

Berlin Marathon 2024

Henry Hart, Belgrave

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TLDR

2:18:45 at the Berlin Marathon 2024.

Best ever training block.

Best ever race.

How can we do better?

The Race

Before the Start

Unacceptable Scrum

| | |
|--------------|--|
| 06:00 | Wake Up |
| 06:40 | Breakfast |
| 07:00 | Start Walking |
| 07:20 | Arrive at Eigenverpflegung – Hand in Bottles |
| 07:40 | Pret for Coffee |
| 08:10 | Scout Start Area |
| 08:20 | Hand in Bag |
| 08:30 | Arrive at Front of Zone A |
| 09:15 | Race Start |

Because of the number of people at the start line, particularly near Zone A, I decided to get there 45 minutes before the start. I managed about 2 minutes of jogging and light drills on the way inbetween the crazy walking queues between the bag drop and the start zones. Once at the front of the Zone A box, I was determined not to move and give up my space. Luckily I had a bin bag to keep me relatively warm and Jonny Neville to keep me company. There is just no way that you can do a normal warm up routine and hope to start at a reasonable time without an elite start. For this reason and others, I won't be doing the Berlin Marathon again without an elite start. Starting late was not an option because the plan was to run with Bester, Hashi and the 2:20 group of women (which was supposed to be the third paced group on the road – 2:16 and 2:18 were the other paces).

About 5 minutes before the start, the organisers parted the barriers about 5 metres back from the front of the Zone A barrier box. This was not great for me and Jonny Neville because we were at the front of the box. I managed to jump the barriers (cramping my calf in the process) and end up on the second row back. Jonny was two rows further back. There was much shouting and anger as people were literally fighting for space. Elites then filed into the zone infront of us. I managed to make contact with Bester and Hashi. A few seconds before the start, they ran us up to the back of the elites.

First Half

Uncomfortable

We got off the line fine, about two seconds after the gun. It felt pretty fast and I was nervous about getting tripped for maybe 50 metres before calming down. Almost immediately I caught Bester and started drafting him as he was leading a group. Hashi was on the other side of the road with a paced group of women. After about a kilometre, our group switched sides so there was one large group. The first two kilometers were bang on the money. The group included Genzebe Dibaba!

Into 5k, we gained some time and went through 2 seconds ahead of 2:20 pace.

My first bottle was at 9k. The elite bottles came first and the group was very choppy coming in. Mostly elite women were all over the place trying to get position for their bottles which were spread over about 30 metres of tables with lots of the bottles being held out by helpers for the elites. A few metres after the end of the elite bottles, the table with my bottle was tucked away on the side of the road and there were probably 200 bottles on a tiny table. I jumped across to the table and managed to get my bottle reasonably quickly but I still lost a couple of seconds in the process. I was already starting to feel very nervous and tetchy in the group – it was not relaxed how I wanted it to feel. There was then a small hill where I lost a few strides on the group going up, and then temporarily dropped them on the downhill. I'm convinced that I took this more efficiently than everyone else in my group. While off the front, I had a chat with an American sounding guy who said he wanted to run 3'18" pace so I told him to go ahead because I didn't want to run that fast. At this point, I hadn't seen Bester for a while. I wondered if he was still in the group or had dropped further back. Looking at the results, it looked like we dropped him before 5k (he was 10 seconds back). I guess this is because he was sticking to a particular heart rate because this is off pace and he was missing out on being in a great group.

At 15k, the elite and non-elite bottles were arranged the same as at 9k. This time I missed my bottle because I just couldn't see it. It was probably there, but difficult to see amongst the dense clump crowded onto a single table. Luckily I was carrying four backup 25g Maurten caffeine gels. I took a cup of maurten mix from the course which I estimated had 16g of carbs (although I doubt I got half of it in my mouth). I then took a gel. This probably replicated my bottle (40g, of which I expected to consume 35g). I hadn't expected how thick the Maurten gel would be. As I was taking it, I started to drift back in my group and I mentioned to Hashi that I thought the pace was a bit too hot. Part of this was probably due to the natural acceleration that happens into a drinks zone. Given that we were 21 seconds ahead of pace, I wanted to drop back a few seconds and perhaps find another group. By the time I got to the back of my group (including Hashi and Dibaba), I looked around and there was no other group near us. According to the results, Bester was 11 seconds back. I had a decision to make about whether to drop back or stay with my group that was going slightly too fast. I wasn't feeling amazing but I thought the group further back would be behind pace at this point and I suspected that there wouldn't be many people capable of negative splitting to keep me or Bester company. I decided to try and hang onto Hashi's group which was difficult for a couple of kilometres but getting to take the racing line due to being off the back was nice and relaxing compared to being a bit more careful in a group of professional women.

