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# Peaking for Performance: How to Train before a Big Event

# How to Train before a Big Event

When you train, you create an 'adaptation stimulus', after which your body undergoes repair, growth and metabolic adjustments so that the next time you train that way, you can handle the training load better – i.e. you have 'adapted'. However, creating the training stimulus is only part of the adaptation process. The other part is rest.

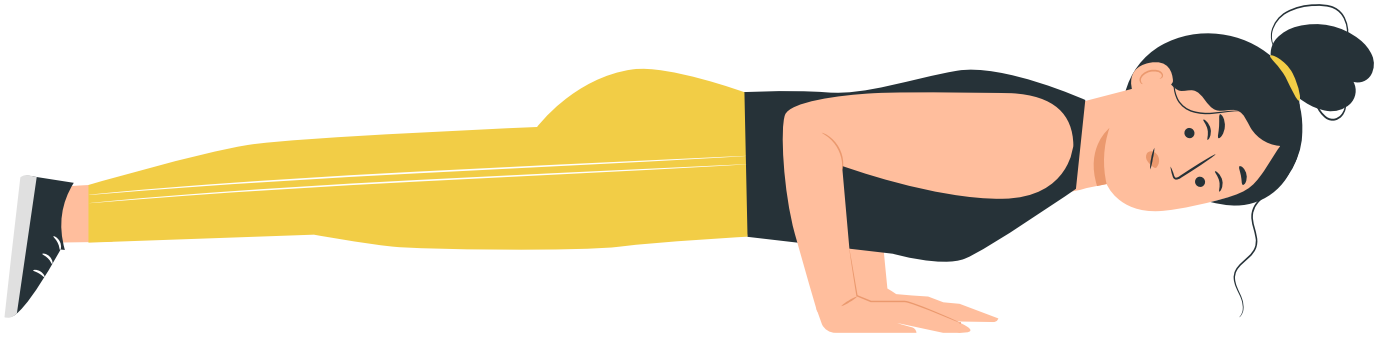
Without sufficient and proper rest, your body can't adapt efficiently to training. Too much training can not only feel stale, but you risk becoming deeply fatigued and overtrained. Too much rest on the other hand and you'll begin to lose fitness and become deconditioned.

When you peak, you aim to maximize adaptation and recovery for a specific event by increasing your rest time and reducing your training volume, while ensuring that what training you are doing is sufficient to maintain your maximum fitness level.

## General Prep Training

This takes up the bulk of your training calendar. Depending on the difficulty or intensity of the event you're training for, you may require a longer general prep phase, meaning you must start your training sooner to give yourself adequate time to be prepared for the event.

This covers the 4 week, 8 week, or other training cycles you will complete in the weeks/months prior to your event. In this time period, you can progressively increase the workload in your training sessions, whether by duration or intensity (or both), you do not need to be at your top physical condition for this training phase, merely in a good enough state that you can apply yourself and stimulate adaptation.



## Adaptation

An often overlooked fact by athletes is that the physiological benefits of a training session performed on day one will not become fully apparent until quite a few days later. During this time period (also known as recovery), adaptation takes place, where muscles are refuelled and rehydrated, and damaged muscle fibres are repaired and built stronger.

The speed of adaptation varies from person to person but good recovery practices like 8+ hours of sleep, sufficient protein intake, and general rest all help the adaptation process.

## Peaking

With the above variability in adaptation time between athletes, the peaking phase can look a little different for everybody. You could always take a month off before your event to ensure full physical readiness, but that would result in significant loss of fitness/strength. Interestingly though, research shows that there are no notable losses in aerobic/muscular fitness until about 5 or 6 days after stopping training, so you can use this to your advantage to get some proper rest pre-event while still not losing out on the fitness you've built up to that point.

In cases of high chronic training loads (let's say 3+ sufficiently intense training session per week over the course of 3 months), it can take longer than 5-6 days for muscles to be fully recovered. Such a rest pre-event would lead to fitness losses, so how can that be avoided? The answer is tapering.

## Tapering your Training

In the lead-in to a big event, athletes tend to reduce their training load over the course of around 2 weeks, although this can be shortened to as little as 4 days for short events, or lengthened to 4 weeks for longer events (ultra-running events). A taper to training pre-event can give performance benefits of 3-6% compared to no taper!

While training load is reduced significantly, the training intensity is not. Also, training frequency, while undergoing some reduction, is not reduced massively. A number of studies on the best way for athletes to taper have been carried out over the past seventeen years, and their findings can be summarised as follows:

- Athletes need to have a good endurance base and 'training volume in the bank' to fully benefit from tapering.
- The average taper period should be around two weeks.
- Training frequency should be maintained or reduced slightly but no more than by around 20%.
- Training volume should be reduced by 40-90% during the taper, with the biggest reductions in volumes coming in the final week.
- The intensity of the training must be maintained. With lower training volumes this can be achieved by running a shorter distance at a faster pace, or lifting a heavier weight for less repetitions.

Despite the overwhelming research, many athletes still train hard right up to the time of the event. In short, training hard until a couple days before your event will mean your physiological peak will likely occur around 10 days after the event has taken place!

## General Peaking/Tapering Principles

1. Plan your training for the year ahead with the events you want to peak for clearly marked out. Remember you need a solid 'bank' of training volume built up before starting to taper.
2. Generally, you can cut your training volume to as little as one fifth of your normal volume without any losses in fitness/strength, providing you maintain all your quality high-intensity work.
3. The longer your event and higher your normal training volume is, the longer your taper should be.
4. For events under 15 mins in duration: 7-10 days of a taper is sufficient. For events lasting up to an hour: 10-14 days is optimal. Longer than this you may need 2-3 weeks to taper your training.
5. Higher impact sports that produce more 'training-damaged' muscle and connective tissue such as running and field sports require longer tapering periods than do lower impact sports such as swimming and cycling.