



Previously: strength and mobility
This one: training sessions
Next: running technique

In #2, I encouraged you to think beyond 'training' and take a wider view of preparing for a marathon, and also outlined some principles that sit behind the process of planning and replanning. Respecting recovery, build-up gradually, adjust as necessary. And #3 looked at some of non-running elements (crosstraining and strength work to help you build up the running with a lower chance of injury).

But of course the preparation will involve a bit of running, so here's something on that. What does a 'training session' contain? What might you include? And how could you define them in a simple way?

The aim is to clarify, but to do that, I have to slightly complicate things. There's a lot of jargon thrown around when describing training sessions. So I'll try to decode that, as well as providing a framework for thinking about how hard you work.

Don't get fixated on the details. As long as it doesn't injure you, any type of run will do something to make you fitter, even if it's not quite optimal. 'Just running' is fine, though it's not always the most efficient approach. But if you can incorporate a range of different types of session you'll potentially make faster progress.

Warm up, work, cool down

There are a huge range of potential sessions, and to some degree each is unique because you're doing it on a new day, with a body that may feel different. However, use the same basic structure each time:

- Warm up
- Work
- Cool down

Don't go out of the door, straight to max speed, and run until you drop. Try to include a gentle start and a return to 'normal' at the end. There are physiological and mental benefits – it eases the body and brain into the session, and also gives a gradual re-entry into the rest of your day.

Should I stretch?

You'll find differing advice about whether and when to stretch, and what stretching to do. Nothing is 'proven', but the following sequence is in line with current thinking:

- Easy warm up, walking or jogging (loosening muscles, raising the heart rate)
- Dynamic stretches (to mobilise and activate the areas needed for running)
- Main session
- Cool down (lower heart rate, flush out waste products)
- Static stretches (gently restoring muscles to how they were pre-session)

Not everyone does this. People run without stretching all the time, and when we evolved to run from animals on the African plains, we didn't stretch first. Because London training can be in cold weather, people want to get moving rather than stop and stretch, so a more practical approach may be to loosen things indoors, rather than after a few minutes of warming up outside.

Personally, I loosen whatever feels creaky, and some basic stretches also help my mind and muscles realise I'm about to run. Five stretches that I find most useful:

- Hip flexors – to open up the hips after spending too much time sitting down
- Chest opening – to free my arms for a full range of movement
- Stretch calves + rotate ankles – so my feet feel responsive when I start to run
- Glutes – to fire up the stabilising muscles and make sure they'll contribute
- Standing stretch – fingers to the sky, to raise hips and shoulders and feel tall

These are reminders of the form I'd like to have, as much as meaningful stretches. Sometimes I do them before warming up, sometimes after. Sometimes not at all.

Stretching and mobilisation are personal. Try different things and see what works for you. But if you don't do it before and/or after running, find time to include some stretching in your week - it really does help (especially if your days involve lots of sitting down, or if you've got a history of injury).

Measuring effort

Runners often agonise over splits and speeds, and some plans (and coaches, and technology brands) try to sound scientific, stating that sessions must happen at a precise pace. This is largely bogus. The various targets (typically heart rate or pace) are meant to correlate with a level of intensity (and that's what matters from a physiological perspective). Heart rate and pace are just *outcomes*, when it's the *input* that's important. Frankly it's all very approximate and there's a lot of error and assumption in there. Our bodies aren't algorithms. If you want to run at a certain effort level then get to know your body and run at that level, don't rely on some ropey calculations to tell you what to do.

In any case, unless you're running on an indoor track, those numbers are fairly meaningless, as they make no allowance for a changing surface, junctions, weather, inclines etc. All of which exist in the real world.

You can waste time and money trying to measuring things - just because you can produce a number doesn't mean it's useful. And I've seen runners have accidents, fiddling with a watch or phone to press a button or read a number at the wrong time.