The 20k bottle was not missed but I had to slow down significantly to grab it. Really, don't use the non-elite bottle service at Berlin.

Half Way to 25k

Slowing

At half way, we were still 21 seconds ahead but some of the men were getting concerned that we were slowing (which we were ever so slightly). One guy in a checked Soar vest pushed on and said he wanted to run 2:20. A few of us set up a train behind him. After a few hundred metres, he asked why none of us were helping and I told him that we'd be better off just waiting for the group which was being paced by some Kenyan men, which was only 5 metres behind us. Everyone agreed and we then sat in. We slowly started to bleed time. The lead car in front of us updated us with km splits every half a kilometre and updated the projected time. It was starting to tick towards 2:20 projected as we were running some 3:22-ish kms. By 25k, we were only 5 seconds ahead...

25k to 35k

Pair Mission

Markus Schweikert (2:20:37 – if anyone knows this guy, please give him my sincere thanks and praise) and I found ourselves at the front. There were a couple of men just behind us, in front of the group of women + Kenyan pacers. Markus suggested we ping it off the front and given that we were starting to bleed time, I agreed. We alternated kilometres, roughly between the half-kilometre points, and I could feel that we were really sending it. My heels were high and my muscles were tightening as they do in a 10k. It felt good, unsustainable, but we had to do something. Immediately, we started gaining time. Going through the km markers, we started to knock off 5+ seconds at a time – we were flying. Usually in the last third of a marathon, you can slow down and still feel like you're sending it, but surprisingly in this instance it seemed we were being rewarded for our efforts.

Apparently, it seemed, we had immediately dropped our whole group, but we had no time to wait. We slowly started to reel in the group of women in front of us (which turned out to be the chasing group behind the lone leader). As we started to build a big buffer (~ 40 seconds), I suggested we turn the temperature down slightly, but Markus wanted to reach the group in front. Just as we were about to make contact around 34k, another pair of men came up behind us. I don't know if they had been letting us work for them the last few kilometres, or whether they were also on a pair mission, but from further back. Once we reached the women's chase group, we were able to relax – I was surprised how great I felt this deep into a marathon, especially given that I had probably just split 32:2x for the last 10k.

