Fitness Training & Consulting LLC

CASL: 2009

SUMMER TRAINING PROGRAM

5 *Core I* *Prehab strength I* *Aerobic I: 30-minutes (~5-second inter-vals)*	*6* *Aerobic IV: work=2-minutes: rest=1-minutes (6 reps)*	*7* *Core I* *Prehab strength I* *Aerobic III: 25-minutes*	*8* *OFF*	*9* *Aerobic IV: work=2-minutes: rest=1-minutes (8 reps)*	*10* *Core I* *Prehab strength I* *Aerobic I: 30-minutes (~5s intervals)*	*11* *OFF*
12 *Core I* *Prehab strength I* *Aerobic IV: work=3-minutes: rest=1.5-minutes (6 reps)*	*13* *Aerobic I: 20-minutes (~10s intervals)*	*14* *OFF*	*15* *Core I* *Reactive I* *Anaerobic Phase I: work=20s: rest=60s (4 reps x 2sets; 90s rest be-tween sets)*	*16* *Aerobic III: 20-minutes*	*17* *Core I* *Prehab strength I* *Aerobic IV: work=3-minutes: rest=1.5-minutes (6 reps)*	*18* *OFF*
19 *Core II* *Reactive II* *Anaerobic Phase I: work=25s: rest=75s (4 reps x 2sets; 120s rest be-tween sets)*	*20* *Aerobic IV: work=3-minutes: rest=1.5-minutes (5 reps)*	*21* *OFF*	*22* *Core I* *Prehab strength I* *Anaerobic Phase I: work=25s: rest=50s (3 reps x 3sets; 75s rest be-tween sets)*	*23* *Aerobic III: 20-minutes*	*24* *Prehab strength II* *Aerobic IV: work=4-minutes: rest=3-minutes (3 reps)*	*25* *Core II* *Reactive II* *Aerobic III*

WARM-UP GUIDELINES

When performing any of the intensive outlined sessions (SAQ, Speed Endurance, Aerobic Endurance) the following is the basic outline which should be followed for the warm-up preceding the work to be undertaken.

The warm-up should consist of two phases.
Phase I targets general warming (raising the heart rate, and increasing muscle and body temperature).
Phase II targets preparing the muscles for the activity to be performed (progressively increase the joint/muscle range of motion and speed of motion to equal that to be performed during the session).

Phase I: Active Warming

- The initial phase of work should consist of a minimum of 3 minutes of continuous work, and is dependent on ambient temperature and fitness level of athlete(s).
- The work undertaken should consist primarily of forward running with a progression towards varying of running styles such as backwards running and shuffling.
- As the body is still physiologically preparing for work, the running styles under-taken should be low in difficulty with little or controlled turning, and performed without the coordinative demands which are integrated in phase two of the warm-up.

Phase II: Functional Dynamic Flexibility Phase

- Primary targets are the maintenance, and if applicable, progression of active warming effect.
- The progressive increase in dynamic flexibility, and increase in speed and coordinative demands of movement.
- Athletes are progressed, in a manner specific to the group and session to follow.
- Primary focus of motor skill coordination and acquisition is technique and the patterning of movement.
- The integration of motor skills and coordinative patterns of movement should occur in a progressive manner: low to high movement speed and simple to complex.

Be sure that the warm-up reaches the same intensity and speeds which will be performed during the session.

- Aerobic session: Warm-up intensity should reach a minimum of 80% of maximal effort and speed.
- Anaerobic session: be sure that the warm-up reaches a minimum of 95% of maximal effort, with short bouts at maximal speed.
- SAQ: Warm-up intensity should reach a maximum of 80% of maximal effort, with short bouts performed at maximal speed.

AEROBIC ENDURANCE TRAINING

The outlined aerobic training sessions looks to maximize the training effect for soccer in two ways:

1) Increase the ability to recover from high-intensity/sprint bouts.
2) Increase the ability to run at, and maintain an overall higher intensity.

Aerobic I: Fartlek Run

The primary goal of this type of work is to increase aerobic capacity, in particular - the ability to recover from intermittent sprint work or short-duration.

- 7-10-minute warm-up and dynamic flexibility.
- 20-30 minute run
- Run at a consistent comfortable pace, with interspersed short sprint work.
- Following each sprint, recover to comfortable speed previously maintained. Once recovering to normal (comfortable pace), repeat sprint.
- Goal is to sprint for a duration of 5-15s, approximately every 1-2 minutes.
- Mix sprint duration, mix recovery time with unpredictability.

Aerobic II: Tempo Run

The primary goal of this type of work is to increase the ability to sustain a moderate-high intensity effort.

- 7-10-minute warm-up and dynamic flexibility.
- 15-25 minute run/walk-jog.
- Select a pace which can be maintained for the prescribed duration of time, no shorter no longer - run as hard as possible (maximal speed) for the prescribed time.
- Following each effort, walk for a duration of 1-minute, then return to a slow jog for the following 2-minutes.

Aerobic III: Aerobic Endurance

The primary goal of this type of work is to increase the ability to maintain a consistent effort over a long period of time - not so applicable to soccer, but good for general fitness/endurance.

- 20 - 25 minute run.
- Select a pace which is comfortable but results in fatigue if maintained for the amount of time selected, not a jog—run.
- Target pace is sub 6:30 miles

Aerobic IV: High-Intensity Aerobic Training

The primary goal of this type of work is to increase aerobic power - this will assist in maintenance and recovery of high-intensity bouts during the course of the game.

- 10-12 minutes of dynamic flexibility, be sure that during this time you get your heart rate up to 85-90% of your maximal effort; this will make the transition to the work much easier, as well as more effective.
- All efforts involve the ball, the primary goal is to maintain an effort that is consistent with your maximal technical speed (running with the ball under control and taking a touch while dribbling at least every 2-3 strides). If you do not maintain control of the ball, the heart rate will not respond as it should and we will not get the training effect that we are after.
- Target HR=90-95%; maximal technical speed.
- Work and rest duration are prescribed on a weekly basis (see weekly layout).
- Use dribbling circuit arrangements diagrammed with transitional metabolic training.

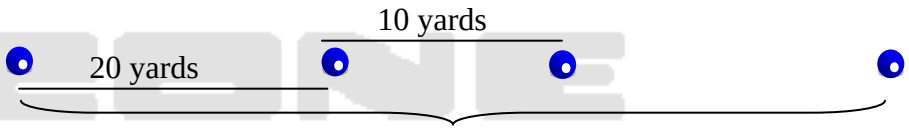
ANAEROBIC ENDURANCE TRAINING

The goal of anaerobic training is to increase the ability to run at and maintain maximal intensity (sprint) efforts in a soccer-specific manner.

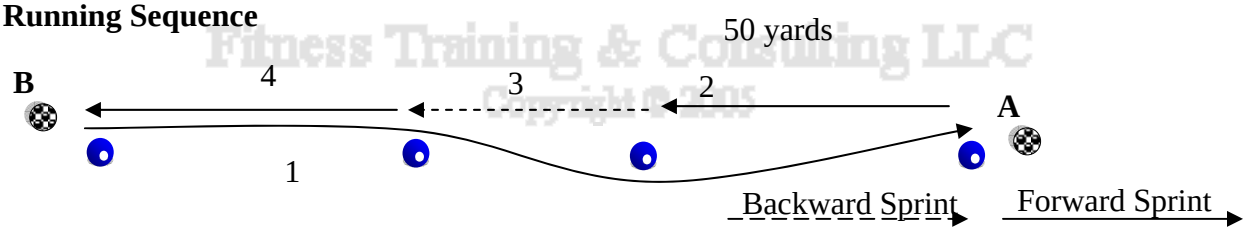
- Each effort is performed at maximal intensity.
- Recovery bouts should be active: consist of walking/jogging.
- Work: Rest should be maintained as prescribed.
- Phase of training, regarding position specificity should be maintained as prescribed.
- Training is progressed in three ways: 1) increasing the duration of the work bout, 2) decreasing the amount of rest time between work bouts, 3) increasing the positional specificity of running movement.