Instead, I'd recommend working with *perceived effort* as the 'gold standard'.¹

Training zones

A focus on perceived effort really helps you get attuned to how your body is working and feeling, and that can be vital on marathon day. To make things easier, you could use a few training 'zones' based on an effort scale of 1-10. For example, you could use four zones and think of them as different gears, or simply different colours:

- Red (9-10) – sprinting or fast efforts for a short period
- Yellow (7-8) – hard work, only sustainable up to perhaps 20-30 mins. You could speak a few words or a sentence, no more.
- Green (5-6) – steady effort that you could maintain for a long time, breathing through your nose rather than gasping.
- Blue (4 and below) – easy coasting, low effort, talk as much as you want.

%age	Perceived Effort	Zones
100	10	Red
90	9	
80	8	Yellow
70	7	
60	6	Green
50	5	
40	4	Blue
30	3	
20	2	
10	1	

Clearly there's a spread within each – hard yellow is tougher than the bottom end of yellow. But four or five zones is enough to work with. The point is to calibrate your effort in a simple and understandable way, because then you're in control of the session without being a slave to the watch.²

¹ That's a quote from the official UK coach for one of the main GPS brands. I'll do a separate note on tech and data but for now, just be cautious about trapping yourself in a world of utterly pointless numbers.

² Just so people don't think I'm totally avoiding the subject, you will find 'training paces' on the web, for example <https://www.runnersworld.com/uk/training/a761676/rws-training-pace-calculator/> or <https://www.fetcheveryone.com/training-calculators-trainingpace.php>. But as the Fetch site says, the numbers are based on a computer program and 'you and your legs' are not a computer.

Where to spend your time

For marathon training, expect to spend most time and most miles in your equivalent of 'Green' (5-6 out of 10). I'll make that point again. Ideally, you'd probably spend more than half of your time running at a fairly easy effort level, whether that's for all of the session, or as part of a longer session which also includes other zones. The 'Green' zone is where your body will get used to working with the appropriate energy systems, and it's where you can think about how you're moving, without straining for speed. A lot of easy running will make running easier.

However, to run faster you also need to run faster – if you don't do any harder running then all you're doing is teaching your body how to run slowly, and you're always going at your maximum speed. So use all the zones in your mix, as they'll all help.

- Blue – warming up, recoveries, cooling down, working on running form
- Green – long easy runs, recovery runs
- Yellow – interval efforts, or a faster finish to longer runs
- Red – speed intervals and strides

Some people talk about 'polarised' or '80:20' training and that's probably a useful shorthand. Instead of doing lots of medium-effort running, ensure your easy runs stay easy and your hard running is hard. 80% easy, 20% hard is a decent starting point.³

Types of session

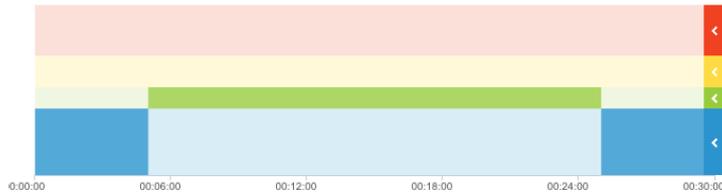
You're really just looking to ensure there's some mix of long, easy, and fast running in your diet. I'll outline five basic types (two of which are similar). I've included visuals, using those 'zones' (so time runs along the bottom, and the colours show the zone for each part of that session).

Hopefully this also helps demonstrate how a limited number of zones can enable you to hold the session in your head (e.g. 5 min blue, 20 green, 5 blue) without continually needing to check the numbers.

1. Easy run

Not every session should be hard. A short, easy run is fine – it'll help you recover from harder days, it's a chance to work on your technique, and it's also an opportunity just to enjoy running and feel how your body is changing. 15-30 minutes, Blues and Greens, no pressure, relax.

³ Although see the note about 'inverting the pyramid' later on. If you can already plod forever but have no speed, you may gain from a higher mix of hard running.

