Efficient Running Training Program: Beginner/Adapter Program

- **Designed for the runner just starting out, after an extended break, or recovering from illness or injury.**
- **Primary goal is safe and gradual adaption back to fitness. This plan is very conservative and designed for anyone.**
- **Schedule is designed with flexibility and different activities, so have fun and make movement a daily habit**

Unlike many programs, we place the major emphasis on aerobic development, running skill, specific strength, health, progression over years, and not on high intensity workouts. Any intense program can give you short immediate gains, but this comes at a cost.

The philosophy behind our schedules and program is eloquently described by the world's leading Sports Scientist Dr. Tim Noakes of South Africa.

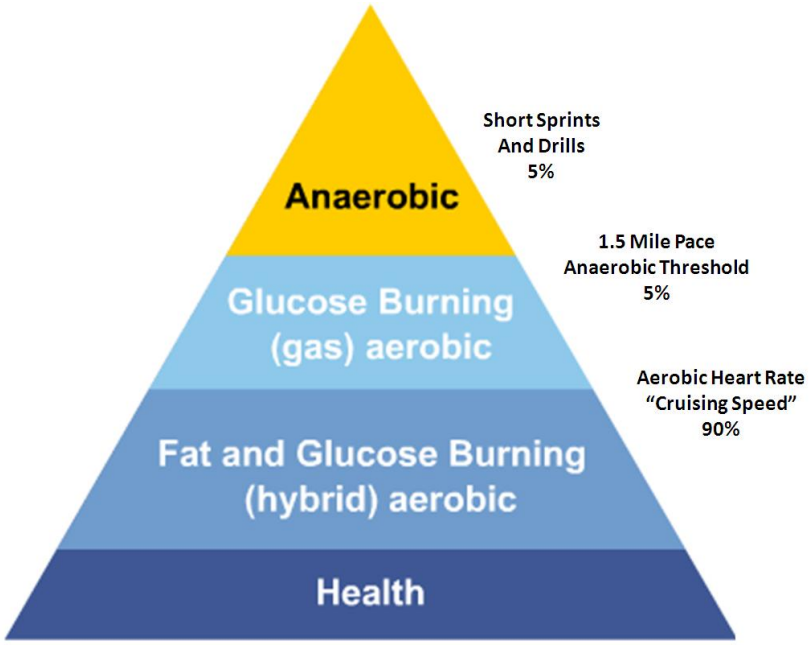
"…. you are not training to run 1.5 miles. What you are training for is to live a long and productive life and maintaining health optimally. For that there is no question that whatever is sustainable is the best type of training. My view is that it is much more sustainable to run longer distances at one's own comfortable pace on a daily basis than to have to force runners to do anaerobic work, which really is not sustainable in the long term for most ."

We also apply the time tested wisdom of former USAF Flight Surgeon and Father of Aerobics Dr. Ken Cooper. The Cooper Institute has tested and trained 1000's of runners over the last 30 years.

"Our general philosophy here at Cooper is that the most effective exercise training programs combine the principles of ***overload, progression, and specificity.*** *By* ***overload****, we mean training longer/more frequently and/or harder this week than last week and longer/more frequently and/or harder next week than this week. By* ***progression*** *we mean increasing the overload very gradually, i.e. just a little longer/more frequently and/or little harder each week. Too much overload too soon leads to musculoskeletal injury. By* ***specificity****, we mean training according to the goal, i.e. running is a lot more effective for improving 1.5 mile run score than swimming. That doesn't mean that the member needs to run at the exclusion of all other aerobic activities, but certainly running needs to be a part of their exercise training program."*

Believe the immortal words of Dr. George Sheehan who said "Everyone is an athlete". Apply the advice of Arthur Lydiard, Coach of Champions and the Cardiac Patients, who said "Train don't strain." Make activity a daily habit and you too will succeed in both fitness and in health.

Efficient Running Training Program: Beginner/Adapter Program



PFT Training Program – Beginner 16-week

Note- the Walk/Run are specific times, and are very conservative start points. These ***need not be rigid***. The goal is to get moving for the total amount of time and keep it comfortable. If you feel well, you can progress these gradually to "Jog" or "Aerobic Run" as indicated in each weekly training block.

