

Training Guidelines to qualify for the UCI Granfondo World Championships

The <u>UCI Granfondo World Championships</u> (the former UCI Masters Road World Championships) are the only opportunity for non-professionals or Masters athletes to wear their national jersey and compete for the coveted rainbow jersey. This is obviously a huge honour and the dream of many thousands of cyclists.

The 2024 event will take place in <u>Aalborg, Denmark</u> from 29 August to 1 September 2024. This will be the last opportunity to compete in Europe until 2027, since the 2025 and 2026 events will take place respectively in Australia and Canada. We can therefore confidently predict that competition to qualify this year will be particularly strong in Europe!

Qualification takes place through participation in one of the events in the UCI Granfondo World Series. These are some 25-30 UCI-sanctioned qualifier races held all over the world between September 2023 and July 2024. The top 25% in each age group at each event are qualified for the 2024 UCI Granfondo World Championships.

Especially if you are a good climber, one of the best opportunities for you to qualify is at the GF Vosges, to be held in the Vosges area of eastern France on May 19, 2024. There are two distances for qualification: the 178km Granfondo for all male riders aged between 18 and 59, and the 122km Mediofondo for all women as well as men aged 60 or over.

1. What does it take to qualify at this event?

Competition will be strong and make no bones of it, it will be a real race! Almost by definition, only experienced riders with strong climbing, descending and road-racing skills relative to others in their category have a realistic chance of qualifying.

So how best to prepare for a qualification attempt at the GF Vosges?

Before answering this let's take a look at the demands of the event.

The **Granfondo** is 178km long and includes 3,500m of climbing, over a total of ten climbs of 5km or more and at least four or five shorter ones. Some of the gradients approach 10% for two or three kilometres, although most are in the 6-8% range. The roads are often narrow and some of the descents are technical. About 23km could be described as relatively flat, in three sections, after km 22, 70 and 95. The final 60km are relentlessly up and down.



Granfondo Vosges profile (2023)

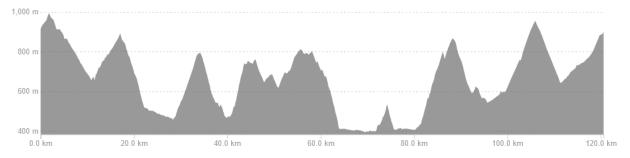


The qualifying times depend on your category. Here are the finishing times and average speeds for the last (slowest) riders to qualify in their categories at the Granfondo Vosges in 2023:

Category	Finishing	Average	No. qualified/
	time	speed	total finishers
M19	5:27	32.7	95/378
M35	5:35	31.9	32/128
M40	5:50	30.6	31/123
M45	5:52	30.3	36/142
M50	5:55	30.1	28/109
M55	6:08	29.0	24/96

We can expect broadly similar results in 2024, perhaps a little faster if the competition is stronger, as might be the case.

The **Mediofondo** is 122km long and includes 2,700m of climbing over five climbs of 5km or more and four shorter ones. As for the Granfondo, the roads are often narrow, the descents technical and gradients are mostly in the 6-8% range but sometimes approach 10% for 2-3km. About 20km is relatively flat, in three sections, after km 22, 64 and 76. The final 40km of the Mediofondo are relentlessly up and down.



Mediofondo Vosges profile (2023)

As for the Granfondo, the qualifying times depend on your category. Here are the finishing times and average speeds for the last riders to qualify in each category at the Mediofondo Vosges in 2023:

Category	Finishing	Average	No. qualified/
	time	speed	total finishers
F19	4:31	26.7	13/52
F35	4:44	25.5	4/16
F40	4:50	25.0	3/9
F45	5:03	23.9	4/14
F50	5:23	22.4	3/10
F55	4:57	24.3	4/14
F65	6.00	20.1	3/3
F70	5:55	20.3	7/1

Category	Finishing	Average	No. qualified/
	time	speed	total finishers
M60	4:43	25.5	17/65
M65	4:46	25.3	7/26
M70	4:53	24.7	5/18



Again, we can expect broadly similar results in 2024, perhaps a little faster if the competition is stronger.

