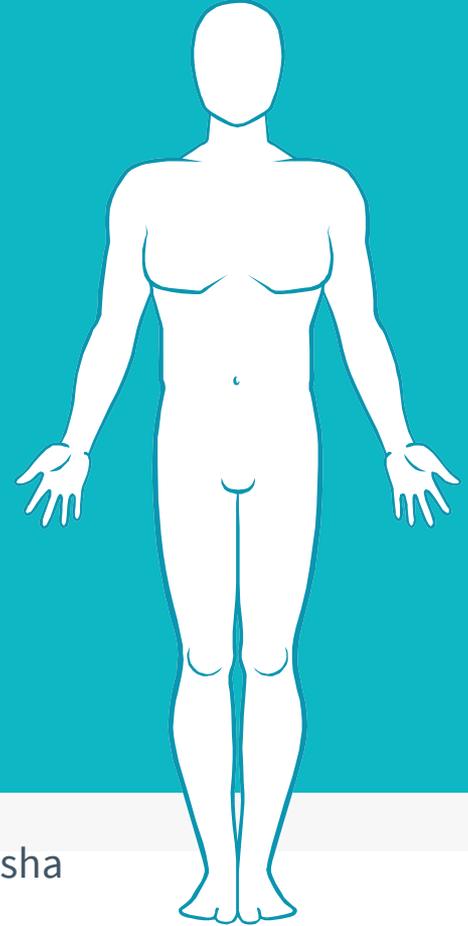


Fitness Conditioning Project



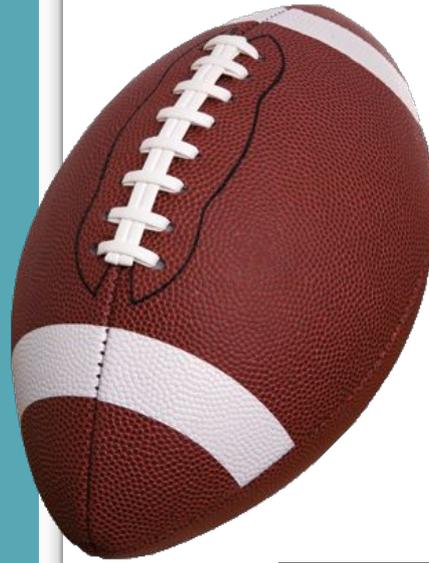
By: Elina Kang, Karthik Iyer, Sanjana Shankar, Harsha Sangam, Adyasha Padhi, Saijal Chaudhary, and Tasneem Zubi

Our Fitness Circuit

Athlete: Football Player

Goals:

- Improve Lateral Agility
- Build Core Strength



Our Athlete

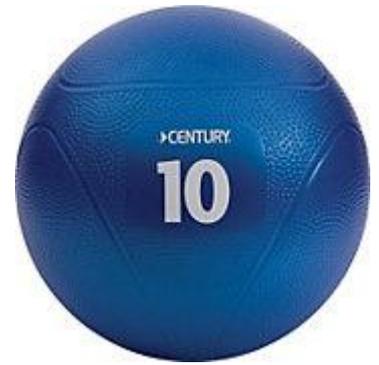
Athletic American football players such as Aaron Rodgers need agility and strength to be as powerful as they are. Since football is such an intense and potentially dangerous sport, it's important that athletes, especially quarterbacks, are strong and need great lower body strength and agility in order to get past the opposing defense and score a touchdown.



Station Materials:

For this circuit, we need

- 2 agility ladders
- 5 agility hurdles
- 3 medicine balls (10 lbs.)
- 3 green resistance bands
- 3 gray resistance bands
- 8 bosu trainers
- 10 “10 lbs.” kettlebells
- 10 “15 lbs.” kettlebells
- 30 purple agility steps
- 5 green agility steps



Station Setup

Station 1: Line up 5 hurdles in a straight line. Start by standing on their left and jump from side to side.

