     B. Relay Work – Technique/ Getting Out/ Sprint Work
     C. Block Starts- Block Mechanics/ Reaction/Sprint Work
D. 250m to 350m - Speed Endurance

E. Short Speed Work – 30m or More : Aerobic(short rest) or Anaerobic(long rest)

F. Running Drills/Hurdle Mobility Drills- Working on mechanics and form

4. Late Season Training(10 weeks): Mid April to June

- Track Training/ Reload Periods

A. Middle/Fast 200m’s – Tempo Endurance

B. Relay Work – Technique/Getting Out/Sprint Work

C. Block Starts- Block Mechanics/Reaction/Sprint Work

D. 150m’s – Aerobic or Anaerobic

E. Event 200m- Working on Different Phases of the Race

F. 250m to 320m/350m – Speed Endurance

G. 100m in Grass- Running Mechanics

H. Short Speed Work – 40m or more- Fully recovery
<table>
<thead>
<tr>
<th>Day</th>
<th>Type of Workout</th>
<th>Sample Workouts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>100m/200m Tempo Endurance</td>
<td>7x200m(29)M (32)W Take 2min Rest</td>
</tr>
<tr>
<td></td>
<td>400m Group Tempo Endurance</td>
<td>9x200m(29)M (32)W Take 2min Rest</td>
</tr>
<tr>
<td>Tuesday</td>
<td>100m/200m Speed/Sprint</td>
<td>Blocks: 3x10m, 2x30m, 2x50m</td>
</tr>
<tr>
<td></td>
<td>400m Group Speed Endurance</td>
<td>2x450m(55)M (65)W take 10min Rest</td>
</tr>
<tr>
<td>Wednesday</td>
<td>100m/200m Speed End. or Light Day</td>
<td>250m-350m take 4-5min Rest per run</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grass Running or Totally OFF</td>
</tr>
<tr>
<td></td>
<td>400m Group Speed Endurance (Event)</td>
<td>3 x 350m Take 5min Rest per run</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 x 300m/100m Take 5min Rest per run</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 x Invent 300m Take 5min Rest per run</td>
</tr>
<tr>
<td>Thursday</td>
<td>100m/200m Speed End or Light Day</td>
<td>Like Wednesday</td>
</tr>
</tbody>
</table>
Friday

100m/200m    Speed/Sprint    4x120m 4-6min Rest
             Blocks
             Flying Runs: 2x3x30 or 40m 5/10min Rest

400m Group   Speed End/Light Day    3x100m Hills 5min Rest per set
             Stretch, Drills, and 1x15min Run

**Keys to Running a Good 4x1 Relay**

It is not always the four fastest runners that make up the best 4x1 team. I believe that the best 4 athletes who can work best together can execute good passes will run fast. The big key in relay running is getting the baton to move through the zones and around the track. Here are some of my thoughts on good 4x1 relays:

1. You have Trust
2. You must leave on Time
3. You must give a good Target
4. You must have good spacing

**4x1 Relay Drills**

1. Standing Hand-Offs: 3 count then Take Baton
2. Standing Hand-offs: Hot Stick
3. Running Hand-offs: 60m-70m of Running for Incoming and Outgoing Runners
   A. Start with 18 steps for international zone, then make adjustment
   B. Must make sure the outgoing runner is going out hard

**Keys for the Incoming Runner**

A. Must remember they are in control
B. Must give the Baton
C. Must follow the elbow
**Keys for the Outgoing Runner**

A. Must Leave on Time
B. Must Go out Hard
C. Must Set Up Good Hand target/Take the baton
D. Must Give Incoming room

**Keys for Each Runner**

1\textsuperscript{st} Runner: Good Starter, Must be Reliable, keep the team in the race

2\textsuperscript{nd} Runner: Responsible, like your second anchor, must be prepared to run the longest leg

3\textsuperscript{rd} Runner: Good Curve Runner and Responsible

4\textsuperscript{th} Runner: Be Confident (A little Cocky), Sprint well under Pressure, be in control

**Keys to Running a Good 4x4 Relay**

Many athletes can run this relay: 400m runners, 100-200m runners, 400IH, and even your 800m runners. Practicing hand-off for the 4x4 relay can possibly take 2 second off your team’s time.