35k to Finish

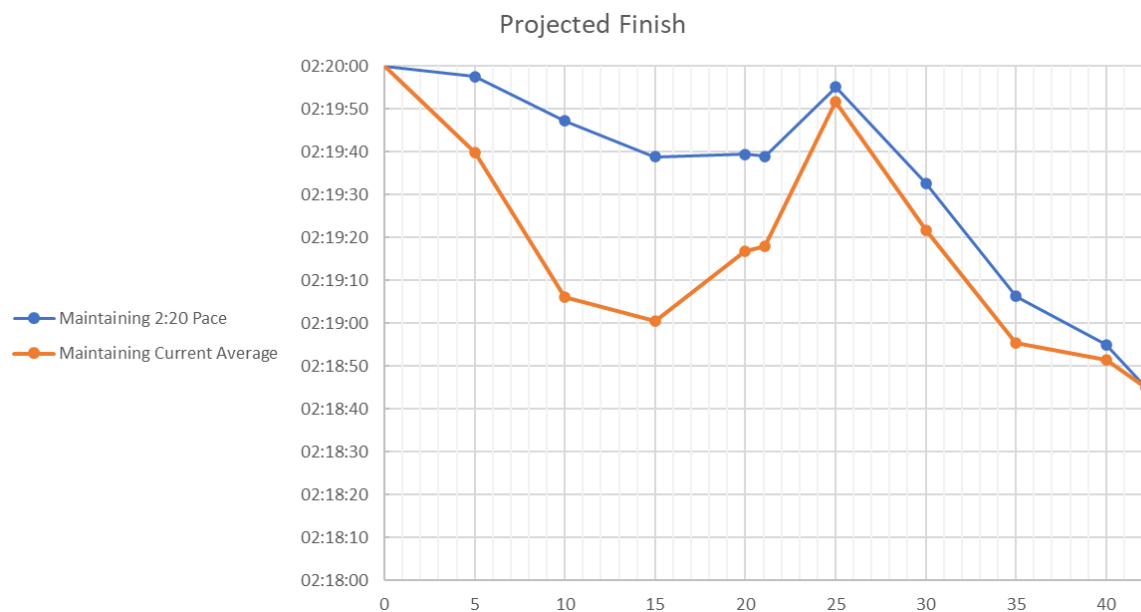
Avoiding Catastrophe

Coming into 35k, I was beginning to celebrate internally. We were almost a minute up and apart from heavy legs, I felt pretty fresh. I think it was at this point that I noticed that I couldn't see Markus in the group anymore – sad.

Then, a nightmare.

For the first time in my life, my peroneal began to cramp mid-stride as my foot was coming down. My foot was not pronating at all when this would happen. I had to tense the medial side of my calf to stabilise my feet in the air, but then that side of my calf would also cramp. My foot was cramping in both rolling directions and it was really tricky to control. A couple of times I was

dropped from my group because I was running 4' kilometres for a few strides trying to control my feet. I would then catch up. Stephen Blake from Aldershot was kindly trying to give me encouragement when this happened – perhaps he thought I was blowing up. I knew coming into 38 and 39 kms that we were approaching a buffer of 1 minute so I could stop to stretch if needed, although I wasn't confident that this would not have caused more cramping issues. I had to run to the side of the group to limit the chances that I would trip into them during a cramp and this also allowed me to avoid any uneven road that was triggering my cramps. I tried a few different cadences; a faster cadence seemed to help a bit. Eventually, I was able to drop the group (which also conveniently stopped me interfering with them because of my defective feet). At 40k, I was over a minute up and only then did I think I could run 2:18. At 41k, I had lost some time due to caution and unhelpful bends (not good for lateral/medial cramps), but coming into the Brandenburg gate I could really send it knowing that I had a good buffer to 2:20.



After the Finish

I was very happy after the finish, obviously. Stephen Blake crossed very soon after me and we congratulated each other. Then Bester followed and I congratulated him but I don't think he was really conscious of the world around him. Hugo Fry came over the line and his watch showed he'd run 2:20:01 – a few minutes later we would find out that his actual chip time was 2:19:58.

Soon all the Belgrave lot were in the fenced area and we'd all had huge races. Most of us ran a 5 minute PB, including sub 2:30s from Tom Lole and Jonny Neville who have spent ages trying to break that barrier. It was a great day for Belgrave. Emily Robbins ran the 22nd fastest British time in 2024 and has big potential for Seville.

The Block

Training

The sole goal for the block was to run 2:19 in Berlin. I had half an eye on running 29:xx for 10k but there was no way I would compromise my training to make this happen.

- The block lasted 16 weeks (vs. 18 for Frankfurt 2023):
 - 3 easy (vs. 4 for Frankfurt)
 - 6 adding tempos (vs. 4 for Frankfurt)
 - 7 adding VO2max work (vs. 10 for Frankfurt)
 - This final phase included a 2-and-a-bit week taper for Berlin (vs. 2 tapers for Frankfurt)

Mileage

- Stacked 9 weeks of 200-210km in the middle of the block
- Averaged 202.2k for 10 weeks (vs. 149.3 for Frankfurt)
- Averaged 194.1k excluding the taper (vs. 143.3 for Frankfurt)
- Averaged 186.7k including the taper (vs. 138.4 for Frankfurt)

Gym

- Went to the gym twice every week before the taper, spreading 10 exercises of typically 3x8 across the visits including squats, deadlifts, curls, bench, calf raises and leg extensions. I prioritised calf raises to avoid any achilles/peroneal/soleus injuries. I stopped doing arm exercises 7 weeks out and gradually tapered the number of exercises to the point of doing no gym in the last week. In total, the gym work was about twice as large as for Frankfurt.
- My office routine shrunk to just unweighted calf raises, glute bands, flexor hallucis longus bands and peroneal shrugs. This is because I wanted to prioritise weighted work.