Station 2: Place the bosu with the rounded side down on the ground. Put your feet on the flatter side and squat.

Station 3: Set up two of the purple agility step supports and place the green step on top. The height can be adjusted as needed. Stand sideways with one foot on the agility step in a side squat stance and jump alternating your feet.

Station 4: Hold 2 dumbbells in each hand, and get ready to go down into a squat position. Lunge forward and back.

Station 5: Have one person hold the resistance band, while the other person should go into the resistance band, and pick up the medicine ball. Have the one holding the band go into a squat position. The other on should slam the medicine ball, pick it up, and continue.

Station 6: Lay out the agility ladder and have the participant move forward with their feet in an in, in, out, out motion.

Groups

Group Size

Please divide
yourselves up into
groups of 5 now

Station 1

Side Hurdle Jumps

Station One - Exercise Explantation

1. Need one adjustable hurdles per person
2. Stand with both feet planted on the ground shoulders width apart lateral to the hurdle.
3. Lift foot closest to hurdle and push off the ground.
4. Continue jumping side to side over the hurdle.



Modifications and Progressions



Progression:

- Try to jump over the hurdle, then immediately jump back over



Modification:

- Instead of jumping, step over the hurdle with both feet sideways

Benefits of Station One

The sideways jumping motion over the hurdle helps promote balance and stability. This, in turn, helps to strengthen the core and leg muscles. Although seemingly simple, the exercise can work leg muscles very hard and targets the calf and hamstring muscles. This helps improve agility by improving lateral precision and strength.



Station 2

Bosu Squats

Station Two - Exercise Explantation

1. Stand on the flat side of the bosu, and make sure that you are balanced
2. Go down into a squat while maintaining balance, then come back up
3. Repeat till time is up



Benefits of Station Two

Squats engage muscles in the hips, legs and core muscles and are essential for building pure lower limb strength and preventing injuries, especially from tackles. Squats also improve speed and make power output more efficient. The Bosu Ball



Modifications and Progressions



Progression:

- Add dumbbells to the bosu squats and push your arms up while coming up



Modification

- Don't use the bosu ball and just squat

Station 3

Lateral Side Steps

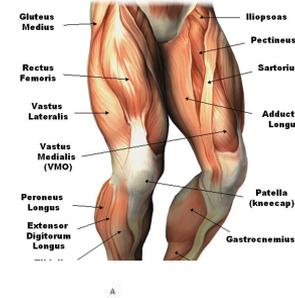
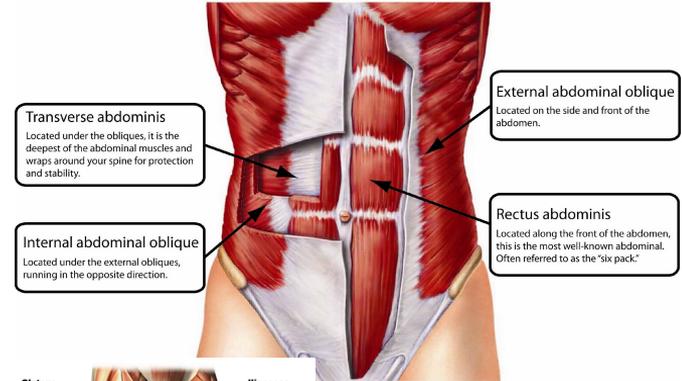
Station Three - Exercise Explantation

1. Start on either side of agility step
2. Hop on with the foot furthest away from the step
3. Step off with the other foot and touch the ground with your hand