**Keys to Passing the Baton**

A. Good Hand off/Good Target
B. Good Movement Through the Zone
C. Good Passing the Baton

**Keys for Each runner**

1\textsuperscript{st} Runner: Must be someone who can keep you in the race. You first leg must be smart. Remember the stagger is longer than a 400m race.

2\textsuperscript{nd} Runner: Must be aggressive and smart. This leg is like your second anchor, must be willing and able to move ahead of maintain your team good position.

3\textsuperscript{rd} Runner: Must maintain what the 2\textsuperscript{nd} runner does if in the lead or they must the 4\textsuperscript{th} leg is good position

4\textsuperscript{th} Runner: Not always your best runner. The anchor leg must be smart and aggressive like the 2\textsuperscript{nd} runner. This runner must be able to handle the pressure.
Athletes coached by Michael Ford at Baylor University

<table>
<thead>
<tr>
<th>Athletes</th>
<th>60m</th>
<th>100m</th>
<th>200m</th>
<th>400m</th>
<th>4x4 Split</th>
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</thead>
<tbody>
<tr>
<td>Reggie Witherspoon</td>
<td>10.55</td>
<td>20.32</td>
<td></td>
<td>44.99</td>
<td>45.2(1st)</td>
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<tr>
<td>Jacob Norman</td>
<td>6.56</td>
<td>10.28</td>
<td>21.17</td>
<td></td>
<td></td>
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<tr>
<td>Courtney Thomas</td>
<td>6.78</td>
<td>10.31</td>
<td>20.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trey Harts</td>
<td>6.6</td>
<td>10.3</td>
<td>20.29</td>
<td>45.4</td>
<td>(2nd)</td>
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<tr>
<td>Whitney Prevost</td>
<td>6.68</td>
<td>10.39</td>
<td>20.71</td>
<td>45.75</td>
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<tr>
<td>Jamen Szuri</td>
<td>10.58</td>
<td>20.89</td>
<td></td>
<td>45.52</td>
<td>(2nd)</td>
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<tr>
<td>Braelon Davis</td>
<td>10.46</td>
<td>20.84</td>
<td></td>
<td>45.9</td>
<td>(2nd)</td>
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<tr>
<td>Woodrow Randall</td>
<td>6.6</td>
<td>10.13</td>
<td>20.8</td>
<td></td>
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<tr>
<td>Everett Walker</td>
<td>6.7</td>
<td>10.12</td>
<td>20.53</td>
<td>47.0</td>
<td>(2nd)</td>
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<table>
<thead>
<tr>
<th>Women</th>
<th></th>
<th></th>
<th></th>
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<tbody>
<tr>
<td>LaKadron Ivery</td>
<td>7.31</td>
<td>11.26</td>
<td>22.95</td>
<td>51.99</td>
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<tr>
<td>Tiffany Townsend</td>
<td>7.23</td>
<td>11.09</td>
<td>22.58</td>
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<td>51.80(3rd)</td>
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<tr>
<td>Carla Grace</td>
<td>7.54</td>
<td>11.54</td>
<td>23.09</td>
<td>52.91</td>
<td>52.00(2nd)</td>
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<tr>
<td>Kandace Tucker</td>
<td>7.46</td>
<td>11.6</td>
<td>23.04</td>
<td>51.00</td>
<td>(2nd)</td>
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<tr>
<td>Tiffani McReynolds</td>
<td>7.36</td>
<td>11.37</td>
<td>23.4</td>
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<table>
<thead>
<tr>
<th>4x1 and 4x4 times</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
<td>Men 4x1</td>
<td>NT</td>
<td>39.41</td>
<td>39.63</td>
<td>39.37</td>
<td>39.25</td>
<td>39.18</td>
<td>39.09</td>
<td>39.15</td>
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<td>Women 4x1</td>
<td>43.9</td>
<td>44.11</td>
<td>44.89</td>
<td>43.6</td>
<td>43.77</td>
<td>44.24</td>
<td>43.75</td>
<td>45.39</td>
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</tbody>
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| Men 4x4             | 03:01.8| 03:02.9| 03:00.0| 03:00.2| 03:01.1| 03:01.8| 03:01.7| 03:03.4 |
| Women 4x4           | 03:33.9| 03:29.3| 03:34.3| 03:31.9| 03:29.5| 03:33.3| 03:31.5| 03:32.3 |