

Strength Training for Distance Runners

Drills, core and workouts to keep your athletes healthy and strong

By Forest Braden-UCLA Track and Field

Overview

- **Drills**-Team Indiana Elite Drills.
- **Core**-Medicine ball and body weight exercises.
- **Workouts**-Workouts that make athletes strong and keep healthy.

Drills

- Developed by and arranged in part by Dr. Robert Chapman, exercise physiologist at Indiana University and coach of Team Indiana Elite.
- Active stretching routine implemented before practice to get body warmed up and muscles firing.
- Also helps to maintain core fitness.

High-Knee Hold

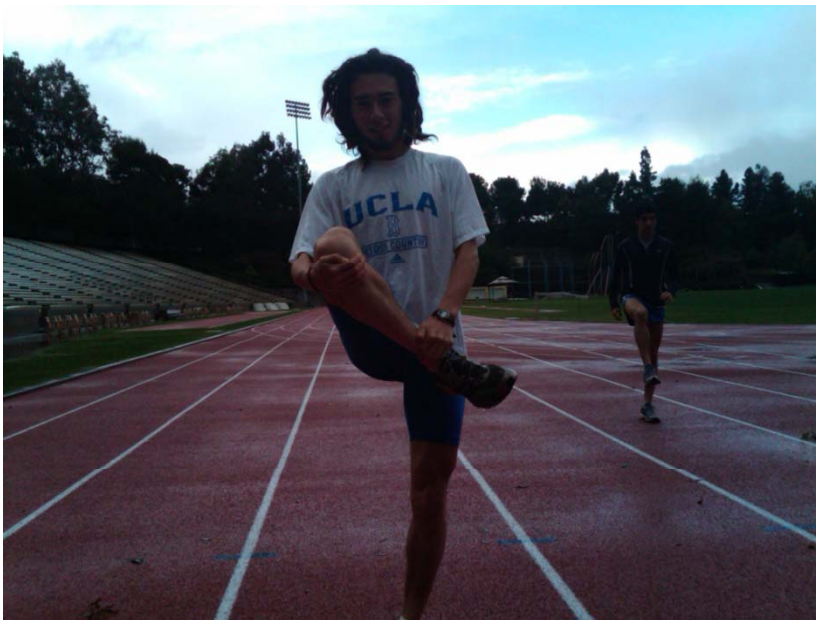


- As you walk, bring knee as high as it can go, then grab with hands and pull lightly to chest.
- Hold 2 seconds.
- Get up on your toe.
- Bring down to ground and continue with other leg.

Butt-Kick Hold

- Start with a high-knee
- Bring the leg back into a 'butt-kick'
- Hold for 2 seconds
- Walk into the same thing with the opposite leg.

High-Knee Side Holds



- As you walk, bring knee as high as it can go, then grab with hands and pull lightly to chest at a 45 degree angle.
- Hold 2 seconds.
- Get up on your toe.
- Bring down to ground and continue with other leg.

Superman

Stretches

- Hamstring
- Quads
- Groin
- Works on core strength as well.
- Walk into a high knee.
- Swing your leg back
- Extend opposite arm and opposite leg.
- Finger-tip to heel should be straight.

Walking Hands

Stretches

- Hamstrings
- Calves
- Achilles
- Works on core strength.

Start in push-up position.

Slowly walk legs toward hands.

Walk all the way to hands.

Walk hands back down to
push-up position.

Repeat 5 times.

Zombie



- Keep arms stretched out in front of you.
- Bring straight leg up to toes.
- **DO NOT SWING LEG...LIFT LEG.**

“A” Walk/ “B” Walk

- Walking, bring heel up to butt.
- Extend leg and put a light snap into the knee.
- Continue walking alternating legs.

“A” Skip/ “B” Skip

- Same as walk but add a skip into the drill.
- Make sure arms are moving with the legs.
- Quickly but strong and efficient.

Butt Kicks

- Running butt-kicks.
- Standard, classic drill that gets quads firing and joints moving.
- Should not cover that much distance.

Karaoke

- Running side ways, crisscross left and right legs.
- 30-50 meters.
- Switch directions.

Big Skips

- Powerful skips off the ground.
- Focus on height rather than length.
- Add big arm circles forward and backwards.

Hamstring Walk



- Walking, bend down and touch your toe.
- Keep the leg straight that you are stretching.
- Bend the leg that you are not stretching

Key Points of Drills

- Drills should be done for a length of 10-20 meters except Karaoke and Butt-Kicks which will be longer (30-50 meters).
- Be quick, but don't hurry (John Wooden). Applies to these drills as well. Fast, Strong, Efficient.
- Every drill is in control.

Medicine Ball/Core Exercises

- Most of Medball/Core exercises influenced by Dr. Chapman, Jay Johnson, Morgan Bonds, David Welsh, and Pat Tyson.
- Core is designed to get the athlete strong in order to prevent injury and increase performance.
- Strengthen the entire body to prevent weaknesses.
- Keeps athletes tough and disciplined.

