

Training for Catalyst

Fitness Levels

Our challenges attract people of all levels of experience and fitness, all ages and backgrounds. We expect all participants to train hard in advance to achieve this challenge, but we respect everyone's limits. We design our challenges so that everyone can go at their own pace: this is not a race. For logistical and safety reasons we sometimes need to regroup, so the front-runners will find themselves waiting for the slower ones. Please relax and remember that this is a team effort that enables people to achieve their personal goals and earn sponsorship.

FITNESS WARNING: DESIGNED TO BE CHALLENGING!

This ride is designed to be challenging for those of good health and fitness, and is achievable for most people provided they train well in advance. Training for the challenge is all part of the preparation and requires commitment! Without it, you will find the ride less enjoyable – and we want you to have the time of your life!

Do I really have to train?

Yes! Cycling Challenges are designed for people of average fitness as long as you are prepared to train. You should start training several months before the event.

How you start training for a long-distance bike ride depends largely on your present fitness level, age and the amount of cycling you have done in the past. There are various ways to train for your challenge; below are various training regimes that can be adapted to fit into your personal lifestyle.

Non-Cyclists / Low Fitness

People who have not ridden a bike for several years or indeed at all will have to start their training regime at least 4 months in advance of their trip. Mileage should be built up gradually to avoid injury and over-exercise, and to establish a good base fitness on which to build the stamina levels you will need on a cycle challenge.

The 20-week sample training programme below shows how you will need to gradually build up the mileage to be able to cycle for up to 8 hours a day on consecutive days! To begin with though, avoid overstretching yourself – don't ride in a gear that's too difficult or as fast as you can. Regular training sessions will allow you to develop your speed and adjust to different gears.

Cadence

From the outset you should attempt to develop your cadence, which is the speed at which your legs rotate (RPM); this will improve your aerobic capacity, meaning that your heart and lungs will grow stronger and be less stressed when cycling or exercising.

To develop your cadence you should select the gear that feels most comfortable when you are cycling on whatever gradient. If you can keep a steady RPM of around 60 - 70 most of the time this would greatly aid the speed at which you become cycling fit, and will increase your strength and stamina which you can then build on.

Before you know it you will find yourself being able to push harder gears while maintaining the same RPM. After you have become comfortable with your cadence and riding position, it will be time to start stepping up the mileage.

Social Cyclists / Moderately Fit

This category might include anyone who has been cycling intermittently over the years, perhaps by cycling to work in the summer or regular Sunday rides with the family. As you will have a degree of basic fitness and confidence built up from previous cycling, 3 months or so of training should prepare you for the ride.

The 10-week sample training programme below should enable you to gradually build up your mileage to be able to take on the challenge. If you don't feel able to go straight in at week 10, plan ahead and start training earlier using some of the 20-week programme as appropriate. Be honest with yourself: you will enjoy the challenge much more if your fitness levels are good!

Regular Cyclists / Fit

This category would include people who cycle regularly throughout the year, whether it be commuting 20 miles or more to work a day or training seriously with weekend races and time trials. People within this category should already have a good training schedule and be amply fit to tackle a cycle challenge, though should probably step-up training for long days of riding.

People included within the commuting bracket may find it a good idea to step up their weekly mileage by cycling a longer route to work, or doing a brief morning or evening ride and by also doing regular weekend rides of around 50 miles or more.

Fitting training into your busy life

This training guide is just that, a 'guide'! With work, family and fundraising commitments you might not be able to follow it to the letter, but you can maximise your training time by making some small changes to your routine.

- Get up an hour earlier and go out for a quick cycle with some stretching in the morning before work, it will get you moving and ready for the day!
- If you can cycle to work, do so. If you can't cycle the whole distance between work and home, why not cycle to a station/bus stop in between home and work and then continue your journey on public transport. You will obviously need to be happy that you are able to leave your bike in a safe and secure place!
- Use your lunchtimes to take regular brisk walks or cycle around where you work.
- Find a steep set of stairs i.e. five floors of a department store/office block and climb them five times, at least three times per week.
- Try your local leisure centre or gym. You may be able to get a fitness instructor to design a programme specifically for you. Make use of the exercise bikes or try spinning classes, where you can train hard with other people and an instructor. You still need to cycle as much as possible in 'real' conditions. The more you can train in similar conditions to your challenge, both in terms of terrain and weather, the better.
- Try to get to some hilly country at the weekends to experience cycling on different surfaces, hills and of course the weather in all its variety!
- Train using the kit you want to use in your challenge. If you're planning to use SPDs (clipless pedals) on your challenge, get used to them well in advance – most people fall off a few times

when getting used to them! Whether you're planning to use a small rucksack, camelbak or large bum-bag to carry the things you need access to during the day, get used to it when training.