Speed Endurance: Wide Midfielder / Wide Back Phase I

Exercise Set-Up



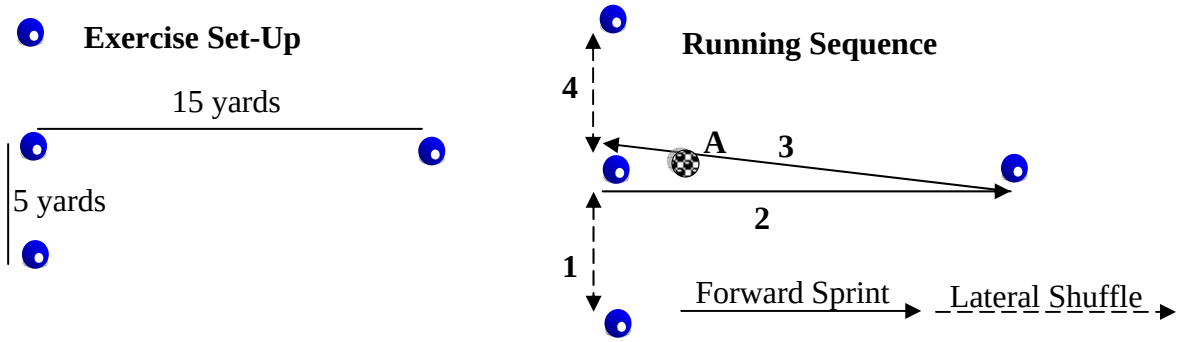
Running Sequence



1) Player begins sprinting forwards at full speed as diagrammed from the first cone, between the middle cones and through the final cone. On reaching the cone, player cuts and 2) continues forwards sprint towards start position. 3) At 1st middle cone, player turns and continues run via backwards sprint, 4) 2nd middle cone player turns and continues forwards sprint finishing at the start position. (Player repeats sequence for duration of work prescribed).

- Alternate directions of turn to work on turning over either shoulder effectively.
- All work is done at maximal speed/effort.
- If possible involve a ball/technical work at the diagrammed points, your technical choice.
  - **A -** Cross/Shot at position. **B -** Recovery to header/tackle/defend at position.
- Reverse direction of movements for left-sided players.

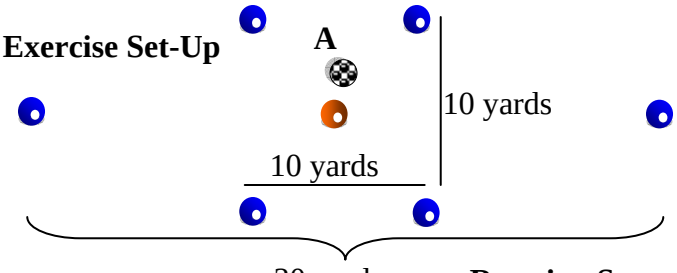
Speed Endurance: Central Midfielder Phase I



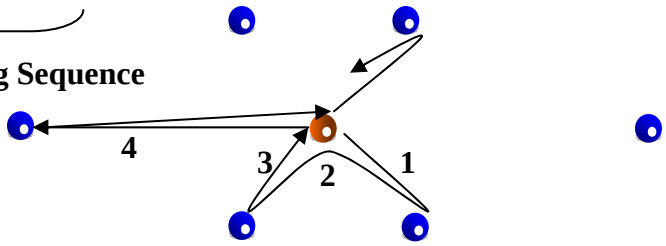
1) Player begins with lateral shuffle moving from inside cone to outside cone and back. Player then 2) sprints forwards to cone, 3) cuts and returns to center cone via forward sprint, on reaching cone player decelerates and 4) turns to shuffle wide to opposite side cone (repeating sequence 1-3). Player repeats sequence for duration of work prescribed).

- Alternate directions of start position to ensure working turn over both shoulders effectively.
- All work is done at maximal speed/effort.
- If possible involve a ball/technical work at the diagrammed point(s), your technical choice.
    - **A** - Short pass on each arrival at center cone.

Speed Endurance: Forward Phase I



If possible involve a ball/technical work at point **A**. Replace cone with server: your choice of technical work. Spin out in new direction as quickly as possible following pass.



1) Player begins with sprint from central cone to wide cone, cuts and sprints back to center, 2) player sprints at center cone then makes sharp turn to move to alternate wide cone. 3) Player cuts at wide cone—sprints back to center cone, 4) cuts at center cone and makes long sprint to cone, cuts and returns to center. On reaching center, 5) player cuts and repeats sequence 1-4 to opposite side. Player repeats sequence for duration of work prescribed.

- Alternate directions of start position to ensure working turn over both shoulders effectively.
- All work is done at maximal speed/effort.

POWER TRAINING

The goal in training for power is to train for short periods of time with maximal effort.

- Each effort is performed maximally (maximal height, distance, speed).
- The activity under-taken is of short-duration and high-intensity.
- Full recovery between each bout is essential to allow maximal effort to be maintained.
- Fatigue should never be an issue - work to rest ratio should be equal or greater then 1:7. For instance work for 5s results in a minimum of 35s rest. Take as much rest as necessary to perform the entire session at maximal.

Work is prescribed as the number of jumps performed, with the number jumps performed and/ or the difficulty of the exercise being increased.

REACTIVE TRAINING LEVEL 1

Using one of the diagrammed sprint sequences (speed-power training) perform 2 sets of each of the following activities - 6 total jumps, then immediately sprint as diagrammed.

Forwards Skipping

Perform a simple skipping sequence while moving in a forward direction. Coordinate arm and leg movement (opposite arm moves in corresponding fashion to that of the opposite leg), maximize power via coordination of extension of hip-knee-ankle. Torso should stay upright - core strong, head in neutral and looking forwards, arm movement should be tight to the body. As movement is in the forward direction all movement of the body should contribute to propelling the body forwards. Feet should be in contact with the ground for as short a time as possible.

Backwards Skipping

Perform a simple skipping sequence while moving in a backwards direction. As in forward skipping: coordinate arm-leg movement, and maximize power via hip-knee-ankle movement. forward direction. Torso upright - core strong, head neutral, looking forwards, arms tight to the body. All body movement should contribute to linear movement in the backwards direction. Feet should be in contact with the ground for as short a time as possible.

Forward Bounding

Best described as an exaggerated running action - likened to jumping across a stream on rocks trying not to get your feet wet. Each foot makes a single contact with the ground and then drives the body up and out, the next foot contact occurring with the opposite foot. Arm-leg movement is coordinated, the torso strong and upright - head neutral and looking forwards. All body movement should contribute to linear movement in the forwards direction. Feet should be in contact with the ground for as short a time as possible.

Two-Footed Hops

Begin feet at shoulders' width and drop into a 1/4 squat. On reaching bottom of squat explode powerfully out of squat coordinating arm-leg movement to drive up and forward maximally. On landing, decelerate via flexion at hip-knee-ankle, arms moving down and back, dipping into 1/4 squat during deceleration action. On reaching bottom, range explode maximally out and upwards into next jump. Feet should be in contact with the ground for as short a time as possible.

Lateral Bound to Balance

Similar to bounding, except the jump is performed in a lateral direction. Jump off of a single-leg in the lateral direction to land on the opposite foot. On landing decelerate body via flexion at hip-knee-ankle, coordinating upper body to maintain single-leg balance. Pause on landing, then repeat action in the opposite direction.

REACTIVE TRAINING LEVEL 2

Using one of the diagrammed sequences (speed-power training) perform 2 sets of each activity for 8 total jumps, then immediately sprint as diagrammed.

