

Fitness training

Before you start

Getting fit is a very important part of pre-challenge preparation, and its importance should not be underestimated. Even if you already lead an active lifestyle and exercise regularly, it is a good idea to adapt your training towards your chosen activity, (trekking, biking, horse riding etc). This is vital in order to build the strength, cardiovascular stamina and muscle endurance necessary to undertake the challenge ahead of you. Everyone is different and has unique training needs; therefore we cannot offer a definitive fitness programme here. The information contained in the following section is aimed to give you some general guidelines on the types of fitness training that you should be looking to undertake. We do recommend that you seek advice from a fitness professional; as they will be able to develop a programme to suit your individual needs based on your current level of fitness and lifestyle. A good fitness trainer will be able to develop a training programme specific to your needs, specifying the types of exercise and the duration and intensity for each exercise. They will also be able to advise you on nutrition and diet.

Prior to starting any physical training programme it is a good idea to consult your doctor particularly if you suffer from a heart condition, high blood pressure, diabetes, asthma, joint or back problems, or if you are pregnant or on any medication. Please make sure that the equipment you are using (including clothing and footwear) is appropriate for the type of exercise you are doing and is in good condition.

Training principles

At the beginning of any training programme it is a good idea to establish your training objectives/goals. These should be realistic and achievable but at the same time challenging. Don't set your goals too high as if you don't reach them, you will lose morale. Also, you don't want to over do it and injure yourself. Your objectives should be reviewed every couple of weeks to ensure that you are still challenging yourself. Your training programme can then be adjusted where necessary. The earlier you start your training programme prior to your expedition the better. We recommend a lead-time of at least 16 weeks prior to your departure date. This will allow you time to build up your fitness level gradually, reducing the risk of injury.

General training programme

When developing your training programme you should be looking to incorporate the following components:

- The Warm Up
- Stretching
- Cardiovascular Training
- Cross Training
- Resistance (weight) Training
- The Cool Down

The warm up

With any form of physical training the body has to work hard to adapt to the higher levels of stress being placed upon it. A warm up period is therefore essential in order to raise the heart and respiratory rates gradually. Also it helps to raise the body's muscle and blood temperature reducing the potential risk of injury. Again the warm up should be related to the type of activity to be performed, i.e. walking, running, or cycling.

Stretching

Developing a good stretching regime both before and after exercising will help in improving your flexibility. Stretching will also lead to a reduction in muscle tension and an increase in your joints' range of motion, again reducing the risk of injury. Daily stretching will also be important while you are on your expedition. The important muscle groups to concentrate on when stretching are: Legs: quadriceps, hamstrings, calves and ankles. Upper body: abdomen, trunk, back, shoulders, chest, neck and arms.

Cardiovascular training

Cardiovascular (CV) training is primarily concentrated on developing and improving your heart and lungs (i.e. improving the body's ability to get oxygen to the working muscles). The benefits of this include increased stamina levels and muscle endurance. CV work should form the main part of your training programme. Common types of CV training include walking, running, cycling, rowing, swimming and aerobics. Many well equipped gyms will also have additional CV equipment such as Steppers and X-Country Skiers. Ask your personal trainer or someone in the gym to help you if you are not sure how to use them.

Exercise intensity

How hard you train or your exercise intensities are based on a percentage of your maximum heart rate (pulse rate). The level of intensity that you start your CV training at will depend on your current level of fitness. To calculate your maximum heart rate (for fitness purposes), use the adage: $220 - (\text{your age}) = \text{maximum heart rate}$. If you have not been exercising regularly for some time, it is a good idea to start training at around 50 – 55% of your maximum heart rate (i.e. $220 - (\text{your age}) \times 0.55$) for a period of about 20 minutes three times a week. As your fitness level improves, you can gradually increase the length of the workouts staying at the same medium level of maximum heart rate. As this becomes easier, it is then advisable to increase the intensity of your workouts until you are able to work at levels between 75% and 85% of your maximum heart rate for extended periods.

Cross training

Whilst it is important to build fitness specific to your activity, cross training (i.e. participating in other aerobic activities) also helps to develop cardiovascular fitness. Cross training aids develop muscle strength, hand-eye co-ordination and an improved range of motion, but probably most importantly it helps prevent boredom. If you have a specific sport or activity that you enjoy doing then this is excellent to use for cross training purposes.