So how to ensure that you qualify?

The exact requirement can of course only be known after the event, since it depends on the number of persons in your category and their performance on the day. A reasonable starting point is to target **slightly faster** than the average speed of the last qualifier in 2023 in your category. For example, if you are a woman aged 47, you are in the F45 category. The last person to qualify in 2023 did so at an average speed of 23.9km/h. It would be prudent in 2024 to target 24.5km/h in order to have a good chance.

Qualifying riders will have the following characteristics, compared to others in their category:

Physiological

- Excellent aerobic endurance
- Excellent durability (ability to repeat successive 20-30 minute climbs at threshold)
- Excellent short-term muscular endurance (short, hard efforts to place well before climbs, bottlenecks and intersections)
- A high power-to-weight ratio
- The ability to recover quickly between efforts

Psychological

- The ability to maintain focus, motivation and lucidity for the time it takes to finish, even when severely fatigued
- The self-discipline to stick to one's maximum sustainable pace on the climbs (and let others go... perhaps to see them again later!)
- The ability to tolerate long periods of pain and discomfort
- The ability to stay positive and deal with setbacks and negative thoughts

Technical

- Excellent energy-efficient climbing skills, on varied gradients
- Excellent descending and cornering skills
- Excellent bunch riding skills
- The ability to fuel the ride: to eat and drink at opportune moments

Tactical

- The ability to identify which wheels to follow (and which to let go)
- The ability to identify when to move to the front of the peloton

It might be possible to qualify for the UCI GF Worlds without being (relatively) strong on all these criteria, but it is unlikely. Each criterion is important and any particular weakness could prevent you from qualifying.

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

To obtain your best performance you should not only continue to develop your strengths, but also to 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 30 seconds to a minute on each descent. The cumulative effect however will be much worse because you will lose touch with the people you were riding with and drop back at least one group each time. The result could easily add up to a 10 or 15 minute deficit by the end, which would cost you your qualification. This is a shame, because descending faster is a skill that can be learned and has almost no extra energy cost!

2. 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 thus be sub-optimum at best and potentially damaging. 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.

HOWEVER, this is not a book and we cannot possible explain here all the nuances and individual variations inherent in the training process. We therefore strongly encourage you to use this document as an aide-memoire to **what** might be important, but then either to do your own research into **how** to apply it, or to find a coach to help you.

The key principles behind a strong training plan to qualify for the UCI Granfondo World Championships are:

- 1. Your commitment to make your qualification a priority. This should go without saying, but if you want to qualify, you must commit to a serious effort of preparation. Our plan assumes you will train for 8-12h per week on average through the early part, rising to 15h per week on average during the final two months.
- 2. **Be consistent.** This is the single most important success factor. Of course your training load will vary from one week to the next but these variations should be deliberate in order to create overload and then recovery and super-compensation. If you are unable to train normally for a period you should keep this to a minimum and find ways to compensate (e.g. leg & core strength workouts, climbing stairs, walking, jogging, swimming...)
- 3. **Build a strong aerobic base**, so you can ride steadily for several hours without having to ease off. To do this, we recommend you train predominantly at low intensity, below LT1¹, the point at which the lactate concentration in your blood starts to increase above the baseline. This is quite likely to be much lower than the current level at which you train. It's important to understand that training at this low intensity provides the endurance adaptations you need without adding unnecessary fatigue, thus allowing you to train more.
- 4. **Develop your fat-burning capacity,** to conserve your glycogen stocks during the climbs and thus your ability to climb hard for longer. Metabolic adaptation is an important differentiator in road racing. It is very difficult to consume enough carbohydrate during the ride to fuel it adequately and therefore the more you can use your fat stores the better you will perform.
- 5. **Build your pain tolerance.** Endurance is "the struggle to continue against a mounting desire to stop"². There's no escaping the fact that the GF Vosges is going to make you suffer. The better

¹ Ideally, you should determine LT1 via a lactate test. Failing this, you can estimate it by paying very careful attention to your breathing while starting at a very low intensity and increasing slowly. Your LT1 will be the point where you first feel the need to start breathing more deeply. For the majority of people, LT1 will be in the range 60-65% of FTP or 60-65% of HRmax