Structure

- A typical week in the last phase consisted of:
 - VO2max session on Tuesday (cruise intervals for tempo phase of block)
 - Heavy gym session afterwards on Tuesday
 - Single or double T session on Thursday/Friday
 - Long run on Saturday/Sunday
 - One other smaller gym session usually focussing on calves
 - If I had time, I would add 1-2 hours of hypoxic exposure at c. 5500-6000m altitude
- Typically, I would do ten runs across the week. That gives me four half rest-days, which I find is a better way of thinking about rest days, although I would try and take one whole day off each week (which life usually mandates anyway).

Double T

- This was a substantial change from Frankfurt. I felt that with my increased mileage, it was important not to let the intensity wilt. I would aim to do about 20k a week at marathon pace or faster, and stack these so they were on adjacent half days, i.e. [Thurs morn, Thurs eve] or [Thurs eve, Fri morn].
- I think I did this 5 times during the block.
 - I typically felt less pressure to double up on T when I had a spicy long run planned in the week.
 - I really struggled to run fast enough in the mornings. This was also reflected in my heart rate, which would also stay too low.

- The accumulated fatigue of these double sessions was significant. At some points I felt as though it wasn't worth it.
- A number of these tempo sessions were disappointingly slow while feeling very hard. An example that stands out came with just over 5 weeks until the race on a Friday morning after 7k + 3k @3'10" the Thursday evening before: I went to the track to do 10k@3'10-12" and couldn't get my legs to turn over. It felt very difficult, way harder than half marathon pace but I was only going at 3'30" pace (note that I was on the track, so there was no GPS error). Towards the end of the session, it became more manageable but I felt physically unable to speed up. A week later I ran 30:30 at the Wilne 10k so I'm at a loss to explain this session other than perhaps extreme accumulation of fatigue. This is the only block where I have done sessions that are so out-of-keeping with my fitness at the time.

Intensity Volume

- As mentioned above, for this block I tried to focus on keeping a high proportion of the mileage intense which is easy to neglect when pushing more mileage than in previous blocks.
 - For VO2max sessions, I tried to hit 10k of work. I have found in the past that it is too difficult to hit the right intensity and recovery ratios if I try and do more than that. Even 10k of work might be in that category. For the Valencia 10k block I've got coming up, I think I'll limit the VO2max days to 8k of work to ensure that the pace is faster than 5k pace.
 - For tempos, I tried to hit over 20k of work across a single or double. I would let this slip if I had a hard long run planned. Sessions were typically one of:
 - 6k@ 1-hour pace
 - 10k@ half-marathon pace
 - 16-26k@ marathon pace
 - Short rest intervals @10k pace
 - My half-marathon pace is now close to 1-hour, so I'm going to have to think about a new pace for my medium tempos – will consult with Dr. Jack (Daniels Running Formula).
 - I tried to focus more on spicy long runs in this block rather than longer easy runs. I will carry this forward in future blocks.
 - I only did a couple of fasted long runs. I just don't think it's that useful if you're training for a 2.3 hour race where you're looking to maximise carb burning. Especially when you're looking to push the intensity and mileage, the recovery cost of these runs is too high. The exception would be if you have to skip your normal long run to go with slower friends; you can get a bigger stimulus if you do a 24-hour fast before.

