



# Running Guide

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runningwithus



# Hello, and welcome to the team!

Hello from the RunningWithUs team and thank you for signing up to your running challenge with Alzheimer's Society!

We might be called RunningWithUs, but we're actually a lot more than just running. We're the UK's leading endurance sports coaches supporting runners, trekkers, cyclists, triathletes and much more. We've helped thousands of people, from beginners to athletes train for their challenges and achieve their goals.

We've put this guide together to help you get ready for your run, but you can also contact us directly. If you have an important training question you can email us directly through our email hotline: **info@runningwithus.com**. We can advise on what to do if you're ill, injured or struggling with your training.

We wish you loads of luck for your run and will be with you every step of the way.

Nick, Siobhan, Mike and Alex



## Meet your coaches

### A bit about Nick

Nick is an England Athletics coach and manages GB squads at events such as the World Half Marathon Championships. Having coached hundreds of athletes from beginners through to Olympians, Nick is one of Europe's most highly respected coaches.

### A bit about Siobhan

Siobhan is one of the UK's leading female coaches, with extensive experience working with runners across the UK. Siobhan's dynamic and real approach makes her a hugely influential voice with everyday runners with a fantastic track record of success.



# Five top tips for getting started

## 1. Train to time

You can easily find yourself clocking up miles rather than training sensibly. Give every session a purpose! Some sessions should be easy, allowing you to recover or build endurance, whilst others should be harder, helping to build a strong heart and pace.

## 2. Don't just run

Cross training such as aqua jogging, cycling, swimming and gym work can play a vital role in building your fitness by adding variety, loading different muscle groups and helping you to remain injury free. Including the exercises in this guide will add variety to your training and help you remain injury free and develop more strength endurance.

## 3. Listen to your body

You have a plan now, but don't be a slave to it. Your body is an amazing machine, if you feel tired and sore consider training at a light intensity for that day, stretching, eating well or getting some massage. Rest allows your body to heal and recover.

## 4. Set targets

Training plans contain weeks of training. Set some targets that are realistic within this journey to race day. Targets will motivate you and help you check your progress. It might be a half marathon or two in the build up to a marathon or even a 10km or your local park run.

## 5. Fuel and recover

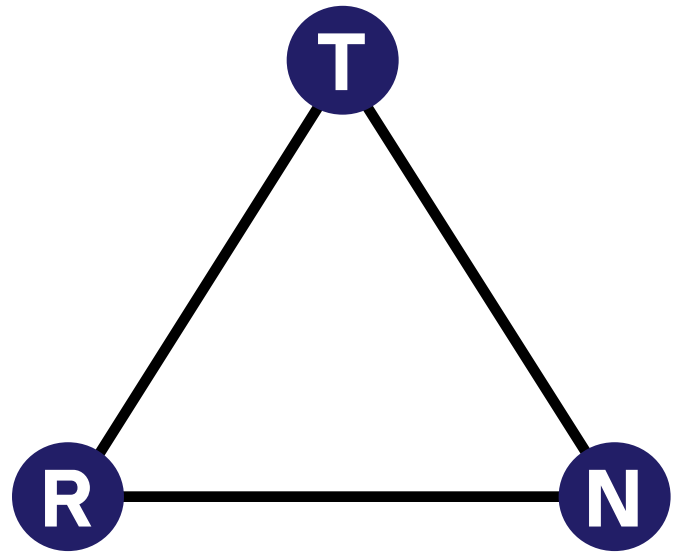
Your body needs rest and fuel in order to train and improve. Clever athletes sleep well and have a diet rich in protein and micro-nutrients supported by high quality carbohydrate. Snacking and eating between meals and sessions helps to fuel training correctly and promote active recovery.



