# **Otterbein University**

# Digital Commons @ Otterbein

Health and Sport Sciences Faculty Scholarship

**Health and Sport Sciences** 

4-2011

# A Conditioning Program for Skill Positions Using Lunge Variations

Kim Fischer Otterbein University

Follow this and additional works at: https://digitalcommons.otterbein.edu/hsports\_fac



Part of the Sports Sciences Commons

# **Repository Citation**

Fischer, Kim, "A Conditioning Program for Skill Positions Using Lunge Variations" (2011). Health and Sport Sciences Faculty Scholarship. 23.

https://digitalcommons.otterbein.edu/hsports\_fac/23

This Article is brought to you for free and open access by the Health and Sport Sciences at Digital Commons @ Otterbein. It has been accepted for inclusion in Health and Sport Sciences Faculty Scholarship by an authorized administrator of Digital Commons @ Otterbein. For more information, please contact digitalcommons07@otterbein.edu.

The Cover 2 Slide • Winning in a Small Town, Part 2

VOLUME 16 NUMBER 7 2010

# MONTHLY MONTHLY JOSEPH DE LA CONTROLLE DE LA

# I Larier Inchient for the Committee of t

His 5 Essentials for Coaching Every Quarterback 7 Concepts for a Winning Mentality

How to Win with the 46 BEAR DEFENSE

In-season Training
for your Punter
and Kicken

PUSTING Shotgun Fly Sweep Fused with Perimeter Screens



# A CONDITIONING PROGRAM FOR SKILL POSITIONS USING **LUNGE VARIATIONS**

By Kim E. Fischer, Ph.D., CSCS • Teri Walter, Ph.D. • Joseph Matovich, CSCS Department of Health and Sport Sciences, Otterbein University

osition requirements for skill position players like running backs, defensive backs, wide receivers, and quarterbacks differ from the offensive and defensive line positions in that quickness, agility, change of direction, balance, body control, and reaction time are even more critical characteristics for player success. Skill position players are coming to the ball or to a player in a full sprint. They are playing more pass coverage that requires alternating between forward and backpedaling movements. A defensive back, for instance, might be sprinting, a horizontal movement, and have to jump in the air to deflect a pass or contest a reception, thus moving into a vertical plane. An offensive skill position player, like a running back or wide receiver, must be able to make similar quick horizontal to vertical plane changes in direction when receiving a pass. A running back, for instance, pushed from one side by an opposing tackler and then in another direction by a would-be tackler, would require balance and body control to be successful in gaining extra yardage.

The goal of this article is to present a progression of four lunge variations to be used instead of a squat as the core lower body strength exercise in a conditioning program for skill position collegiate football players such as running backs, wide receivers, QBs, and defensive backs.

There are benefits to using lunge variations as opposed to squats as core lower body strength exercises. One benefit of using lunge variations is to reduce the axial load on the typically smaller, lighter, skill position players while still increasing strength. A lesser axial load is likely to reduce the wear and tear on the player's body. Another benefit of using these lunge variations is in greater translation to the sport-specific movements on the field. Lunges require horizontal to vertical movements unlike a squat which is strictly vertical in its execu-

Photo 1: Starting Position



Hip Flexion

tion. Thirdly, walking forward lunges, reverse lunges, forward to reverse lunges, and reverse lunges to a step up require greater body control, balance, and change of direction than required in a typical squat. The fourth benefit of these lunge variations is in developing single leg strength. A squat develops double leg strength by its execution. Finally, changing from a squat to a series of lunge variations to develop core lower body strength may be a welcome change to players used to squat-type lifts.

The first lunge variation presented in this nine-week conditioning program for collegiate football players is a walking lunge. Forward walking lunges are suggested because they represent a more common movement to the athlete, i.e., that of running.

The second lunge variation is the reverse lunge. This movement requires even more balance and body control because the initial movement is in stepping back rather than forward as in walking lunges. Combining a reverse lunge with hip flexion at the end of a repetition allows for practice in translating backward to forward horizontal movements to vertical efforts and the added challenge of body control and balance.

The third in the lunge progression is a forward to reverse lunge combination. This combination of movements has an added difficulty level because of the rapid changes in direction while attempting to maintain the body control and balance necessary for proper execution.

