Fit For Football

All the tactical knowledge and the perfect 12-month training plan will achieve very little if you simply don't have the time (or the inclination) to train 3 or 4 days a week.

Think about what you want to achieve in football. If you take the time to prepare physically now you will reap the rewards later.

1. How much time you are willing to commit to your football training program.
2. What is your current level of conditioning? Which elements of fitness do you need to work on most? Speed? Strength? Endurance?

There are a series of simple fitness tests below to help you find out.

Of all the different types of football training you could perform (strength training, speed training, skill work etc.) it's important to focus on the 20% of training that will make 80% of the difference to your game.

The 12-Month Training Program.

Even if you only play 8 months of the year, your training program should stretch the entire 12 months. There are 4 distinct phases outlined below.

Health Warning

Please note that these fitness tests and exercises should be supervised until participants are competent enough to manage their own fitness routine.

You should seek advice from a sport/medical professional before attempting any of these exercises.

Children and young people under the age of 18 must obtain permission from a parent or guardian before attempting any of these exercises.

Young children under the age of 14 should avoid intense or load bearing exercises due to growth spurts. Bones, tendons, ligaments and muscles are far from fully developed at this age.

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1. Early Pre-Season (4-6 weeks)

Professional players might not see a ball for the first half of the pre-season.
The emphasis is on preparing yourself for the more demanding, late pre-season training. At this early stage break keep things light and not too demanding. The last thing you should do is dive straight into all out, stomach wrenching interval training!

Endurance Training	Stick to predominantly continuous type training. This is lower intensity aerobic conditioning. Continuous training should be the only form of endurance training you perform for the first 2-3 weeks. Gradually progress to more intense interval training as you move into late pre-season.
Strength Training	Ideally you want to develop maximum strength a few weeks before the start of the competitive season. Why? Before you can develop explosive power and even speed you must first develop a solid strength base. Maximum strength can take up to 12 weeks to develop.
Speed & Power Training	No need for any speed or power work at this stage. Leave it until the late pre-season and In-season.
Flexibility	Don't under estimate the importance of flexibility in a soccer training program. Unfortunately most soccer players do. Flexibility training is essential for recovery and injury prevention. The best players in the World are useless on the sidelines! Again you'll find some good soccer stretching exercises you can use to increase your range of movement below. And do remember there stretching to improve flexibility is NOT the same as stretching during a warm up. There are some key differences.
Skill & Tactical Training	The amount of skill work you do at this stage depends on the amount of time you have available. Players old enough to perform demanding fitness training (Over 16) will have a relatively high level of skill. Having said that, you can never stop improving!

2. Late Pre-Season (4-6 weeks)	
A word of warning - these few weeks might have you asking, "Why didn't I take up golf?" but this is the phase of your football training program that will have the greatest impact on your game from a fitness perspective.	
Endurance Training	By now, all of your endurance training should be in the form of interval training. Your training should also become more specific during the late pre-season. Try to match the movement patterns you would find in a typical match. For example; Keep the intervals short and intense, include twists and turns and running backwards, train on grass and juggle a ball during active recovery periods etc.
Strength Training	Gradually decrease the number of strength sessions and replace them with power training sessions such as plyometrics. Plyometric training can be extremely effective at developing power and explosive off-the-mark speed but is not suitable for everyone.
Speed & Power Training	As the competitive season draws closer your training should place more and more emphasis on quickness and sharpness. Again your conditioning must be football specific. Vary your sprint starts for example, by running backwards for a few meters first, jumping to head a ball or controlling and passing a ball before sprinting etc.
Flexibility	As the volume and intensity of your training increases flexibility training becomes even more essential.
Skill & Tactical Training	Combine skill work with some of your fitness training to save time. If you plan to do an intense interval training session do your skill work first. If you plan to combine plyometrics or sprint drills with skill work always perform the plyometrics or sprints first. It goes without saying that the warm up should precede all of these.

Before we move on to In-Season training phase take a look at this chart. It will give a quick reference as to how all the different elements of football fitness integrate over a season.

Priority of Fitness Elements	Early Pre-Season	Late Pre-Season	In-Season
Continuous Training	High	Low	Low
Interval Training	Low	High	Maintenance
Strength Training	High	Moderate	Low
Power Training	High	Moderate	Maintenance
Speed Training	Low	High	Maintenance
Flexibility Training	High	High	High

3. In-Season Training

The goal here is to maintain the fitness you developed during pre season. Regular, competitive matches maintain basic levels of endurance so any additional training should concentrate on speed, power and anaerobic endurance development. Suppose your team trains on Tuesdays and Thursdays and plays on Saturdays, below is an example of how an In-Season training week may look.