# The training triangle

## Keeping it all in balance

Performance training and developing your fitness can seem complicated at times with lots of information and conflicting advice. In truth it can be kept pretty simple. The key is the training triangle you see to the right. Most of us think about the training sessions we need to do to become stronger, fitter or faster. In reality you won't really make gains until the other two sides of the triangle - the nutrition, and the rest and recovery are also provided as much focus and attention. As you increase your training keep the triangle in balance by improving your nutrition by ensuring you listen to your body and respect its need to rest in order to improve, throughout this guide we cover each of these areas in turn.



## Training

Your running, conditioning and cross training is designed to progressively overload your muscles. When they recover from that overload they will get stronger. Our training plans include a mix of different effort levels to progressively build endurance.

## Rest

Your body improves and progresses during rest phases, rest days and as you sleep. We provide our top tips in the second part of this guide.

## Nutrition

Fuel your training and recovery correctly ensuring you have the right macro and micro nutrients to both have the energy to train hard but also to allow your body to heal and to keep your blood, bones and immune system healthy.





# Picking the correct shoes

## The essentials

Before you embark upon your running journey do you have the right shoes?

### Understand your feet!

Your running gait is simply the way in which your foot strikes the floor as it lands and then pushes off into the next stride. Your trainers can aid in making each step as efficient and safe as possible if matched to the type of foot plant you have.

### Importance of the correct trainers

A pair of trainers that are correctly fitted and sized for you is a sensible investment. Wearing the correct running trainers that are suited to your feet and running gait will play a huge role in preventing injury.

## Wet foot test!

Step in some water and then stand on a dry floor, bath mat or piece of paper. This test works on the basis that it roughly translates into the amount of stability you will need from your trainer. This simple test will give you a rough indication of the type of foot strike you have, and will equip you with some basic knowledge to help show you what features to look for in your running shoe.



## The normal foot

### The neutral runner:

A slight curve in the footprint shows a normal arch. It shows the forefoot and heel connected by a narrower section (but not as narrow as the high arch below). This indicates a very efficient 'neutral' foot strike where the foot transitions nicely through the arch to the ball of the foot before take off.

Trainers needed -

A neutral shoe or a stability shoe with moderate control features.

## The flat foot

### The over pronator:

60-70% of people over pronate. The whole shape of the foot being printed on the floor indicates this. It suggests a flat foot, with the arch collapsed. The foot strikes the floor with the outside of the heel and then rolls inwards taking off from the inside.

Trainers needed -

A stability shoe with motion control. The trainer has a firmer section on the inner/mid section of the shoe.

## The high arched foot

### The supinator

The footprint shows a very narrow section or no section at all between the forefoot and the heel. The foot strikes on the outside of the foot and doesn't pronate enough. It is a lighter foot strike.

Trainers needed -

Cushioned (or 'neutral') shoes with plenty of flexibility to encourage foot motion. Stay away from motion control or stability shoes, which reduce foot mobility.



# Training. How should it feel?



## Understanding the terms

There are a number of different paces that you should aim to master which will make up your training:

### **Easy runs:**

Fully conversational at the speed of chat and about 6/10 effort.

### **Steady runs:**

Conversational, controlled but working at about 7/10 effort.

### **Threshold running:**

Controlled discomfort and 3-4 word answer pace 8/10 effort.

### **Interval running:**

3k-5k-10k effort or 9/10 effort.

## Learn to feel your pace

The feeling of not being sure how fast you should be running for any particular session is common, from beginners to elite athletes. For beginners it never feels as though running is easy but we can assure you that running doesn't need to be hard all the time.

At the beginning all you are trying to do is get out and run. That should be at an easy pace or 'the speed of chat' – if you can't talk as you are running, you're going too fast. For the more experienced runner, 'the speed of chat' is how your easy and recovery runs should feel - totally in control and relaxed. If you are combining walking and running, the effort level remains the same – you should be able to hold a conversation on both the walking and running segments.

Faster than easy, conversational running is 'steady running'. This is the backbone of training for more experienced runners. This is where you must be honest and not push too hard or you might ruin your faster sessions, so conversation should still be possible, but a little strained.

