

Spring 15 LMG Ideas

Mobility demonstrated:

http://running.competitor.com/2014/04/injury-prevention/the-10-best-mobility-exercises-for-runners_36329

12 Standards of assessment before being Ready to Run:

1. Neutral feet

- a. When you're standing/walking/running, your feet are straight, parallel, shoulder-width apart, directly under your hips.
- b. Not duck feet, not biased or unbalanced.
- c. No flip-flops or high heels. Be barefoot as much as possible.
- d. Brace position:
 - i. Squeeze glutes, setting pelvis in neutral position.
 - ii. Breathe into diaphragm, tighten abs, and slowly exhale. This pulls your ribcage into neutral position.
 - iii. Set head to neutral position extend arms to the side, pull shoulders into external rotation, then lower arms.
 - iv. Dial all down to 20% power. This is neutral position.
- e. Exercises:
 - i. Couch stretch
 - ii. Adductor smash
 - iii. Anterior hip smash
 - iv. Hamstring floss
 - v. Double-banded hip distraction
 - vi. Global gut smash
 - vii. Glute smash and floss
 - viii. Hip capsule rotation

2. Flat shoes

- a. Having your heel higher than your toes aids heel-striking, and this is a "MUST NOT" to avoid pain while running.
- b. How to switch to minimalist shoes:
 - i. Choose a pair you like (look for zero drop and zero arch support)
 - ii. Plan on a minimum of 6-8 weeks to transition.
 - iii. Use the 10% rule: If you're running 800m, run 80m in your new shoes, then finish in your old.
 - iv. Each week, increase by 10%. But listen to your feet.
- c. Exercises:
 - i. Plantar mobilizations
 - ii. Toe grip
 - iii. To re-animator
 - iv. Calf smash

3. A supple thoracic spine

- a. "A tight, hunched thoracic spine shuts down the flow of power within the body's systems."
- b. Exercises:
 - i. T-spine global smash
 - ii. T-spine double-ball strip
 - iii. Anterior shoulder

4. An efficient squatting technique

- a. Test #1: Can you perform a squat with good technique, using the patterns your body is designed to squat with?
 - i. Stand with feet just outside your shoulders--the classic power stance in athletics.
 - ii. Activate glutes and posterior chain.
 - iii. Drive your knees outward.
 - iv. Drop your hips below the plane of your knees without extending your knees over your feet.
 - v. Keep your knees from extending over your feet.
 - vi. Keep a flat back. Glutes and abs should stay active to maintain a strong, neutral spine and flat back.
 - vii. Hang out in squat position.
- b. Test #2: Can you maintain a minimum of 10 good, clean air squats within the Tabata interval protocol?
 - i. 8 sets of 10 good air squats in 20 seconds with 10 seconds rest between each set.
 - ii. If you can do more than 10, great. Just keep them good.
- c. Exercises:
 - i. Couch stretch
 - ii. Banded ankle mob
 - iii. Posterior chain banded floss
 - iv. Low-back ball smash
 - v. 10-minute squat test
www.mobilitywod.com/2010/08/episode-01-the-first-of-many-beat-downs

5. Hip flexion

- a. Test: Can you stand on your left leg and express normal range of hip flexion with your right hip for 30 seconds, then repeat with your right leg and left hip?
 - i. Stand on one leg with a braced, neutral spine and straight feet, and pull other knee to your chest to fully flex your hip.
 - ii. Drop hands. To pass the standard, your knee must break the plane of the top of your hip and achieve a 120-degree angle of flexion or better.
 - iii. Point your toes. Hold this position for 30 seconds.
 - iv. Repeat with other leg.
- b. Exercises:
 - i. Banded hip, single-leg squat

- ii. Double-band hip distraction
- iii. Glute smash and floss
- iv. Hamstring smash and floss

6. Hip extension

- a. Sit as little as possible.
- b. Do the couch stretch every day.
 - i. Back your feet against a wall. Slide left leg up so your knee hits the wall. Make your shin flush with the wall and point your toe.
 - ii. Squeeze your glutes and keep squeezing to stabilize your lower back and position your hip joint correctly.
 - iii. Draw up your right leg and post it in front of you with shin vertical.
 - iv. With glutes squeezed, drive the front of your hip toward the ground. Maintain this position for 1 minute.
 - v. Drive your torso upright, glutes still engaged, and hold 1 more minute.
- c. Exercises:
 - i. Couch stretch
 - ii. Banded hip, single-leg squat
 - iii. Psoas smash and floss