Monday	Interval training.
Tuesday	Team training. Tactical and technical. Plyometrics and sprint work.
Wednesday	Weights session and flexibility.
Thursday	Team training. Tactical and technical. Interval training.
Friday	Rest.
Saturday	Match.
Sunday	Recovery run and flexibility.

The competitive season can last up to 8 months. Training at the same level of intensity week in week out only promotes the chances of injury and burn out. Every 6 weeks or so give your body a break and a chance to recover. For a week, drop the intense speed and power sessions and just perform 2 or 3 light aerobic sessions instead.

4. Closed Season Training

Avoid abandoning all forms of physical conditioning now the season has ended. If you do nothing for 6 weeks much of the hard work you've put in over the last season will be lost.
Do what professional players are advised to do. Cross-training or X-Training.
Do some other form of activity that keeps your fitness levels ticking over AND gives you a mental break from football. Swimming, cycling, tennis, basketball - any of these are good alternatives. Try to exercise 3 times a week for at least 30 minutes.

	Phases In A 12 Month Football Training Program											
Month	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Phase	CS	CS	EPS	LPS	IS	IS	IS	IS	IS	IS	IS	IS

CS = Closed season soccer training, EPS = Early pre-season soccer training, LPS = Late pre-season soccer training, IS = In season soccer training.

Splitting the football training program up this way really is the most effective approach to conditioning. And it will give you a tremendous advantage over other players and teams.

5. 1-RM (one repetition, maximum)

Take your 1-RM weight for the bench press and leg press and divide it by your body weight. So for example, if you were able to lift 300lbs (136kg) on the leg press and you weigh 175lbs (80kg), that equates to a score of 1.7. Compare your score with this chart.

Bench Press	Poor	Fair	Good	Very good	Excellent
Men	0.6	0.8	1.0	1.2	1.4
Women	0.3	0.4	0.5	0.6	0.7
Leg Press	**Poor**	**Fair**	**Good**	**Very good**	**Excellent**
Men	1.4	1.8	2.0	2.4	2.8
Women	1.2	1.4	1.8	2.0	2.2

6. Strength Endurance Assessment

The score is simply determined by the number of repetitions completed in one minute.
For a sit up to qualify you must place you hands to the side of you head, bend your knees and keep your feet flat on the floor. Your elbows must touch your knees and someone should hold your feet for support. Compare your score with this chart.

Sit Ups	Poor	Fair	Good	Very good	Excellent
Men	20	30	40	50	60
Women	20	30	40	50	60
Push Ups	**Poor**	**Fair**	**Good**	**Very good**	**Excellent**
Men	10	20	30	40	50
Women	10	20	30	40	50

*The scores for women's push ups are based on the modified push up - i.e. placing your weight on you knees instead of your toes.

7. 40m Sprint - Short Term Power Test

This test measures your ability to accelerate to full speed quickly, as well as reaction time:
1. Set out two markers 40 meters apart.
2. On a signal of "Marks - Set - Go" sprint from one cone to the other as quickly as possible.
3. Ask a training partner to record your time with a stop watch.
4. Perform 2 trials and take the average time to the nearest 0.1 seconds.

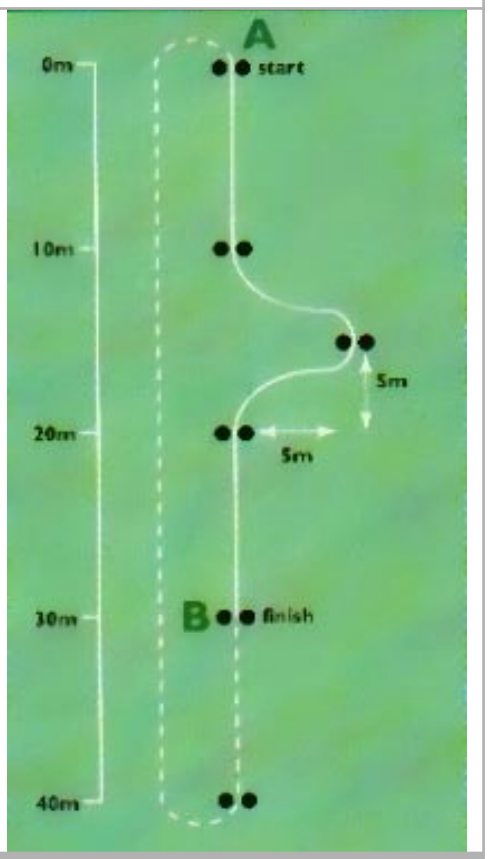
Trial 1	Trial 2	Average score	Excellent	Fair
5.23	5.41	5.3	4.6	5.8

Your score can vary from 4.6 seconds for competitive athletes to 5.8 for recreational participants.