Incorporating threshold running is how the elites train. This is where you are running at a controlled discomfort level, you can still talk between breaths, but only 3 or 4 word phrases. This is not running to exhaustion or sprinting. You may already feel able to include some 3-5 minute blocks into a run each week which will grow in volume throughout your training as per your training plan.

Interval training and 5k/10k pace is top-end training. This is often called the 'hurt locker' and is used in training to replicate the feeling at the end of a hard race. The effort levels here should be almost at maximum.



# Perfect posture check



Good running posture is very important in helping you to maintain good form for the whole run and therefore adding to efficient running style, injury prevention and aiding good breathing.

- Carry out the perfect posture test (see opposite).
- Think about your 'form' whilst you run.
- Try to be upright and tall.
- Feel as though you're falling forward into every stride.
- Practice perfect posture in every day situations to ensure your muscles don't tighten up.

**You can all check your posture and get an idea of a good running form by doing the following exercise which DOESN'T involve going for a run!**

## Perfect Posture Check

Stand with your feet hip width apart. Imagine there is a piece of string pulling you through the centre right through the top of your head and towards the sky. This will create your 'running tall' posture, a feeling of your upper body being lifted up and out of your hips. At this point your shoulders may have risen, so relax your shoulders by rolling them back and down making sure there is no tension through the shoulders and neck. Without lifting your heels lean forwards ever so slightly, your whole body should lean from the ankles, not just the top half. This is a very small movement but should give you a slight feeling of falling forwards. You shouldn't be leaning so far forwards that you look like you are about to fall over!

It's important to remember at this point that your leg speed is determined by your arm speed. In your 'perfect posture check' position begin to swing your arms as if you are running. Remember to drive the hands forwards and the elbows backwards with thumb lightly resting on forefinger.

If you imagine you are wearing a running jacket with a zip down the middle, your hands should not be crossing the line of that zip. This will limit lateral (side to side) movement - running is a linear (straight forwards) sport so we want all of our energy going forwards towards that finish line! At this point whilst you drive your arms (remember that slight forward lean) you should feel as though your legs want to start running.

# The key stretches

## Key stretching tips

Stretch both legs and repeat 2-3 times if certain muscle groups seem particularly tight

Hold stretch for 40-45 seconds each time and complete them after your runs.

Never stretch cold muscles.

A good stretching routine will help to restore the muscle balance and allow you to be more flexible.

Consider investing in an 'MOT' with a sport physiotherapist or some sports massage which can help manage the build up in tightness that will occur in your training.

A 'foam roller' can be used to supplement your stretching on a day to day basis to carry out self massage.



### Glutes

Sit with one leg out straight. Cross the other leg over, keeping your knee bent. To feel the stretch in your backside, hug the bent knee into your chest, whilst keeping your back straight.



### Hamstring (Origin)

Lay on your back. Pull one leg up to your chest and hug with both arms. Keep one leg straight on floor, whilst keeping your ankle flexed.



### Hamstring (Belly)

Lay on your back. Keep one leg on the ground. Raise other leg, holding the back of the calf. Bring up to feel the stretch in the middle of the hamstring.



### Lower Back

Lay on your back. Bring one leg up to your chest and rotate to lower your knee to floor using opposite arm as a weight. Keep one leg straight and both shoulders on floor. Other arm should be straight out at shoulder level.



# The key stretches



## Quads

Grasp the top of the ankle with the same side hand and bring heel to backside. Hips should be pushed forward.



## Hip Flexors

Kneel on one with a 90 degree angle at both knees. Push hips down and forwards until a stretch is felt at the front of the hip.



## Calf (Gastrocnemius)

Stand with feet shoulder width apart. Take one foot forward and keep feet parallel. Maintain the arch in the forward foot by pressing down with the toes to stop foot rolling in. Straighten back leg and feel stretch in top area of the calf.



## Calf (Soleus)

Repeat position of the gastrocnemius stretch but this time bend back leg to take stretch into lower calf above achilles. Straighten back leg and feel stretch in top area of the calf.