Resistance (weight) training

Cardiovascular exercise should form the largest proportion of your training programme, but resistance (weight) training will help in developing strength and muscle endurance. Resistance training has the benefit of being able to target specific muscle groups. There are various methods of weight training; these depend on the performance objectives. Weight training for expedition purposes should focus on using light to moderate weights, with the emphasis being placed on repetitions. With most exercises you will be looking to do 2-3 sets of the exercise, each set consisting of 10-15 repetitions. The use of ankle and wrist weights is a good way to increase your workload whilst exercising. For a list of the main muscle groups to focus on, please refer to the stretching programme. NB: If you are unfamiliar with using weights please seek advice from a personal trainer or a gym instructor - it's what they are there for. Good technique can also lead to improvements in flexibility. Poor technique may lead to injury, so please be careful.

The cool down

Equally as important as the warm up is the cool down as it allows the body time to adapt from being physically active to resting. Five minutes of brisk walking after a run or gentle cycling is all it takes to help the body adjust. The cool down allows the body to keep circulating oxygen, which breaks down lactic acid - a fatiguing by-product that builds up in the muscles during exercise - and aids a more rapid recovery.

The hazards of over-training

Although training is incredibly important, you should try to get the right balance between your exercise programme and resting, in order to gain the most from all of your hard work. Over-training can leave the muscles depleted of energy and working below their full potential. It may also lead to injuries. It takes muscles a full 48 hours to recover fully from an exhaustive workout. You should therefore, whenever possible, try to work different muscle groups on alternate days. If this is not possible, then after a day of intensive exercise, restrict yourself to a light workout. Ensure that you take at least one day off a week to allow for full recovery.

Basic stretch programme

Developing a good stretching regime both **before and after** exercising will help in improving your flexibility. Stretching will also lead to a reduction in muscle tension and an increase in your joints' range of motion, again reducing the risk of injury.

Daily stretching will also be important while you are on your expedition. It is important that before stretching, all muscles and especially the joints are warmed up. Only ever stretch warmed up muscles. All muscles, tendons and ligaments need an adequate blood flow so as not to become over stretched or torn. A slow rotation of the joints can be performed after the warm up to provide optimum blood flow to these areas. The warm up should involve light exercise which is best if it is activity specific i.e. a short cycle ride, light jog on the spot, brisk walk for about 5 minutes. This can be done as part of the whole exercise programme and the stretches done on route after the first 5 minute warm up.

Never stretch too far. You should feel a slow pull on the muscle with no pain. It is important that all stretches are done slowly under control and that no bouncing or dynamic stretching is attempted. If you have any injuries, then it may be advisable to be especially careful whilst exercising and stretching. If in doubt, see your doctor before undertaking any warm up, stretching programmes or general exercise.

The easiest way to keep to a good stretch programme is start at the top and work down. This will help you not to forget or miss out any vital body area. All stretches should be held for about 10 seconds.

Neck:

- Stand with arms hanging loosely at your sides.
- Turn head, keeping it level, to one side looking over your shoulder and hold.
- Repeat with head to other side and hold.
- Repeat.
- Stand with arms hanging loosely at your sides.
- Gently tilt head sideways pushing your ear to your shoulder and hold.
- Repeat with head to other shoulder and hold.
- Repeat.
- Stand with arms hanging loosely at your sides.
- Gently tilt head forwards and hold.
- Repeat.

Shoulders and upper arms:

- Stand and place right arm horizontally across your chest.
- Place left hand on elbow of right arm and press down and pull across body and hold.
- Swap arms, repeating process and hold.
- Repeat.

Shoulders, upper arms and waist:

- Stand with knees slightly flexed.
- Put right arm over head with arm bent onto top of head.
- Hold right elbow with left hand.
- Pull elbow behind head gently as you slowly lean to your side and hold.
- Repeat on other side.
- Repeat.

Shoulders, back, arms, hands, fingers and wrists:

- Interlace fingers and turn palms outwards.
- Extend arms in front at shoulder height and hold.
- Repeat.

Back:

- Stand with hands on hips.
- Gently twist entire torso at the waist keeping the head in line and hold.
- Repeat the process twisting in the opposite direction.
- Repeat.

Hamstrings:

- Stand with your feet at shoulders width apart.
- Bend your knees and bring your hands down to hold the back of your calves.
- Slowly straighten your knees and hold.
- Bend your knees to release the stretch and then slowly stand up.
- Repeat.

Quadriceps:

- Stand with one hand against a wall for support.
- Standing straight, grasp top of your left foot with your right hand.
- Pull heel towards your bottom and hold.
- Your knees must be close together.
- You can push your hips forward to increase the stretch if needed.
- Repeat on the other leg.
- Repeat.

Groin:

- Stand with your feet pointed straight ahead and legs about 1m apart.
- Bend your right knee slightly and move your left hip downward towards right knee and hold.
- Keep your back straight and head looking forwards.
- You can increase the width of your legs to improve the stretch if necessary.
- Swap legs and repeat.
- Repeat.