- Try to cycle some consecutive long days; you might ache a bit after one full day's cycling but the best way to improve your fitness and stamina is to go out again the next day! Cycling is very beneficial to your body and the best way to prepare for your challenge, but you can add other activities to your training to improve your general fitness. Playing squash, tennis or badminton, going to the gym, cycling or swimming for an hour or more will improve your fitness and keep you interested in your training. While you may not stick to the training guide exactly, you need to make time to train. You will enjoy the challenge far more if you are physically fit!

Training Tips

- 1 hour of QUALITY workout in the gym is worth 2 hours out on the road but does not prepare you to physically push a bike through the air.
- It is important to warm up for at least 10 minutes before starting a training session – see the attached basic stretch programme for guidance.
- A good idea is a circuit of machines giving aerobic workout e.g. rowing, cross-country skiing, stepper/climber, exercise bike.
- Spinning classes are excellent, leg weight training is also recommended.
- Turbo trainers are very good, especially during the winter months as they enable you to train indoors on a "real" bike. It will keep you fit and get you used to the shape of your bike. Fluid turbo trainers are quieter if noise is a problem in your household.
- Make sure you plan adequate rest/recovery days as part of the training.

Note: Before using any gym equipment, please ensure that you are properly instructed by the staff at your gym / leisure centre.

20-week Training Programme for Non-Cyclists

Weeks 1 – 3:

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Rest Day	Cycle 20 – 30 mins	Rest day	Cycle 20 – 30 mins	Rest day	1 ½ - 2 hours cycling	

Weeks 4 – 6:

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Cycle 40 mins (8-10 miles)	Rest day	Cycle 40 mins (8-10 miles)	Rest day	Cycle 40 mins (8-10 miles)	Cycle 2 – 2 ½ hours (25 – 30 miles)	

Weeks 7 – 9:

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Rest Day	10 -15 miles	Rest day	10 – 15 miles	Rest day	30 – 40 miles (2 – 2 ½ hours)	

10-week Training guide For Regular Cyclists

Weeks 10 – 12:

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
10 – 15 miles	Rest day	10 – 15 miles	Rest day	10 – 15 miles	40 – 50 miles	

Weeks 13 – 15:

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
10 miles	Rest day	15 – 20 Miles	Rest day	15 – 20 miles	45 – 60 miles	

Weeks 16 – 18:

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
20 – 25 miles	Rest day	25 – 30 miles	Rest day	20 – 25 miles	50 – 65 miles	

Weeks 19 & 20:

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
15 miles	Rest day	25 miles	Rest day	25 miles	65 – 75 miles	

Week before you go!

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
10 miles	5 miles	10 miles	5 miles	Rest day	15 – 20 miles	

Warm up

Before you start on a training session it is important to gradually increase the level and intensity of activity to prevent injury. Start by riding slowly for 5 minutes then gradually increase the pace so you are riding fairly fast for another 5 minutes. This should raise your heart rate and make you feel warm and slightly out of breath! You should then do a few basic stretches to prepare your muscles. Warm up on foot before your ride if it's more practical.

Basic Stretches

1 – Calf:

Stand approximately 1metre away from a wall, bring one leg forward with your knee slightly bent and place your hands on the wall to steady yourself; keep your back straight. Make sure your back leg is straight; you should feel a pull along the back of your calf. Hold for 15 seconds before swapping legs.

2 – Hamstring:

Step forward so your feet are approximately half a metre apart; lean forwards, keeping your back straight and bending your right knee. Place your hands on your bent knee to balance. You should feel the stretch up the back of your left leg. To extend the stretch, lift your toes up (as shown, left) you should then feel a gentle pull up your calf. Hold for 15 seconds before changing legs.

3 – Quadriceps:

Raise one leg behind you, take hold of your ankle and pull your foot towards your backside; you should feel a pull down the front of your leg. You may need to balance yourself with your free hand touching a wall or back of a chair. Hold for 15 seconds then change legs.

4 – Groin:

Sit on the floor with your legs stretched out in front of you. Bend your knees outwards to bring the soles of your feet together. Place your hands on your ankles and elbows on your thighs. Push your elbows down to increase the stretch on the inside of your legs. Hold for 15 seconds.

5 – Triceps:

Raise one arm above your head, bend elbow and reach hand down behind head to touch upper back. With your other hand gently push your raised elbow back to increase the stretch. You should feel a gentle pull on the underside of your upper arm. Hold for 15 seconds then change arms.