8. 30m Sprint Fatigue - Power Maintenance Test

In many multi-sprint sports such as basketball, hockey, rugby, football and so on, players often have to reproduce sprints in quick succession. The ability to recover between sprints and produce the same level of power over and over is a measure of sprint fatigue.

For this test you require 12 cones or markers and a stopwatch. Look at the diagram to see how to set the cones out:
1. Sprint from A to B between the cones deviating 5m sideways in the middle of the sprint. Ask a training partner to start you and time your sprint from A to B.
2. Jog slowly for 10 meters after point B and then back to the start taking 30 seconds to do so.
3. As soon as you reach the start repeat the sprint.
4. Complete a total of 10 sprints and note down all the times.
5. Subtract your fastest time from your slowest time. This is your sprint fatigue. For example if your slowest sprint was 7.8 seconds and your fastest sprint was 6.9 seconds your sprint fatigue is 0.9 (7.8 - 6.9).
Another useful tool to use with your results is to find the average speed of the first three trials and divide it by the average speed of the last three trials. So if your times were: 7.1, 6.9, 6.9, 7.0, 7.2, 7.1, 7.3, 7.3, 7.4, 7.5
The average of the first 3 times is 6.97, the average of the last 3 times is 7.40.
6.97 divided by 7.4 = 0.94 x 100 = 94%



Power Maintenance

Level	Category	% Top Speed Maintained
1	Excellent	+90%
2	Good	85-89%
3	Average	80-84%
4	Poor	<79%

9. Hexagon Drill

This is useful for all athletes to measure their agility, balance, co-ordination and quickness.

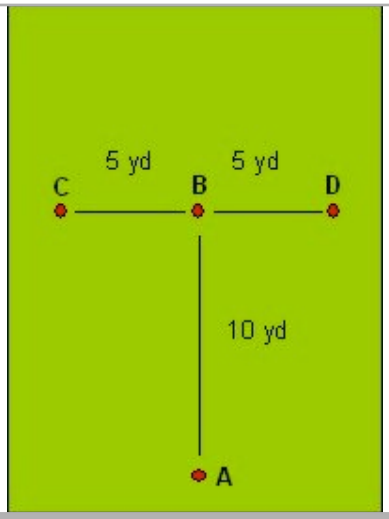
1. Mark out a hexagon on the floor with tape or chalk. Each side should be 24 inches long with a 120 degree angle. Avoid hard surfaces such as concrete.
2. Stand inside the hexagon opposite one of the sides. Keeping your feet together, jump across the side you are facing and then immediately back into the middle of the hexagon.
3. As soon as you land jump over the next side of the hexagon. Continue until you have completed 3 full revolutions of the shape. You can go either clockwise or anticlockwise.
4. Have someone time you. There is no data to compare this test to so keep a note of the time to beat on your next testing day.

10. T-Test

The T-test is the standard test used to measure agility.

1. Set out 4 cones according to the diagram below.
2. Starting on cone A sprint to cone B touching the base.
3. Turn left and shuffle to cone C also touching its base. Face forwards when shuffling (i.e. so the left foot leads) and do not cross your feet over one another.
4. Shuffle right to cone D facing the same way (i.e. leading with right foot) and touch the base.
5. Shuffle back to cone B (still facing the same way) and touch the base.
6. Finally, run backwards to cone A and stop the clock.

Take the best time of two trials to the nearest 0.1 seconds. Compare your results to the chart below:



Power Maintenance

Classification	Males	Females
Football	8.9	9.9
Cricket	9.2	10.4
Tennis	9.4	11.1
Recreational players	10.5	12.5
Social players	11.1	13.5

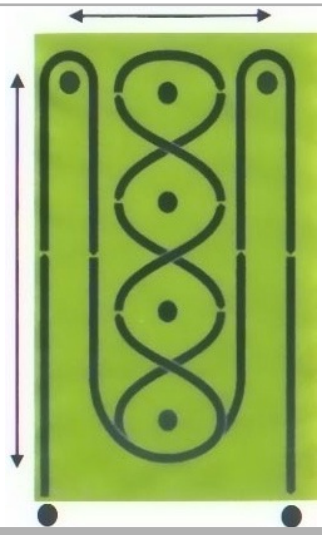
11. Standing Long Jump

Along with the vertical jump, this power test is used to measure explosive power.