Forwards Skip for Distance

Performing a simple skipping sequence moving in a forward direction—the *goal is to extend each jump as far as possible in the **forward** direction*. Coordinate arm and leg movement (opposite arm moves in corresponding fashion to that of the opposite leg), maximize power via coordination of extension of hip-knee-ankle. Torso should stay upright - core strong, head in neutral and looking forwards, arm movement should be tight to the body. As movement is in the forward direction all movement of the body should contribute to linear movement and into propelling the body forwards. Feet should be in contact with the ground for as short a time as possible.

Forwards Skip for Power

Performing a simple skip moving in a forward direction—the *goal is to drive maximally upwards with each successive jump as **high** as possible* while moving slightly forwards. Coordinate arm and leg movement (opposite arm moves in corresponding fashion to that of the opposite leg), maximize power via coordination of extension of hip-knee-ankle. Torso should stay upright - core strong, head in neutral and looking forwards, arm movement should be tight to the body. As movement is in the forward direction all movement of the body should contribute to linear movement and into propelling the body forwards. Feet should be in contact with the ground for as short a time as possible.

Lateral Bound for Reactive Power

Similar to bounding, except the jump is performed in a lateral direction. Jump off of a single-leg in the lateral direction to land on the opposite foot. On landing decelerate body via flexion at hip-knee-ankle, coordinating upper body movement to control balance. On decelerating landing action into a single-leg 1/4 squat, immediately repeat action - drive up and across the body in the opposite direction. Feet should be in contact with the ground for as short a time as possible.

Squat Jump

Begin with the feet at shoulders width and drop into a full squat hands/arms moving down and backwards with body. On reaching bottom range of squat, drive powerfully up and slightly forwards out of squat in a maximal jump. Coordinate arm and leg movement in jump and extend maximally at hip-knee-ankle. Land with feet at shoulders' width and decelerate flexing at hip-knee-ankle downwards into squat. On reaching bottom range of motion in squat, repeat action.

Lunge Jump

Begin in lunge position, feet approximately 1 stride length apart, drop at hips directly between feet, arms move in correspondence (opposite to that of legs). On reaching deep portion of lunge drive upwards maximally, coordinating arm movement with jumping movement. Torso should remain upright and head in neutral. On returning to the ground, land with the feet staggered (feet in same position as initial jump) decelerate into bottom portion of lunge position then repeat jump.

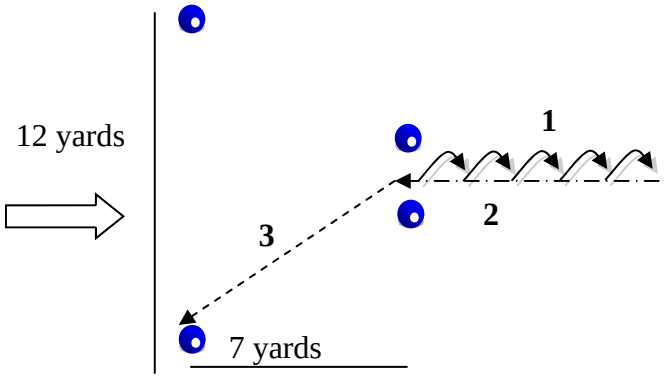
Lunge Jump to Squat Jump

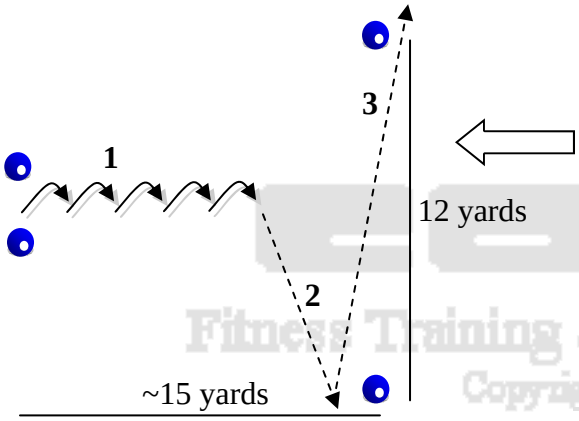
Begin in lunge position, feet approximately 1 stride length apart, drop at hips directly between feet, arms move in correspondence (opposite to that of legs). On reaching deep portion of lunge drive upwards maximally, coordinating arm movement with jumping movement. Torso should remain upright and head in neutral. On returning to the ground, land with the feet parallel and just wide of shoulders' width. Decelerate into squat and then immediately explode upwards out of squat into maximal jump. Return to both feet then repeat action beginning from lunge position.

Reactive Training Set-ups

Turning & Twisting

1) Starting between cones, perform reactive training activity in the diagrammed direction, on finishing final repetition, 2) sprint backwards to start position. On reaching start position 3) turn as quickly as possible in direction of wide cone and sprint as diagrammed (alternately twist over wide shoulder and sprint to opposite sided cone).





Lateral Speed & Acceleration

1) Starting between cones, perform reactive training activity in the diagrammed direction, on finishing final repetition, 2)sprint wide cone. On reaching wide cone, 3) cut and sprint through opposite cone as diagrammed. Alternate sides.

Lateral Speed & Acceleration

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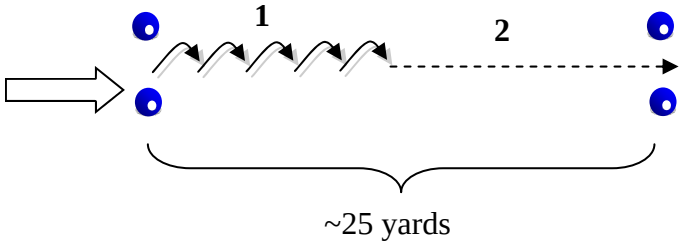
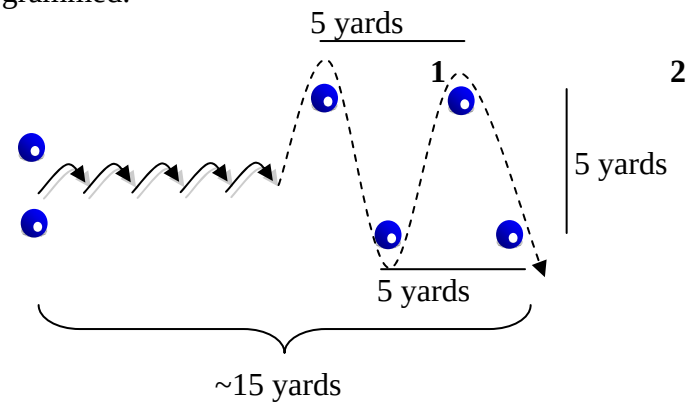
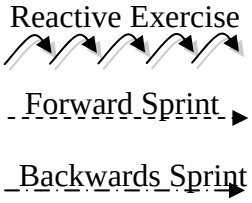


Lateral Agility

1) Starting between cones, perform reactive training activity in the diagrammed direction, on finishing final repetition, 2)perform lateral agility at maximal speed through cones as diagrammed.





PRE-HABILITATION STRENGTH TRAINING

The goal in training strength for soccer is to dually train for the prevention of injury, and increase the ability to use the core and hip musculature to increase the ability to "ground" and maintain balance when faced with confrontation in the game.

- All exercises are performed with body weight.
- Maintain the Work: Rest ratios prescribed - their purpose is to develop strength endurance in some areas, while developing general strength in others.
- Progression of work is done primarily by increasing the complexity of the exercise being performed.
- If exercise can be performed with more complexity, on unstable surface, or with single-leg as opposed to both progress as soon as ready.

Pre-habilitation Strength I

Forward Lunge: 1 x 20reps (each leg) - 30s rest - *Backward Lunge* 1 x20reps (each leg) - 30s rest - *Glute Bridge*: 2 x 15 reps (45s rest between sets) - *Push-Up Knee to Chest* 3 x 15 reps (45s rest between sets) - 60s rest - *Chin-Ups* 2 x maximal reps (60s rest between sets) - 90s rest - *Supine Barbell Rows* 2 x maximal reps - 2 minute rest - *Human Arrow* 2 x 30s - rest 60s - *Human Arrow Obliques* 2 x 30s.

