

# Up and Running

## Igniting Life-long Fitness and Vitality

**If you are currently not exercising and want to get up to speed; this is the program for you!**

**Lydiard Foundation's "Up and Running" Program** is based on the training of the great 20<sup>th</sup> century coach, Arthur Lydiard, using the same principles used by Olympic endurance athletes the world over. The same program that inspired the running revolution that took America by fire in the 1970's and set the whole world running.

**This schedule is designed to safely take you from ZERO to a minimum of 15~20 minutes of continuous running in 8 weeks, and an hour in 12 weeks**

*This is easily achievable for anyone in reasonably good health who wishes to follow a simple, sound program that has stood the test of time with hundreds of thousands of athletes. You will be taken through an easy progression of walk/jog/run using the classic cycle of **Intervals** – a training method of alternating running and walking while using the basic Lydiard Principle of Adaptation to balance workout days with subsequent recovery days. The main goal is **CONTINUOUS COMFORTABLE RUNNING** by gradually increasing the running and decreasing the walking.*

**All you need to do to begin is make a 30 minute commitment 3X a week!**

## Can You Afford Not To?

It is essential to understand that we are all individuals. What might take one person 4 weeks may take longer for another. **THE MOST IMPORTANT THING IS TO UNDERSTAND YOUR OWN UNIQUE PHYSIOLOGY.** As long as you follow the **5 Lydiard Principles** and adjust the schedule according to how you are responding you will improve your fitness.

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© **Nobby Hashizume** and **Lorraine Moller** with the late **Arthur Lydiard**

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**The Pattern: Space out your workouts over the week.**

**Begin by running 3 days a week.** These training days can be any day of the week although it is highly recommended, though not an absolute “must”, to have a recovery day(s) in-between the workouts to give your body a chance to rest.

Day 3 is designed to be a slightly longer workout, so it is usually a good idea to plan it for a weekend day, Saturday or Sunday. It is recommended, though not essential, that Day 1 and 2 be followed by 2 rest days and Day 3 followed by 3 rest days.

**Recommended:** Tuesday, Thursday, Saturday or Wednesday, Friday, Sunday. Avoid stringing all your workout days together.

**The Workouts: Jog 2 minutes, walk 3 minutes. Repeat 3 X.**

**That’s it!** Your workout is just a total of 15 minutes (always begin with a warm-up of a warm-up brisk walk of 3~5 minutes and cool-down after the workout with another brisk walk of 3~5 minutes).

As the weeks go by you will gradually lengthen the jogging segment (from 2 minutes to 3, then 4...) while cutting down the length of walking segment; and on some weeks you will add an additional day.

Each week you will go back to the easy workout, usually on Day 2, to give your body a chance to recover from the increased workload.

On Day 3 you get to gradually stretch the envelope.

**Stage I: Getting Started (4 weeks)**

Week	Day 1	Day 2	Day 3
1	Brisk walk 3~5 minutes: <b>Jog 2 min.</b> Walk 3 min. (repeat this 3 times; total of 15 min.): Brisk walk 3~5 minutes.	Brisk walk 3~5 minutes: <b>Jog 2 min.</b> Walk 3 min. (repeat this 3 times; total of 15 min.): Brisk walk 3~5 minutes.	Brisk walk 3~5 minutes: <b>Jog 2 min.</b> Walk 3 min. (repeat this 3 times; total of 15 min.): Brisk walk 3~5 minutes.
2	Brisk walk 3~5 minutes: <b>Jog 2 min.</b> Walk 3 min. (repeat this 3 times; total of 15 min.): Brisk walk 3~5 minutes.	Brisk walk 3~5 minutes: <b>Jog 2 min.</b> Walk 3 min. (repeat this 3 times; total of 15 min.): Brisk walk 3~5 minutes.	Brisk walk 3~5 minutes: <b>Jog 3 min.</b> Walk 2 min. (repeat this 3 times; total of 15 min.): Brisk walk 3~5 minutes.
3	Brisk walk 3~5 minutes: <b>Jog 3 min.</b> Walk 2 min. (repeat this 3 times; total of 15 min.): Brisk walk 3~5 minutes.	Brisk walk 3~5 minutes: <b>Jog 2 min.</b> Walk 3 min. (repeat this 3 times; total of 15 min.): Brisk walk 3~5 minutes.	Brisk walk 3 minutes: <b>Jog 3 min.</b> Walk 2 min. (repeat this 4 times; total of 20 min.): Brisk walk 2 minutes.
4	Brisk walk 3 minutes: <b>Jog 3 min.</b> Walk 2 min. (repeat this 4 times; total of 20 min.): Brisk walk 2 minutes.	Brisk walk 3~5 minutes: <b>Jog 3 min.</b> Walk 2 min. (repeat this 3 times; total of 15 min.): Brisk walk 3~5 minutes.	Brisk walk 3 minutes: <b>Jog 4 min.</b> Walk 1 min. (repeat this 4 times; total of 20 min.): Brisk walk 2 minutes.