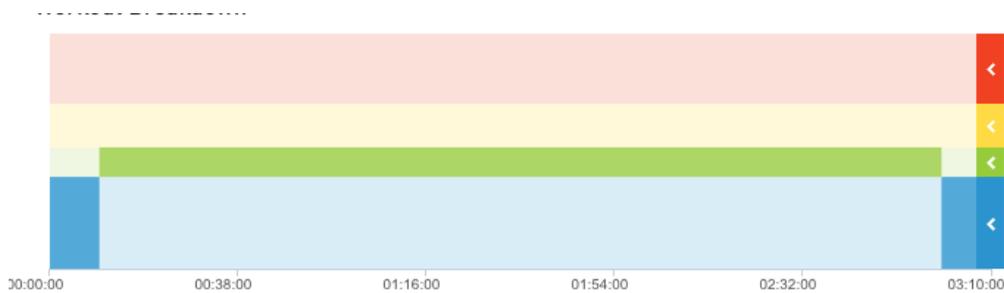


2. Long run

This is considered to be particularly important for marathon training, so I'll talk about it in more detail another time. As the weeks pass, aim to build up the duration, but in the short term, think of it as being an easy, sustainable run. A bit of Blue, a lot of easy Green, conversational pace. It's good to do with someone else or in a group, because the need to talk forces you to run slowly.

Ideally, about three months out from race day, you'd want to be able to do this for at least ten miles, which probably means 90-120 minutes. If you aren't there yet, that's fine, don't leap straight to it. But aim towards that, from where you are right now. Feel free to include sections of walking – e.g. 10 mins running, 2 mins walking, repeated.

The time will come for these to get longer, maybe adding 10% each week. But for now just start to see how they fit into your routine, and how you recover.



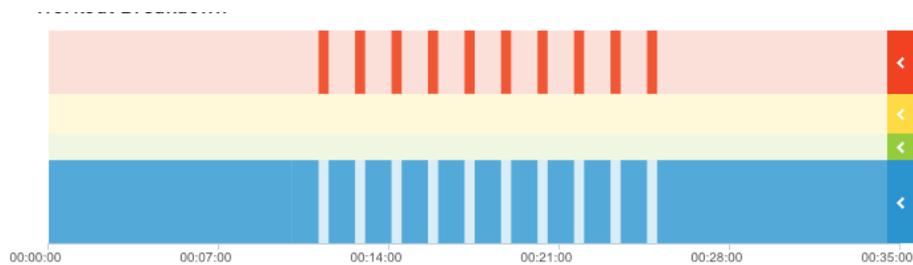
3. Intervals

Here, you'd mix up faster running (Yellow or Red) with recoveries (Green or Blue). Again, include easy movement to warm up and cool down – don't launch straight into a hard effort, and don't stumble breathless through your door to finish.

Two examples here. The first would involve surging from Green to Yellow and then back again, so there's not a huge variation and it'll feel like a continuous run with some harder efforts.



And the second is more of a speed session, short Red sections with easy Blue recoveries. This sort of thing would often be called 'strides' – where you're striding out for a very brief interval.



There are lots of variations on interval sessions. For example, the intervals could be formed by hills, where you work harder on the up but the pace doesn't change.

In order to mark the change from one pace to the next, you could use time, you could use distance, you could use landmarks (e.g. the end of a road, a tree).

Roughly speaking, you could work on the basis of a 30-40 minute session. 5 mins at the start and finish to take things easy. Then within the remainder, around 5k of 'work' divided up (5 x 1k, 12 x 400m etc.) with recoveries in between.