	Mon	Tues	Wed	Thurs	Fri	Sat (long run day)	Sun
Week 1	Walk 15 - 20	REST Or X-T 30	Walk 15 - 20	REST Or X-T 30	Walk 15 - 20	Walk 15 - 20 Or X-T 30	
Week 2	Walk 20 - 25 Phase 1 drills	REST Or X-T 30	Walk 20 - 25	REST Or X-T 30	Walk 20 - 25 Phase 1 drills	Walk 20 - 25 Or X-T 30	REST Or Fun Active Play
Week 3	Walk 5 + Run 1/ Walk 5 x 5 Phase 1 drills	REST Or X-T 30	Walk 5 + Run 1/ Walk 5 x 5	REST Or X-T 30	Walk 5 + Run 1/ Walk 5 x 5 Phase 1 drills	Walk 5 + Run 1/ Walk 5 x 6	REST Or Fun Active Play

Efficient Running Training Program: Beginner/Adapter Program

Week 4	Walk 5 + Run 1/ Walk 4 x 6 Phase 1 drills	REST Or X-T 30	Walk 5 + Run 1/ Walk 4 x 6	REST Or X-T 30	Walk 5 + Run 1/ Walk 4 x 6 Phase 1 drills	Maximum Aerobic Function Test 2 to 3 mile distance	REST Or Fun Active Play
Week 5	Walk 5 + Run 2/ Walk 3 x 8 Phase 1 drills	REST Or X-T 30	Walk 5 + Run 2/ Walk 3 x 10	REST Or X-T 30	Walk 5 + Run 2/ Walk 2 x 10 Phase 1 drills	Walk 5 + Run 2/ Walk 2 x 12	REST Or Fun Active Play
Week 6	Walk 5 + Run 2/ Walk 2 x 10 Phase 1 drills	REST Or X-T 30	Walk 5 + Run 2/ Walk 2 x 10 strides/ pickups	REST Or X-T 30	Walk 5 + Run 2/ Walk 1 x 10 Phase 1 drills	Walk 5 + Run 2/ Walk 1 x 12	REST Or Fun Active Play
Week 7	Walk 5 + Run 3/ Walk 2 x 7 Phase 1 drills	REST Or X-T 30	Walk 5 + Run 3/ Walk 2 x 7 strides/ pickups	REST Or X-T 30	Walk 5 + Run 3/ Walk 1 x 8 Phase 1 drills	Walk 5 + Run 3/ Walk 1 x 10	REST Or Fun Active Play
Week 8	Walk 5 + Run 4/ Walk 2 x 8 Phase 1 drills	REST Or Jog 15-20 Or X-T 30	Walk 5 + Run 4/ Walk 2 x 6 Easy Hills strides/ pickups	REST Or Jog 15-20 Or X-T 30	Walk 5 + Run 4/ Walk 1 x 8 Phase 1 drills	Maximum Aerobic Function Test 2 to 3 mile distance	REST Or Fun Active Play
Week 9	Walk 5 + Run 4/ Walk 2 x 8 Phase 1 drills	REST Or Jog 15-20 Or X-T 30	Walk 5 + Run 4/ Walk 1 x 8 Easy Hills strides/ pickups	REST Or Jog 15-20 Or X-T 30	Walk 5 + Run 4/ Walk 1 x 8 Phase 1 drills	Walk 5 + Run 4/ Walk 1 x 12	REST Or Fun Active Play