**\* Running is a great way to relieve stress in your busy life: don’t make it another source of stress.**

## Common Questions for Beginners

### Q: How Often Do I Need to Exercise?

Three-times-a-week is minimum amount of exercise to maintain good health. Stick to the routine at the beginning.

### Q: I Have Started Exercise Programs Before But Didn't Last. How Do I Stick To It?

If you are thinking of doing it you know that you need to. The hardest part of any running program is turning the doorknob. There is a hump that you need to get over before you establish it as part of your routine. It takes a minimum of 3 weeks for a new habit to form and for your physiology to kick in. When that happens your body will not only expect it but it will relish it. The first 4 weeks of this program are designed to be gentle to allow that process to take place. But we cannot do it for you. To strengthen your resolve, invest in a new pair of sneakers or a heart-rate monitor or kit of your liking. Use this site to find a running group, a training buddy or a coach to cheer you on. Finally put a photo on your refrigerator of the fittest person ideal body that you are aiming to emulate by doing this and stick a photo of your face on it. Then take it one step at a time.

### Q: Can I Do More Than The Schedule Says?

If after a month you start to feel antsy and feel like doing more, we would recommend adding another day to the weekly schedule instead of trying to run faster. Make sure, however, that you space your runs so that you **FOLLOW A WORKOUT WITH AN EASY DAY** – resting, walking or jogging – whatever it takes for your body to recover.

**IT IS ALWAYS BETTER TO DO LITTLE OFTEN** than do too much at once (weekend warrior) and take a lengthy break afterwards (because you were too sore). Let your pace come naturally.

### Q: Can I Add Cross-Training On My Recovery Days?

It is okay to substitute these easy extra days with other forms of cross training. However, if running is your goal in the end, it is advisable to run as much as you can. Running is unique in a sense that you are pushing off the entire body weight off the ground against gravity; unlike cycling or swimming where your body weight is supported. Not that these other activities are not good; but there are certain adaptations that you may not be able to achieve by doing other substitute activities. The truth of the fact is; you may in fact recover more quickly if you include an extra easy day or two of running during the week.

### Q: I'm Not Ready For Stage II – Can I Repeat Stage I?

Absolutely! If, at any stage, you feel like the schedule is pushing you along too quickly; **DO NOT hesitate to repeat the previous week.** This is, by no means a program to be completed within a month. Absolute beginners and those with limited time may be prudent to repeat each week twice and make this a 2 or 3 months program. Do whatever it takes for you.

There is no shame in progressing slowly. You may take twice as long to get to the same fitness level as somebody else but you WILL eventually get there. If you force it, you will end up delaying your own progress by getting discouraged or injured. **Stay the course at your own pace**

### Q: Should I use a Heart-Rate Monitor?

Heart-rate monitors can be a useful feedback tool for beginners, especially for those runners who tend to do too much too hard. By all means use your monitor but treat it as you would training wheels for a bicycle – use it until you become proficient at reading your own body signals. The long-term success of your training program depends on your ability to be able to tune in to your physiology and pitch your effort so that it is exactly right for you.

## Progress Calibration Run (PCR™):

### Determining Your Target Heart Rate

The old and simple way to calculate "Target Heart Rate" is:  $220 - \text{your age}$ . However, as we all know, some very fit old people are very much in a better shape than unfit youngsters. Therefore, your training background and your current state of fitness level should be taken into account.

This new formula takes your current fitness level (Resting Heart Rate) into account:

$$(220 - \text{age} - \text{RHR}) \times 70\% + \text{RHR}$$

Women might want to add 3.

Five beats above and below would give the range.

See the page on "Heart Matters" for more details.

After you have completed Stage I, it is a good idea to take the following simple calibration exercise on one of your runs. This is one of those occasions where a heart-rate monitor is useful but not essential:

1. Choose a relatively flat course where you can easily run out-and-back without much interference such as traffic lights or crossing of a major street, etc.
2. Take 2~3 minutes of brisk walk as a warm-up.
3. Considering wind or hills if any; go out at a comfortable effort that you feel you can maintain for 10-minutes. (The idea is to go out for 5 minutes; turn around and come back the same course in 5 minutes.) Time yourself to your turn-around point.
4. After 5 minutes of continuous running, take a brief moment and stop to take the pulse quickly for 15 seconds.
5. Turn around and take the same course and run back to the starting point while timing this return portion.
6. At the finish, stop and take another 15 seconds of pulse.
7. Take 2~3 minutes of brisk walk as a cool-down.

### **What It Means:**

#### **Going out slower than coming home/heart rate similar**

It is perfectly okay if you come home, say, 15~30 seconds (2~5% of total running duration) faster than outward bound. If you come home more than a minute faster (approximately 10% of the total running duration), you started out too slowly.

#### **Going out faster than coming home/heart rate similar**

If you come home more than a minute slower, you started out too fast OR 10 minutes of continuous running may be a bit too stressful for you at this point. You should stay at this week for a little while. This is a very important discipline and is a classic trade-mark progress-checking method of Lydiard.