1. Stand at a mark with your feet slightly apart.
2. Taking off and landing with both feet, swing your arms and bend the knees to jump forward as far as possible.
3. Measure the distance, rest fully and repeat a total of 3 times. Take the longest of the 3 trials as your score. Compare your results with the table below:

Standing Long Jump Test

Classification	Males	Females
Excellent	>3.0m	>2.8m
Good	2.7m	2.5m
Average	2.5m	2.2m
Below Average	2.3m	1.9m
Poor	<2.0m	<1.7m

12. Illinois Test		
This test measures your ability to change direction quickly, or an athlete's agility		
You will require 8 cones and a stop watch. Look at the diagram to see how to set the cones out: 1. Sprint the course from start to finish and ask your training partner to record your time. 2. Rest fully and repeat the test for a total of 3 trials. Take your quickest time and compare to the chart below:		
Power Maintenance		
Classification	Males	Females
Excellent	<15.9 secs	<17.5 secs
Good	15.9 - 16.7 secs	17.5 - 18.6 secs
Average	16.8 - 17.6 secs	18.7 - 22.4 secs
Below Average	17.7 - 18.8 secs	22.5 - 23.4 secs
Poor	>18.8 secs	>23.4 secs

13. Balke 15 Minute Run	
This is a very simple test to predict VO2max. You will require a stop watch and a standard 400m running track.	
After warming up run for 15 minutes continuously. The idea is to maintain a steady pace throughout the run. The distance you cover is converted into a predicted VO2max using the following table:	
Balke Test	
Distance (meters)	Predicted VO2max (ml/kg/min)
6000	80.0
5600	75.0
5200	70.0
4800	65.5
4400	61.0
4000	56.5

14. Standing Vertical Jump

This is a classic test for short-term explosive power and is particularly useful for any athlete that is required to jump.

1. Chalk your hand and stand next to a wall. Reach up with your hand closest to the wall and make a mark. Remember to keep your feet flat on the floor.
2. From a standing start dip down quickly until your thighs are roughly parallel to the ground and then jump up as high as possible. Make a mark on the wall with your hand at the highest point. When dipping down prior to the jump, do NOT pause in a bent knee position. This reduces the amount of power generated reducing the overall score.
3. Measure the distance between the two chalk marks. This is your score.
4. Complete three trials and take the best score to the nearest 1cm.

Compare your results to the table below:

Jump height can be converted into a power using the following formula:
Power = body mass(kg) x (4.9 x height jumped in meters)2
So for example if you weigh 80kg and jumped 50cm (0.5m) your score would be;
{80 x (4.9 x 0.5)2} = {80 x 2.45 x 2.45} = {480kg-m}

Vertical Jump Test

Classification	Males	Females
Excellent	>65cm	>55cm
Good	60cm	50cm
Average	55cm	45cm
Below Average	50cm	40cm
Poor	<46cm	<36cm

15. Cooper 12 Minute Run

This is another endurance test you can use to predict your VO2max. Again you only require a stopwatch and a 400m track.

Run or walk continuously for 12 minutes. Try to maintain a constant pace throughout. Note the total distance covered and use one of the following formulas to predict your VO2max:

For distance in yards.
0.0206 x yards covered minus 11.3

For distance in meters.
0.0225 x meters covered minus 11.3

So if you covered 3000 meters for example:
0.0225 x 3000 - 11.3 = 56.2 ml/kg/min

16. Multistage Shuttle Run (Bleep Test)
This is a maximal test which means it is performed until exhaustion. The test is excellent for multi-sprint sports such as football and rugby and it allows testing for an entire team simultaneously.
The test involves running 20 meter shuttles. The test is split into a series of 1-minute levels. Each level consists of a number of bleeps that dictates the pace at which each 20 meter shuttle must be run. As the levels progress the bleeps become quicker and more frequent so a greater number of shuttles has to be completed inside 1 minute. The starting speed (level 1) is 8.5km/hr and increases by 0.5km/hr for each level. The test ends when the athlete(s) can no longer maintain the pace of the bleeps.

17. Flexibility Tests
Use these flexibility tests before you begin a stretching program and then every 6-8 weeks during your flexibility training.
Before you perform these tests make sure you warm up thoroughly with 10 minutes of light jogging or skipping.

18. Modified Sit and Reach Test
The sit and reach test is the most common flexibility test. It measures the flexibility of the lower back and hamstrings. It requires a box about 30cm (12 inches) high and a meter rule:
1. Sit on the floor with your back and head against a wall. Legs should be out straight ahead and knees flat against the floor. 2. Have someone place the box flat against your feet (no shoes). Keeping your back and head against the wall stretch your arms out towards the box. 3. Have someone place the ruler on the box and move the zero end towards your fingertips. When the ruler touches you fingertips you have the zero point and the test can begin. 4. Lean forward slowly as far as possible keeping the fingertips level with each other and the legs flat. Your head and shoulders can come away from the wall now. Do NOT jerk or bounce to reach further. 5. Slowly reach along the length of the ruler 3 times. On the third attempt reach as far as possible and hold for 2 seconds. Have your training partner read the score. Repeat twice and compare your best score with the table below.