# Strength and Conditioning



## Finger Crusher

Get into a sit-up position. Find the natural arch in your back and place your hands under the arch. Engage your lower abs and pelvic floor and push your spine down onto your hands, trying to crush your fingers into the ground. Hold this for 45-60 seconds per set.

The next level: Do small alternate leg lifts, while still keeping even pressure on your hands or extending in to 'bicycle' movement in and out with your legs.



## Back Extension

From a prone position with your toes on the ground and fingers on temples raise your chest off the ground by engaging your lower back muscles. After a few seconds relaxed back to the ground and repeat for 45-60 seconds.

The next level: Extending your arms out in front of you will add a greater lever angle and make this exercise more challenging.



# Strength and Conditioning



## Plank

Lift your body up with your weight on your elbows and toes. Keep a straight line from the neck down through the legs to your ankles, engage all your core muscles by sucking your belly button up to the ceiling. Keep your chest over your elbows. Hold for 30-60 secs.

The next level: Add in small alternate leg lifts. If this is too hard to begin with, you can avoid lower back pain by doing this with your knees on the ground.



## Side Plank

Make a right angle with your supporting arm, your feet together and your stomach strong. Rise up, making sure you squeeze your glutes and push your pelvis through. Hold it for 30-60 seconds.

The next level: Lift your free arm into the air, keep your side really strong, and don't let your middle sag.

# Strength and Conditioning



## Bridge

From a sit up position raise your hips up so your body forms a straight line from shoulder to hips to knees. Hold this position for 45-60 seconds by squeezing your glutes and your lower abdominal muscles.

The next level: From a 'bridge' position straighten one leg at a time aiming to not let your hips 'sag' as you do so.



## Single Leg Squat

Stand on one leg, engage your glute on your standing leg, keep your hips facing forward and aligned with your knee and toe. Send your hips backwards whilst bending at the knee. You don't want your knee to roll inwards, so go down as far as you can without that happening before moving back to a tall standing position. Repeat 8-15 times before changing legs.

The next level: You can use a Swiss ball or use a 'wobble board' under your foot.



# Cross training

## What it's all about

The strength exercises we have shown you in this guide are one form of 'cross training' or 'XT' in the plans. The other is non-running cardiovascular training such as swimming, cycling, aqua jogging (yes running in the pool with a buoyancy aid!), rowing and using a cross trainer. This exercises the heart and muscles and will definitely keep you aerobically fit.

Your heart doesn't know the difference between going for a walk or cross training it just works as hard as you ask it to. You can really boost your fitness with additional XT in your week.

## Get checked out

If you're injured firstly consult a doctor or a physiotherapist before embarking on your cross training. If they say you are able, still follow your training plan but use cross train instead. Don't lose that hard-earned fitness - keep going!

If you can see a sports physio or injury expert they will also offer treatment and training advice. Ensure that the cross training is also pain free and that you add the specific rehab exercises you have been set.

## 'Time and effort'

If you are struggling to get out and run through injury or weather conditions you can complete key sessions in the plan using cross training. Runners have a tendency to panic and just stop when injury hits. Provided you can cross train safely and pain free you can maintain and even progress your fitness.

Simply replicate the time and effort we have asked in the running session using the other training options available to you.





# Cross training

## Keep focused

Whilst cross training can add masses of value and variety to your weekly training remember your goal. At the end of your block of training you need to feel you have the strength and the fitness to run your chosen event.

The minute your conditioning or cross training is getting so hard that it's leaving you too tired to complete your key runs, or even risks injury itself then the cross training has lost its benefit. Remember it's there to support your running, not totally replace it.

## Heart rate

If you want to get serious with your cross training you may wish to explore investing in a heart rate monitor which will help you hit the training in the correct effort zones and allow you to keep a track of your developing fitness as you run and train more.

Over time you should feel that you are better able to control sudden increases in heart rate and then you will be able to run at a similar speed but a lower heart rate. You may also notice your resting heart rate going down a few beats!