#### **Heart-rate at finish exceeds heart-rate at turnaround**

Most of us are very competitive, especially when we measure ourselves. It is most likely that you kicked it home when you come around the final corner. This is neither recommended nor desirable at this stage. .

#### **You kept checking your watch on your run**

Some people tend to check their watch too frequently – meaning they compare themselves with the previous time at various landmarks. This is not desirable because invariably you'll strive to do better each time and you are in danger of your competitiveness sabotaging your progress. Ideally, you should check your watch just at the turn-around point and at the finish. If this is you, arrange to have several different venues so you can use different out-and-back courses every time you do this progress test run.

## **Heart-rate exceeds Target Pulse-rate at turnaround and your return run was slower (see "Checking Your Target Heart-Rate")**

Your pulse at the turn-around point should not exceed your target pulse rate. If your pulse already exceeded the target pulse rate at the turn-around point, and you could not maintain your pace on the return journey you are working ahead of yourself. It is recommended that you stay at this first stage for a few weeks longer.

**NOTE: The above-mentioned Progress Calibration Run (CPR™) should be done every 2~3 weeks but NOT be performed the day after the hard day (the third day of week 4, for example) as your results will be inaccurate.**

### **What You Can Expect As You Progress:**

As you get fitter, you should see the followings:

- 1) You will be running further within the same duration of running time,
- 2) You will be coming to the same turn-around point in less time, or
- 3) You are reaching the turn-around point in the same time with a lower pulse-rate
- 4) You will be running faster (1 and 2) with the same pulse

So as you perform this simple test, you should look for these signs. If you don't see any of them; particularly if your pulse rate is elevated, it indicates that you are actually over-working – or trying too hard to meet the goal. Back off and take it easy.

**LET THE PACE COME TO YOU - you cannot, and should not, squeeze it out of yourself.**

### **Golden Rules**

- ❖ Train, don't strain!
- ❖ You can NEVER run too slowly. It's not the distance (duration) that stops you but the speed
- ❖ If in doubt, do less
- ❖ It is always safer to progress slowly than to push for quick results
- ❖ If you feel you're struggling to progress repeat the previous week's schedule
- ❖ Always listen to your body; not the predetermined schedule
- ❖ Know that what you are doing today is laying a solid foundation for tomorrow

### **The Importance of Establishing a Solid Foundation:**

Many of today's programs are geared towards getting beginners to attempt a marathon as quickly as possible. To achieve this, lots of walking breaks are included, and the weekly long runs are often increased linearly without any consideration to one's response. Most beginners can "complete" (not necessarily "run") the marathon in 3 or 4 months time. It will probably take you 5 or 6 or 7 hours. However the chance of getting injured or mentally burnt out is greatly increased. These such programs do not develop the ability to continuously run nor do they teach you to run correctly at an efficient pace (say, 8~9 minute mile pace instead of 12~15 minute). This program is a long-term approach that is more enjoyable and safer and ultimately will yield superior long-term results.

Remember; there is no short-cut to doing things right.

## Stage II: Moving Right Along (4 weeks)

Week	Day 1	Day 2	Day 3
5	Brisk walk 3 minutes: <b>Jog 4 min.</b> Walk 1 min. (repeat this 4 times; total of 20 min.): Brisk walk 2 minutes.	Brisk walk 3 minutes: <b>Jog 3 min.</b> Walk 2 min. (repeat this 4 times; total of 20 min.): Brisk walk 2 minutes.	Brisk walk 3 minutes: <b>Jog 4 min.</b> Walk 1 min.; followed by <b>10~12 min. jog</b> ; Walk 1 min. <b>Jog 4 min.</b> (total of 20~22 minutes) Brisk walk 2 minutes.
6	Brisk walk 3 minutes: <b>Jog 4 min.</b> Walk 1 min. (repeat this 4 times; total of 20 min.): Brisk walk 2 minutes.	Brisk walk 3 minutes: <b>Jog 3 min.</b> Walk 2 min. (repeat this 4 times; total of 20 min.): Brisk walk 2 minutes.	<b>Jog 4 min.</b> Walk 1 min.; followed by <b>15 min. jog</b> ; Walk 1 min. <b>Jog 4 min.</b> (total of 25 minutes)
7	Brisk walk 3 minutes: <b>Jog 4 min.</b> Walk 1 min.; followed by <b>10 min. jog</b> ; Walk 1 min. <b>Jog 4 min.</b> (total of 20 minutes) Brisk walk 2 minutes.	Brisk walk 3 minutes: <b>Jog 4 min.</b> Walk 1 min. (repeat this 4 times; total of 20 min.): Brisk walk 2 minutes.	<b>Jog 4 min.</b> Walk 1 min.; followed by <b>10 min. jog</b> ; take 1 min. walk break; followed by <b>10 min. jog</b> ; Walk 1 min. <b>Jog 4 min.</b> (total of 31 minutes)
8	Brisk walk 3 minutes: <b>Jog 4 min.</b> Walk 1 min.; followed by <b>12~15 min. jog</b> ; Walk 1 min. <b>Jog 4 min.</b> (total of 20 minutes) Brisk walk 2 minutes.	Brisk walk 3 minutes: <b>Jog 4 min.</b> Walk 1 min. (repeat this 4 times; total of 20 min.): Brisk walk 2 minutes.	<b>Jog 4 min.</b> Walk 1 min.; followed by <b>20 min. jog</b> ; Walk 1 min. <b>Jog 4 min.</b> (total of 30 minutes)