² Samuele Marcora, quoted by Alex Hutchinson in his book *Endure* (2018)



- you can train yourself to tolerate the pain and discomfort as it becomes harder and harder, the more likely you are to qualify.
- 6. **Do as much climbing as possible**. In the last 3-4 weeks you should be doing at least 2,600m in a single ride if you are preparing the Granfondo, and at least 2,000m if you are preparing the Mediofondo. Vary the intensity on your climbs: if you attack every climb in your training as hard as you can, you will build mainly fatigue, not fitness. As you get closer to the event you should do **some** of the climbs at race pace, especially towards the end of your rides. If you live in a flat area your options are (1) to do hill repeats on whatever you can find nearby; (2) to travel to find some climbs; (3) to use a smart trainer linked to an app which will simulate the climbs for you.
- 7. **Build short-term muscular endurance**, which is the ability to ride above threshold for short periods in order to close gaps, stay with a group and power up short climbs.
- 8. **Increase the load progressively, then recover,** to allow your body to adapt and get stronger. Remember, hard training actually breaks you down and makes you weaker! You only get stronger when your body has the time to recover, adapt and rebuild. There should be a big difference between your hardest and your easiest training weeks.
- 9. Monitor your readiness to take on high load. The best way to do this is via measuring your RHR (Resting Heart Rate) and HRV (Heart Rate Variability), which provide insights to the state of your parasympathetic nervous system and therefore the stress you are under. Research has shown that training when you are stressed (high RHR, low HRV) provides little or no benefit and may even be harmful. We recommend monitoring your RHR and HRV every morning as soon as you wake up. If RHR is significantly higher than normal and/or HRV significantly lower, train easy or not at all. For more on this read here.
- 10. **Include exercises to develop your technical skills**, and not only your physiological capacity, because bike racing is not only about FTP (Functional Threshold Power, or the power you can sustain for about one hour). These exercises might include low-cadence while climbing, high-cadence while riding on the flat, cornering, riding in a group, etc.

Our framework training plan begins on November 1st. This is the traditional start to a new cycling season, and gives you five and a half months to prepare for the event.

A key assumption is that you will continue to ride regularly on the roads throughout the period. If this is not possible, you will have to compensate by doing long rides on a turbo trainer and ideally by joining a training camp in the early part of the year in a warm-weather location such as southern Spain or Portugal, Mallorca or the Canary Islands.

Alpine Cols is running two coaching camps in 2024 which could help you. Both have a strong focus on improving the skills and technique you need to qualify. The first is in the <u>Canary Islands 27 Jan to 3 Feb</u> and the second is our special <u>GF Vosges camp 15-19 May</u>, which includes route reconnaissance, route analysis, race tactics and coaching on your bike-handling skills as well as a 4-night accommodation package and logistical support for the event.

Alpine Cols coaching camps

3. Your Training Plan: Overview and 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.



It's important to understand that such a structure is essentially arbitrary and takes no account of the total stress you will be under (life stress + training stress) on any particular day.

Current best practice is to monitor readiness to train, using a combination of daily HRV (Heart Rate Variability) measurements with perceptions of fatigue and muscle soreness, and to adjust the plan accordingly. If you feel very tired, have sore muscles and your HRV is below the normal range, you should either take a very easy day or not train at all until you have recovered. Research has shown that training when you are stressed (low HRV) provides little or no benefit and may even be harmful. Read here for more on how to use HRV to guide your training.

Remember that hard training breaks you down: you only get stronger during recovery!

In terms of intensity distribution, we recommend that the Preparation phase be **Polarised** (80% low / 20% high intensity, or even 90% low / 10% high) and the Pre-Competition phase be **Pyramidal** (70% low / 20% medium / 10% high).

Download the training plan.

4. Your Training Plan: by Period

4.1 Preparation Phase: November to Mid-February (29 -> 15 weeks to go)

The key objectives here are to (re-)accustom your body to training 8-12 hours per week, to build a strong aerobic base, and to use high intensity interval sessions to develop threshold power and short-term muscular endurance.

