

2021 Plan 13. Low heart rate training - 21.1 km

Zebra Zoom

This training plan is for those who would like to build a bigger aerobic base, stay uninjured, stay fresh and get faster over time through more consistent training.

Low heart rate training has been promoted by the Maffetone training principles and has worked incredibly successfully by runners around the world. The principles and benefits can be found on the Maffetone website [here](#). A lot can be learned here, and you may wonder why we are providing a training plan here. It is our goal to simplify the process for you with this plan.

You will note that the plan has in the top row, 'day' instead of 'run 1' up to 'run 6' as in plans 1 to plan 10. This is because it is allowable in this plan to run more than once during the day, so long as your heart rate stays below a certain number. Well, as much as you can, taking into account heart rate sensor inaccuracies.

So, the goal of each of the low heart rate runs is to keep your heart rate below a number worked out by the Maffetone formula. The basic formula is $180 - \text{your age}$ but there are other determinants that from my research do vary a little. The following is my interpretation of how the calculation proceeds.

1. 180 bpm

2. Subtract your age from 180

3. Adjust number using the following:

- a. If you do not regularly exercise at a gym or run, subtract 5 beats.
- b. If you regularly exercise at a gym or run only 1-2 days a week, subtract 2 or 3 beats.
- c. If you regularly exercise at a gym or run 3-4 times a week keep the number where it is.
- d. If you regularly exercise at a gym or run 5-6 times a week keep the number where it is.
- e. If you regularly exercise at a gym or run 7 and over, times a week, and have been doing so for over a year, add 5 beats.
- f. If you are over 55 or younger than 25, add 5 beats to the number so far.
- g. If you are under 20 years old, add another 5 beats.

4. Subtract 5 if you have been sick or had surgery recently and still recovering. By sick, I mean a cold or flu, not a major illness like a heart attack or cancer. By surgery, I mean minor surgery like a hernia operation, not a heart operation. If you have anything serious, illness or surgery, then you need to be assessed by your doctor before commencing any exercise plan including this one.

For example, using myself as the runner and using the above steps.

I am 61, so working through the process

1. 180
2. 119
3. e, add 5 and f, add another 5 to get 129
4. 129 - 5 to get **124 (I had minor surgery a couple of months ago)**

I am currently trying to do most of my running under this number of 124, only partially successful because of a couple of reasons; the questionable accuracy of my smartwatch's wrist sensor and also my chest band monitor when I wear that when it is too dry or tight enough, and the tendency to want to run faster, too quick for my body to keep the heart rate low enough to qualify as low heart rate training.

This plan would suit those runners who may be interested in trialing a low-stress way of preparing for the Zebra Zoom, or maybe recovering from injury or sickness, or just trying something different having found that previous plans have not worked for you in getting you to the start line fresh and ready to go!

This plan has only one day off because the running is mostly very easy. You may even have to walk initially if your heart rate goes above the calculated number from above. That is ok. Persist, walk when you have to, and get the heart rate down, and eventually, your body and heart will adapt allowing you to run and run more quickly at that low heart rate.

You will also notice that later in the plan, there are some sessions that allow faster running with a lower heart rate. These include run downhill/walk uphill and 8-sec run surges. These are to facilitate your musculoskeletal system to tolerate and enjoy faster running when you get to the start line.

Note also, that the time running (or walking) below in the plan does not have to be in one session. I myself choose to run twice most days keeping my heart rate down as much as I can. It has worked for me so far, without getting the niggling pains I have had with previous personal plans where I have run once and too fast for my body to adapt sufficiently.

Day 5 in weeks 1 and 9 is a test run where you run for the time specified with a heart rate no higher than your calculated number. This is to see how far you go in kilometers. Hopefully, in week 9, you go further than week 1 :-)

You will also note in the plan below that from week 8 to 14 that Day 5 increases in run time to provide all the advantages of a [longer run](#)

Starting Week Number	Starting Week Date (Monday)	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Total running time
1	10th May	45 minutes	20 minutes	45 minutes	20 minutes	45 minutes Heart rate distance trial	20 minutes	2 hours 55 minutes
2	17th May	45 minutes	20 minutes	45 minutes 8secS x 3	20 minutes	45 minutes	20 minutes	3 hours 15 minutes
3	24th May	50 minutes	20 minutes	50 minutes RD/WU x 3	20 minutes	50 minutes	20 minutes	3 hours 45 minutes
4	31st May	50 minutes	20 minutes	50 minutes	20 minutes	50 minutes	20 minutes	3 hours 45 minutes
5	7th June	55 minutes	25 minutes	55 minutes 8secS x 6	25 minutes	55 minutes	25 minutes	4 hours
6	14th June	55 minutes	25 minutes	55 minutes RD/WU x 6	25 minutes	55 minutes	25 minutes	4 hours
7	21st June	60 minutes	30 minutes	60 minutes	30 minutes	60 minutes	30 minutes	4 hours 30 minutes

8	28th June	60 minutes	30 minutes	60 minutes	30 minutes	70 minutes	30 minutes	4 hours 40 minutes
9	5th July	45 minutes	20 minutes	45 minutes 8secS x 8	20 minutes	45 minutes Heart rate distance trial	20 minutes	2 hours 55 minutes
10	12th July	60 minutes	30 minutes	60 minutes RD/WU x 8	30 minutes	80 minutes	30 minutes	4 hours 50 minutes
11	19th July	60 minutes	30 minutes	60 minutes	30 minutes	90 minutes	30 minutes	5 hours
12	26th July	60 minutes	30 minutes	60 minutes	30 minutes	100 minutes	30 minutes	5 hours 10 minutes
13	2nd August	60 minutes	30 minutes	60 minutes 8secS x 10	30 minutes	110 minutes	30 minutes	5 hours 20 minutes
14 Longest run. Tapering begins	9th August	45 minutes	20 minutes	45 minutes RD/WU x 10	20 minutes	2 hours	20 minutes	4 hours 10 minutes
15 tapering	16th August	30 minutes	30 minutes	30 minutes	30 minutes	30 minutes	15 minutes	2 hours 45 minutes
16 tapering	23rd August	30 minutes	30 minutes	30 minutes	15 minutes	rest	Zebra Zoom	1 hour 45 minutes + time for race event

RD/WU - run downhill/walk uphill

Find a 100 to 200-meter hill. Walk to the top, and then run down with a quicker run pace than you would for your normal day sessions. Repeat for the number of times specified for the day included in the run time.

8secS - 8-sec run surges

During your day sessions, surge to a faster pace (not a sprint, maybe a slightly faster pace than a goal pace for your event). Repeat for the number of times specified for the day included in the run time. Don't worry too much if your heart rate surges a little bit as well.