

Simple At-Home Resistance Training for Runners

Shannon McGinn, Creating Momentum Coaching
Certified Running Coach, USATF, RRCA, NFHS
Revised March 2020

When training myself to run the fastest of my life in 2016, I did not lift at the gym. Since then, I have started to lift weights because I love it. But I don't need to pay for a gym membership to get strong enough to run my best.

At the minimum, I will do **four (4) body-weight exercises immediately after my hard workouts up to 3 times per week**. This routine helped me achieve all of my lifetime PRs after I turned 40 years old (including two sub-3 marathons, a 4th overall finish at the 50 Mile National Championship (7:31), a 6-hour age group American Record (43.16 miles), a half marathon PR (1:27), an 8K PR (6:00 pace) and a 5k PR (18:54). All of these achievements occurred between 9/10/16 and 12/3/16. I was fast, fit, strong and resilient. I believe my simple at-home resistance routine kept me injury-free during that challenging Fall season. **I would like to share my routine with you.**

My routine consists of jump rope, single-leg squats, jackknife sit-ups, and pushups. Early in a new training cycle, I will start with easier versions of these exercises to build up my strength. I do my resistance training right after my runs, in the parking lot, in my backyard, or inside my home. **Most importantly, I do these exercises after my harder workouts to allow my easy training days to be restful recovery days.** If I don't have hard days on my plan, I still limit full-body strength training to three times per week.

FAQ: Isn't lifting weights bad for runners?

No, not necessarily. Often it can help, especially for older runners, such as those over 40 years of age. I believe that getting into the gym to lift heavy will help me to retain muscle mass which naturally wastes away with age unless we do something to maintain it. I also feel heavy lifting helps me to make additional strength gains that will benefit my running and keep me competitive. My heavy resistance training comes only after I have first built a foundation of strength in the areas needed to support optimal running form, which my simple at-home routine provides for me.

Yes, it is true that "too much" lifting can interfere with endurance gains (and vice-versa). It is wise to be careful and add resistance training slowly in a thoughtful and intelligent way to a race-training plan. For example, I run first so my resistance training does not impair my ability to achieve my run training targets since running well is my primary goal. For those whose primary goal is to get stronger, cardio should come after lifting so as to not interfere with their ability to achieve their strength training targets.

FAQ: How much lifting is "too much"?

There is no rule about how much lifting is "too much." This will be personal. "Too much" lifting will be most easily recognized as the point in time when you feel you are not recovered enough from your strength training to run your next hard workout. This will be evidenced by your inability to complete your run workouts as planned. If you are training hard but not getting any faster, try reducing your strength training and see what happens.

FAQ: Ok, that was all very interesting, but I really want to know how to begin this "At-Home" program?

Below is a very beginner-friendly starting point. Some of you may find this too easy. Others

may find this too hard. During our work together, my clients and I discuss modifications to help identify a level of volume and intensity that works best.

Do this routine **only three times per week** with at least one rest day between sessions. **On your first day**, you want to identify how to successfully execute each exercise by doing just one set. You may be surprised to find that you are sorer the next day than expected. If you are not sore at all the next day, then you should add more sets before trying to make the exercises harder.

FAQ: Do I have to do all these exercises at the same time?

Yes. This is a complete full-body circuit that should be done all at once to be most effective. This plan is one giant **super-set** (same muscles worked in different ways) that is done in the form of a **circuit** (series of exercises to be done in rapid succession).

The order of this circuit is deliberately designed to allow the exercises to work similar muscle groups together when possible (i.e. the super-set concept), so don't change the order. Don't do half of these in the morning and the other half later in the day.

Work through the circuit without rest between exercises. If you do need rest, you should take only as much as needed. After a complete circuit, rest only as much as necessary to ensure that you can complete the next circuit with good form if you are doing more than one set.

FAQ: What exercises should I do?

(1) Jump Rope: I use a speed rope. Any appropriate length and effective rope will do. I don't recommend weighted ropes.

Use a timer. Aim for 30-60 seconds of single hops with feet together. If you need to bounce once between skipping over the rope, do it. We are not trying to do anything fancy. Keep it simple. Over time, work up to 120 seconds in total. If you want to make this harder, consider alternating single leg hops for 10 seconds per leg and then move on to a running step. These modifications are more specific to running and a better use of jump rope time than anything more extreme (like double-unders).

The jump rope is the warm-up. It also works the entire body from arms to abdominals to glutes, quads, and calves. It is a plyometric exercise. It builds endurance and strength at the same time. Jumping ropes is especially useful for runners because it reinforces ideal running form by getting you to land with your feet directly under your center of mass without any bend at the waist. If you do not use proper form when jumping, the rope will catch. As your form improves, the less trouble you will have.

(2) Unweighted Two-Leg Squats. After jumping, we want to continue to target the legs. First, start with two-leg squats. Sit in a chair or on a bench (even a park bench). Using two feet at the same time with feet spread to hip-width apart, stand up. Do not use your hands to assist you. Hold them straight out in front of you parallel to the floor as you rise up. If you need a little assist from your hand then use them, but over time rely less on your upper body to help you up.