### Continuous Running:

Your goal during this stage is to increase the length of CONTINUOUS RUNNING within the span of a 20~30 minutes period. The continuous running is increased while the walking breaks are decreased. A 10-minute continuous run is introduced on Day 3 and by the end of the month you will be running 20 minutes without stopping. Do not be daunted, your aerobic system is very quickly responsive and you will find that once you run the distance a few times it will quickly become a piece of cake.

### Phasing Out Walking Breaks:

Taking walking breaks is a great way to cover greater distance/duration than you've ever done before, physically as well as mentally. However, it is the continued effort that brings about cardiac pressure to develop your aerobic capacity and your general fitness level. It is surprising how quickly your heart rate comes down during your walking break. What is more surprising is how quickly you become conditioned making the walking breaks less and less physically necessary. Do not allow the walking breaks to be a mental crutch – the sooner you do away with them, the faster you will progress. Once you have given up walking breaks they will quickly become an annoyance if for some reason you have to walk during your run!

You don't do anything physical for 10 years after college; all of a sudden you get out and play basketball or touch-football with buddies or teenage kids... You pull your calves or hamstrings. That's understandable. We all know that it COULD happen. Same thing with our heart. Heart is a muscle – just like our arms and legs. If you put it under a great strain unprepared – like running 26 miles – when NOT prepared properly, a chance of damaging it would be much greater than when properly prepared.

We believe CONTINUOUS running is what prepare your heart properly to go the great distance. Also very important is to start out slow enough so you CAN cover the entire length, or duration, of your long runs COMFORTABLY, not so fast that you'd have to take frequent walking breaks.

The study shows that our heart decreases in size IMMEDIATELY following exercise. This means continuous steady pressure by the heart is necessary for the optimum development; not a series of high stresses interspersed by frequent walking breaks. And, for that, low to moderate level of Heart Rate is crucial in order to maintain that steady pressure by the heart for a long period of time.

Interval training is effective when you are starting out in order to provide necessary "breaks" to your body, both your heart AND leg muscles until they can handle constant pressure. However, interval training allows stimulus to stop; this means constant stimulus is being interfered. Granted; time and place for everything, however. Walking breaks or easy jogging in between – a classic interval approach – can be very effective when you want to recruit more muscle fibers (stimulating white muscle fibers by going faster); a concept favored by Dr. Peter Snell. But that can wait until first, and foremost, your aerobic foundation is being established.

### **Time on Your Feet:**

Pay a close attention to your pacing. If you are slowing down toward the end of the continuous run, this means you are running above your current fitness level. SLOW DOWN THE OVERALL PACE. **It is important to increase the total duration of time spent on your feet.** By running faster than

your level of fitness can handle, you may jeopardize fulfilling this purpose. Don't let anybody fool you that you can be better off doing faster for less time.

### Perseverance, as well as Common Sense, will be tested

Running is different from other aerobic exercises such as swimming or cycling or cross-country skiing in a sense that you lift the entire body weight in the air against the gravity and catch it falling back down on one leg. Leg muscles will go through extra strain and trauma for that.

If you've never done anything like running previously, depending on your running form and your body weight, certain leg soreness will be expected, particularly around your knees and shin area.

It is very important to identify whether the discomfort is (a) process of strengthening or (b) beginning of injury. If it is in fact a damage to the muscle and could potentially develop into an injury, you should be able to pin-point the sharp pain and it gets worse as you continue to exercise. On the other hand, if it's more of a dull discomfort and it goes away as your body warms up, it's most likely just a strengthening process.

This is where Common Sense becomes very crucial and, if you determine it is not an injury, keep the sore area warm and apply ice massaging and continue to exercise (perhaps a little more moderately at times)!! For that reason, it is strongly encouraged to learn to run properly and economically. To be light on your feet helps to reduce the poundings and consequently reduce a chance of injuries.

## Stage III: Building Stamina (8 weeks)

By now you should be at the level where you can run continuously for 20 minutes or thereabouts. Stage III adds a little more advanced training to increase your stamina.

### Increasing the Volume:

#### If you have the time ...

During this stage increase your running days from 3 to 4 per week. If you feel like doing more, introduce one other day of running 15-minutes (an easy day) to make it 5-a-week; alternatively you can add one or two days of cross training (cycling, swimming, cross country skiing, rowing, etc.). Easy jogging on your recovery days helps you recover.

#### If you don't have the time ...

Skip Day 2 (medium long run). Another option is to do the hard day (the longest run of the week on the schedule) every other week instead of every week.

**At this stage the more running you can do, the better and any running is better than no running at all.** Even 15 minutes a day is beneficial. Any running, even if it elevates your pulse to only 100 would still be doing you some good.