The final and most challenging of the lunge variations is the reverse lunge into a step-up. This variation requires both horizontal and vertical movements - a reverse lunge (horizontal plane movement) followed by stepping onto a box (vertical plane movement), all in one repetition. From the "box" position, the hip and knee of the same limb are flexed. The combination of movements required in this reverse lunge into a step-up is similar to a wide receiver



Photo 2: Exaggerated Photo 3: Forward Lunge



Photo 4: Reverse Lunge

or running back sprinting down the field on a pass route and then jumping for a ball thrown over his head. The rapid horizontal to vertical change of direction would be necessary for a successful reception.

# **EXERCISE TECHNIQUE**

# Walking Lunge:

- Start in a standing position with a barbell across the shoulders (Photo 1).
- · Begin the initial movement with exaggerated hip flexion (Photo 2).
- Keep the leg tight to the body with the foot dorsiflexed (similar to running).
- Step forward into a lunge position (Photo 3).
  - ✓ At the bottom of the movement, both knees should be flexed to about 90-degrees.
  - ✓ The back thigh should be perpendicular to the floor with the front thigh parallel to the ground.
  - ✓ The back is straight and centered directly above the hips with the body weight evenly distributed on both feet.
  - The knee of the forward leg should be in line with, but not in front of, the toes.
- · Take the next step in the walking lunge by bringing the back hip into exaggerated flexion while flexing and then extending the back knee.
  - ✓ Do not allow the original back foot to touch the floor in the middle of the motion but balance all the body weight on the original front
- Continue this pattern of lunging.

# Reverse Lunge with Hip Flexion:

- · Start in a standing position with a barbell resting across the shoulders (Photo 1).
- In a controlled movement, extend the hip and reach back with the back leg and foot, while flexing the front hip and knee (Photo 4).
  - ✓ At the bottom of the movement, both knees should be flexed to approximately 90degrees.
  - ✓ The back thigh should be perpendicular to the floor with the front thigh parallel to
  - ✓ The back is straight and centered directly above the hips with the body weight evenly distributed on both feet.

- ✓ The knee of the forward leg should be even with, but not in front of, the toes.
- Pause momentarily in this reverse lunge position.
- Then, using the front foot for balance and strength and without taking a middle step, bring the back hip into exaggerated flexion while flexing the knee. End in a "stork" position (Photo 2.
- Repeat the reverse lunge without returning to the starting position.

## Forward/Reverse Lunge Combo:

- Start in a standing position with a barbell across the shoulders (Photo 1).
- Begin the initial movement with exaggerated hip flexion (Photo 2).
  - ✓ Keep the leg tight to the body with the foot dorsiflexed (similar to running).
- Step forward into a lunge position (Photo 3).
   At the bottom of the movement, both knees should be flexed to approximately 90-degrees.
  - ✓ The back thigh should be perpendicular to the floor with the front thigh parallel to the floor.
  - ✓ The back is straight and centered directly above the hips with the body weight evenly distributed on both feet.
  - ✓ The knee of the forward leg should be even with, but not in front of, the toes.
- Extend the front knee and hip simultaneously to move the body up and backwards.
- Remaining balanced on one foot and leg and without taking a middle step, extend and reach back with what was the front leg while flexing the hip and knee of the opposite leg.
- Pause momentarily in this reverse lunge position (Photo 4).
- From this position, extend the hip and knee to propel the body up and forward to get into the upright or starting position.
  - ✓ This forward lunge into a reverse lunge into an upright position constitutes one repetition.

### Reverse Lunge into Step Up:

- Start in a standing position with a barbell resting across the shoulders(Photo 1).
- In a controlled movement, extend the hip and reach back with the back leg and foot, while flexing the front hip and knee (Photo 4).
  - ✓ At the bottom of the movement, both knees should be flexed to approximately a 90-degree angle.
  - ✓ The back thigh should be perpendicular to the floor with the front thigh parallel to the floor.
  - ✓ The back is straight and centered directly above the hips with the body weight evenly distributed on both feet.
  - ✓ The knee of the forward leg should be even with, but not in front of, the toes.

Strength Report continued on page 40

