

Cycling guide



**Alzheimer's
Society**

Together we are help & hope
for everyone living with dementia

Hello, and welcome to the team!

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

We might be called Running with us, 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 cycle, but you can also contact us directly. If you have an important training question you can email us directly: 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 cycle and will be with you every step of the way.

Nick and Siobhan



Top ten training tips

1

Have a routine

Your body likes consistency and patterns. Regular consistent training will yield better results than peaks and troughs!

2

Plan it out

Check out our training plans or look online for support from a coach. Keeping variety in your training and progressing at a sustained, sensible pace is vital.

3

Ringfence your training time

Once you have decided on your plan and routine get the sessions into your diary at times and on days you know are going to work around work and home life – don't set yourself up to fail!

4

Train to time

You can find yourself clocking up miles rather than training sensibly. Cycle to time and effort. Give every ride a purpose! Some should be easy to allow you to recover or build endurance, some harder building a strong heart and pace.

5

Get out of the saddle!

Cross training such as running, swimming and gym work can play a vital role in building your fitness, adding variety and loading different muscle groups.



Top ten training tips

6

Adapt to succeed!

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 a massage. Rest allows your body to heal and recover.

7

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. Maybe it could be a best time for a shorter sportive or your favourite local route using strava.

8

Find your strength

Including the exercises in this guide will add variety to your training and help you remain injury free and develop more strength endurance.

9

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 micronutrients supported by high quality carbohydrate. Snacking and eating between meals and sessions helps to fuel training correctly and promote active recovery.

10

Keep it social

Training with other people – both with your cycling but also cross training and conditioning helps keep you focused, have more fun and train more consistently. Surround yourself with positive, like-minded people.

