

Training Guidelines for the Tour du Mont Blanc

Revised and updated November 2021

Often referred to as the toughest one-day sportive in the world, the [Tour du Mont Blanc](#) is a loop through three countries (France, Switzerland and Italy) around the highest mountain in Europe. The route covers 338km with 8,500m of climbing. These are huge numbers and the event is not to be taken lightly. One of the Alpine Cols coaches, Silas Cullen, who finished the Tour du Mont Blanc in 2013 in 13:46 in atrocious conditions, calls the event a “Marmotte on steroids”.

The Tour du Mont Blanc is one of the very few events where many participants seriously wonder if they will be able to finish. Depending on weather conditions, up to 50% of the riders who cross the start line will not reach the finishing line. The event is above all an endurance challenge, and although all participants are timed, there is no official classification and all finishers receive a well-deserved “Gold” certificate.

What does it take to do well – or simply finish - this event?

Depending on your level, it will take you between 12 and 20 hours to finish the Tour du Mont Blanc. The challenge is at least as much mental as physical, if not more so. You will push yourself to your limits, and then have to dig deeper still, experiencing moments of euphoria followed by despair, revealing depths of character you may not have known you possess. Most participants think of quitting many times and yet manage to find the cussed determination they need to keep going.

An event such as this should be prepared over several years. If you are relatively new to cycling, we recommend you accumulate experience riding shorter events before tackling the Tour du Mont Blanc. We suggest riding an absolute minimum of 5,000km with at least 50,000m+ of climbing in the year before. The great majority of participants ride between twice and four times these amounts.

So how best to prepare for the TMB?

To answer this let's take a look at the demands of the event.

From start to finish, the route is a constant succession of climbs and descents with barely a single metre of flat road. The majority of the long ascensions are at an average gradient varying around 6-7%, but the col de Champex is harder, offering 10.5km at 8.2% with some long pitches at 10%. The longest climb, the col du Grand Saint Bernard from Orcières, is 24.8km and 1,580m of vertical, with the last 6.5km at close to 9%. We will analyse the route in more detail in a future post.

The weather is a major imponderable, and can turn an extremely tough event into a terrible ordeal if you are unprepared or lack the right clothes. Extremes of heat can be as challenging for some as heavy rain, sleet or even snow and the resulting risk of hypothermia for others. Even if it doesn't rain, you may experience temperatures varying from ~0°C to 30°C throughout the day.

Getting into the detail, the Tour du Mont Blanc makes the following demands of you:

Physiological

- Exceptional aerobic endurance
- A high power-to-weight ratio
- The ability to recover quickly on the descents between long efforts on the climbs

Psychological

- Maintain focus and motivation for the time it takes to finish
- Stay positive and deal with inevitable setbacks and negative thoughts
- Maintain concentration and lucidity when severely fatigued
- Keep to the optimum pace on the climbs

Technical

- Excellent climbing skills, on long climbs and varied gradients
- Excellent descending and cornering skills
- The ability to refuel effectively with nutrition and hydration choices that work for you
- The ability to change clothing or at least adjust for temperature while riding

It is certainly possible to reach the finish line of the Tour du Mont Blanc without being “excellent” on all these criteria. It will, however, take longer and feel harder... Each criterion is important and your particular combination will determine your overall performance, or indeed whether or not you finish.

Before working on your personal training plan, take the time to analyse your current abilities against this list to identify your strengths and limiters.

Plan not only to develop your strengths, but also work on your limiters, at least to the point where they no longer handicap you. As an example, if descending is a limiter for you, you might easily lose 10 minutes on each descent, adding up to as much as an hour and a half by the end. This is a shame, because descending faster is a skill you can learn which has almost no extra energy cost!

Developing Your Training Plan

Principles

The best training plan for you is one that has been designed with your unique strengths, limiters, objectives, context and constraints in mind, and is constantly adapted for you when things change (as they inevitably do).

A generic plan will be sub-optimum at best and potentially useless. This is why we are not providing a generic plan. The “plan” we propose below is in fact a framework and a set of guidelines for you to adopt and adapt as appropriate. Our goal is to give you the means to think carefully about the process and take responsibility for your own preparation.