Sit and Reach Test - Distance (cm)		
Classification	Men	Women
Excellent	15+	16+
Good	11-14	12-15
Average	7-10	7-11
Below Average	4-6	4-6
Poor	<3	<3

19. Trunk Rotation Test
This flexibility test measures trunk and shoulder flexibility. The only equipment required is a wall and a piece of chalk or pencil.
1. Mark a vertical line on the wall. Stand with your back to the wall directly in front of the line. You should be about arms length away from the wall with your feet shoulder width apart. 2. Extend your arms out directly in front of you so they are parallel to the floor. Twist your trunk to your right and the touch the wall behind you with your fingertips. Your arms should stay extended and parallel to the floor. You can turn your shoulders, hips and knees as long as your feet don't move. 3. Mark the position where your fingertips touched the wall. Measure the distance from the line. A point before the line is a negative score and a point after the line is a positive score. 4. Repeat for the left side and take the average of the 2 scores and compare with the table below:

Trunk Rotation - Distance (cm)		
Classification	Men	
Excellent	20cm	
Good	15cm	
Average	10cm	
Below Average	5cm	
Poor	0cm	

20. Groin Flexibility Test
This flexibility test measures flexibility in the adductors. The only piece of equipment you require is a ruler or tape measure:
1. Sit on the floor with your knees bent, feet flat on the floor and legs together. 2. Let your knees drop sideways as far as possible keeping your feet together. The soles of your feet should be together. 3. Clasp your feet with both hands and pull your ankles as close to your body as possible. Measure the distance from your heels to your groin. Compare the results with the table below.

Groin Flexibility - Distance (cm)		
Classification	Men	
Excellent	5cm	
Good	10cm	
Average	15cm	
Below Average	20cm	
Poor	25cm	

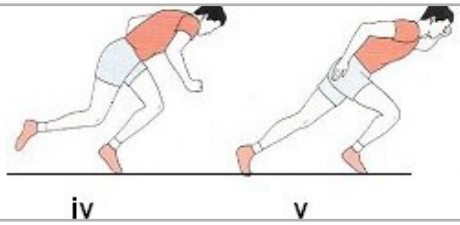
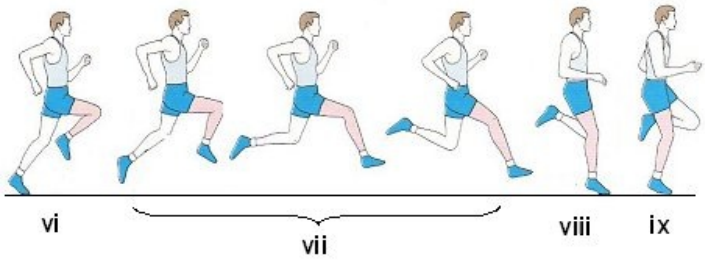
21. Total Body Circuit Training Exercises	
Squat Jumps	1. Stand with feet shoulder-width apart, trunk flexed forward slightly with back straight in a neutral position. 2. Arms should be in the ready position with elbows flexed at approximately 90. 3. Lower body where thighs are parallel to ground. Explode vertically and drive arms up. 5. Land on both feet and repeat. 6. Prior to takeoff extend the ankles to their maximum range (full plantar flexion) to ensure proper mechanics.
Burpees	1. Start in a standing position and bend your knees and place your hands on the ground. 2. Extend your legs back into a push up position. Bring your knees back in towards chest and stand back up. 3. This should be a continuous motion and be fluid.
Skipping	There are various types of skipping and they make excellent circuit training exercises - two feet off the ground, alternate feet, hop on one leg for 5 then swap and so on.
Dumbbell Squat and Swings	1. Start position: Holding a dumbbell in each hand start in squatted position with dumbbells between legs. 2. Start movement by standing up and keeping arms straight rotate shoulders and trunk towards the left. 3. Return to the starting position and repeat to the other side. 4. Repeat for the prescribed number of repetitions.
Tuck Jumps	Standing on the spot, jump up with both and tuck both knees in towards your chest.
Squat Thrusts	In a push-up position bring both knees in towards your chest and then explode out again so they are fully extended. Repeat in a smooth, rhythmical fashion.
Treadmills	Similar to squat thrusts only alternate your feet. In the push-up position with legs extended bring one knee into your chest, then quickly switch to bring the other knee into your chest. The action should be a smooth running motion as your arms stay fixed.
High Knees	Running on the spot pick your knees up to waist height and pump your arms.
Fast Feet on Box	Use a sturdy box or aerobic step. Step on and off quickly making sure both feet come into contact with the box. Every 20 or 30 step-ups change your feet so the opposite leg leads.
Jumping Jacks	Start with your legs side by side and your arms by your side. In one motion jump and spread your legs out to the side while your arms raise out and up over your head. Land in this position and then return to the starting position and repeat.