Results

- I ran 2:18:45 at the Berlin Marathon (8/10)

Minor results included:

- 2:12.7 at the second Rosenheim, barefoot (tactical - N/A)
- 4:13, 2:08 & 8:55 at the third Rosenheim (tactical - N/A)
- DNF at 2.1k of the 3000m final of the Rosenheim. Through 2k in 5:48 (2/10)
- 30:30 at the Wilne 10k (6/10)
- 68:55 during 26.2k workout at Battersea Park Half Marathon (7/10)
- 14:23 at the September PUL (9/10)

Lessons

The Berlin Marathon was by far the best result I have ever achieved. It ranked 21st in the country for 2024 (vs. 123rd for 14:23 5k, not including 5,000m runners).

I rate it 8/10 because some things went well:

- Temperature was 9deg-13deg – only slightly above ideal
- My execution in terms of pacing and picking groups was nearly perfect
- There was hardly any wind
- I had some great people to run with, particularly Markus Schweikert who helped me bridge the absolute chasm between our slowing 2:20 group and the chasing women's group
- I took some gels with me off the start because I sensed that bottles would be easy to miss – I was right
- Before the race, I predicted that I was in almost exactly 2:20 shape. A week before Frankfurt 2023, I ran 14:44 with decent pacing on the track. Two weeks before Berlin 2024, I ran 14:23 with similarly ideal competition. That implies a marathon of 2:20:06, but with an extra week of taper. To run over a minute faster than that prediction is pretty surprising to me.

And some things were not ideal:

- Non-elite bottles are not the one. Even though carrying gels costs c. 21 seconds, it probably still would have been faster than those terrible bottle stations. Not to mention that I lost 9 seconds by having to carry four backup gels.
- My unprecedented foot cramps that nearly ruined my race and cost me some seconds.

Getting Dropped

I have noticed that I am more sensitive to pace in races these days. When my group would speed up, I would almost get dropped, and vice-versa. I think allowing myself to float between the waves of people changing pace around me is quite useful for conserving energy. I noticed that this happened in the PUL 5k where my pace turned out to be very even while everyone else around me was more variable.

Carb Loading

I focussed a lot more on carb loading and optimisation in this block. I won't lay it out all here because it's basically exactly the same as what is described in the podcast episode titled "An Hour of Carbs with Tim Podlogar" on Pro Tri News and the YouTube video titled "Optimal food intake a week prior to your important race | Endurance nutrition".

My stomach turned to bits approximately 12 hours after the finish. I don't know if this was more because of the solid-free, beer only diet I had after the race, or whether the extreme lack of fibre had caught up with me. Next time I might try and be slightly less strict with avoiding fibre at the beginning of the last week.

Perhaps I didn't have enough salt in the last week – might have contributed to my cramps.

In the 8 days prior to the race, I avoided caffeine.

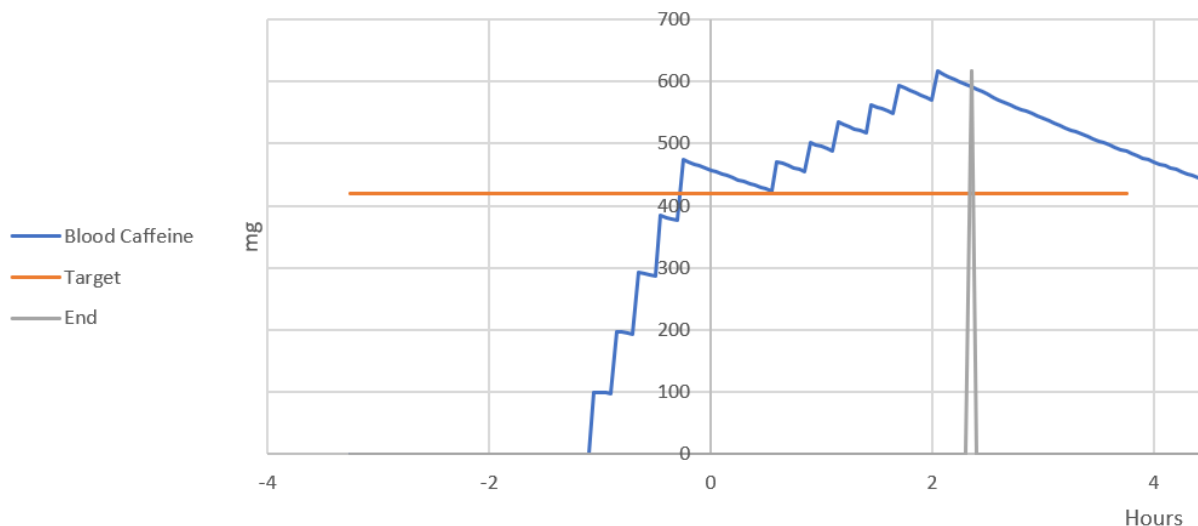
In the 6 weeks prior to the race, I avoided alcohol.