Efficient Running Training Program: Beginner/Adapter Program

Week 10	Aerobic Run 30 x 10 Surges	REST Or Jog 15-20 Or X-T 30	Walk 5 + Run 5/ Walk 2 x 6 Easy Hills strides/ pickups	REST Or Jog 15-20 Or X-T 30	Walk 5 + Run 6/ Walk 1 x 6 Phase 1 drills	Walk 5 + Run 6/ Walk 1 x 8	REST Or Fun Active Play
Week 11	Aerobic Run 35 Phase 1 drills	REST Or Jog 15-20 Or X-T 30	Walk 5 + Run 6/ Walk 2 x 6 Easy Hills strides/ pickups	REST Or Jog 15-20 Or X-T 30	Walk 5 + Run 6/ Walk 1 x 6 Phase 1 drills	Walk 5 + Run 8/ Walk 1 x 7	REST Or Fun Active Play
Week 12	Aerobic Run 35 Phase 1 drills Or 1.5 mile Time Trial @ track	REST Or Jog 15-20 Or X-T 30	Walk 5 + Run 6/ Walk 1 x 7 Easy Hills strides/ pickups	REST Or Jog 15-20 Or X-T 30	Walk 5 + Run 10/ Walk 1 x 3 Phase 1 drills	Maximum Aerobic Function Test 2 to 3 mile distance	REST Or Fun Active Play
Week 13	Aerobic Run 35 Phase 1 drills	REST Or Jog 15-20 Or X-T 30	Walk 5 + Run 7/ Walk 1 x 6 Hills or Fartlek strides/ pickups	REST Or Jog 15-20 Or X-T 30	Walk 5 + Run 15/ Walk 1 x 3 Phase 1 drills	Walk 5 + Run 20/ Walk 2 Run 15/ Walk 2 Run 15/ Walk 2 Run 10/ Walk 2	REST Or Fun Active Play
Week 14	Aerobic Run 35-40 Phase 1 drills	REST Or Jog 15-20 Or X-T 30	Walk 5 + Run 8/ Walk 1 x 5 Hills or Fartlek strides/ pickups	REST Or Jog 15-20 Or X-T 30	Walk 5 + Run 20/ Walk 2 x 2 Phase 1 drills	Walk 5 + Run 20/ Walk 2 Run 15/ Walk 1 Run 15/ Walk 1	REST Or Fun Active Play

Efficient Running Training Program: Beginner/Adapter Program

Week 15	Aerobic Run 40 Phase 1 drills	REST Or Jog 15-20 Or X-T 30	Aerobic Run 40 strides/ pickups	REST Or Jog 15-20 Or X-T 30	Jog 40 Phase 1 drills	Walk 5 + Run 30/ Walk 2 Run 20/ Walk 2 Run10	REST Or Fun Active Play
Week 16	Maximum Aerobic Function Test 2 to 3 mile distance	REST Or Jog 15-20 Or X-T 30	Aerobic Run 40 easy hills strides/ pickups	REST Or Jog 15-20 Or X-T 30	Aerobic Run Run 40 flat Phase 1 drills	1.5 mile time trial or Race a 5K Congrats!	REST Or Fun Active Play

Training Zones Key (Cross Train is not on the above pyramid):
Aerobic Development | Speed/Endurance | Strength/Quickness | Cross Train X-T

Types of Runs:

1. Building Endurance and Aerobic Recovery
   a. Aerobic Runs
   b. Long Runs
   c. Jogs
2. Relaxed Speed/Endurance
   a. Tempo Runs
   b. Fartlek
   c. Intervals
   d. Hills
3. Strength/Quickness
   a. Strides
   b. Drills
4. Assessing Progress
   a. Maximum Aerobic Function Test
   b. 1.5 mile PT Test simulator
5. Cross Training

Efficient Running Training Program: Beginner/Adapter Program

Aerobic Runs

Purpose: These runs are the foundation of fitness and health. Run at or slightly below your Aerobic Heart Rate (AHR) for the duration of the run. You should be able to happily converse. At least 80 % of your running should be at or below the AHR except for 4-6 weeks prior to an event or PT test.

See Maffetone Method and 180 formula

Instruction /Tips: First 10 minutes are really relaxed to warm up and gradually raise HR toward AHR. When you are finished these runs you should feel as if you could run more.

Adaptation: Aerobic development. Builds capillaries, mitochondria, fat burning capacity, and relaxed running form.

Common Mistakes:

- Ignoring AHR and effort since you may be going slow. When you run above AHR you are all glucose/glycogen and often tapping into anaerobic metabolism, which inhibits aerobic development.
- Trying to run a specific pace
- Going too fast up hills

Long Run

Purpose: This is a large aerobic stimulus. Time on your feet is the goal and stimulating aerobic development, fat burning, and recruitment of muscle fibers in a sugar depleted state. Duration is the goal not speed.

Instruction/Tips: Start very comfortable and easy below your AHR. On the return you may run at your AHR. Build up your pace slowly. Slowly extend the time on your feet to an hour and a half (2 hours for experienced runners) once every 2 weeks. Maintain adequate hydration by following your thirst cues. Do not over drink water as this can lead to hyponatremia. Replace fluids with a good recovery meal shortly after a long run (preferably within 30 minutes).