The key principles are:

- **Build the strongest possible aerobic base.** To do this, we recommend training in Zones 1 & 2, below the aerobic threshold (meaning below 65-75% of FTP or HRmax). Unlike other, shorter events, you should plan to ride the entire Tour du Mont Blanc in Zones 1&2, and training at this low intensity provides all the adaptations you need while keeping fatigue manageable.
- **Do as much climbing as possible**, at low intensity. Get used to climbing at a steady pace below 70% of your HRmax.
- **Increase the load progressively, then recover, in 4 week cycles** (3 hard weeks followed by 1 week of active recovery). Consider adopting a 3 week cycle (2 hard weeks followed by 1 week of active recovery) if you are 50+ and find it's getting harder to recover.
- **The recovery weeks are essential** to allow your body time to adapt and get stronger. Remember, training breaks you down and makes you weaker! You only get stronger when you give your body time to recover and adapt. There should be a big difference between your hardest and your easiest training weeks.
- **Work on both strengths and limiters.**
- **Include exercises to develop technical skills.**

Note that the Tour du Mont Blanc is an exceptional event in terms of distance, climbing and time taken to finish. The training guidelines we give here are quite different from those we give for the Marmotte, for example. For the Tour du Mont Blanc, the focus is almost exclusively on endurance.

Our framework begins in January, six months before the Tour du Mont Blanc, and assumes your ability to continue to ride regularly on the roads throughout the period. If this is not the case, you will have to compensate by doing long rides on the turbo and ideally by joining a training camp in the early part of the year in a convenient warm-weather location such as southern Spain or Portugal, Mallorca or Tenerife.

To finalise your preparations, plan a training camp in the mountains in June and ride as much as possible in hot weather to acclimatise. Alpine Cols is running training camps in Tenerife (29/01 to 05/02), in the Mont Ventoux area (08/05 to 14/05) and in the Alps (11 to 18 June): all of these are specifically designed to help prepare for events such as the TMB.

[Alpine Cols coaching camps in 2022 \(Tenerife, Ventoux, Alps\)](#)

TRAINING PLAN STRUCTURE

Our suggested framework includes three phases: **Preparation**, **Pre-Competition** and **Competition**. Each phase is then broken down into 4-week cycles including 3 load weeks and 1 recovery week, with a target training load for each week.

If you are over 50, consider adopting a 3-week cycle of 2 load weeks and 1 recovery week.

[Download the training plan](#) and details of the Training Zones.

1. PREPARATION PHASE: JANUARY TO MID-APRIL

The key objectives in this period are to accustom your body to training 10-15 hours per week and to build a strong aerobic base. Given the exclusively aerobic nature of the event, there is a much lower emphasis on HIT than in most training plans.

ON THE BIKE, JANUARY TO MID-APRIL

1. **Aerobic endurance:** progressing to 6h rides in Zone1/Zone2 (less than 70% of your HRmax or FTP; if in doubt, err on the cautious side. The rides should FEEL slow). Aerobic endurance is by far the most important quality you need to build and you should spend ~80% of your training on this. Beware, however, of focusing exclusively on long, slow rides; adaptation depends on occasional changes in the training stimulation and the off-the-bike exercises are important for avoiding injury.
2. **Lactate threshold:** multiple 10'-30' efforts first in Zone3, later in Zone4. Some of these efforts should be done at low cadence and will help build leg strength and climbing ability. No more than one per week, and none during the recovery weeks.
3. **Technical limiters:** e.g. descending, cornering, etc. Take every opportunity on your long rides to practice technical skills. If you are not a confident descender, consider joining a training camp in the mountains with a coaching team qualified to teach you to do this.
4. **Test equipment and nutrition options:** your long rides are also the perfect opportunity to try out different equipment options under different weather conditions, and to test different nutrition and hydration choices. Better find out now what doesn't work!

OFF THE BIKE, JANUARY TO MID-APRIL

You may not be used to off-the-bike training. Nevertheless, it can have a significant impact on your performance. To cycle faster, you need to push harder on the pedals, which means you need not only stronger leg muscles but also greater core strength to stabilise and channel the extra force. The best way to strengthen your muscles is off the bike, using appropriate exercises and good technique.

1. **Strength and conditioning:** one or two sessions per week, ideally guided by a Strength and Conditioning coach with experience in cycling. If you are new to this, err on the side of caution to limit the risk of injury.
2. **Flexibility and stretching:** two to three 20' sessions per week. Pilates or Yoga can be extremely beneficial. Learning correct technique is vital so choose a practitioner who knows cycling and only takes small groups (or better still individuals).
3. **Complement** occasionally with other sports: running, swimming, etc. If cycling is your only sport you will build up imbalances and soft tissue problems over time.

2. PRE-COMPETITION PHASE: MID-APRIL TO END-JUNE.

The key objectives during this phase are to increase the training load to up to 20 hours per week or more and to reinforce your aerobic base. HIT is not recommended during this period, since it will create too much fatigue for too little benefit.