The Christian Smith Drill



What he's doing

- Sit on back of your butt.
- Scissor legs up and down never touching the ground.
- Bring medicine ball through legs.
- Work up to a minute at a time. Very difficult at first.
- My favorite core exercise!!!

Russian Twist

- Sit on back of butt.
- Bring medball from left to right side.
- Work up to a minute.
- Twist at core.

Morgan Bonds Drill

- Lay flat on ground with MedBall in your hands with arms stretched out flat behind you.
- Bring MedBall up to feet.
- Lay back down and repeat.
- Bend from the core.
- Strengthens your muscles from your quads through your abdominal and up into arms and wrists.
- Strengthens lower back muscles as well.

MedBall Bridge



- Place hands on Medball, feet on the ground.
- Keep back straight.
- Keep both feet on the ground.
- As you get stronger, move medball further out over your head.

Advanced MedBall Bridge



- From regular Medball bring knee towards arms and hold.
- Switch legs as fits.
- Once you get strong enough, switch straight from MedBall Bridge to Advanced MedBall Bridge.
- One minute regular bridge to 30 seconds each leg advanced bridge.

MedBall Pushups



- Place one hand on ball, one hand on the ground.
- Go down and do pushup on ball.
- Roll ball to other hand repeat.

MedBall Pushup Variations

- Place both hands on medball and do repeat pushups.
- Place medball on ground, do pushup and place left hand on ball, quickly pushup and place your right hand on the medball. This pushup is fast and explosive.
- Put feet on medball/exercise ball/bench/chair/whatever you can put you feet up on and do pushups.
- **KEEP YOUR CORE TIGHT/FLEXED.**

Exercise Ball Squeeze



- Place exercise ball between your legs.
- Squeeze exercise ball repeatedly.
- Works inside of your legs and groin.

MedBall Squats

- Get in squat position.
- Hold medball out in front of you.
- Keep feet shoulder width apart, toes straight.
- Make sure knees do not come past feet as you squat.
- Basic squat technique.

Other Classics

- Pull-ups
- Push-ups-Hundreds of variations!
- Dips
- Plank
- Side Plank
- Atomic drops
- Lunges
- Wall sits
- Bicycle
- Penguin
- Box Step-ups
 - Step onto box and drive upwards.
 - Get up high on your toe and arms follow legs.

Keys to Drills

- Get in the habit of doing more and doing it better! Discipline and toughness come from callusing your body to feel the pain. In running, pushups, sit-ups, stretching, drills.
- Put enthusiasm into everything you do!
- Keep everything tight:
 - Must be in control.
- Keep abdominal flexed:
 - Should feel like you are bringing your bellybutton towards your back.

Workouts

- Running great is about finding the balance between doing too much and not doing enough.
- There is a fine line between greatness and injury.
- An athlete cannot run fast if they are not on the track.

Finding the balance...

- Intensity will get you hurt before mileage will.
- If you are smart with mileage you can run more. As you get stronger you can run more. As the years go by without injuries, you can run more.
- BUT to run fast you need to feel race pace turnover.
- You need to do fast track session. Your legs have to turnover.

My Principles

- Barefoot grass strides 4-5 days a week.
 - Get some turnover into your legs
 - Get your feet stronger.
 - Shakeout the gunk in your legs.
 - Incorporate racing spikes into strides to get your calves and feet used to them.
- Workout hard 2 days a week and use long run as “medium-hard”
- I never put my athletes on the track during the cross country season.
 - You can run very fast off of strength training especially over 6 or 10 thousand meters.
 - Longer reps on grass or dirt and the occasional longer steady state on the roads gets the legs and body ready for the pace of a cross country race.
 - Keeps them hungry and excited for the track.

Lactic Threshold Runs

- Early in the season
- Increase your bodies ability to combat or hold off lactic acid.
- Builds aerobic strength and helps maintain throughout the grueling season.
- Bread and butter of summer and early season training.
- Incorporate them throughout the season
- Start at pace your body can handle cut down every mile.
- 6-10 miles.

Long Repeats

- 1k X 8-10 with jog recovery (Men)
- 1k X 5-8 with jog recovery (Women)
- Mile repeats.
- 2k repeats.
- Long repeats very little recovery continues to maintain strength but gets body used to moving at race pace or faster.

Recovery Days

- Take a couple easy days a week to run how you want to.
- Make sure you take advantage of recovery days.

Typical Training Week

- Sunday-Long Run. Drive as team to trails.
- Monday-AM: 3-4 miles easy PM: 8-10 miles+5-10 grass strides. Core in the weight room.
- Tuesday-AM: 3-4 miles easy PM: Hard workout plus team stretching.
- Wednesday-PM: Medium Long run 8-12+5-10 grass strides and team stretching/pushups/situps.
- Thursday-AM: 3 miles easy PM: 8 miles recovery. Run how you feel.
- Friday-Am: 3-4 miles easy PM: Hard workout+team stretching.
- Saturday-0-8 On Your Own.

In Closing

- For an athlete to maximize his/her potential he/she MUST minimize the occurrence of injuries.
- Confidence
- Base
- Experience
- Our responsibility to keep athlete on the track/course as much as we can!