Adaptation: Aerobic development. Builds capillaries, mitochondria, fat burning capacity, and relaxed running form. Longer runs (>1 hour) stimulate maximum muscle recruitment without the run being “hard”.

Common Mistakes:

- Running too fast so that you finish the run fatigued and slow. Like all training runs, you should feel as if you could do this run again if you had to.
- Starting out above AHR and tapping all the glucose reserves instead of stimulating fat burning
- Relying on replacement carbohydrates for energy versus training your body to mobilize fat as fuel.
- Making this one run more than 50% of your weekly miles

Efficient Running Training Program: Beginner/Adapter Program

Jog

Purpose: Recovery and focus on relaxed and efficient movement pattern. Mental relaxation and stress reduction. General health.

Instruction/Tips: Run much slower than you are capable of, well below AHR. Use light springy running motion (not overstride jog). Keep cadence close to 180. Goal is easy 30 minutes of activity.

Adaptation: Aerobic development same as “Aerobic Runs” as this is below AHR. You train the movement pattern as you focus on form, breathing, and relaxation.

Common Mistakes:

- Timing your jog
- Frustration at how slow it is
- Deciding to run this above AHR

Threshold or Tempo Run

Purpose: Threshold is the fastest pace you can run without generating more lactic acid than you can recycle back into energy. This is a pace you could sustain for at least 30 minutes once you are fit. This is the top end aerobic pace (above the AHR for mixed fuel use) and right at the line between anaerobic and aerobic. It is called the Anaerobic Threshold (AnT) and is still aerobic. This pace is about 90% of your 1.5 mile test pace, a pace which does make you anaerobic toward the end.

Instruction/Tips: Warm up nice and easy for at least 10 minutes. Choose an out and back or loop course you enjoy running that is uninterrupted with traffic. A track works well for shorter distances. Run at comfortable hard effort building from 15 to up to 30 minutes. Your effort and heart rate (if you wear HRM) should be constant from week to week but as you become more efficient your pace will increase naturally.

Adaptation: Develops relaxed speed, running economy, improves aerobic development (remember this is below Anaerobic Threshold) and also raises Anaerobic Threshold by running at a pace at or slightly below this. Helps teach pacing.

Common Mistakes:

- Many novice and experienced runners do this “all out” or think of these as “races”
- Checking watch and wanting to run specific times
- Thinking you need to improve time with each successive run and trying to force this. Think instead “fast and relaxed”.

Efficient Running Training Program: Beginner/Adapter Program

Fartlek

Purpose: Running should be fun. A type of fun running first done in Sweden in the 1930's and practiced by runners and coaches until this day. "Fartlek" literally means "speed play". Speed up and slow down according to how you feel, not by any set pace or time interval. This is how a child runs. Make the recovery runs very relaxed. Great way to work on form, relaxation, dynamic stretching, and strength.

Instruction/Tips: Make it up as you go. Run quick and relaxed to telephone poles, up hills, to a certain target. Like play, there is not time or distance outcome. The fast run segments can be 30 seconds to a few minutes. The total run time anywhere between 20-40 minutes, or longer once fit and ready. Pick a fun and scenic route with little traffic. Warm-up 10 minutes. Run the whole mix of paces over an undulating terrain. Mix in some sprints, ups and downs, pick-ups for a minute or two, and recover between the speed segments. Cool-down for 10 minutes.

Adaptation: Aerobic development and coordination with efforts right below the AnT. Develops relaxed leg speed as this is your focus and not a specific pace. Also develops strength if you incorporate sprinting up some hills.

Common Mistakes:

- Making this a structured workout with a time or pace goal
- Making this hard and anaerobic for long segments
- Not recovering between speed segments

A short article on the Rebirth of Fartlek

Intervals

Purpose: Develops relaxed speed at pace at or close to 1.5 mile PT test pace. Improves your ability to run at Anaerobic Threshold where you are still aerobic and recycling lactate. Teaches pace judgment, relaxation with effort, and rehearses speeds of the test without the run being overly taxing. Goal is to feel a strong effort but far from "all out".