Calves:

- Stand facing a wall and lean on it with crossed forearms and head resting on your arms.
- Place right foot in front of you with leg bent, left leg straight behind you.
- Keep both feet facing forward.
- Slowly move hips forward until you feel the calf stretch in the left leg and hold.
- Do not bounce and do not hold your breath.
- Swap over legs and repeat process.
- Repeat.

Ankles:

- Hold onto something for balance.
- Raise your right leg and point your foot straight forward and your toes downwards and hold.
- Turn the foot to the left, keeping the leg straight, and hold.
- Turn the foot to the right, keeping the leg straight, and hold.
- Turn the foot up towards you pointing the toes straight up and hold.
- Swap legs and repeat process.
- Repeat.

Whole body stretch:

- Stand with feet together.
- Clasp hands and reach over head as high as possible and hold.
- Repeat x 3.

Trekking Training Guide

Training is very specific to the activity that you are undertaking. Therefore to become fitter for trekking, you need to trek. This can be mixed up with some cross training of your favourite sport or outdoor activity e.g. swimming, aerobics, climbing, running, squash etc.

Most training should be part of an ongoing lifestyle but if this is not the case then you should begin training 4-6 months prior to the challenge. If you are very unfit and it is the first time you have ever undertaken a real trek, then this time will need to be extended.

Why bother training?

- You will have a far better chance of completing the challenge.
- You will enjoy the trek far more if you have a good level of fitness.
- You are far less likely to become injured.
- It will allow you to prepare mentally for the trekking challenge.
- It strengthens your heart, reducing the risk of heart attack and stroke.
- It will improve your circulation, breathing and endocrine functions.
- It tones muscles and strengthens bones, reducing the risk of osteoporosis.
- It reduces blood fat and cholesterol.
- It burns calories and helps you manage your weight.
- It boosts mental performance and improves psychological well-being.

How to avoid injuries whilst training and trekking –

- To avoid blisters keep your feet dry and wear socks made with fibres which draw moisture away from your skin - steer clear of pure cotton. Don't lace your shoes too tightly or too loosely. As soon as a hot spot occurs (a rubbing of the skin which then feels warm), remove your boot and apply a blister prevention kit i.e. 'Compeed'.
- When walking, try to make sure your heel touches the ground first and then you push off with your toe.
- Keep your toenails neatly trimmed and remove all hardened skin on the foot with a pumice stone.
- Try to walk with your head up and eyes focused ahead; not always easy at altitude or on difficult terrain!
- Keep your shoulders level, pulled back and down, lift your chest.
- Carry your arms either at 90° angles and move them forward and back, rather than side to side or allow them to relax by your sides.
- If using walking poles, remember to read the guidelines with regards arm angles etc. Mountain Adventures recommend Pacerpoles who offer the best trekking pole on the market. For further information please visit www.pacerpole.com

Walking Boots –

The choice of walking footwear is incredibly important and should not be decided on price alone. Your feet are what will get you up, along or around the trekking challenge so treat them with the best pair of footwear that you can afford that are appropriate for the trek. If trekking on rough terrain or with a rucksack, then the boot should have a reasonably high ankle and a stiff heel counter to give lateral support. There are two main different materials on the market for non technical trekking, leather or fabric. Both types need to be regularly waterproofed. Leather boots will normally last longer but need a lot of time to wear in whereas a good pair of fabric boots can feel like a pair of trainers and not always need to be worn in. Wear them around the house, on the way to work, etc, and then on longer trips. Once they have conformed to the shape of your feet there is less likelihood of getting blisters. No boot is 100% waterproof when in use. Damp feet can occur through water ingress over the top of the boot e.g. when over trousers are tucked into gaiters or through wicking down your socks. Dampness will occur within even the most water repellent boots through sweating. Thicker leathers generally last longer and give better waterproofing but need to be worn in and are heavier in use. Do not dry any boot using direct heat. When tying, pull the laces up towards the knee not outwards as this can lead to the weakening of the eyelets, hooks and rings. Never pass laces around the back of your ankle before tying as this could lead to tendon injury. Not only the boots but the socks that you wear are vitally important and it is worth investing in some good pairs of socks that do not blister. Taking time before the trek using your equipment is the key to having a successful expedition.

16 - 24 week Training Schedule

Again, one of the most important aspects of training is that you make it as specific as possible to the actual trekking expedition that you will be undertaking. This, of course, becomes difficult if you intend trekking at high altitude or in a very mountainous region and you live in Lincolnshire. There are however ways of overcoming this. Firstly, if you intend trekking at altitude, then it is a good idea to build up over the 16 weeks from carrying nothing on your back to carrying a day sack to carrying a full rucksack with all your equipment in. Secondly, if you intend trekking on steep terrain, then find a nearby hill (or an office block or block of flats with lots of stairs) and progress from walking on the flat to, once a week, walking the same distance or time on the staircase, both up and down.

