

Football Speed Bonus
Metabolic conditioning for football
"Only the Tough Survive"
By Lee Taft

Football is a game of speed, power, cutting, and agility. If players are not an explosive athlete football may not be the right sport. However, because football is a long duration game with relatively short rest periods between plays, especially in today's game of no-huddle or quick huddle play calling, you better be in shape or you won't survive.

Football is a contact sport, which in certain positions requires combative wrestling type strength, and requires high levels of conditioning for success. Huge men are pushing and pulling and using every ounce of energy on every play to defeat their opponent. Players are using their legs to drive the pile or start and stop to run an opponent down time and time again for four quarters. The bottom line is players better be in shape or they will get man handled and turned back every time.

One of the toughest conditioning methods for football players to endure is called "The 4 Quarter Metabolic Workout." It will test your ability to survive both physically and mentally. Keep in mind, this workout has nothing to do with pure speed training, or agility and quickness training. It is about hard conditioning so you can play four quarters of football and be the last man standing.

Metabolic conditioning means the athlete is being conditioned at the cellular level. Adaptations are being made within the cardiovascular and respiratory systems. Some of the changes that will be seen with this form of anaerobic training are:

1. Decrease in resting hear rate
2. Increase in cardiac output
3. Increase in max stroke volume
4. Blood volume
5. Percentage body fat will decrease
6. Increase in mitochondrial numbers

(Information modified from Exercise Physiology, Energy, Nutrition, and Human Peformance, McArdle W., Katch F., Katch V 1991)

As you can see much of the changes that will occur make the athlete more fit. They will have forced their metabolic system to adapt to the demands of training and be able to withstand greater levels of intense exercise.

One of the important keys to remember with metabolic conditioning is that if properly conditioned, and athlete can use his other physical skills more efficiently for longer periods of time. In other words, if they are out of shape, they won't be as agile and quick as they were in the first quarter.

In the sport of football players may not be able to control many things such as fumbles and how the game is played out, but they can always control their conditioning!

Here is a metabolic workout that will be sure to get you in great shape.

Skill Players:

Week 1-2

1 st quarter	2 nd quarter	3 rd quarter	4 th quarter
10	20	30	40
15	25	25	35
25	15	15	5
40	30	5	15
5	10	10	5
35	20	10	35
25	40	35	20
30	5	5	10
5	10	20	15
20	30	5	25

3 minute rest between quarters

Week 3-4

1 st quarter	2 nd quarter	3 rd quarter	4 th quarter
10 5	20 10	30 15	40 20
15 30	25 15	25 5	35 20
25 15	15 20	15 35	5 15
40 40	30 25	5 20	15 10
5 10	10 5	10 5	5 5
35	20	10	35
25	40	35	20
30	5	5	10
5	10	20	15
20	30	5	25

1 minute rest between first set of 10 runs and second set per quarter

3 minute rest between quarters

Week 5-6

1 st quarter	2 nd quarter	3 rd quarter	4 th quarter
10 5	20 10	30 15	40 20
15 30	25 15	25 5	35 20
25 15	15 20	15 35	5 15
40 40	30 25	5 20	15 10
5 10	10 5	10 5	5 5
35 5	20 20	10 5	35 15
25 40	40 30	35 25	20 40
30 15	5 15	5 40	10 5
5 10	10 10	20 15	15 10
20 35	30 5	5 10	25 10

1 minute rest between first set of 10 runs and second set per quarter

3 minute rest between quarters

Game over!

Here are the rules:

1. Players must come out of their position stance. Running backs, receivers, corners, safety, sometimes linebackers...
2. Players are given no more than 10 seconds to get back on the line they just ran to. The

longer the run from 20 yards on they're given 10 seconds, if under 20 they are given 5 seconds.

3. They must move on the whistle, a false start means that rep is repeated.
4. Players always turn around and go the opposite direction for the next rep.

Line/linebackers:

Week 1-2

1 st quarter	2 nd quarter	3 rd quarter	4 th quarter
10	20	40	5
15	35	15	5
5	15	25	5
40	10	5	25
5	10	15	5
10	25	20	35
25	40	30	10
10	5	5	35
5	5	15	25
20	25	5	15

3 minute rest between quarters

Week 3-4

1 st quarter	2 nd quarter	3 rd quarter	4 th quarter
10 10	20 15	40 20	5 25
15 20	35 15	15 25	5 5
5 30	15 15	25 15	5 20
40 5	10 5	5 30	25 5
5 10	10 35	15 5	5 30
10	25	20	35
25	40	30	10
10	5	5	35
5	5	15	25
20	25	5	15

1 minute rest between first set of 10 runs and second set per quarter

3 minute rest between quarters

Week 5-6

1 st quarter	2 nd quarter	3 rd quarter	4 th quarter
10 10	20 15	40 20	5 25
15 20	35 15	15 25	5 5
5 30	15 15	25 15	5 20
40 5	10 5	5 30	25 5
5 10	10 35	15 5	5 30
10 20	25 10	20 25	35 5
25 20	40 10	30 20	10 25
10 5	5 10	5 15	35 5
5 5	5 5	15 10	25 10
20 15	25 10	5 5	15 10

1 minute rest between first set of 10 runs and second set per quarter

3 minute rest between quarters

Game over!

Here are the rules:

1. Players must come out of their position stance. D. line, O. line, linebacker...
2. Players are given no more than 15 seconds to get back on the line they just ran to. The longer the run from 20 yards on they're given 15 seconds, if under 20 they are given 5

seconds.

3. They must move on the whistle, a false start means that rep is repeated.

4. Players always turn around and go the opposite direction for the next rep

Important points:

- The metabolic conditioning should be done 2 times per week with at least 2 days in between bouts

- Players should go through a thorough warm-up and cool-down prior to beginning the metabolic 4 quarter training.

- Players should go through 1-2 weeks of prep conditioning and form running exercises prior to beginning the first week of the metabolic conditioning.

- This should not be done on extremely hot humid days. Best done early or later in the days.

- If players seem to be really struggling getting through this conditioning or look sick, or unable to catch their breath between quarters, have them sit out of the remainder of the metabolic training.

- ALWAYS MAKE SURE THEY HAVE BEEN CHECKED OUT THOROUGHLY BY A DOCTOR BEFORE BEGINNING THIS FORM OF TRAINING!

When players first begin the metabolic training program the first quarter will seem fairly easy. As they move through the quarters the accumulation of all the previous work will start to build and it will get increasingly more difficult. The first 2 weeks won't be too difficult. The first weeks are extremely important to set a foundation for the remainder of the metabolic conditioning. Don't get antsy and do more than is outlined. Athletes not only need to get their cardiovascular and respiratory systems prepared for more intensity, they also need to gradually prepare their muscles and joints for the acceleration and deceleration that takes place.

This is a great workout to get football players in super conditioning. As I said earlier, don't let conditioning be the reason you lose! You have complete control.

Train Smart,

Lee