Instruction/Tips: you cover a set distance with repetitions and a recovery interval between each. Warm up for 10 minutes. Consider some light quick and short strides to loosen up. Choose a distance or duration that you feel comfortable repeating. This can be in minutes or laps. The total distance of the faster running can be 5 minutes for the beginner and up to 20 minutes for the more advanced. Usually the interval recovery will be of equal time to the faster interval. Allow the Heart Rate to recover to 120~130 range and you feel ready to go again. Stop the workout if you struggle to hold your pace or feel your form is compromised. Cool down with an easy10 minute jog. Pace of the interval is not all out, but pick a pace near your 1.5 mile or 5k goal pace. You should always end this workout feeling as is you could do another interval if you had too.

Adaptation: Develops relaxed speed. Raises Anaerobic Threshold by running at a pace at or slightly above this. Helps teach pacing and tolerance to oxygen debt.

Common Mistakes

- Trying to run a specific time and running "all out" and too fast. The times are not important, it is the physiological and strength adaptations that matter.
- Too short a recovery jog and not running the repetition well.
- Racing these with training partners or joining a group above your level

Hills

Purpose: Many runners fear hills and avoid them. Running up and down hills at a comfortable pace with good technique develops strength as you run up. This is like going to the gym for free and you are outside! Running downhill is really fun as you develop relaxed speed and work on form.

Instruction/Tips: The course can be a loop with a couple hills ranging from a hundred meters to a half a mile. If you are lucky to live in the mountains you can climb for a couple miles and then run swiftly down. As a beginner do not try to run fast on the uphills. Keep tall with your chest up and open. Look forward and resist the tendency to look down and bend at the waist. Keep stride short and use your glutes to push and spring off the ground. Practice running efficiently and quickly on the downhills with faster turnover. Do not hit hard into the ground with an outstretched leg. Think "run *over* the ground and not *into* the ground". On the uphills your Heart Rate will exceed your AHR but should still be below your AnT.

Adaptation: Leg Strength (uphill). Leg speed, coordination, and mobility (downhill). Aerobic development as the courses will involve running below your AnT with most of the running relaxed and below your AHR.

Common Mistakes

- Running too fast and straining up the hill at the expense of good form and going into oxygen debt (anaerobic)
- Running too hard with high impact on the downhills. Remember good downhill running is a skill.

A fun video tutorial from Boulder CO

Strides/pickups

Purpose: Develop Speed and coordination without running "hard". This is a form of dynamic stretching and strength work as distances are very short. No lactic acid accumulates. This should be fun! All animals (humans included) love to do short sprints. Strides make you a better runner for short and long events as you improve your skill of running.

Efficient Running Training Program: Beginner/Adapter Program

Instruction/Tips: During a run, at the end of a run, or after a thorough warm-up do 4-8 pickups of 50-80 meters. A grass field is ideal. Accelerate naturally and progressively and decelerate slowly. Give yourself a full recovery between each. The goal is to not develop lactic acid or fatigue. Each should feel progressively easier and quicker as you loosen up. Focus on form and relaxed speed.

Adaptation: Strengthens and adds mobility to the key muscles and tendons used in running. Develops coordination and skill of running.

Common Mistakes:

- Running too hard and long for the strides so that your form breaks down
- Not recovering between and building up acidity in muscles
- Thinking of these as "workouts" which need to be done harder and faster each time
- Not focusing on form and muscling through them.

Drills

Purpose: Drills first develop coordination through repetition of correct movement. As you progress they add more strength and mobility. Like sprints, this should be fun and a bit challenging!

Instruction/Tips: Work on mastering the movement before trying to add speed or power to the drills. A grass field is ideal surface. Give yourself a full recovery between sets. Progress from Phase 1 to Phase 2 drills as per Modules 2 and 3. Try for twice a week at the end of a run.

Adaptation: Strengthens and adds mobility to the key muscles and tendons used in running. Develops coordination and skill of running.

Common Mistakes:

- Doing drills with incorrect form
- Not recovering between sets
- Applying power before mastering the movement skill
- Not focusing on form and muscling through them

Cross Train

Instruction: Pick an enjoyable activity you can fit into your day to get 30 minutes of relaxed activity. Swimming, biking, cross fit, gym work, yoga, aerobics….it is all good as long as it is not a large stress and fits into the relaxation and recovery.