21. (cont) Total Body Circuit Training Exercises	
Alternating Split Squat	1. Stand with feet hip width apart. Take left leg and step back approximately 2 feet standing on the ball of back foot. 2. Feet should be positioned at a staggered stance with head and back erect and straight in a neutral position. Place hands on waist. 3. Lower body by bending at right hip and knee until thigh is parallel to floor then immediately explode vertically. 4. Switch feet in the air so that the back foot lands forward and vice versa. 5. Prior to takeoff extend the ankles to their maximum range (full plantar flexion) ensure proper mechanics.
Squat to Presses	Holding a relatively light dumbbell in each hand by your side, squat down until your knees are bent just above 90 degrees. As you extend your legs push the dumbbells overhead and extend your arms fully. Lower the weights as you squat down again.
Ricochets	Stand with your feet together and arms by your sides. Keeping your feet together jump forward a foot or so. Jump back to the starting position. Jump to your left, back to the start, then the right and then behind you. Repeat this sequence by keeping ground contact time minimal and feet together.
Cardio Equipment	If you're lucky enough to own any cardiovascular equipment (treadmill, cross trainer, rowing machine) they make good circuit training exercises. Of course if you perform your routine at the gym you have an even greater range of choice.

22. Upper Body Circuit Training Exercises	
Dumbbell Exercises	There are dozens of upper body circuit training exercises you can do with dumbbells. Examples include biceps curls, lateral raises, alternating shoulder presses, triceps extensions, front raises, single arm rows.
Push-Ups	To make regular push-ups easier (remember you need to sustain them for 30-60 seconds), keep your knees in contact with the ground.
Wide Push-Ups	Same as a regular push-up except spread your hands to wider than shoulder width.
Diamond Push-Ups	Same as a regular push-up except place your hands together and make a diamond shape with your thumbs and forefingers.
Plyometric Push-Ups	Same as a regular push-up except as you extend your arms push up explosively so your hands leave the ground. Then allow your elbows to bend slightly to absorb the shock as you land. Lower and repeat. A variation of this exercise is to quickly clap your hands as they are in the air.
Bench Dips	1. Sit upright on the edge of a sturdy bench and place hands hip width apart, palms down, fingers pointing forward and gripping the edge of the bench. Place heels on another bench with legs out straight in front of you. 2. Start position: Slide gluts off bench with elbows slightly bent. 3. Lower body by bending at elbows until elbows are at 90 degree angle. Return to start position.

23. Lower Body Circuit Training Exercises	
Dumbbell Exercises	As with the upper body there are dozens of circuit training exercises for the lower body you can do with a simple set of dumbbells. Examples include, squat variations, lunges, calf raises, dead lifts
One Leg Squat	This is one of the more difficult lower body circuit training exercises - even with just your own bodyweight. Make sure you build gradually up to this one... 1. Stand with feet hip width apart with knees slightly bent and toes pointing forward. 2. Start position: Lift one foot off ground and extend leg forward. Extend arms forward at hip level. 3. Lower body by flexing at the hips and standing leg knee. Upper body can flex forward at the hips slightly (~5) during movement. Be sure to "sit back" so that knees stay over the feet. 4. For balance, hold on to a chair by your side. Once thigh is slightly above parallel return to start position. 5. Remember to keep head and back straight in a neutral position - hyperextension or flexion may cause injury. Keep weight over the middle of foot and heel, not the toes. Keep abdominals tight throughout exercise by drawing stomach in toward spine.
Single Leg Kickbacks	1. Start in a four point position with your hands and knees on the ground. 2. Proceed to kick your leg back and up until you reach full extension. 3. Squeeze your glut muscle while performing this movement. Repeat with the other leg
Forward Lunges	1. Start by standing with your feet shoulder width apart. 2. Step forward with one foot and bend your knees into a lunged position. Your back knee should come close to touching the ground and your front leg should be bent to about 90 degrees at the knee. 3. Maintain your upright posture throughout the movement. Return to the starting position and repeat on the opposite leg. 4. If you have them, hold a light dumbbell in either hand.
Box Step with Knee Drive	1. Stand behind box and place one foot on top of box, heel close to the closest edge. Hold a dumbbell in each hand. 2. Push off the box and explode vertically and drive your other knee up towards your chest. 3. Repeat with other leg.
Bicycle Kicks	1. Lie on your back with your knees at chest level and your arms flat on the floor. 2. Alternate extending your legs by extending one leg out straight and as you bring it in extend the other leg out. 3. Continue to repeat this process like you are riding a bicycle until the required repetitions are completed. 4. Make sure you keep your back flat during the movement. If you are unable to keep your back flat then reduce the extension of your legs.