The training intensity distribution during this phase should be **Polarised**, meaning 80%-90% of your training should be at low intensity and only 10%-20% at high intensity. The percentage breakdown is calculated on the basis of the number of hours in the workout, not the actual time spent at high intensity. Thus, a typical high-intensity interval session will last an hour (and should be counted as such) even if the actual high-intensity time doesn't exceed 10-20 minutes. If you add 5-10 sprints to a 4-hour low-intensity outing, count 3 hours at low intensity and 1 hour at high intensity.

You should avoid extensive training at medium intensity (in Z3, often called Tempo or in low Z4, often called Sweet-Spot), because at this time of year it creates too much fatigue for too little benefit.

4.1.1 Preparation Phase, on the bike training

- 1. Aerobic endurance: progressing to 5h rides at intensity below LT1, the point at which the lactate concentration in your blood starts to increase above the baseline (usually less than 60-65% of your HRmax or FTP). If in doubt, err on the cautious side. The rides should FEEL slow (and only become tiring after 3h or more). Aerobic endurance is by far the most important quality you need to build and you should spend ~90% of your training on this.
 - Riding slowly may sound incredibly boring and it certainly takes some adaptation, not least in your attitude and mindset. Read here for tips on how to help the time pass on long slow rides.
 - If you are unable to ride outside you will have to do long sessions on your turbo trainer. Read here for suggestions on how to make these more tolerable.
- 2. **Fat-burning capacity:** Progress towards this by limiting your intake of refined sugar and high glycaemic-index carbohydrates, both on and of the bike. Do one long low-intensity ride per week partially or fully fasted, and only begin to eat on the bike after the first two hours (later three hours, then even four).



A good overall macro-nutrient split in terms of total kCal you consume overall has been shown to be 48% from carbohydrate, 24% from protein and 28% from fat³. Obviously each food item should be as high quality and as natural as possible. Avoid processed and especially industrial foods.

Finally, remember to adjust your food intake to your energy expenditure: eat more on high load days and during high load weeks, and cut back during easy days and recovery weeks. Keep an eye on the scales to be sure that any weight loss is slow and progressive: the priority at this stage is to fuel your training! Read here for more on nutrition while training.

- 3. **Short-term muscular endurance**: High short-term muscular endurance is essential for making the short, hard efforts required to stay with a group during a road race on narrow roads with frequent changes of direction and gradient. You should do two sessions per week (except recovery weeks) to include multiple 4'-8' efforts, initially in Zone3 then increasing progressively to Zone5; and/or 1'-2' efforts initially in Zone4 increasing progressively to Zone6. Do some of these efforts at low cadence.
- 4. Technical limiters: e.g. bunch riding, 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 descend fast and safely. This is always a key focus on all Alpine Cols coaching camps.

4.1.2 Preparation Phase, off the bike training

You may not be used to off-the-bike training. Nevertheless, it can have a significant impact on your performance, especially as you get older. 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 & Conditioning coach with experience in cycling. The goal at this time of year is to increase the strength of your leg and core muscles.
 - If you are new to this, err on the side of caution to limit the risk of injury. Good exercises to begin with include squats, lunges, planks, bridges and roll-downs. All of these require correct technique to be beneficial. Once you've learned good technique you can do this at home.
- 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: walking, running, swimming, etc. If cycling is your only sport you risk building up imbalances and soft tissue problems over time.

4.2. Pre-Competition Phase: Mid-February to May. (14 - 2 weeks to go)

The key objectives during the Pre-Competition phase are to increase the training load to 15 hours per week or more, to reinforce your aerobic base, to improve your climbing at race pace and to improve your general race readiness.

The training intensity distribution should now switch to **Pyramidal**. You should still train for 70% of the time at low intensity but you should now introduce medium intensity training (Z3 tempo and low Z4 sweet-spot) for 20% of the time, while maintaining 10% at high intensity. Your training thus becomes

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³ See, for example, https://alancouzens.com/blog/improving_fat_burning2.html



more race-specific as you get closer to the event. In practice it means adding tempo or sweet-spot sessions to one or two rides per week while maintaining one ride per week focused on high intensity work.