Pre-habilitation Strength II

Multi-Directional Lunge: 1 x 15reps (each leg) - 45s rest - *Single-Leg Squat* 2 x10reps (each leg) - 45s rest - *Single-Leg Glute Bridge*: 2 x 10 reps (45s rest between sets) - 90s rest - *Hamstring Ball Bridge* (progress to single-leg ball bridge when able) 2 x 10 reps (45s rest between sets) - 60s rest - *Push-ups Knee-Shoulder* 4 x 10 reps (30s rest between sets) - 90s rest - *Chin-Ups* 2 x maximal reps (60s rest between sets) - 90s rest - *Supine Barbell Rows* 2 x maximal reps - 2 minute rest - *Human Arrow* 2 x 30s - rest 60s - *Human Arrow Obliques* 2 x 30s.

Glute Bridge Single-leg

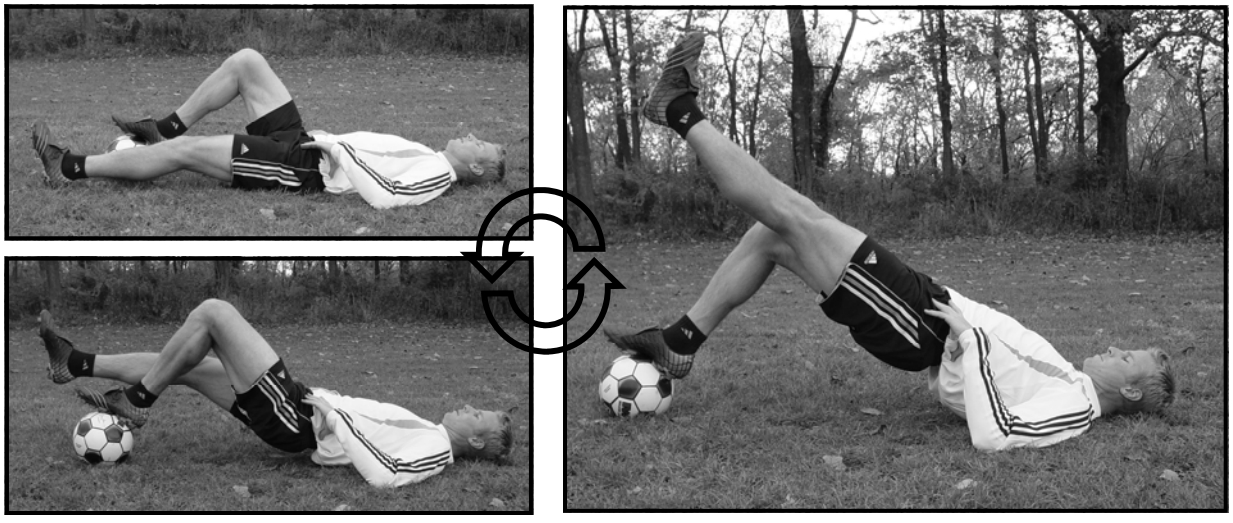
Begin lying flat on the back, one leg fully extended, the alternate foot flat on the floor and the knee flexed to 90°. From this position, raise both hips off of the ground via activation of the hip musculature and into the bridged position. Be sure to keep hips even throughout movement. Pause at end range of motion (shoulders should be even/plank-like fashion with hips) then with control lower the hips back to the floor.

Hamstring Ball Bridge

Begin lying flat on the back, feet placed flat on top of balls and knees flexed to 90°. From this position, raise both hips off of the ground via activation of the hamstring and hip musculature into a bridged position - keep hips even throughout movement. Pause at end range of motion (shoulders should be even/plank -like fashion with hips) then with control lower the hips back to the floor.

Hamstring Ball Bridge - Single-Leg

Begin lying flat on the back, one leg fully extended, the alternate foot placed flat on top of ball and the knee flexed to 90°. From this position, raise both hips off of the ground via activation of the hamstring and hip musculature into a bridged position. Be sure to keep hips even throughout movement. Pause at end range of motion (shoulders should be even/plank-like fashion with hips) then with control lower the hips back to the floor.



Lower Body Pre-Habilitation Training

Forward Lunge

Feet parallel at shoulder's width, step forward just short of a stride length, lead foot pointed slightly towards the middle of the body. Keep lead knee in line with foot, flex at the knee and hip to drop towards the floor and the body's middle. Return to the standing position by extending out of knee and hip to push rearwards into standing.

Multi-Directional Lunge

Begin standing, step forward just short of a stride length, lead foot pointed slightly towards the mid-line. Keep knee in line with foot, flex at the knee and hip to drop directly down and into a lunge. Extend at the hip-knee out of the lunge and return to stand in a single-leg balance. Lunge alternately straight, away from the body's mid-line and across the body at approximately 45 degrees. Rear foot should point directly forwards during all movements. Between each lunge return to single-leg balance, pause and move in next direction.

Glute Bridging

Begin lying flat on the back, feet flat on the floor with knees flexed, raise the hips off of the ground into a bridged position via activation of the hip musculature. Be sure to keep hips even throughout movement. Pause at end range of motion (shoulders should be even/plank-like fashion with hips) then with control lower the hips back to the floor.

Glute Bridging

Begin lying flat on the back, feet flat on the floor with knees flexed, raise the hips off of the ground into a bridged position via activation of the hip musculature. Be sure to keep hips even throughout movement. Pause at end range of motion (shoulders should be even/plank-like fashion with hips) then with control lower the hips back to the floor.

Single-leg Squat

In a single-leg balance stance, alternate foot held in air to the side of the body - hands in front of body to assist in balance. Initiate the movement into squat dropping downward directly between the front and rear feet. Maintain integrity of knee in-line and behind foot.

Single-leg Transverse Squat

Standing in single-leg balance initiate movement via dropping down and back at the hips and flexing at the knee, with (medicine) ball in hands reach across the body and support leg to touch inside of the stance foot. After touch-down return to upright position to reach overhead to the body's opposite side.

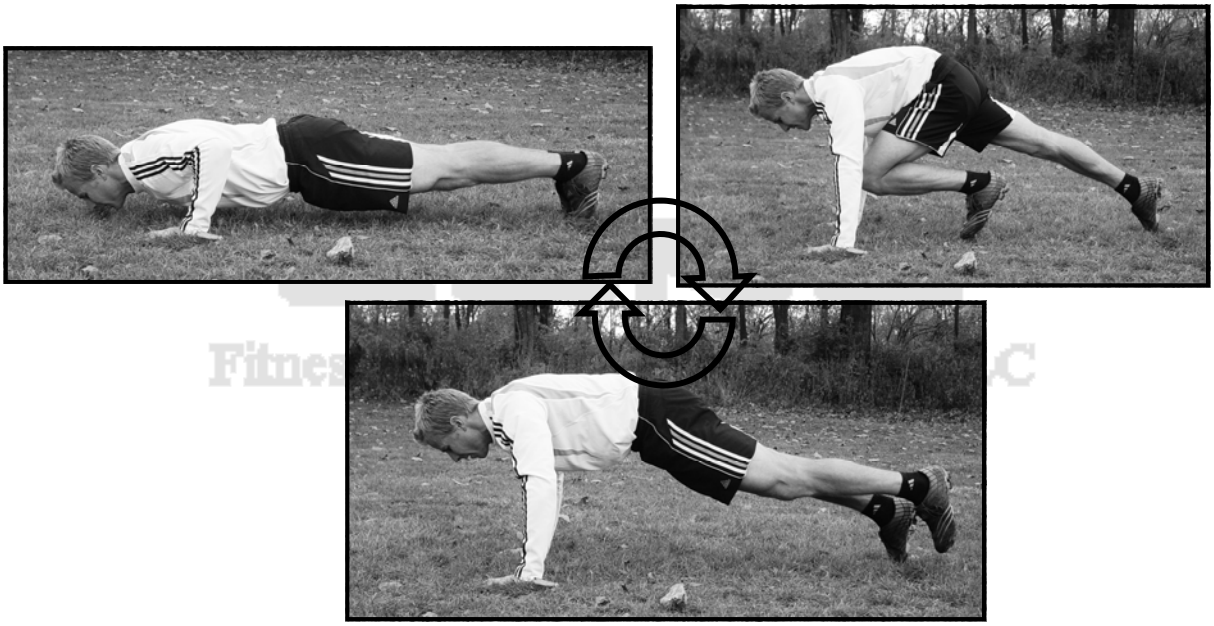
Upper Body Pre-Habilitation Training

Push-Ups

Core tight, head in neutral, feet less than shoulders' width apart. Lower body til upper arm is parallel to floor, fully extend arms in the upper portion of the movement. If back begins to arch or break, relax, reset the body in the start position and start again. If fatigue is too great to maintain integrity of the back/core rest longer before continuing.