Purpose: Different activities allow you to recover from the tissue stresses of running, especially for the beginner. The ACSM recommends that all try to get 30 minutes of physical activity daily with the safe guidelines of increasing your running volume no more than 10% a week. Cross training can be fun and will work your entire system in a different way to produce greater overall fitness. It is

not specific to running though so do not assume that cross training will greatly assist you in passing the PT test.

Adaptation: Continued aerobic development as well as specific strength.

Common Mistakes:

- Doing recovery cross training days too hard.
- Using poor technique in new activities, adding to mechanical stress to tissues.
- Assuming the cross training will make you run faster
- If you are using cross training during an injury, assuming when the injury is healed you can jump back into the same volume and intensity of running as you were doing with cross training sessions. Remember that the tissue load of running is different, even if you are "fit".

Maximum Aerobic Function Test (used w/permission from Phil Maffetone)

Link to article by Phil Maffetone

Purpose: measures the improvements in aerobic speed during base building. Aerobic speed means you can run faster at the same aerobic heart rate. Without objective measurements, you can fool yourself into thinking all is well with your exercise and you are progressing

Instruction /Tips: perform the MAF test on a track or measured flat with your Heart Rate Monitor, running at your maximum aerobic heart rate found with the 180 Formula.Three to five miles provides good data, although a one-mile test still has value. The test is done following an easy warmup.

Below is an actual example of an MAF Test performed by running on a track, at a heart rate of 145, calculating time in minutes per mile:

Mile 1 11:32
Mile 2 11:46
Mile 3 11:49

Adaptation: The MAF Test should indicate faster times as the weeks pass. You are building capillaries, mitochondria, fat burning capacity, and relaxed running form. This means the aerobic system is improving, enabling you to do run faster *with the same effort.* Below is an example showing the improvement of the same person from above. This faster MAF test corresponds to a faster 1.5 mile hard effort run which is done at a pace and Heart Rate higher than the (AHR). Perform the test regularly through the year, ideally every month.

	September	October	November	December
Mile 1	11:32	10:29	9:35	9:10
Mile 2	11:46	10:46	9:43	9:22
Mile 3	11:49	10:44	9:47	9:31

Chart your progress!

Common Mistakes:

- Running different courses in different conditions for the test. Examples would be an extremely hot day or a course with significant wind, both of which affect your speed at the same effort.
- Doing the test on a day you are extremely fatigued
- Not warming up
- Doing too long a test when you are starting. If you are a new runner do this for only one or two miles.
- "Cheating" and running faster than the pre-determined AHR.

Time Trial

Purpose: This run is a PT test or race simulation done at a pace close to what you want to achieve but not "all out". You practice and develop rhythm, relaxation at higher speeds, and pacing. You are maximally tapping your aerobic system and becoming slightly anaerobic to help develop tolerance to lactate and fatigue. Ideally should only be done 4-6 weeks out from your PT test or event. Anaerobic work inhibits your aerobic development. Build confidence in what you can do event day.

Instruction/Tips: Simulate what you will do on test/race day. Wear similar clothes and footwear, find a similar course, eat similarly, and warm up for 10 minutes. Do a few light strides. Do not stretch. Try using positive affirmations before and during the run.

Adaptation: Develops your Anaerobic Threshold and rehearses relaxed speed.
Chart your progress!

Common Mistakes:

- Going 100%. Try 95%. Finish strong and save your best for event day.
- Starting out too fast and slowing at the end
- Trying to run faster each time

Additional Tools: Efficient Running Training Program

1. **Pre-assessment**
2. **General Principles of Healthy Running**
3. **Positive Affirmations**
4. **Warming up**
5. **Stretching**
6. **Injury Prevention**
7. **Recovery**
8. **Use of a Heart Rate Monitor**
9. **Signs of Improving Fitness and Health**
10. **Goal Setting**

Efficient Running Training Program: Beginner/Adapter Program

Pre-assessment:

If you are new to any fitness program we highly recommend seeing an expert at your Health and Wellness Center and going through the Cooper Institute 5 step process or something similar

- medical screening
- fitness and nutrition assessment
- goal setting
- exercise and nutrition prescription
- adherence- how can you make activity a daily habit

The Efficient Running Program will help with some of this but is not a substitute for a Health and Fitness Professional.