4.2.1 Pre-Competition Phase, on the bike training

- 1. **Aerobic endurance**: continuing long low-intensity rides, progressing to a 6-7h ride by end-April, with as much climbing as possible. Either do these long rides alone or with an understanding training partner willing to stick to the low intensity.
- 2. **Fat-burning capacity:** continue along the lines laid out for the Preparation phase. It is important to keep your overall macro-nutrient balance close to the recommended split (based on kCal): 48% from carbohydrate, 24% from protein and 28% from fat.
 - It is equally important to ensure that you are fuelling your training adequately as well as not over-eating during recovery weeks. Keep a close eye on the kCal expended per ride (as reported by apps such as Strava) to guide how much you should eat.
 - Read here for more on <u>nutrition while training</u>.
- 3. **Threshold**: multiple 10'-30' efforts, first in Zone3, then in Zone4 to develop your ability to climb at race pace. No need to structure too much: just make all the climbs in Zone3 or Zone4 on a 2-4h ride. Try to push a bit harder on the final climb. No more than two per week, less if overly fatigued.
- 4. **Sportive or club ride**: twice per month in March and April, either ride a sportive or join a fast club ride in order to sharpen your reflexes and (re-)accustom yourself to race pace.
- 5. **Recovery**: short rides, 60-90 minutes, strictly in Zone 1. Make the recovery EASY. If the hardest training has pushed you close to your limit, then recovery must be easier than normal, otherwise you will overtrain and lose the benefit.
- 6. **Test different nutritional and equipment choices** so that come race day 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 CO2 cartridges, or a pump.

4.2.2 Pre-Competition Phase, off the bike training

- 1. **Strength and conditioning**: one or two sessions per week, ideally guided by a Strength & Conditioning coach with experience in cycling. The goal during this period is to maintain the strength of your leg and core muscles. Cycling does not do this adequately.
- 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, a 1-2h walk or perhaps a light jog.

4.2.3 General

- 1. **Maximise your sleep**. This is essential for recovery and adaptation. You should aim at a minimum of 7h per night, and try to wake up naturally (without an alarm-clock). Banish all screens from the bedroom.
- 2. **Minimum travel, minimum stress**: the less you add to the stress on your body, the better off you will be. Look for psychological coping strategies to reduce the impact of the most stressful events that can't be avoided.



4.3. Competition Phase: taper for the last 2 weeks

The key objective is to eliminate fatigue without losing fitness. You want to arrive on the start line the fittest you have ever been, but also super-fresh and thus able to race hard and ensure your qualification.

4.3.1 Competition Phase, on the bike

Progressively reduce your training volume by at least 50%. For example, if you have been riding 15h per week, you might bring it down to 10h in the second-to-last week and no more than 7h in the final week. If in doubt, do less. It's too late to make any difference to your fitness and it's far more important to eliminate the accumulated fatigue.

Ideally, you should arrive in the Vosges at least 2-3 days before the start. The earlier, the better. Do a couple of short rides to spin the legs but nothing strenuous. Some people find it beneficial to do a few short efforts at high intensity on the day before a race, e.g. 5'-10' in Zone4, 1'-2' in Zone5, but this doesn't work for everybody. If you are not sure if it works for you, better not to risk it.

4.3.2 Competition Phase, off the bike

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.

<u>Download the training plan</u>. Remember, it is up to you to adapt it depending on your personal situation.

5. SUPPORT FROM ALPINE COLS

All of our coaches are experienced at road racing and know the challenges extremely well. We can help you prepare in three complementary ways:

- 1. Sign up for a six-month <u>coaching agreement</u> to receive individual day-to-day coaching and one-on-one advice;
- 2. Join a one-week <u>coaching camp</u> 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. The coaches ride with you on their own bikes and use both observational feedback in real time and videos to help you improve.
- 3. Join our special <u>GF Vosges camp 15-19 May</u>, which includes route reconnaissance, route analysis, race tactics and coaching on your bike-handling skills as well as a 4-night accommodation package and logistical support for the event.

<u>Contact Alpine Cols</u> if you would like a **professional coach** to help you qualify for the UCI Granfondo World Championships.