Bottles

Non-elite bottles are not worth it. Indeed, non-elite Berlin may be slower than non-elite Frankfurt. It is a right yomp to get your number from the Tempelhof Flughafen and the start line is a complete bun fight.

90g/hr of carbs was pretty easy, especially using Maurten. My homebrew Maurten doesn't seem to work; the sodium alginate and pectin clump up.

I used caffeine in the bottles again. See below my estimated blood caffeine concentration over the course of the race.



IMPORTANT: I put my bottles in the fridge overnight. On the morning of the race, I chopped up some ice, put about 50ml of it into each bottle and put the bottles in the freezer for 15 minutes before leaving. This meant that the bottles were still pretty cold when I picked them up on the course. This is the most effective way to keep core body temperature down during a marathon.

Weight

Sources

Dead weight costs about 2 seconds per mile per pound

(<https://www.ncbi.nlm.nih.gov/pubmed/723510>,
<http://www.abstractsonline.com/pp8/#!/4196/presentation/10828>)

Dead weight on your shoes costs about 1.1% increase in oxygen consumption

(<https://www.sportsperformancebulletin.com/training/endurance-training/economic-burden->

Altitude machine

I have used a DIY hypoxicator extensively throughout the block, but mostly before June in order to be acclimatised ahead of an attempt to do Chamonix-Mont Blanc-Chamonix in a single day. That didn't come off for a number of unrelated reasons.

There is limited evidence that hypoxic exposure helps for running (https://fellrnr.com/wiki/The_Science_of_Intermittent_Hypoxic_Exposure) however it does seem to have an effect on EPO production, and so a bit like heat training, one would think that it does help. I will keep searching for evidence. In the meantime, it's quite an easy thing to do if there's a bike race on TV and you don't have to concentrate much. You can sit at 5,500m altitude for an hour or so and the cost is pretty low, other than you might not be able to concentrate that well on the cycling.

Future Improvements

Berlin Improvements

During this Berlin build, I made a list of things that I'd improved since Frankfurt 2023 to give myself confidence:

- Flexor Hallucis Longus injury mostly went away after June
- Higher mileage
- More gym work
- Less drinking (6 weeks dry, and less drinking in general)
- Higher threshold volume
- Higher vo2max volume
- Hydrogel
- Less liquid in the bottles
- Less illness in the block
- Lighter watch
- Better shoes (Alphafly vs. Vaporfly)
- Better carb loading
- Lighter vest
- Lighter shorts underwear combination
- Flatter course
- Better pack
- Lighter Alphaflys

Further Improvements

This time, I am struggling to so easily find further ideas for improvement. Here's what I have so far:

- Don't neglect salt during the carb load. This could have prevented my feet spasming out in the last few miles.
- Go to Kenya for a few weeks. A number of my friends have been and really recommend it.

- I have purchased and used the Maurten Bicarb system, but there is no evidence that it has any effect over LT2 so I didn't take it for the marathon. It is possible that evidence subsequently emerges which means that it will make sense to take it next time.
- More intensity and volume?
 - This is a tricky one because there were countless times during this block when I thought that I was training too hard and not seeing the benefits of my labour. In the end, it all came good and I had by far the best race of my life, but does that mean that doing 220k + a week with 30k of threshold, spicy long runs and 10k of VO2max work would be better? It could be worse.
 - I guess we'll have to find out...
- Heat training is getting a lot of positive press at the moment. It's not very practical or nice though.
- I had some niggles, but less than par for a build like this. I bruised my toe, hurt my calf, bruised my extensor hallucis longus and had a cold for a week. This only cost me a handful of kilometres and minimal intensity.