General Principles of Healthy Running:

- Train the Endurance Engine First
- Do not jump into harder running too soon
- Devote an hour a day to your health (to include shower and change).
- Strides, drills, short hills can be added from the start to help develop strength and coordination progressively
- Fun and variety. Find types of runs and locations that are enjoyable for you and provide the appropriate challenge and stimulus.
- Have patience. It takes 8-12 weeks for cardio-respiratory and muscular/metabolic adaptations to occur, 8 weeks for strength and flexibility. These adaptations continue to build progressively for years.
- Body composition changes take 8-12 weeks.
- Play! Focus on the relaxation of running and walking.
- Don't sit all day.
- Running faster is not always better, in fact it rarely is. "Train Don't Strain" (Arthur Lydiard 1960)
- Always run with correct technique.
- Exercise is not only good for, it is essential for your brain.
- Get in touch with your human springs. Your body has monster truck shocks in the feet, ankles, Achilles, knees, and hips. Do not overstride and take the load in your joints.
- Always start off slower than you plan to finish. Take it easy up front and slowly relax and build your momentum as your body allows.
- Teach your body to stay relaxed at the start and carry that with you into your workout. Keep your posture aligned, but relax your shoulders, arms, hips and lower legs. Held tension creates inertia and can slow you down.
- If your breathing is labored, slow down, shorten your stride, or take a short walking break
- Stretch regularly *after* you run. Warm up and loosen before you run.
- Keep your posture tall but with a slight lean from the ankles. Think "face forward".
- Set your countdown timer to remind yourself to check in with your technique focuses and to relax your shoulders, arms, and lower legs.

Efficient Running Training Program: Beginner/Adapter Program

- Hydrate before and after every workout. You do not need sugared sport drinks.
- Follow a harder workout with an easier one or a day off.
- Run with a cadence between 170-180 steps per minute.
- Relaxed speed comes from fartleks or surges, and not necessarily on a track (short surges or gear changes followed by short slower-pace rest breaks).
- Short hills are great strength builders.
- Downhills are great for coordination and speed development. Use them to stretch your legs without effort
- Breathe deeply from your belly, not in shallow quick breaths. Watch this video for how to do it.
- Mix up your workouts to keep your activity playful and interesting.
- Have a plan but be willing to modify it if needed. Listen to what your body needs and what it can handle on any given day.
- There's no rule that says you have to run the entire way. If you need a recovery break. Learn to take short recovery breaks if you need them.
- During your 6-week ramp-up, practice timing yourself for ½ mile intervals running at or slightly faster than your ideal test pace. Then, in your practice workouts, run 3 x 1/2mile intervals with a 30 sec. break between each interval. Your pacing should be: #1 slightly slower than test pace; #2 at test pace; and #3 slightly faster than test pace.
- Rehearse your pace a couple times in the month before the test, and to it at the track.
- Do your test practice runs on the track so that you can get comfortable doing exactly what you plan to do on test day.
- Set goals and chart them.
- Make physical activity a daily habit

Positive Affirmations:

Runners can use positive statements or thoughts to activate the power of the mind through the repetition of positive statements. With time the statement is accepted by the mind as true, resulting in an overall sense of well-being, energy, and belief in the statement.

Runners can use affirmations to bring about a desire or result they wish to achieve. Goals could include simply having a great run today, achieving a personal best time in a race or test, overcoming anxiety around the fitness test, or completing an event for the first time.

You can use "I" or "you". Often the second person "you" is more powerful. Create your own affirmations and repeat them daily. The best ones are the ones you make up yourself

Here are a few examples.

- You are a strong runner

- You feel powerful and springy
- You are getting faster
- You are relaxed and focused
- You are light and fast
- You love the hills
- You are getting strong and healthy

Warming up:

Give yourself 5-10 minutes to warm up at a very easy pace. Use light springy steps and there is no speed too slow. You are waking up the fascia. This is the connective tissue in your tendons which must glide and spring. If you wonder why you feel awkward running right out the door in the morning this is why. Listen to your body, it tells you when you are loose and ready. Warm down in the manner.