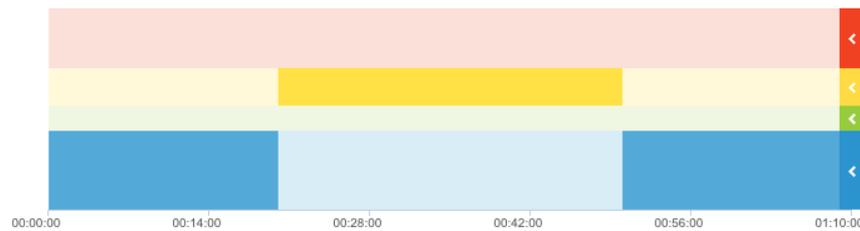
4. 'Tempo' run

This would consist of warming up and then a steady effort – hard Green or easy Yellow. Somewhere between 4-6 miles of work, so the total session is likely to be between 45-60 mins. You're not running to exhaustion, but comfortably uncomfortable. There's no reason to strain or to lose your running form, and the objective is not to finish on your knees.

5. 'Threshold' run

Similar to the previous one, and sometimes people lump them together. But this would be a little harder, to the point where you definitely feel fatigue building, and the last part of the work feels tough. Again, a steady effort but aim for Yellow. The aim is to be running at or just below the 'threshold' where your body can't process the waste products from your muscles. After about 30-40 mins here, you'll have had enough.

Similar distance and time to the 'Tempo' run, or you can include a section of this towards the end of a longer run. It'll help with fitness, and it'll also help you really understand where that limit lies for you. When it comes to the marathon, you don't want to go over the line into your 'red zone' until well into the second half of the race.



A weekly diet?

Try to include a bit of everything through the course of the week, if a weekly routine works for you. I'm very cautious about appearing to set a 'plan' when I don't know people's individual stories (so don't take this as a recommendation) but one approach would be a regular routine⁴, for example:

- Tuesday intervals
- Thursday tempo
- Saturday strides and some focus on technique
- Sunday long run
- And maybe one or two short recovery runs, if you feel they'd help

This isn't a prescription. You might run more or less often, or on different days. Do what you can do, and what you enjoy. Substitute other activities as appropriate (e.g. a spinning class might equate to an interval session). The point is that variety is good, different sessions have different purposes, and it's rarely just about mileage.

What to do, when?

Traditional marathon training has often been divided up into phases. For example, 'building the base', 'sharpening', 'tapering'. That would mean spending time slowly increasing the mileage, then trying to add speed, then restoring and recovering for the big day. That's fine, but it's not ideal for everyone. If you've already got speed but don't have the endurance, then focus on endurance more than speed. But, if you can already go forever but only have one gear, then there's nothing wrong with starting with a greater balance of intervals and tempo/threshold work. If nothing else, those will be shorter sessions and perhaps a bit more manageable when it's cold and dark through Jan and Feb.⁵

Don't get too hung up on it. If it's a dreadful day then it's going to be no fun grinding away slowly for mile after mile. Always give yourself the option of swapping things

⁴ A regular weekly schedule is how most Kenyan groups do it - <http://www.train-inkenya.com/2016/10/08/wilson-kipsang-training/> But remember that they're free to structure their lives around running. You may not have that luxury.

⁵ A good blog about 'inverting the pyramid' - working on speed early, rather than late: <https://www.theendurancestore.com/blogs/the-endurance-store/54873923-the-egyptians-might-have-been-faster-if-theyd-reversed-the-pyramid>

around so you're doing something suitable that day. Work to maintain your strengths as well as addressing any weaknesses. Remember to recover after a hard session. And do what you enjoy, because then you'll do it.

There's nothing wrong with just 'going for a run' and sometimes that's a good way to shake off the day. But by deliberately including a range of sessions, you'll get more benefit from your time and effort. Throwing sheer mileage at the problem is really not the most efficient or intelligent approach and it's more productive to mix things up. Try to have the shape of the session in your head before you go, and aim to stick to it, more or less. And it's all easier if you work with some simple zones rather than get tangled up with meaningless 'precision'.⁶

As usual, three points to finish:

- **Warming up and cooling down are important, whatever the session**
- **Find a simple system for structuring a session, ideally based on perceived effort**
- **Mix up the types of session you do, in order to use your time well**

⁶ One other way to ensure every session counts is to give yourself something technical to think about - arms, feet, hips etc.. The next note will tackle that topic.