**AND REMEMBER, THERE'S NO SUCH THING AS A JUNK MILE! They all count.**

### Four-days-a-week Schedule:

Week	Day 1	Day 2	Day 3	Day 4
1	15 minutes easy jog	20~30 minutes easy jog	15 minutes easy jog	30 minutes easy jog
2	15 minutes easy jog	20~30' jog + strides	15 minutes easy jog	45 minutes easy jog
3	15 minutes easy jog	30' PCR (15' out/back) <sup>1</sup>	15 minutes easy jog	30 minutes easy jog
4	15 minutes easy jog	30 minutes easy jog	15 minutes easy jog	45 minutes easy jog
5	15 minutes easy jog	30 minutes <u>undulation</u>	20 minutes easy jog	45~60 minutes easy jog
6	20 minutes easy jog	40' PCR (20' out/back)	20 minutes easy jog	40~50 minutes easy jog
7	15 minutes easy jog	40 min. jog + strides	20~30 minutes easy jog	1 hour easy jog
8	20 minutes easy jog	40 minutes <u>undulation</u>	20~30 minutes easy jog	1 hour easy jog

<sup>1</sup> Progress Calibration Run

### **The Pattern:**

Vary the duration of the long runs from week to week instead of increasing the distance or duration linearly each week. Also always go back to an easy day of 15~20-minutes after a longer day to give your body a chance to recover and rebuild.

If, at any point, you feel that you are not recovering enough to keep up with the schedule comfortably; step back or take an extra day off. If you need to cut back take Day 2 out from the schedule and keep 2 easy days as well as the long run (Day 4).

### **Progress Calibration Run:**

Continue doing the Progress Calibration Run (CPR™) every 2~3 weeks.

However increase the duration of this run every month. Increase this to 30~40 minutes at this stage (going out for 15~20 minutes and turn around and come back in the same time).

We suggest you do this calibration run on one of your harder week days rather than on your long run. The long run should be more relaxed and fun.

### **Points to Keep in Mind For Stage III:**

- ❖ All the same principles in Stage I apply in all the stages.
- ❖ If you feel the progress is too fast, stay in the same week or repeat it 2 or 3 times until you feel comfortable.
- ❖ Always start your workout with a warm-up consisting of a few minutes of brisk walking and some light stretching.
- ❖ You will improve rapidly. Continuous running rapidly develops under-developed capillary beds in the working muscles (legs) and develop greater muscular endurance which, in turn, enables you to go even further.
- ❖ Always remember to go back to shorter/easier days after the harder effort (longer run).
- ❖ If, at any point, you feel you are struggling toward the end of the run or felt you need a walk break, chances are that you are trying to run too fast. Slow down.
- ❖ Always go slow enough that you can finish the run strongly.
- ❖ Attempt to keep an even effort throughout the run.

### **Introducing New Elements:**

There are a variety of new workouts introduced here:

- (1) Medium long jog;
- (2) Medium long jog + some easy strides;
- (3) Medium long jog over undulating terrain to work on the leg power, range of motion;
- (4) Progress Calibration Run (PCR) for a longer duration (30~40 minutes)

You can mix these up any way you prefer as long as you pay attention to the workout/recovery cycle and balance the harder/longer workouts with subsequent recovery days.

For strides, estimate a distance of about 50~100m, or 20~30 counts\*, at slightly faster speed than you normally run. Concentrate on your **RUNNING TECHNIQUE** with straight back, forward-leaning torso to take advantage of gravity and land with a mid-foot strike, etc.

*\* Count "one" whenever right foot hits the ground. So "one count" is actually 2 steps=approximately 2~3m. 20~30 counts would make about 50~100m. Take about 3-minutes EASY jog for recovery before repeating 3~10 times*

When running over undulating terrain, do not try to run fast; rather maintain good running form and develop an acute awareness of navigating the varied ground. Cultivate a balanced but nimble foot strike.

## Stage IV: Getting Ready for More (8 weeks)

Up until now, you have been working on a progressive training program. Now you should be able to hold an easy aerobic effort for at least an hour and are ready for a set weekly pattern of training. Following is a sample training program for the next 4~8 weeks. After this stage, if you so choose to, you will be strong enough to move on to the *Base2Race™* Training Pyramid Schedules and consider entering some track or road races.