ON THE BIKE, MID-APRIL TO END-JUNE

1. **Aerobic endurance:** continuing long rides in Zone1/Zone2, progressing to a 10h ride by mid-June, with as much climbing as possible. In spite of the low intensity, these long rides are exhausting so you cannot attempt too many, and there is no need to do more than ~60% of the event time and distance in any one training ride. Better to spread it over the weekend and work up to, for example, one 8h ride on Saturday and one 6h ride on Sunday (or vice-versa), followed by taking Monday, Wednesday and Friday off and doing no more than a short recovery spin on Tuesday and Thursday. Either do these long rides alone or with an understanding training mate; best to avoid the weekend club run which will be too fast for what you need at this time.
2. **Recovery:** short rides, 60-90 minutes, strictly in Zone 1. Make the easy weeks EASY. If the hardest weeks have pushed you close to your limit, then the easy weeks will need to be easier than normal, otherwise you will overtrain and lose the benefit.
3. **Continue testing** different nutritional and equipment choices so that come July you know exactly what works – and what doesn't work. Practice changing clothing and adapting to different temperatures while riding. Get used to carrying two spare inner tubes and canisters or a pump (Silas had two punctures on his TMB and still finished in 13:46!)

OFF THE BIKE, MID-APRIL TO END-JUNE

1. **Strength and conditioning:** one or two sessions per week, focused on maintaining the strength of your legs and core.
2. **Flexibility and stretching:** as in the previous phase it is vital to maintain these sessions to keep your body flexible. Do two to three 20' sessions per week.
3. **Other activities:** optional, as desired. We recommend an occasional swim or perhaps a 1-2h walk.

GENERAL, MID-APRIL TO END-JUNE

1. **Maximise your sleep.** This is essential for recovery and adaptation. You should aim at a minimum of 8h per night, and try to wake up naturally (without an alarm-clock). Banish all screens from the bedroom.
2. **Ensure high quality nutrition.** This is even more important than usual, due to the high training load. The key principles are to avoid industrial food and supplements (except under medical advice) and eat the widest possible variety of fresh, top-quality natural foods. Read here for more on [nutrition for the TMB](#).
3. **Minimum travel, minimum stress:** the more you can avoid adding to the stress on your body, the better off you will be. This is certainly easier said than done but it is possible to learn psychological coping strategies to reduce the impact of the most stressful events that life can throw at you.

3. COMPETITION PHASE: TAPER FOR THE LAST 2-3 WEEKS

The key objective in this period is to eliminate fatigue without losing fitness, so that you arrive on the start line the fittest you have ever been, but also super-fresh and thus able to go the distance. The longer the event, the longer the taper: if you would normally taper 7 days prior to a typical event, taper 14 days for the Tour du Mont Blanc.

ON THE BIKE, LAST 2-3 WEEKS

Progressively reduce your training volume by at least 50%. For example, if on the weekend of 25-26 June you do your final long rides, totalling 15h over two days, you might do two 1h recovery rides on Tuesday and Thursday, followed by riding 10h in two rides over the weekend of 2-3 July, a further two recovery rides during the week and no more than 6-7h total (in two rides) on the final weekend, 09-10 July.

Ideally, you should arrive in Les Saisies 2-3 days before the start. Do a couple of short rides to spin the legs but nothing strenuous.

OFF THE BIKE, LAST 2-3 WEEKS

The need for sleep, good quality nutrition and minimum stress are even more acute during the taper. The advice is the same as for the Pre-Competition Phase. The better you can plan to sleep well, eat well and avoid stress, the better off you will be...

[Download the training plan](#). Remember, it is up to you to adapt it depending on your personal situation.

SUPPORT FROM ALPINE COLS

Two of our coaches have ridden the Tour du Mont Blanc multiple times and know the challenge extremely well. We can help you prepare in two complementary ways:

1. Sign up for a six-month [coaching agreement](#) to receive individual day-to-day coaching and one-on-one advice;
2. Join a one-week [coaching camp](#) to benefit from a big block of training as well as one-on-one coaching on your technical skills and of course plenty of advice and tips for your preparation and the event itself.

[Contact Alpine Cols](#) if you would like a **professional coach** to help you prepare for the Tour du Mont Blanc.

Do you want to perform at your best during the Tour du Mont Blanc? Join an [Alpine Cols coaching camp](#) to improve your skills and learn how to tackle this challenging event from our expert coaches.