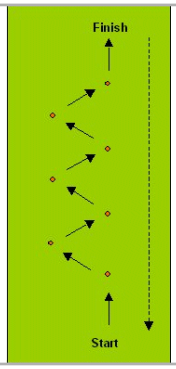
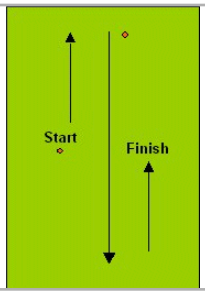
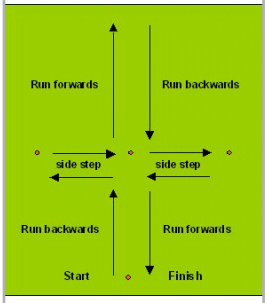
24. Core Region Circuit Training Exercises	
Sit-Ups with a Twist	1. Start position: Lie back onto floor or bench with knees bent and hands behind head. Keep elbows back and out of sight. Head should be in a neutral position with a space between chin and chest. 2. Leading with the chin and chest towards the ceiling, contract the abdominal and raise shoulders off floor or bench. As you come up twist one shoulder towards the opposite knee. 3. Return to start position and repeat with the other shoulder. 4. Remember to keep head and back in a neutral position. Hyperextension or flexion of either may cause injury.
Supermans	1. Start position: Lie face down on floor with hands down at sides. You may place a rolled towel under forehead to clear face from floor. 2. Raise chest and head off floor keeping feet in contact with floor. To increase resistance, extend arms out in front like superman. 3. Do not raise head past 8-12 inches - excessive hyperextension may cause injury. To vary exercise raise feet while raising trunk.
Double Crunch	1. Lie back onto floor or bench with knees bent and hands behind head. Keep elbows back and out of sight. Head should be in a neutral position with a space between chin and chest. 2. Start position: Hands behind head and knees bent at 90 degrees. 3. Leading with the chin and chest towards the ceiling, contract the abdominals and raise shoulders off floor or bench. During the crunch, also bring knees towards chest. 4. Return to the start position.
V-Ups	1. Start position: Lie back onto floor or bench with knees bent and hands extended towards ceiling. Head should be in a neutral position with a space between chin and chest. 2. Leading with the chin and chest towards the ceiling, contract the abdominal and raise shoulders off floor or bench. Also raise legs up towards ceiling and attempt to touch your hands to your feet. 3. Return to start position.
Oblique Crunch	1. Start by placing your left foot over your right knee and place your hands behind your head. 2. Lift your shoulders up off the ground and twist so that your right elbows tries to touch your left knee. 3. Return to the starting position and repeat according to the required repetitions. 4. Repeat with the other side.
Hip Thrusts	1. Lie on your back with your legs bent 90 degrees at the hip. 2. Slowly lift your hips off the floor and towards the ceiling. 3. Lower your hips to the floor and repeat for the prescribed number of repetitions.
Push-UP Superman. Alternating Arms	Starting Position: Start the movement in a plank position. Holding that position raise your right arm and left leg off of the ground. Return to the starting position and repeat with the other arm and leg. Hold each lift for 1-2 seconds.

25. How to Improve Your Sprinting Technique	
By breaking sprinting technique into its component parts you can focus on and improve specific phases of the action. Good sprinting technique has some of the following characteristics (1):	
START PHASE	i) Bodyweight evenly distributed over four contact points in the start position (i.e. hands and knees). Front knee angle is ~90o, rear knee angle ~100-130o. ii) Explosive push off with both legs. Front leg extends remaining in contact with the ground while back leg swings forward. Extended front leg and trunk form a straight line. iii) Arms swing opposite to legs, elbows flex to ~90o and fists swing towards forehead.
	
ACCELERATION PHASE	iv) After first two strides, foot touches down in front of centre of gravity. v) Forward body lean begins to decrease until normal sprinting position is reached after about 22 yards (20 meters). Head is relaxed, eyes focused straight ahead.
	