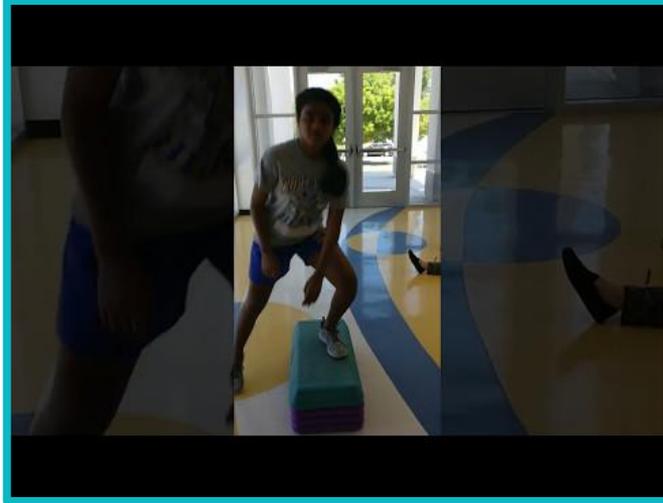


Benefits of Station Three

This exercise tones your quads, outer thighs, and even your obliques. The lateral side steps helps build agility. This exercise is common for football players because of its focus on increasing quick reflexes and pump up your glutes. By increasing strength it also benefits precision of steps in any sport.



Modifications and Progressions



Progression:

- Add more steps to make the lateral side steps more challenging



Modification

- Remove steps to make the lateral side steps more easier

Station 4

Kettlebell Lunges

Station Four - Exercise Explantation

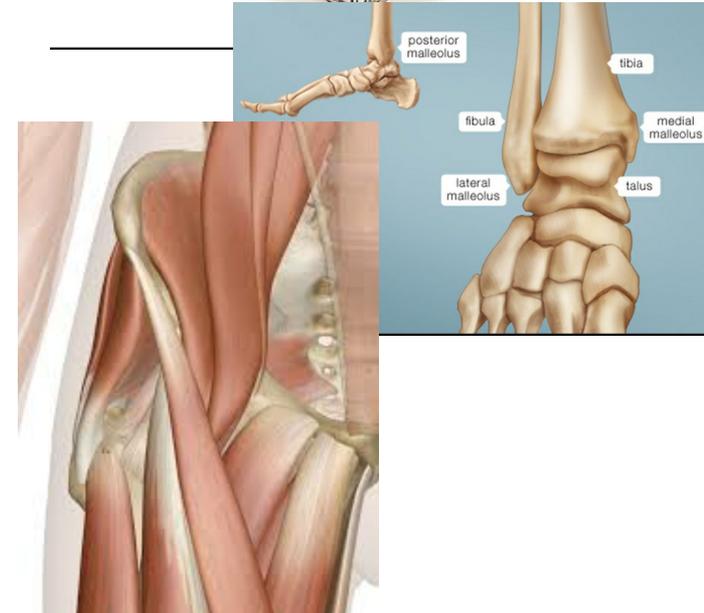
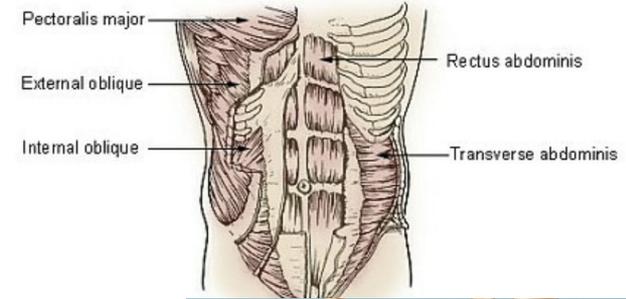
1. Step forward with right foot while keeping your arms straight down holding the dumbbell
2. Retract your right foot
3. Switch to your left foot and continue till time is up



Benefits of Station Four

This exercise challenges the athlete's core muscles and it improves and prevents nearly all forms of foot, ankle and hip deficiencies. It also improves one's alignment from head to toes. Intensifies body stability and improves full body posture.