**Sample Weekly Schedule:** Workout days are shaded in red. Include a minimum of 2 per week.

Week	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	15 minutes easy jog	20~30' jog + strides	15 minutes easy jog	45 minutes easy run on hilly terrain	Rest or cross-training	15 minutes easy jog	1 hour easy aerobic running
2	15 minutes easy jog	30' PCR (15' out/back) <sup>2</sup>	15 minutes easy jog	30 minutes easy run on hilly terrain	Rest or cross-training	20 minutes easy jog	45 minutes easy aerobic running
3	15 minutes easy jog	30~40 minutes jog + strides	15 minutes easy jog	45 minutes easy run on hilly terrain	Rest or cross-training	15 minutes easy jog	1 hour 15 easy aerobic running
4	15 minutes easy jog	40 minutes fartlek	15 minutes easy jog	45 minutes easy run on hilly terrain	Rest or cross-training	25 minutes easy jog	50 minutes easy jog
5	15 minutes easy jog	40' PCR (20' out/back)	20 minutes easy jog	30 minutes easy run on hilly terrain	Rest or cross-training	20 minutes easy jog	1 hour 30 easy aerobic running
6	20 minutes easy jog	30~40 minutes jog + strides	20 minutes easy jog	50 minutes easy run on hilly terrain	Rest or cross-training	30 minutes easy jog	1 hour easy aerobic running
7	15 minutes easy jog	45 min. fartlek	20~30 minutes easy jog	45 minutes easy run on hilly terrain	Rest or cross-training	25 minutes easy jog	1 hour 40 easy aerobic running
8	20 minutes easy jog	40' PCR (20' out/back)	20~30 minutes easy jog	55 minutes easy run on hilly terrain	Rest or cross-training	35 minutes easy jog	1 hour 15 easy aerobic running

<sup>2</sup> Progress Calibration Run

### How to Do a Hill Workout

If you decide to do specific hill exercises, find a hill of about 200m in length, run up the hill on your toes with exaggerated knee lift with powerful straight arm swing with your back straight, in other words, not looking down. Do not try to run up the hill fast. Running up the hill fast would become highly anaerobic and this is not desirable. Besides, the slower the forward movement, the more resistance will be felt in your legs and the more benefit you will obtain. Jog down the hill easily and repeat. Make your total hill running just 10 minutes at first and see how your legs feel. If you readily recover then gradually increase the time on hill-work by 10 minutes each week until the total volume is 30-40 minutes. If the appropriate hill not be found near-by, try using steps. Easy springing exercises on hills and steps develop strong ankles and help you eliminate Achilles tendon problems.

### How to Do Fartlek Training

Fartlek is a Swedish term whose literal meaning is 'speed-play'. There is no set pattern other than to vary the pace of your run by adding sprints, spurts and sustained bursts of any length from 50 meters to 800 meters, each followed by a reduction in pace to gain one's breath before resuming normal pace again. The pacing of fartlek is rather like playing "tag" without the tagging. The beauty of fartlek is that there is no measuring or wrong way of doing it. Best done on varied terrain it can be a lot of fun especially in a group where each person takes a turn at being the leader.

## Expanding the Repertoire:

If your goal is simply to stay fit, this program would suffice. The exercise that makes you healthy and fit is purely an aerobic affair. But if you start thinking about entering some track or road races, or try to improve upon your performance; you would need to work on some other elements other than continuous aerobic exercise, which is what the Base2Race Pyramid Training Programs are designed for.

If you have got this far you will be consistently running 4~6 times a week with easy days of about 20~40 minutes, and longer days of up to an hour and a half.

## Adding Specificity to Workouts:

- ❖ Once a week or once every other week, run some undulating course or do some easy hill exercises to work on strength and suppleness in your legs. Hill running introduces power and flexibility in your legs and, not only helps you run faster, but also injury-free. (check out the first of the three exercises referred at: "Hill Training" section of this site)
- ❖ Fartlek introduces a variety of paces into your workouts and is excellent to transition an athlete into faster workouts. The beauty of this workout is that is completely self-directed (see side bar and Useful Running Terms).
- ❖ Also once a week do some easy strides of about 100~150m 3~6 times with easy recovery jog/walk of about 3 minutes. "Run tall" by holding your pelvis high with your back straight, arms swinging straight ahead and remaining light on your feet (not landing hard on your heel).

## Practice Good Form:

The runner should be upright when running with the hips directly under the torso. The upper body should be relaxed with the arms coming through loosely and low and upwards so that the thumbs are just inside the shoulders. The upright body carriage helps to lift the knees higher so increasing stride length and stride speed relative to the speed he or she is attempting, and the relaxed style saves

energy and helps the runner the maintain balance and avoid sway from side to side. By keeping up tall, it is possible to gain a drive off the back leg and run lightly. A runner should NOT hit the ground hard with the feet as happens when someone sits back and keeps the knees bent. Hill exercises will help you eliminate running "sitting in a bucket".

Hill exercises and easy strides and some drills teach you correct running technique. A good running technique can help in gaining better results and can also help to eliminate some injuries.

## Stage V: Next Steps (4 weeks)

Move to Stage V, the Final Stage for Beginners, only if you can run an hour COMFORTABLY at least once a week.

### Volume Of Exercise Still The Primary Goal:

Even at this stage, your objective should still NOT be to see how fast you can run. It is the volume of exercise, or the duration of continual running that develops your body's ability to assimilate, transport and utilize oxygen and convert it into ATP. ATP is the chemical that releases energy in your cells that enables you to move. As this ability improves, your running speed will naturally quicken without any extra effort from you. On the other hand, if you force the pace, you most likely will end your workout prematurely and lose the vital benefits of the program.