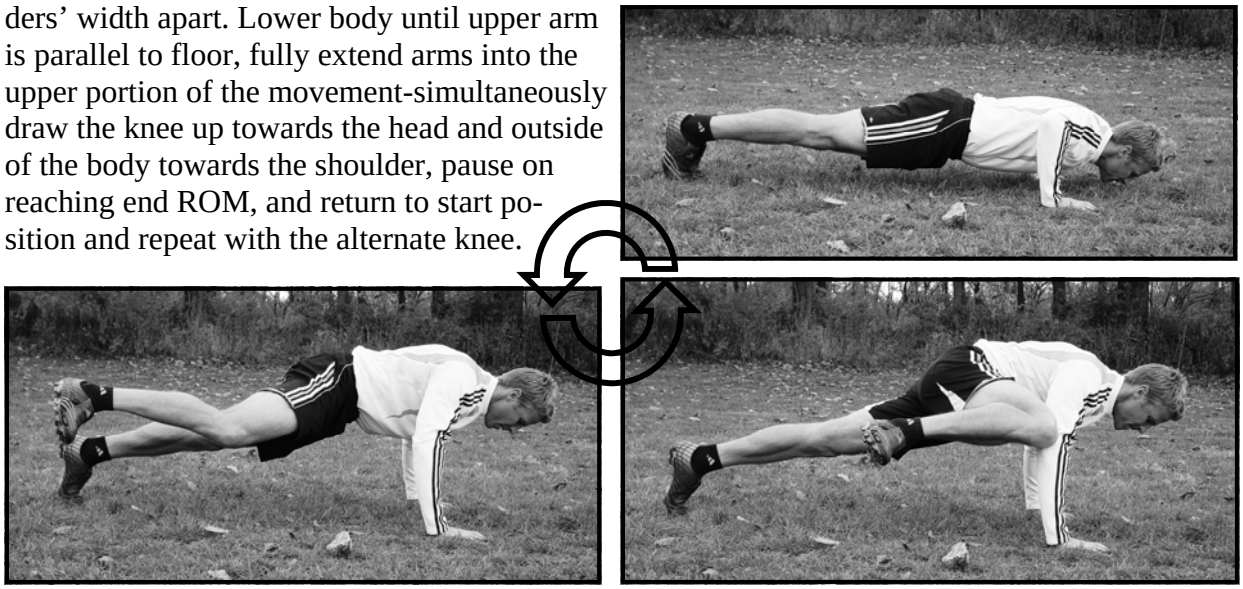
Push-Up - Knee to Chest

Core tight, head in neutral, feet less than shoulders' width apart. Lower body until upper arm is parallel to floor, fully extend arms into the upper portion of the movement-simultaneously draw the knee to the chest, pause and return to start position and repeat alternating knees to chest.



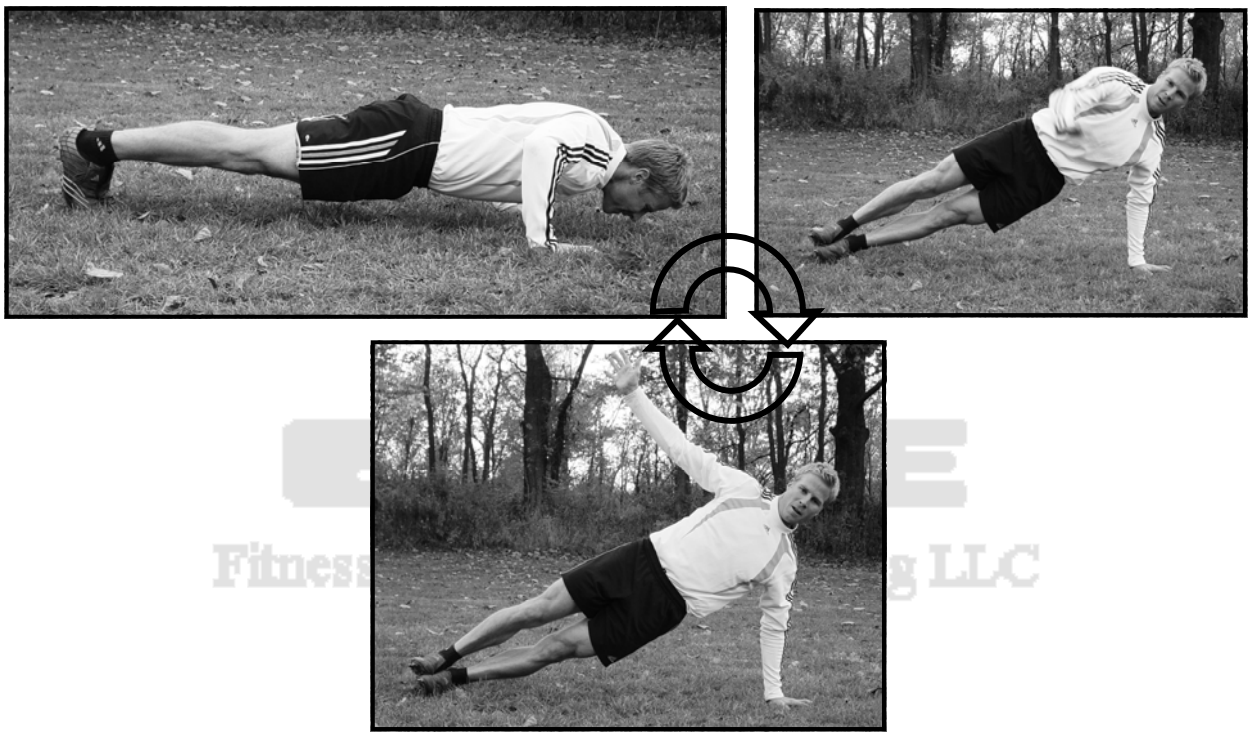
Push-Up - Knee to Shoulder

Core tight, head in neutral, feet less than shoulders' width apart. Lower body until upper arm is parallel to floor, fully extend arms into the upper portion of the movement-simultaneously draw the knee up towards the head and outside of the body towards the shoulder, pause on reaching end ROM, and return to start position and repeat with the alternate knee.



Push-up to Oblique Plank

Core tight, head in neutral, feet less than shoulders' width apart. Lower body until upper arm is parallel to floor, on reaching bottom ROM press upward. On nearing the top portion of the movement, rotate the body in a transverse fashion to end in the oblique plank posture - lateral portion of feet and hand on the floor, posture maintained via oblique musculature.



Chin-Ups

Grasp bar overhead with palms facing the body slightly wider than shoulders' width. Pull the body upwards initially through the back and finishing through the biceps to pull the chin even to the bar.

Pull-Ups

Use an overhand grip slightly wider than shoulders' width apart; minimize the involvement of the lower body either by crossing the legs at the ankle, or keeping legs completely straight. Do not cheat movement by jerking with the arms, or by rocking with the legs.

Supine Barbell Rows

With a barbell at hip height in a squat rack, move underneath the bar to face upwards and grip the bar slightly wider than shoulder's width, arms extended. With the feet on the ground, take up a strong posture, core braced, hips up, back flat and head in neutral - pull directly upwards, the chest towards the bar to maximum ROM, then return with control, posture maintained to the start position.