7. Ankle range of motion

- a. Test #1: Dorsiflexion -- can you get into a pistol position?
 - i. Start in a standing position with feet together.
 - ii. Drive your knees out as you squat toward the ground.
 - iii. Keep heels on the ground (rounding back is okay).
 - iv. Once in a deep squat, prepare to extend your right leg into the pistol position.
 - v. Right leg should be straight, left leg in full flexion with heel on ground, and knee tracking in line with foot.
 - vi. Don't let your left arch collapse.
- b. Test #2: Plantar flexion -- can you get into a kneeling position?
 - i. Full kneeling position with both feet in dorsiflexion.
 - ii. Sit tall with back completely straight.
- c. Exercises:
 - i. Plantar mobilizations
 - ii. Dorsiflexion
 - iii. Plantar flexion overdrive
 - iv. Anterior hip smash
 - v. Couch stretch

8. Warming up and cooling down

- a. Exercises:
 - i. Couch stretch
 - ii. Hip capsule rotation
 - iii. Spending time in a deep squat

9. Compression

- a. Compression (socks) assists the body's circulation and lymphatic systems in restoring worked tissue.
- b. Wear compression socks at least some part of every day, especially if you do a lot of sitting or traveling.

10. No hotspots

- a. "You are ready to run when your routine maintenance is up-to-date and you have no hot, starchy tissues or joints."
- b. "If you feel pain during or after moving, then what you were doing was not functional movement."
- c. Use voodoo floss band compression
 - i. Start a few inches below the hotspot.
 - ii. Always wrap towards your heart.
 - iii. Use a 1/2-inch overlap with each wrap of the band.
 - iv. Shoot for about 75% of stretch tension over the problem spot, and 50% above and below it.
 - v. Leave some slack at the end to secure the band.
 - vi. Once wrapped, immediately begin mobilizing the joint through full range of motion.
 - vii. If you start to go numb or feel pins and needles, unwrap.
 - viii. After about 2 minutes, unwrap. If you are wrapping to restore sliding surfaces, do this 2-3 times a day. If wrapping to counter swelling, 5-10 times is okay.

11. Hydration

- a. "When it comes to your body and your performance, water is a smart bomb. It dissolves. It circulates. It removes."
- b. "A 2% drop in your optimal body water level can enable max VO_2 power losses of up to 11%. This is because, in a hypo-hydrated state, your blood gets more viscous [thick] and is not delivering as much oxygen."
- c. Optimally, you should drink 2-3 liters of water a day (70-100 oz).
- d. When you aren't drinking with meals, add a pinch of salt to aid absorption into your tissues.

12. Jumping and landing

- a. Test #1: Jumping onto a box
 - i. Load your hips and hamstrings.
 - ii. Keep knees, feet, and back neutral. Power should be coming from your posterior chain.
 - iii. Land with your feet/knees straight, driving your knees out on landing.
 - iv. DON'T let knees collapse inward.
 - v. DON'T collapse arches of the feet.
- b. Test #2: 30 Single-leg jumps
 - i. Use your hips to power your jumps.

- ii. Keep a neutral position throughout, from your head through your shoulders through your feet.
 - iii. Land on your forefoot and allow your heel to lightly kiss the ground before popping up.
 - iv. Each of the 30 landings for each leg must be with your foot straight and your knee in a neutral position.
 - v. DON'T collapse arch or knee.
- c. Exercises
- i. Double-ball ankle smash and strip
 - ii. Plantar mobilizations
 - iii. Dorsiflexion work
 - iv. Plantar flexion overdrive
 - v. Adductor smash

Targeting your “goats” - The 12 standards will help you pinpoint your major weaknesses. They are one of 4 types:

1. A lifestyle issue (such as not standing with neutral feet)
2. A mobility issue (such as poor hip extension)
3. A position issue (such as being unable to squat well)
4. An issue of mechanics (such as poor jumping and landing technique)

Improving your mobility

“Mobility work is just one aspect of the *Ready to Run* construct. It’s one part of a three-part approach:

1. **Lifestyle.** Make sure that your lifestyle choices are in order. Proper hydration, flat shoes, compression socks, neutral feet at all times--remember to attend to these simple yet powerful disciplines.
2. **Mobility.** Make sure that you are working toward or maintaining the mobility standards, like hip extension and ankle range of motion.
3. **Mechanics.** Make sure that you are jumping, landing, and squatting correctly. With lifestyle and mobility humming along well, you have the ability to get into and practice good position and good mechanics. From here, you can further refine your mastery of running by taking on the Pose Method or a similar running-form technique.”

Mobility work: Guiding principles

1. At least 10 minutes a day. If you get 20, that’s even better. But commit to at least 10.
2. Two minutes on each mobilization. Don’t cut this one short. And make sure it’s a *focused* 2 minutes. This means you might only get one or two mobilizations in 10 minutes, but that will be more effective than targeting every muscle group for 10 seconds each.
3. Work upstream and downstream of the problem.

4. “If it feels sketchy, it is sketchy. While you want to push deep and peel back layers of discomfort with your mobility work, if the signal coming from your body says, ‘This is wrong,’ then it is wrong.”
5. Be creative. Don’t get locked into the same few exercises.
6. No days off.

(Taken/Adapted from *Ready to Run* by Dr. Kelly Starrett)