Try to have a rest day in between each training day if possible. Remember to warm up, stretch, then exercise, cool down and stretch to finish.

You should progress to training with your boots on and any other equipment that you may be using on the actual trek from week 4 at the latest but preferably from week 1 if the boots have been worn in already.

The cross training and resistance training evening can always be on the same day as the shorter 1 hour walk.

You can involve friends or family on these training walks so that you are not always missing family and friend commitments.

The length of your training will depend upon your fitness level so if in doubt, seek professional advice from a fitness trainer at a local gym. The training schedule below allows for each pair of weeks to be extended into 3 weeks and the first week to be extended into 2 weeks, thereby providing you with a 24 week / 6 month programme.

Week 1: Source a good circuit that you are happy with and provides you with the best fit for your expedition. 3 x 30mins walks.

Week 2 & 3: 2 x 30 min walks. 1 x 1 hour walk.

Week 4 & 5: 2 x 30 min walks. 1 x 2 hour walk.

Week 6 & 7: 2 x 45 min walks. 1 x 2 hour walk.

Week 8 & 9: 2 x 1 hour walks (1 walk on difficult / steep terrain). 1 x 4 hour walk.

- Week 10 & 11:** 2 x 1 hour walks (1 walk on difficult / steep terrain). 1 x 6 hour walk.
1 x cross training or resistance training evening.
- Week 12 & 13:** 2 x 1 hour walks (1 walk on difficult / steep terrain).
1 x 8 hour walk (On difficult / steep terrain.)
2 x cross training or resistance training evenings.
- Week 14 & 15:** 2 x 1 hour walks (1 walk on difficult / steep terrain). 2 x 6 hour walk
(on difficult / steep terrain - use the weekend to see how the body
copes with two days of walking one after the other as on the trek).
2 x cross training or resistance training evenings.
- Week 16:** 2 x 1 hour walks. 1 x 4 hour walk.

10 Top Tips for Training –

The above 16 week / 24 week programme is only a rough training guide and we at Charity Challenge are very aware that other commitments such as work, family and fundraising may not allow you to stick rigidly to the schedule. However, in order to get close to achieving the training it is very important to organise your time properly and prioritise your goals with regards this once in a lifetime expedition. Some ideas that have worked for other challengers are:

1. Get up an hour earlier and go out for a quick walk in the morning before work.
2. If you can walk to work, do so. If you get to work by public transport, get off a stop or two earlier than usual, so that you can walk some distance each day. If you drive, park further away than usual, or walk a longer route to work.
3. Use your lunchtimes to take regular brisk walks around your work area, not just a stroll around the shops.
4. 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.
5. Cross training such as swimming, squash, badminton, cycling and any other sport will also help get you prepared.
6. Joining a leisure centre is a good idea as the local fitness instructors may well be able to design a programme specifically for you. Most good gyms have a walking machine, or even better a stair climber, where you can clock up mileage more safely and comfortably, but do try to walk as much as possible in 'real' conditions and wearing your rucksack and boots.
7. Book weekends away with the family or friends to some mountainous region in the UK to experience walking on different surfaces and in a mountain environment to test out all your equipment.
8. Book onto the Pre-Challenge Training Weekends in Snowdonia run by Expedition Wise.
9. You should make the time to walk some consecutive long days as on the training schedule. It is the accumulation of walking day after day that really tests you on expedition.
10. Always wear your expedition equipment; rucksack, boots etc even if you are walking up and down stairs in an office block or in the local park.

Footcare for Walkers

There is no such thing as the Ideal Boot!!



On the whole you get what you pay for as far as quality and durability are concerned. The boot should be high enough to support the ankle with firm toe and heel counters to provide additional protection and support.

Although good socks and a 'quality' pair of boots will contribute greatly to walking comfort, the footbeds supplied in nearly all footwear do not support the foot sufficiently to reduce fatigue, pronation, supination etc. as we all have different shaped feet.

Customised footbeds will help to spread your body weight more evenly through your feet, re align your gait and posture, reduce over pronation or supination and reduce fatigue thus making your feet more comfortable and efficient.



Normal Foot

Customised footbeds act as a support for the arches allowing flex but absorbing a lot of the shock, giving more stability, balance and comfort

Flat feet can cause muscle cramps, trapped nerves, poor blood circulation and poor shock absorption. Customised footbeds will help the alignment of the body for better balance and comfort



Flat Foot



High Arch

This foot shape creates the most problems and a customised footbed will help the foot to relax



Combined with the use of Pacerpole trekking poles you will have the best of both worlds:

- Best foot posture/support
- Best ascent/descent aid

For an expert fitting contact Andy at [Anything Technical](#) in Kendal.