MAXIMUM SPEED PHASE	vi) Push-off angle from ground is ~50-55o. Trunk is almost erect with ~5o forward lean. vii) (Mid-flight) Push-off leg folds tightly towards buttocks in a relaxed heeling motion. Front leg thrusts forward and upward at maximum speed (~44mph in elite sprinters). When front thigh reaches maximum possible knee lift, lower leg swings forward in a relaxed movement. viii) Foot meets ground with ankle slightly extended (plantar flexion) directly under centre of gravity. Bodyweight is balanced so that only the ball of the foot touches the ground. ix) Shoulders remain steady, elbows flexed at ~90o, kept close to body throughout all phases. Hands swing forward and up above shoulder height, down and past hips. Arms and hands should have an aggressive hammering action. Head aligns naturally with trunk and shoulders and facial/neck muscles are relaxed by keeping the mouth slightly open.
	

25. (cont) Sprinting Technique Program	
These sprinting technique drills can be performed in this order or alternatively focus on just 3-4 drills. There is no need to perform multiple sets and repetitions.	
Raise Knees	10 meters - jog - 10 meters - rest Sprint 10 meters concentrating on raising knees as higher than normal. Jog for 10 meters and then sprint for 10 meters and rest.
Fast Knee Pick Ups	10 meters - jog - 10 meters - rest Jogging on the spot raise your knees to waist height while emphasising arm action. Move forward 10 meters with this action concentrating on the number of ground contacts rather than how fast you cover the distance. Try to get as many ground contacts as possible.
Flicks	10 meters - jog - 10 meters - rest While sprinting over 10 meters concentrate on flicking your heels up to touch your gluteus.
Leg Speed	60 meters This is a normal sprint over 60 meters except all of your focus should be on your legs. Try to gauge the optimum leg speed for you by taking different stride lengths to see which yields the best results.
Skipping	40 meters
High Hops	3 x 40 meters Bound from one foot to the other. The action is similar to skipping except your are trying to gain as much height as possible and stay in the air for as long as possible. Remember to recover fully between attempts.
Elbow Drive	40 meters Sprint for 40 meters concentrating on driving your elbow in a straight line. Keep your elbows flexed at right angles while keeping your arms relaxed.

26. Six Soccer Agility Drills

Use these sample soccer agility drills to improve your balance, body control, foot speed and co-ordination. Like speed drills, agility drills should not be physically exhausting. A slow jog or walk between each drill should allow complete recovery. The emphasis must be on quality and form. Because these soccer agility drills are not physically demanding, you can perform them any time during the week and on any day. Many coaches like to get all the intense physical training out of the way before they move on to (more enjoyable?) skill practise. The problem is skills need to be performed with near perfect form. Practise does NOT make perfect - it makes permanent. So rehearse getting it right! With that in mind I would perform soccer agility drills and skill work after the warm up before moving into more enervating, fitness drills. A typical agility session could consist of 3-5 sets of 10 repetitions in total (a repetition being one drill).

Weave In Weave Out	1. Place 4 markers out in a straight line approximately 3 yards apart. 2. In between each set of markers place another marker, 3 yards to the left. (see diagram right) 3. Sprint from one marker to the next bending down to touch each one with your hand. 4. The emphasis is on taking quick side steps, rather than turning to face the marker and sprinting forward - that takes more time (which you don't have in a game).	
Follow the Leader	1. Mark out a large area - 20 x 20 yards for example. 2. Pair up with a team mate and have them run randomly within the area. 3. Try to maintain 2 yards distance from them at all times. Your team mate should be changing direction and pace constantly.	
Box Drill	1. Use 4 cones or markers to mark out a square approximately 5yards by 5yards. 2. Place a cone in the centre of the square. This is your starting position. 3. Give each corner a number and remember it! Have a team mate (or your coach) call numbers at random. 4. Sprint to the corner shouted and return to the middle.	
Mini Shuttle	1. Place 2 markers 20 yards apart. Place marker in the middle only 3 yards to the side. (see diagram) 2. Starting from the middle marker sprint to one end (10 yards), turn and immediately sprint to the other end (20 yards) and then back to the start (10 yards). 3. Turn on a different foot at each marker and try to touch the ground with your hand.	
Super Shuttle	1. Set a series of cones out in a cross formation. (see diagram) 2. Run backwards to the centre cone, side step to the right cone (or your left if you are performing the drill), side step back to the centre cone still facing the same way. 3. At the centre cone turn and sprint forward to the end cone. Now run back to the centre cone, side step to the left, side step back to the centre, then turn and sprint back to the start. 4. Phew! Sounds complicated - it's not - the diagram explains it quicker than I can!	
Slalom	1. Place 10 shuttles in a line 5 yards apart. 2. Weave in and out as fast as possible and walk back to the start. 3. This exercise is often performed much more slowly with a ball. The goal here is to develop speed of leg movement so no ball is used.	