6 – Trapezius and Pectorals (back and chest):

Reach your arms out in front of you and link your fingers. Tense your arms (as if you were hugging someone tightly!). You should feel the stretch across the top of your back and shoulders. Hold for 15 seconds.

Then reach your arms behind you and place in the middle of your lower back. Keeping your back straight, draw your shoulders back and try to pull your elbows together. You should feel the stretch across your chest. Hold for 15 seconds.

7 – Deltoid:

Take one arm across your body at shoulder level, keep it straight and use your other hand to pull it towards you. You should feel the stretch across the top of your arm and shoulder. Hold for 15 seconds before swapping arms.

8 – Latissimus Dorsi (side and back):

Stand with your feet shoulder-width apart; raise one arm above your head. Bend the arm over your head and stretch your torso over to one side. Keep your body in a straight line, don't lean forwards or backwards. You should feel the stretch down the side of your stomach and ribs. Hold for 15 seconds then change sides.

9 – Standing stretch:

Stand with your feet together. Place hands together and reach as high as you can; hold for 15 seconds.

N.B. You should only stretch warmed up muscles. Don't stretch too far, all you should feel is a slow pull, never any pain. Never bounce, always stretch slowly. People with old injuries or bad backs should be especially careful whilst exercising and stretching.

Exercise Circuit

These exercises are designed to strengthen specific muscle groups and improve your general fitness and mobility. Before completing the exercise circuit you should warm up and complete the stretches above, then move through the circuit. The idea is to complete each exercise and then move on to the next. You can take small breaks in between each exercise if you need to (e.g. to have a drink!) but try to keep going! As you get fitter you can increase the number of repetitions of each exercise and repeat the circuit more times.

1 – Mobility exercises

These exercises are to loosen your joints and improve blood flow to your muscles; you can also add them to your warm-up or cool down at the end of a training session to help prevent aches and pains the next day!

- Neck - Starting at the top of the body, slowly turn your head from side to side; keep your shoulders down to gently release tension in your neck. Complete 5 times to each side
- Arms and shoulders - Stand with your feet shoulder-width apart and your arms down by your side. Slowly, keeping your arms straight, swing them up to your ear and then backwards down to your hip (like a windmill!) to loosen up the shoulder. Change direction backwards and forwards and pick up speed a little – or to work on your co-ordination try one arm forwards and one arm backwards!
- Hips - Stand with your feet shoulder-width apart, hands on hips and slowly rotate your hips in a wide circle, first clockwise then anticlockwise. Complete 5 rotations each way.
- Lower leg - Balance on one leg and circle your raised foot, loosening the ankle, five times clockwise then 5 times anticlockwise. You may want to hold on to the back of a chair or

touch a wall if you're wobbling! Change foot and repeat. To improve co-ordination and balance try circling one foot and circling your hands at the same time!

2 – Strengthening exercises

These exercises are to help strengthen your muscles, improve your stamina and work your muscles hard!

- Calf raises - Stand with feet together, raise yourself slowly on to tip toes and then slowly lower. You might need to rest your hands on a wall if you are wobbling! Complete 10 repetitions, rest for 20 seconds then complete another 10 repetitions.
- Squats – Stand with your feet shoulder-width apart; place your hands on your hips. Keeping your back straight and head up, bend your knees to 90 degrees and lower yourself down towards the floor; hold for a few seconds before standing up straight. Repeat 20 times, rest for 20 seconds then complete another 10 repetitions.
- Step ups – Use the bottom step of a staircase or low bench. Start standing on the floor, step up on to the stair or bench with your left foot and bring your right foot up onto the step next to it. Then step down with your left foot and again bring your right foot down next to it. Do 20 repetitions on the left leg, then rest for 20 seconds before changing to your right leg leading.
- Lunges – Start with your feet together, put your hands on your hips and then take a big pace forward, bending your knees so your front knee is at 90 degrees and the back knee is down towards the floor. Step back so that your feet are together again and then step forward with the other leg and repeat the exercise. Complete 10 lunges on each leg.
- Leg raises – Lie front down on a mat or soft floor with your hands under your chin. Slowly raise your left leg six inches off the floor, keeping the leg straight; hold for 3 seconds then lower. Repeat 10 times then change to your right leg. As you get fitter you can complete the exercise circuit more times. These exercises should get your heart rate up, make you breathe harder and sweat slightly! Make sure you drink lots of water to rehydrate after training. You should also stretch after a training session to help promote flexibility and prevent soreness the next day! Go through the stretches above again, holding each stretch for up to 30 seconds. As the pull in the muscle subsides gently reapply the pressure to extend the stretch as necessary.