## Gym classes

You may already be a member of a gym or go to local fitness classes. These can be great for giving you a motivating environment to complete your conditioning or cross training.

Remember the key rules in this though - stay focused and don't leave your classes super tired. Pilates, yoga and core classes can be a great option to add to your training mix.





# Nutrition and recovery



## Balance

Nutrition is a key element of training. Without getting the basics right you will struggle to have the energy to train well or the nutrients to heal and adapt to the training you have completed. It's a huge area with ever developing research so here we cover just the basic tips.

## Micro-nutrients

Vitamins and minerals will deplete more quickly as you train harder so your demands will go up. Iron, vitamin D, B12, C, magnesium and calcium are just some of the basic ones to be aware of. Increase your nutrient density by eating as broad a range of foods as you can, plenty of variety in your fruit and vegetables is a great place to start!

## Never hungry, never over full

Split those big main meals into 5-6 smaller meals, with mid morning and mid-afternoon snacks to ensure blood sugar levels are balanced.

## Hydration

Aim to drink 2-3 litres of fluid a day sipping regularly on water or even water with electrolyte tablets (e.g. High5 Zero). Avoid drinking caffeine with your main meals as this can limit some of your nutrient absorption and late at night which will impact on your sleep. As your peak weeks of training kick in you may wish to monitor alcohol consumption which can have a big impact on your recovery.

## Protein rich, carbohydrate clever

Carbohydrate is critical to fuelling your training effectively. Take on high quality, 'slow release' complex carbohydrates including plenty of oatcakes, sweet potatoes and whole grains. Protein provides the essential nutrients you need to heal damaged muscle fibres and tissues from lean meats, fish, nuts, sprouting seeds and tofu.

## Depleted runs

In some of our plans you may see the occasional run where we ask you to go out 'pre breakfast' at an easy effort. The goal here is to encourage your body to become very effective at metabolising stored fats as an energy source. On these days ensure you eat a high quality breakfast with carbohydrate and protein shortly after the session.

# Nutrition and recovery



## Fuelling your runs

You'll need to practice taking on fuel in your training runs if you intend to do so in the race. If you are running a marathon we highly recommend using gels. Aim to take on a gel after 45-60 minutes and then one every 30-40 minutes after. Sip it slowly in order to control intestinal discomfort.

## Get to bed

Sleep is vital to adapting to training and getting fitter. Regularly getting 4, 5 or 6 hours sleep a night will limit your ability to achieve deep sleep, release growth hormones and will affect cortisol and stress levels. Get into a good pattern at night, avoid digital screens in the final hour before bed and limit caffeine and alcohol late at night.

## Monitor your health

As you increase your training your body and your energy demands will change. Your diet will need to change and adapt with this. Become good at monitoring your energy levels and notice any sustained increase in fatigue or tiredness over several days. Keep a training diary and note down on those runs that felt fantastic what you ate and drank so you can repeat this in the future!

## Avoid the terrible too's

Building your training up too fast, too soon and doing too much training too hard is a sure fire way to pick up niggles and gradually lose the motivation to get on and train. Stick to the plan, be patient and don't panic or back fill training if you have started late or had some time off.

## Ignore the myths

There are a lot of myths and scare stories out there surrounding nutrition. No athlete should ever look to eliminate whole food groups unless recommended to do so by a qualified dietician, nutritionist or doctor. Avoid the advice of unqualified bloggers and if you want to explore your own nutrition in depth seek a fully qualified professional.

## Know when to back off

If you are regularly tired no matter how much sleep you are getting, feel your nutrition is good but still lack energy, are struggling to improve or even going backwards despite doing more and start to lose motivation to get out and train you might be over training. Listen to your body and be prepared to take an extra rest day and adapt your plan if needed.