### Continue Workout Day/Recovery Day Cycle:

The Hard/Easy concept is still applied to your weekly schedule. You will go either longer and/or harder on your workout days followed by shorter and easier recovery runs the next.

### Introducing New Elements:

During Stage III, hill-work and strides are added to work on strengthening your core leg muscles (with hill training) and running technique (strides). Additionally a tempo running workout has been added every other week to increase your pace with a more concentrated effort. Go by time, not over a set route; and change the venue frequently. This way, you will avoid competing against yourself from the previous tempo run.

### Sample Schedule:

You can repeat the following sample two-week schedule. Remember, though, this is **only a guide**. **In the end it is your own judgment that rules so make it work for you and not against you by following the Golden Rules.**

Monday: 20~30 minutes easy jog or cross training  
Tuesday: Hill running or easy fartlek (1)  
Wednesday: 20~30 minutes easy jog  
Thursday: 45 minutes aerobic running  
Friday: Rest or cross training or easy jog  
Saturday: 5~10 x 100m easy strides (2)  
Sunday: 1:00~1:30 easy aerobic running

Monday: 20~30 minutes easy jog or cross training  
Tuesday: 45 minutes aerobic running  
Wednesday: 30 minutes easy jog  
Thursday: Rest or cross training or easy jog  
Friday: 3~5x100m easy strides (2)  
Saturday: Tempo run for 10~15 minutes (3) **OR**  
2~3x5 minutes with 3 minutes walk/jog break (4)  
Sunday: 1 hour easy jog

- 1) **Fartlek** =Swedish word for "Speed Play". See [Useful Running Terms](#)
- 2) **Strides** =should be a fast but relaxed acceleration from start to finish. Concentrate on correct technique.
- 3) **Tempo run** =run at your fastest aerobic pace which is a notch faster pace than your regular runs.
- 4) **2~3x5 minutes** =After at least 10 minutes of an easy warm-up; run for 5-minutes at a comfortably fast but sustainable pace; take 3-minutes of very easy jogging or walking break for recovery and repeat this one or two more times. Preferably the second (or third) one should be slightly faster or the same time as the first one. If not, slow down next time.

## **Myth of "Junk Miles":**

Stage IV and V call for almost everyday, 5~6 days a week, of running/exercising. Some people may not be in the position to take the time to do exercise everyday; or simply may not want to. The more running you can do each day, the better. Even if you didn't have time to go to the gym and work-out for an hour, even 15 minutes jaunt of easy jogging is better than not doing anything at all. ("Even if you only have time to do a 15-minutes of jogging," Arthur Lydiard used to say, "you are still winning.") It actually helps you for better recovery as well as further develops your aerobic capacity.

Hopefully, by the time you have gotten this far, you feel like you want to run more; but even so, you may not be able to afford time to run everyday. If that is the case, instead of trying to cram everything in the week or forcing to stick to day-to-day schedule; spread workouts out and, say, try to complete the week's workouts in 2 weeks.

Often times, people tend to do "point workouts (the days shaded in red in Stage IV schedule) and eliminate other easy jogging days, or, in other words, eliminate "junk mile" days – term not-so-practical lab people had come up with. The fact is; those "in-between days" of jogging are just as important, if not even more so. Those easy days are what support your aerobic foundation. Consider the following:

Meb Keflezighi, who won the 2009 New York City Marathon, the first American to do so since 1982, would train 13 times a week – twice a day, everyday, except for Sunday when he would go for the longest run of the week – and would run about 120 miles a week. Out of those 13 times, the "point workouts" for him – tempo run, intervals, and a long run – would be 3 of them. Other 10 workouts would be mostly nice easy jogging (for him). And out of those 120 miles, "point workouts" would be about 35 miles (20-mile long run, 10-mile tempo run and 5-mile worth of intervals). Can he afford to eliminate all the other workouts and just emphasize "point workouts" and still be as good? NEVER! "There is no short-cut to the peak fitness." Toshihiko Seko of Japan, who won Boston marathon twice along with London and Chicago marathons in the 1980s, went as far to say; "Most of our training would be jogging. You could say that jogging is THE most important part of our training program."

And how fast do they jog? Take Japan's Soh Brothers, for example. They are twin brothers who shared 2:09:05 and 2:08:55 PRs respectively in the 1980s. They start out their morning "jog" at 7-minute/km pace. That's about 11-minute per mile pace! They pick up the pace as fast as 5-minute/km (8-minute per mile) pace. That's quite a leisurely effort considering they run 26 miles at sub-5-minute pace! "You cannot run too slowly..." – Arthur Lydiard.

So, once again, if you don't have time to run 5~6 times a week and only run 3 times; that's fine. Spread your weekly workouts and do them in 2 weeks. So what if it takes 4 months, instead of 2, to reach the peak fitness so long as you do get there!?