Once fully upright, slowly lower your butt back down to the seat, squatting down over the chair or bench. Tap the seat with your butt lightly and then rise back up. Do this motion 20 times for one complete set. If you need to return to the fully seated position between squats, do it. That is what the chair is for. However, aim to sit less and less over time. Complete at least 20 two-leg hands-free squats without sitting before you graduate to Single-Leg Squats.

Single-Leg Squats (Bench Pistol Squats). When two-leg squats become too easy, I will replace them with single leg bench pistol squats. I always do these over a chair or bench. I find it helpful for me to find my center of mass by **starting in the seated position and then I stand up on only one foot.**

Once upright, I fixate my gaze on a stable object in the distance to help keep my balance. With arms straight out like I am holding a box in front of me, and while continuing to stand only on one foot, I lower my butt back down to the bench. If necessary, I may tap the ground with other foot to keep my balance (only if needed) or I may sit back down before getting back up. Ideally, I want my butt to tap the seat lightly before I slowly rise back up on one foot without any balancing help. **Full disclosure:** I do need to sit at first when I haven't done these in a while. I tend to wobble too. But as I get stronger, I wobble less, I won't need to sit and I will eventually be able to do 20-30 of them with fluidity at a rapid pace.

Review this video to understand how to do the **bench pistol** exercise: <https://www.youtube.com/watch?v=1-Yug9pD7JY> Try for 10 on each leg, initially. If you need to break them up into smaller sets because 10 in a row is too hard, then do that. Work up to 20 on each leg. Some of you may graduate to holding a weight out in front of you when you do these. Some of you may want to keep in the two-leg squats with added weight as well. I found I did not need to do that.

(3) Core Work: After your squats, you can start working your core with Crunch Ups and Leg Raises as two separate components. Work up to 20 reps of each exercise.

For **Crunch up**, I find that raised legs take the strain off the lower back. You can press your back into the floor for stability. <https://exrx.net/WeightExercises/RectusAbdominis/BWCrunchUp>

For **Leg Raises**, think about using the lower abdominals to move the legs up. I do not use my hip flexors to pull my legs up. It feels different and when you do it properly you should feel your deep lower abdominals doing all the work. <https://www.youtube.com/watch?v=l4kQd9eWclE>

Ultimately I aim to work up to the **Jack-Knife Sit-Up** (when we put these two components together). Personally, I find that not raising my arms over my head during the jack-knife sit-up initially makes this exercise possible for me. Eventually raising my arms over my head is the goal since it is a more advanced modification of this sit up. <https://www.youtube.com/watch?v=CWOZyf8kaH0>

(4) Push-ups: I do both knee pushups followed by standard push-ups. I believe that both men and women should do both types because each exercise works muscles a bit differently. Knee push-ups are easier as the load on the arms is reduced. But once standards pushups can be accomplished, this doesn't mean that knee-pushups should be eliminated from the circuit. I ultimately aim for 20 knee-push ups followed immediately by 10 standard push-ups per set (i.e. a push-up super-set).

Knee push-up. Aim for 10-20 per set (break this up as needed) <http://www.exrx.net/WeightExercises/PectoralSternal/BWPushupKnee.html>. Use PERFECT FORM and FULL Range of Motion. Notice her chest taps the floor before she rises up. Do not settle for half push-ups. Go all the way down. Do less if that is what it takes to ensure you do them correctly.

Standard Push-up: After you can do 20 knee push-ups correctly, then do as many standard push-up as you can do perfectly AFTER you complete the knee push-ups. Again focus on Full Range of Motion. All the way down to the floor. No half push-ups. If you can only do one that is fine. Work on two next time. I aim for 10 standard pushups after 20 knee pushups. I found that to be adequate for my needs.

<http://www.exrx.net/WeightExercises/PectoralSternal/BWPushup.html>

Congratulations! You just completed one giant full-body super-set circuit. If you time yourself, you should find that it takes about 7-10 minutes. That is not a big commitment. **When ready for round two, grab your jump rope and start over.**

FAQ: How many sets?

During week one of a new training cycle, I start with the easiest exercises I can do that cause me to feel some fatigue. I do just one set. It could take me 10 minutes. That is all. The first week could be a little as three sessions of just one set of those 4 exercises.

When I get to week two of training, I will add another set by going through all 4 exercises and then starting the circuit over for round two. However, please use soreness as your guide. If you are very sore from the exercises don't add more work. If you are not sore at all, add another set sooner.

When I feel comfortable, I will complete three sets three times per week as quickly as possible. I continued with three sets of this circuit three times per week throughout the remainder of my training cycle. I might add calve raises to my plan since I often have a sore Achilles tendon. If you have an area of weakness that you want to address, you can also add a personalized exercise to your circuit.

We don't need to make resistance training a huge time-consuming project. I can get this entire workout done in the same amount of time it would take me to drive to-and-from the gym. For me, this routine was enough strength training to keep me injury free and strong enough to run my best. I think this would be enough for most people too.

Thank you for taking the time to read through this article. If you have any questions or are interested in coaching, please email me a shanmcginn@gmail.com