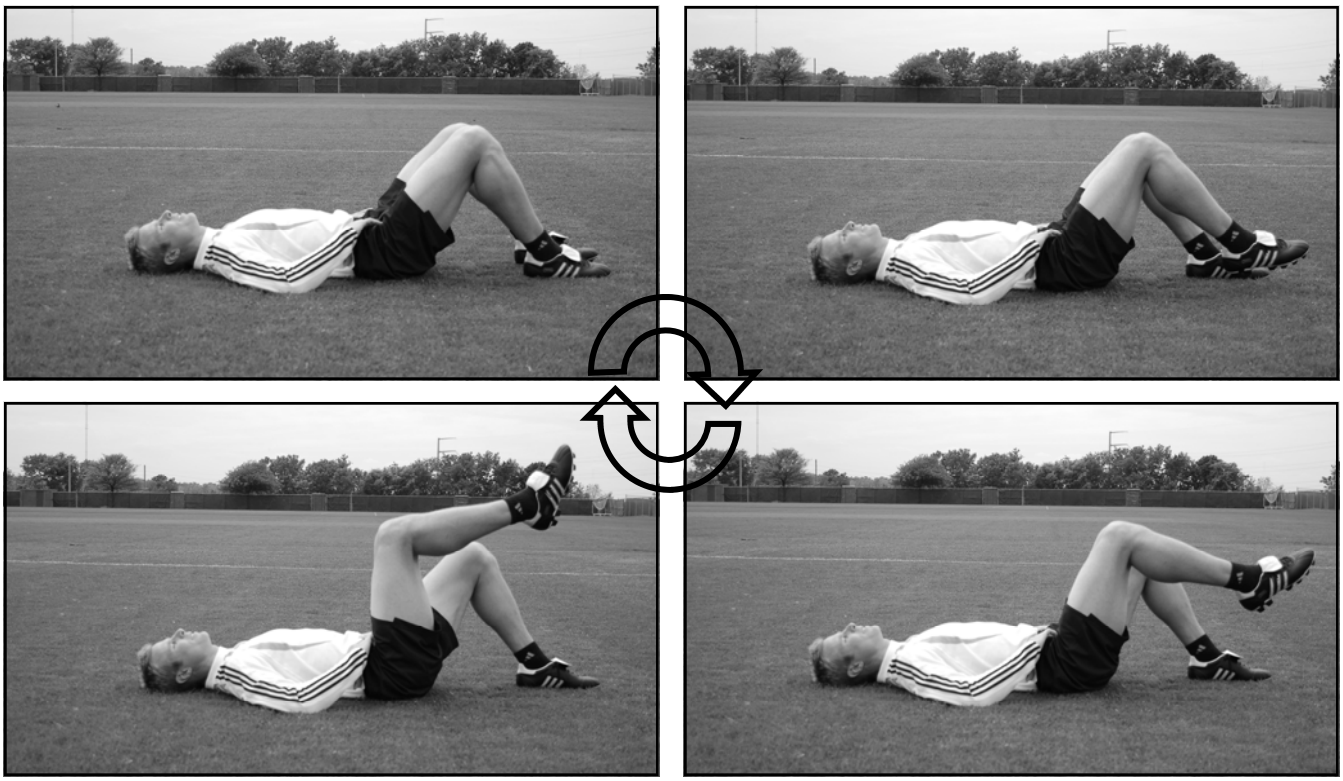
CORE STRENGTH TRAINING

The outlined core strengthening activities targets the stabilization of the lumbo-pelvic-hip complex via training of the deep core musculature in static positions and progresses towards more functional training of the core in a more sport-specific manner. The abdominals are a postural muscle and are used in all movements. For this reason time to fatigue is a primary focal point in training the abdominals. Be patient, if any of these exercises seem to easy or simple, you are probably not performing them correctly.

CORE STABILITY LEVEL I

Supine Abdominal Brace with Bent Leg Raise: Begin lying on the back, feet flat on the floor and knees bent to 90°. Holding this position, draw the abdominals inwards to get rid of the natural hollow of the lower back to flatten the low back against the ground—think of pulling your belly button inwards towards your spine. Hold this position and continue to breathe normally through the diaphragm (your stomach should move as you breathe). Draw either foot off of the ground, and bring the knee upwards towards the head until the point when your hips would begin to tilt—pause and hold. Lower the foot to the floor and repeat with opposite leg. Your abdominals should remain braced throughout the movement.

- Perform 2 repetitions to fatigue - abdominals begin to shake and position cannot be held with proper form.
- Movement is performed in a slow methodical manner. It should take you 5-7 seconds for each repetition to be performed.



Human Arrow: Take up position, with elbows/forearms and toes on the ground, the head and hips in a neutral position. Lift the body into a plank position and draw the abdominals inward — think of pulling your belly button inwards towards your spine. Hold position with abdominals braced for the time prescribed.

- Perform 2 repetitions, held for a maximum of 45 seconds - if abdominals fatigue prior to 45s stop and rest, then perform an additional set of the exercise held again to the point of fatigue (perform a maximum of 4 repetitions).

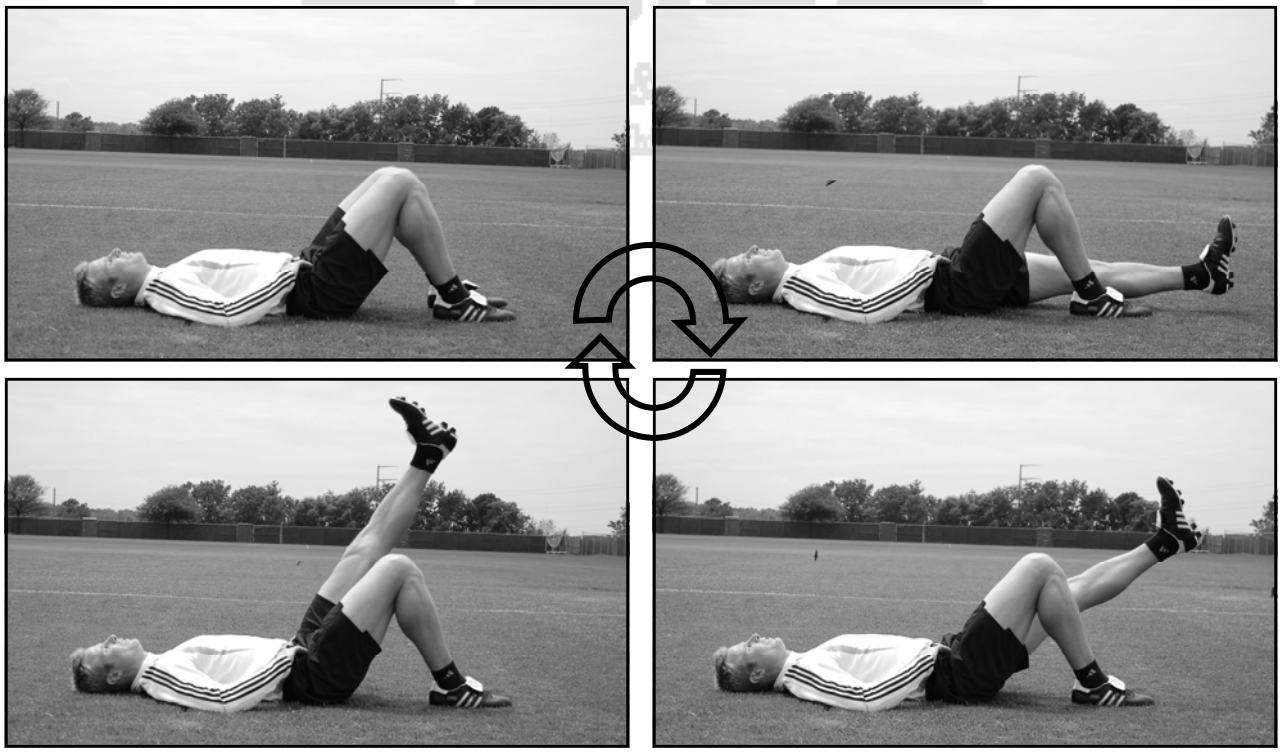
Oblique Human Arrow: Begin lying on the side, forearm and lateral portion of the foot on the ground. Draw the body upwards into a straight position, hips, upper torso, and head in neutral position and in-line with feet. Two components are crucial to performing this exercise: 1) draw the abdominals inwards—think of pulling your belly button inwards toward your spine., 2) keep the hips from sagging—think of pulling the hips upwards to ensure activation of the oblique abdominal muscles.