**If you followed this schedule comfortably for a month you are no longer a beginner!**

**CONGRATULATIONS!!!**

**You have arrived at the base of Arthur's Training Pyramid and are ready to make your first Ascent to Peak Fitness. We have provided on-line training program, Running Wizard, ([www.running-wizard.com](http://www.running-wizard.com)) for you to subscribe to the best training system available.**

\* Beginner's plans for those who start out at 15-minutes of running are also available at Running Wizard.

# The Heart Matters

It is important to monitor the intensity of your workout level. Your proper intensity of exercise will ensure a safe work level, which will benefit the development of your cardio-respiratory system, while decreasing the possibility of injury. This work level should be moderate in intensity, enjoyable and not painful.

Heart Rate is probably one of the most generally used methods to gauge fitness level improvement as well as the intensity of work load.

## **Heart Rate as a Fitness Improvement Indicator:**

- ❖ Our heart is a muscle, just like any other muscles in our body. As you get fitter, your heart becomes bigger and stronger and, as the result, your Resting Heart Rate will decrease, pumping more blood with each stroke as well as total flow per minute
- ❖ In order to compare, it should be recorded under the same condition at the same time of the day
- ❖ How to check your Resting Heart Rate
  1. Turn hand palm side up.
  2. Place two fingers from your opposite hand in the groove between mid-wrist and the bone running along the thumb-side of your forearm.
  3. Lightly feel for your pulse from the radial artery.
  4. Count the "pulses" you feel in 60 seconds.
  5. If you are checking the pulse during the exercise, count the "pulses" you feel in 15 seconds immediately after you stop the exercise and multiple that number by four.
  6. This is "roughly" your heart rate in beats per minute.



## **Target Heart Rate:**

- ❖ Heart Rate is an objective measure. A Target Heart Rate according to your age and fitness level and its range can be obtained from this simple formula:
  - ✓  **$(220 - \text{Age in Years} - \text{Resting Heart Rate}) \times 70\% + \text{Resting Heart Rate} = \text{THR}$**
  - ✓ **5 beats above and below would be your Target Heart Rate Range**
- ❖ This is a very simple formula for calculating your Target Heart Rate as it does not take one's background and circumstances into account. Maffetone's method explained on Checking Your Target Heart Rate is probably a more accurate calculation.



# Useful Running Terms

**Aerobic Running:** Running "with oxygen". You are running at the intensity (speed) that requires oxygen within the body's ability to assimilate, transport and utilize oxygen. In other words, you're not puffing!

**Anaerobic Running:** Running "without (enough) oxygen". The speed of running exceeds your body's ability to use oxygen. You will be breathing unnaturally (puffing).

**Fartlek:** A Swedish word for "Speed Play". You would basically run according to how you feel. If you feel good, speed up and bit; then when you get tired, slow down and jog/walk; go up the hill hard or spring up the hill; jog down the hill... Best done in the natural environment like a golf course or nature preserve.

**Interval Training:** Run one fast and jog one. Initially, we would use this concept to jog/walk to increase the total length of workout. Later interval training might become more exacting race-specific workout where you might run a certain distance/duration faster than normal followed by the equal distance or equal duration of recovery jog/walk and repeat this several times. If repeated over the same course, the last one should be run in the same time or slightly faster than the first one. Otherwise, slow down. Most people use a track to do this workout; but can be done anywhere, on the road, trail, around the park, etc. Make sure you include adequate warm-up and cool-down before and after this type of workout.

**Hill Training:** One of the best ways to strengthen legs in general and to develop speed. There are several ways to do hill training but it is better to use it as a resistance and technique workout rather than trying to run up fast. Keep your torso upright (do not look down), arms swinging straight back and force, bring your knees up high and push off the ground hard.

**Oxygen Debt:** When you are working out at the intensity that exceeds body's ability to use oxygen, you will be creating "Oxygen Debt" that has to be "paid back" after the exercise is stopped. This is why, if you run fast, you "puff" unnaturally after the run. In most cases with the beginning runners, this should be avoided.

**Oxygen Uptake Level:** Body's ability to assimilate (take in to your lungs), transport (through circulatory system to the working muscles) and utilize (in the working muscles) oxygen. The higher the Oxygen Uptake Level is; the higher the intensity of workload (run faster) you can handle without getting into oxygen debt.

**Strides:** Technically, refers to the "steps" (i.e.: stride length, stride frequency, etc.) but here it is used as a term referring to running a short bout (50 to 150m) run at faster speed but also nice and easily and as relaxed as possible, concentrating on a proper running form. Recovery should be at least 3 minutes between the repeats.

**Talk Test:** Talk to your running buddies during the run to make sure you can hold a conversation comfortably during your aerobic running. Otherwise, slow down or walk. Training shouldn't be straining.

**Tempo Run:** To run a certain distance or certain duration (i.e.: 2~5 miles or 15~30 minutes) strongly and evenly at slightly faster pace than your normal runs but still not getting into too much oxygen debt. Make sure you do adequate warm-up and cool-down before and after this workout.

**VO<sub>2</sub>Max:** Stands for Maximum Volume of Oxygen (O<sub>2</sub>). Also called Maximum Oxygen Uptake Level and it represents the amount of oxygen your body can use to do the physical task.