# Training glossary



## Rest (R)

Rest is going to be as important a part of your training schedule as the running itself. Listen to your body and take heed of any warning signs. If you feel fatigued even before you've run or start suffering a series of minor injuries; you probably need more time off. Taking enough rest allows physical and mental recovery and gives your body the time to adapt to your workload.

## Recovery Run (RR)

Training for endurance requires your body to work harder than it's ever done. To see improvement without breaking down, you'll need some recovery runs. These should be nice and easy and you should feel relaxed. Enjoy the scenery. You should be breathing easily and be capable of holding a conversation throughout the run. This will mean that you are running in the 60–65% range of your Maximum Heart Rate (MHR) and it should be no more than 45 minutes in duration. It also helps with the removal of the waste products which accumulate in your muscles after harder efforts.

## Long Runs (LR)

Long runs are vital in your plan and key to racing well in long distance races from 5km – marathon. At first, concentrate on increasing the time on your feet rather than worrying about distance. Start off by heading out for at least an hour and run at a conversational pace or 6/10 effort. Gradually this will build to 75% of MHR as you start to practice periods of marathon or race pace running. These runs improve your muscular endurance and condition your body to burn fat as its primary fuel source.

## Threshold Runs (THR)

After the long run, threshold runs are probably your most valuable workouts. They are run at a controlled brisk pace, about 80–85% of your MHR, you'll only be capable of uttering a couple of words to your training partners. Threshold runs improve your lactate threshold (the speed above which your body struggles to cope with the lactic acid created by burning energy without oxygen), your running economy and aerobic capacity.

## Continuous Hills (CH)

Hill running develops strength in your muscles and tendons without putting them under the type of stress they are exposed to during faster running. Run up a 5-10% gradient for 45-90 seconds at a 'threshold effort'. Turn immediately at the top and run down the hill at the same effort, then turn at the bottom and repeat without any recovery until the rep time ends. Like a tempo/threshold run, a hill session is time to concentrate, as you should be working at about 80–85% of MHR and be able to utter just a few words.

# Training glossary



## **Fartlek (F)**

This is a Swedish term that literally means “speed play”. It involves a number of bursts of effort over a variety of distances with a variable recovery. Originally the length of effort was based on the terrain, for example, pushing harder every time you came to a climb, no matter how long it was. You can adapt it for your needs.

## **Interval Training (IT)**

Intervals help to boost specific race pace speed and involve running timed efforts with a controlled recovery. The effort level is around 85–100% of MHR, depending on the duration of the event you are training for and the length and volume of intervals used. A typical example might be 6 x 3 minutes @ 5km race pace with a 90 second jog recovery.

## **Marathon Pace (MP)**

Understanding the pace and effort you intend on running your marathon at is very important. Pace judgment and patience on the big day will be crucial to running your best marathon. Marathon pace practice allows your body and mind to get used to what will be required on race day, and it builds endurance quickly.

## **Warming Up/Warm down (WU)**

When you are going to do any faster running such as Hills, Threshold Runs, Intervals or a race, it is important to warm up gradually. A 10-15 minute jog lets your muscles warm up and improve their range of movement.

## **Cross-Training & core conditioning (XT)**

It's important that your training is balanced with some non-impact activities such as swimming, cycling, rowing, the cross trainer etc, otherwise you are more likely to pick up an annoying injury that will set back your training. More experienced runners should also add cross training to their regime. Endurance running, especially a marathon, requires whole body-conditioning. To achieve this you should aim to work a variety of muscle groups and not just your legs. Be careful not to make the cross-training so intense that you are left too tired for your running.



## Get in touch

We wanted to take a minute to say a massive thanks for signing up to your running challenge - we know you're going to absolutely smash it!

When your training gets tough, just remember that every step is helping us get closer to a cure. It's thanks to inspiring people like you that we are able to continue being there for everyone affected by dementia.

If you need anything at all, just email the team on [events@alzheimers.org.uk](mailto:events@alzheimers.org.uk), and we'll be delighted to help you!

We'll be in touch again soon, but until then - keep running!

Best wishes,

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