- Perform 2 repetitions to each side, held for a maximum of 30 seconds - if abdominals fatigue prior to 30s stop and rest, then perform an additional set of the exercise held again to the point of fatigue (perform a maximum of 3 repetitions).

CORE STABILITY LEVEL II

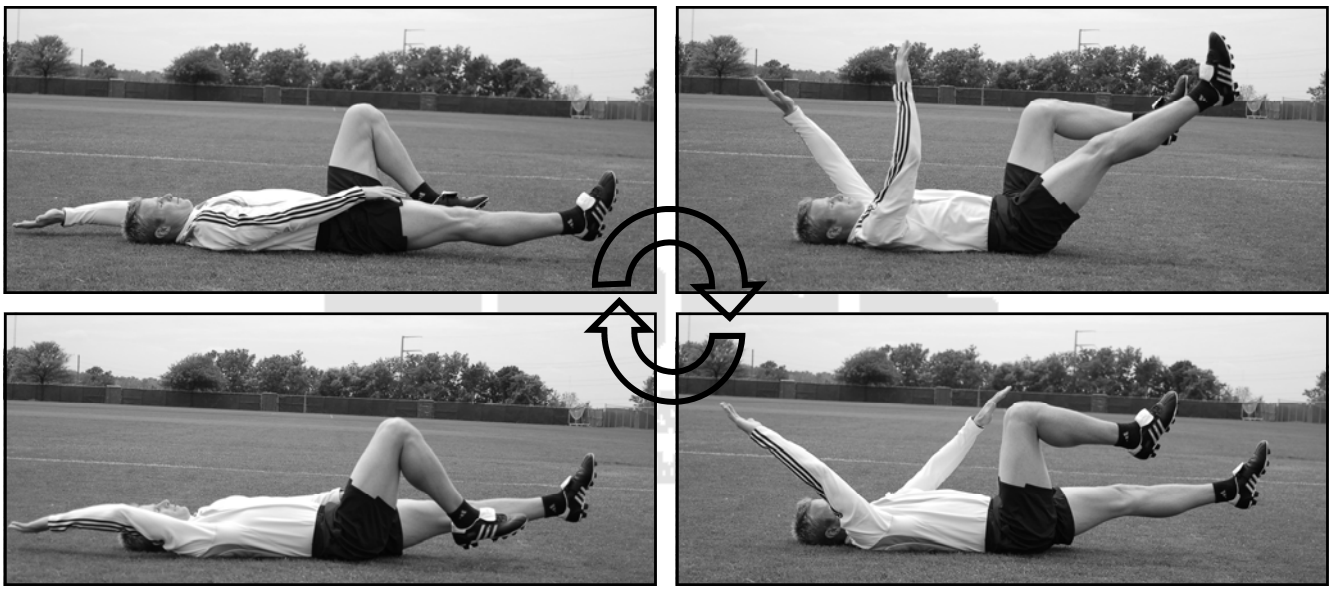
Supine Abdominal Brace with Straight Leg Raise: Begin lying on the back, feet flat on the floor and knees bent to 90°. Holding this position, draw the abdominals inwards to get rid of the natural hollow of the lower back to flatten the low back against the ground—think of pulling your belly button inwards towards your spine. Hold this position and continue to breathe normally through the diaphragm (your stomach should move as you breathe). Draw either foot off of the ground, and extend the leg fully. Keeping the leg extended draw the leg directly upwards until the point when your hips would begin to tilt—pause and hold. Slowly and with control, lower the leg towards the floor to touch heel lightly, then repeat action with same leg. Your abdominals should remain braced throughout the movement.

- Perform 2 repetitions (each leg) to fatigue - abdominals begin to shake and position cannot be held with proper form.
- Movement is performed in a slow methodical manner. It should take you 6-8 seconds for each repetition to be performed.



Dead Bug: Begin lying flat on the back feet flat on the floor with one knee bent and one knee straight—draw the abdominals inwards bracing the abdominals. Keeping the abdominals braced the arms and legs work in an opposing action. Right leg extends & left arm moves upwards to reach over the head, simultaneously left knee bends and the leg is drawn upwards towards the head & the right arm moves down towards the waist. Repeat in opposite fashion. Perform movement with control and maintaining braced abdominals throughout the movement.

- Perform 2 repetitions, for a maximum of 45 seconds - if abdominals fatigue prior to 45s stop and rest, then perform an additional set of the exercise held again to the point of fatigue (perform a maximum of 4 repetitions).



Human Arrow with Rear Leg Raise: Take up position, with elbows/forearms and toes on the ground, the head and hips in a neutral position. Lift the body into a plank position and draw the abdominals inward — think of pulling your belly button inwards towards your spine. Holding position with abdominals braced, lift leg off of the ground and extend upwards out of hip, lower with control and repeat with opposite leg.

- Perform 2 repetitions, held for a maximum of 30 seconds - if abdominals fatigue prior to 30s stop and rest, then perform an additional set of the exercise held again to the point of fatigue (perform a maximum of 4 repetitions).

Oblique Human Arrow with Lateral Leg Raise: Begin lying on the side, forearm and lateral portion of the foot on the ground. Draw the body upwards into a straight position, hips, upper torso, and head in neutral position and in-line with feet. Two components are crucial to performing this exercise: 1) draw the abdominals inwards—think of pulling your belly button inwards toward your spine., 2) keep the hips from sagging—think of pulling the hips upwards to ensure activation of the oblique abdominal muscles. Holding position with abdominals braced lift leg upwards until just over parallel with the ground—pause, and lower in slow controlled manner, repeat.

- Perform 2 repetitions to each side, held for a maximum of 30 seconds - if abdominals fatigue prior to 30s stop and rest, then perform an additional set of the exercise held again to the point of fatigue (perform a maximum of 3 repetitions).

FLEXIBILITY TRAINING

The primary goal of flexibility training is to decrease muscular imbalances in order to diminish the possibility of injury. In soccer players the primary concern is thus placed on the following muscle groups: adductors, hip flexors, hamstrings, calves, gluteals, lower back, and upper thoracic. Incorporate flexibility at the end of a workout, or on its own after a brief warm-up period. The manner in which flexibility work is performed is dependent on when the session is performed. The following protocols should be followed when performing flexibility as a portion of the cool-down after one of the designated workouts, and finally when being performed on its own performed at least 4 times per week.

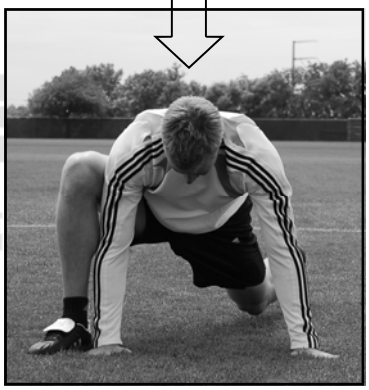
Post-Strength Training Protocol
Perform 2 repetitions of each position, hold each stretch for 5-7 seconds at the end range of motion.
Post Anaerobic Training Protocol
Perform 10 repetitions of each position, take each stretch into the end range of motion until a strong stretch is felt - pause for count of one, then release stretch gently to relax stretched muscle (s), then repeat.
Post Aerobic Training Protocol
Perform 3 repetitions of each position, hold each stretch for 10-15 seconds at the end range of motion.
Individual Flexibility Training Protocol
Perform 1-2 repetitions of each position, hold each stretch for 20-30 seconds at the end range of motion focusing on relaxing into a deep and comfortable stretch.