Watch the Kenyans warm up here in this video by Toby Tanser. Watch these time clips: 1:25-1:30 Kenyan warm up; 2:33 Jumping jacks; 7:55-8:12 Kenyan warm up

Stretching:

You only need do this if you have a mobility deficit. See the material in Modules 2 and 3 for the assessments as well as Running times Cover Story and video by Jay Dicharry and I posted on Running Times.
Running Times April 2012. Click "Are You Ready for Minimal?"
Video Are You Ready for Minimal
There are two ways to approach mobility.

1. There is an excellent and safe method taught by Phil and Jim Wharton called Active Isolated Stretching. This can be self taught and can give immediate loosening of joints. It does not deform tissue but rather cues the neuromuscular to allow a joint to relax. Watch this nice video segment here and consider the book and DVD linked on Resources. The key is never to hold any stretch. Instead, you should move until you feel the resistance, back off immediately and then repeat. This can be done before running, preferably after some light warmup jogging.
2. Static stretches actually deform and lengthen tissue. This process takes 8-10 weeks. So if you are not green light in the mobility assessments work on these stretched as outlined in Modules 2 and 3 after or remote from your runs.

Injury Prevention:

Many gain endurance fitness before the structural gains in the muscles, ligaments, fascia, and tendons. The body will adapt, as long as the load is not above the capacity to adapt. So be progressive in endurance, strength, and

coordination building. *Use the tools in Efficient Running for a holistic injury prevention strategy.*

Recovery:

Balancing Stress and Recovery is essential for healthy progression. We get stronger by applying gradually progressive training stimulus and then through recovery we become stronger. Too much training stress and no recovery – we break down. Not enough training stimulus and there is no progression. Complete rest and inactivity cause deterioration of aerobic capacity and tissue/structural strength. So complete rest of an injury is rarely the answer.

We all live in very stressful daily lives. Running needs to fit in the relaxing part of the day and not be another stress. If you are not feeling recovered, back off on your scheduled activity session. Keep it aerobic and often getting out the door is restorative.

A few recovery indicators:

- Morning Heart Rate
- Weight – a significant drop is not always good and a sign of stress
- Sleep- was your sleep deep and peaceful
- General Sense of Mood and Energy

Use of a Heart Rate Monitor:

- Pay attention to your feelings and learn the language of your physiology. Sure you might be a bit rusty to begin with. So a heart rate monitor (HRM) will help you get a handle on what your body is really telling you. This is called Biofeedback.
- But a word of caution – do not become so reliant on the HRM that you are bypassing your own inner technology. These devices are limited to specific information for which they are programmed
- The human mind has an unlimited capacity to synthesize multitudes of data very accurately and instantly into a “knowing.” This takes *practice*.
- *Always keep in mind* – Ultimately the most accurate feedback comes from you.
- Tips
  - Slow down on the up hills and do not worry if the rate goes briefly above your Aerobic Heart Rate to maintain a run.
  - Can you have an easy conversation? Example – can you sing “happy birthday to you” in a single breath.
  - For the type of HRM- simple is best. All you need is a zone alarm that you can program. There are models available now for $50 that do this.

Signs of Improving Fitness and Health:

- Drop in Resting Heart Rate over weeks of training
- Weight-loss from beginning of program to present
- Ability to hold a lower heart rate at the same pace as previous runs
- Lower perceived exertion at same pace as previous runs
- Less post-run recovery time needed
- Fewer injuries and down-time
- Faster overall speed with no increase in perceived exertion
- Better overall health
- Lower blood pressure
- Improved mental focus and mood
- Better sleep

Goal Setting:

- Where are you now?
- Where do you want to be?
- How will you get there? Chart the course.
- How will you stay there? Sustainability and adherence

Select specific short term (8-16 week) goals with clear objective results. Make sure they are realistic and achievable. Share your goals with a friend or family member. Enlist a friend to work with you. Examples are:

- I want to finish a 5k
- I want to achieve 150 minutes a week of aerobic activity
- I want to lose 10 pounds of body fat

Plot your current fitness levels and health measures:

- Waist Circumference
- Blood pressure
- Maximum Aerobic Function Test
- 1.5 Mile Time Trail

When you can achieve your short term goals with comfort and confidence work toward longer term and sustainable goals.