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
  - Start in push-up position.
- Calves
  - Slowly walk legs toward hands.
- Achilles
  - Walk all the way to hands.
- Works on core strength.
  - 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!