The following is a short-list of stretches which are ideal for increasing soccer-specific flexibility. On the following pages are explanations and pictures of each stretch. If time is an issue in your day's routine, the stretches below with a (#) next to them should be priorities. Keep in mind which stretch's you prefer, which stretches hit the areas you are tightest, and add them to the list.
Downward Dog #
Forward Lunge Calf - straight leg
Forward Lunge Calf - bent knee
Forward Lunge Adductor #
Side Lunge Adductor #
Forward Lunge Overhead Reach #
Forward Lunge Twist
Deep Overhead Squat #
Tea Kettle #
Lying Gluteals
Seated Gluteals #
Kneeling Hamstring
Kneeling Quadriceps
Lying Figure-4 #
Lying Piriformis

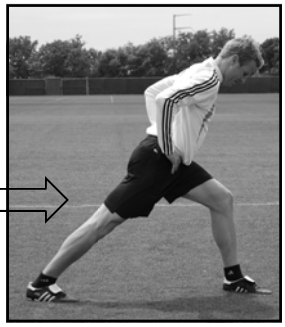
Downward Dog: Begin with hands and knees on the ground. Keeping hands on the ground extend upwards straightening the legs until feet are flat on the and leg is fully extended. Think of sinking the heels into the ground to maximize stretch of hamstring and calves. Keep back and arms straight from the hips into the hands. Feet should be just wide of shoulders' width, move further outwards to ease stretch, and inwards to increase stretch.



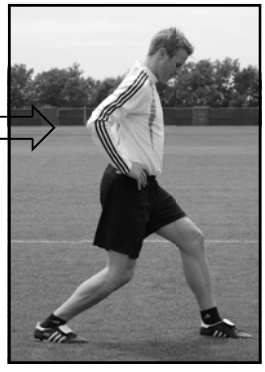
Forward Lunge Adductor: Out of the downward dog position, relax the hips downward and step either foot forward to place foot outside of the same-sided hand. Relax into position pressing hips downward at the body's center without letting the rear knee touch the ground. Perform position both looking downward as in picture 1, and looking up, as in picture 2.



Forward Lunge Calf - Straight Leg: In a normal lunge position, extend the rear leg fully keeping the rear foot flat on the floor with the heel sinking into the ground. Keeping heel on floor push the body's weight forwards over the lead leg to stretch the rear leg's calf. Continue to move body weight forwards to increase stretch.

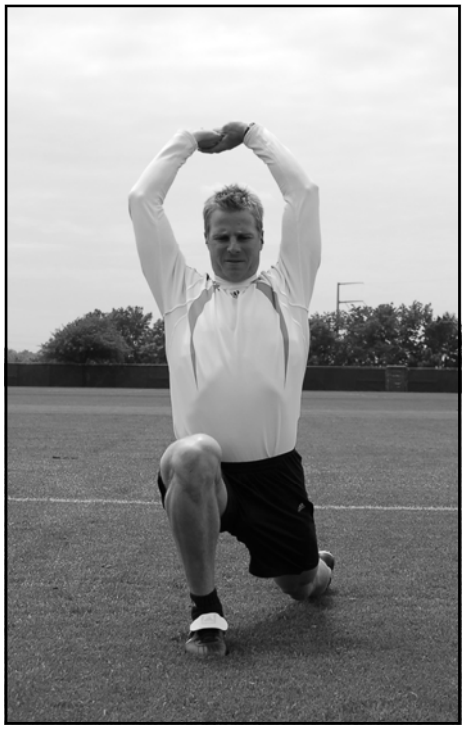


Forward Lunge Calf - Bent Leg: In a normal lunge position, extend the rear leg to approximately 10° short of straight. Keeping the rear foot flat on the floor with the heel sinking into the ground, push the rear knee forward over the rear foot, keeping the body's center of gravity firmly between the two feet. Be sure to maintain upright posture as opposed to forward lean when performing the straight legged exercise above.



Side Lunge Adductor: Step laterally approximately one stride length into a lateral lunge. With the lead foot flat, drop down and back at the hips flexing the lead leg at the knee while maintaining an extended rear leg with the foot flat on the ground. Drop down and back at the hips and knee until the adductors of the trailing leg taking the adductors into a stretch. Perform activity with lead foot facing laterally as in picture 1, and facing in direction of lunge as in picture 2.

Forward Lunge Overhead Reach: Step forward into a lunge position, the front toe turned slightly in towards the mid-line of the body. In a controlled manner, lower the body towards the ground with the rear foot moving into a plantar-flexed position, the toe and ankle pressing into the ground. Moving into the low portion of the movement, reach over the head. On reaching maximal ROM push the hips slightly forward as the hands move upwards and slightly behind the head. Open up the core to and drop lower at the hips to maximize stretch of hip flexor.



Forward Lunge Twist: Step forward into a lunge position, front toe turned slightly in towards the mid-line of the body. In a controlled manner, lower the body towards the ground with the rear foot moving into a plantar-flexed position, the toe and ankle pressing into the ground. On reaching the low portion of the movement, arms held wide for balance, twist the trunk through the maximal range of motion over the outside of the lead foot.

Deep Overhead Squat: Place both feet flat on the ground and slightly wider than shoulders' width apart, drop down and back at the hips to initiate movement into squat. Continue downward movement flexing at the knees and hips with the arms held above the head. Move comfortably into a deep squat, with the hands inter-locked, reach as high as possible overhead. Stretch may be increased by bringing feet closer together and likewise drawing feet closer to neutral as in picture #2.

Tea Kettle: Standing in a single-leg balance stance flexing slightly at the knee and hip. Draw the opposite leg across the body abducting at the hip and flexing at the knee to place the lateral portion of the lower-leg just above the ankle just above the knee. On reaching this position, flex the knee and hip of the stance limb and maximally abduct the hip of the alternate leg to maximally stretch the gluteal muscles. Return the leg to the ground and stand upright to stretch the alternate leg.



Lying Gluteals: With one leg extended behind the body, flexing at the knee bring the opposite leg across the body with the foot coming to the opposite hip. Once in the position, relax through the hips to press downward at the hips and maximize stretch of hip musculature of the bent leg. Remain with upper body upright as in picture 1, or move into deeper stretch by lying chest flat on ground as in picture 2.

Seated Gluteals: This is a two-phase stretch. The initial phase stretches the lower back and gluteals, the second phase stretches primarily the gluteals. Phase 1: Begin in seated position with one-leg extended, draw the opposite leg across and place foot on outside of extended leg. Once in this position turn the body in the direction opposite to the cross-over leg, pressing the arm into the knee to twist into a stretch of the lower back and hips. Phase 2: Out of phase 1, return the upper body to neutral, tuck the extended knee into the opposite side hip. Keeping body centered, pull the knee towards the trunk to stretch the gluteal muscles.

Kneeling Quadriceps: Begin in a lunge position with the knee resting on the ground. From this position, draw the heel of the resting leg upwards to grasp the foot with the hand. Pull the foot upwards and into the glutes to stretch the quadriceps muscles.

Kneeling Hamstring: Begin in a lunge position with the knee resting on the ground. From this position extend the lead leg fully and lean forward over the foot to stretch the hamstring of the lead leg.

Lying Figure-4: Lying flat on the back, extend one leg upwards and cross the opposite leg over the extended leg, the foot placed just above the knee. Place the hands behind the knee of the extended leg and gently pull the knee towards the head and the leg into the desired stretch.

Lying Piriformis/Adductors: Lying flat on the back, place the soles of the feet flat together at a distance from the hips which allows for a comfortable stretch to be undertaken. Relax into stretch. As comfort with stretch increases, draw the legs closer to the body to increase stretch.