Muscles of the Trunk



Modifications and Progressions



Progression:

- Use 15-pound kettlebells instead of 10-pound kettlebells



Modification

- Use only one 10-pound kettlebell and hold it in front of yourself

Station 5

Medicine Ball Slams

Station Five - Exercise Explanation

1. Have one person wrap a band around their waist and have another person hold the band behind them and pull in a squat position
2. Have the first person lift the medicine ball
3. Then throw the ball to the ground



Benefits of Station Five

Doing this exercise will work thighs, glutes and lower legs. This is great especially if your goal is to lose thigh fat, toner legs, or a slim physique.



Modifications and Progressions



Progression:

- Use both the gray and the green resistance bands to double the resistance



Modification

- Use the gray resistance band because it is the least resistance

Station 6

Agility Ladder Drills

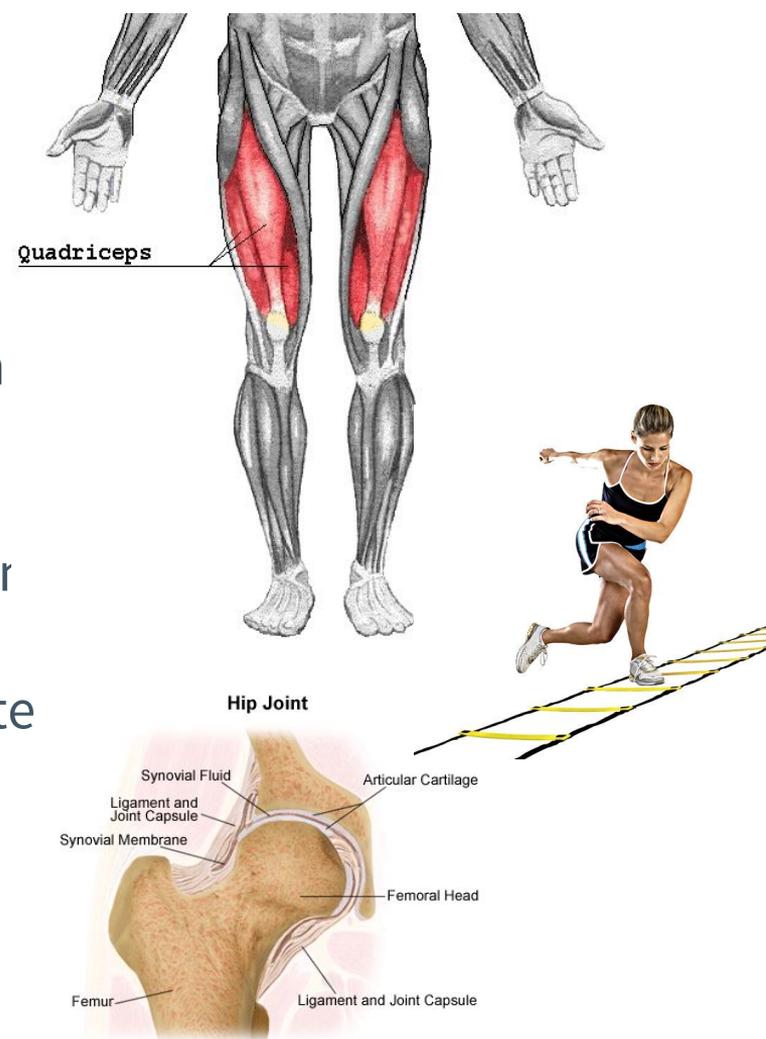
Station Six - Exercise Explantation

1. The exercise begins with the athlete on one side of the agility ladder.
2. The athlete then begins to step into the first space between the rungs with the leg farthest from the ladder.
3. The athlete performs karaoke leg swings till they reach the end of the ladder.
4. The athlete starts over once they reach the opposite side.



Benefits of Station Six

This station helps improve lateral agility because of the sideways swinging motion of the legs. It also helps to stretch the hamstring muscle and warms up the quadriceps. The exercise also helps loosen the hip joints through the turning motion of the torso. The “ladder” helps the athlete know what increments to step in. The exercise will eventually help any athlete develop stronger leg muscles. It prevents bone atrophy in the hip bones.



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