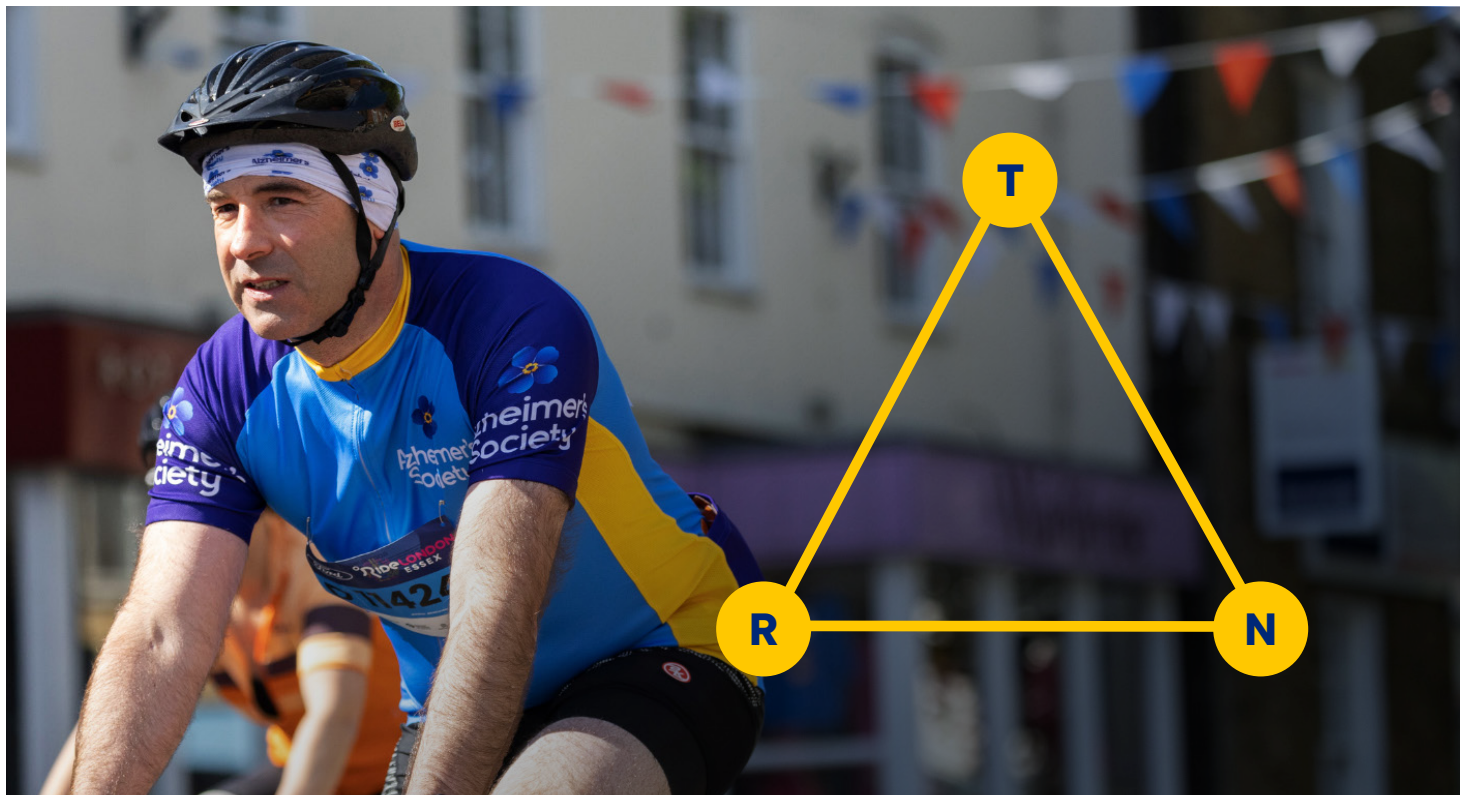


The training triangle

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, rest and recovery – are also considered and given as much focus. As you increase your training keep the triangle in balance by improving your nutrition. Listen to your body and respect its need to rest in order to improve. In the next few pages we cover each of these areas in turn.



Training

Your cycling and any cross training such as running, swimming and conditioning. This guide covers the key types of training to include in your weekly mix.

Rest

Elite cyclists consider rest and recovery between sessions to be as critical to success as the training itself. Your body improves and progresses during these 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.

Bike fitting – the basics

Saddle height

A simple method to determine a good saddle height is to work out your inseam measurement and then put the saddle at 109% of this measurement when taken from the pedal axel to the top of the saddle's height.

Saddle position

How far forward or back your saddle is will change the pressure/ angle of your knee joint. If you have small feet then push your saddle well forward, this will ease the strain on your knees.

Pedals

Ideally you should pedal with the balls of your feet. If you are not using clip in cleats consider toe clips to help secure your foot in the correct position.

Other considerations

There are five pressure points; two hands, two feet and a bum on the saddle. Spread your load appropriately between these points. Lowering the bars shifts some weight to the hands. Pedalling a bit harder shifts some weight to the feet. Wear gloves or mitts. Wear cycling shorts with a chamois (padded underneath).

Getting kitted out

Your bike:

Bikes come in all shapes and sizes. Don't feel as if you need to spend thousands on the latest carbon fibre road bike if you don't wish to, your fitness and training is more important. However, getting a bike you feel comfortable on and is well fitted is crucial. Road bikes are obviously most suited to long sportives or quick road courses and triathlons. Within this you can get more 'aggressive' racing bikes with drop handle bars and aerodynamic riding position, through to more comfortable, touring style bikes with flat bars... try before you buy, and ask the experts.

Your helmet:

Helmets are compulsory for sportive events and should be the first thing you buy at the start of your training. Helmets are designed to draw the air across the head when you are travelling at speed; allowing you to stay cool and comfortable. Fit is everything with the helmet, so measuring your head circumference before purchase is recommended. Most modern helmets can be tailored to fit your head size, often with just a one handed adjustment of a dial.

Your clothing:

A base layer, short-sleeved jersey and bib-shorts with padding, paired with arm and knee warmers, gilet, and lightweight packable rain jacket should see you through poor weather. Also consider gloves, overshoes and replacing a short-sleeved jersey with a long-sleeved equivalent or a soft shell. For all other garments, choose mid-weight sweat wicking technical fabrics. Cycling specific shoes with hard soles and cleats that 'clip in' can dramatically increase the efficiency of your power transference. If you decide to purchase these then practise using them before going on the open road.

Your other kit:

Punctures are far and away the 'mechanical' you're most likely to suffer, so carry an inner tube or (ideally) two, tyre levers, and a pump. A multi-tool fitted with a selection of Allen keys, and sometimes a flat-bladed screwdriver, Torx bit, and chain link extractor is another essential piece of on-the-go maintenance equipment which can be easily stowed in a jersey pocket or saddle bag. Finally, and depending on your level of mechanical proficiency, a spare chain link and gear cable are worth space in your mobile tool kit. Make sure your bike is fitted with a cage and water bottle.

The training

▶ Long rides

6/10 effort focusing on building your time on the bike and developing your aerobic capacity. These rides improve your muscular endurance and condition your body to burn fat as its primary fuel source. They also prepare you physically and mentally for the task ahead. If your goal is a long sportive or ride of 80+ miles don't expect to necessarily get this far in your training, but the goal should be to achieve between 65-80% of the distance before race day.

▶ Threshold rides

The golden zone of training for endurance sports anaerobic threshold training should form a key element to your weekly training mix. Ridden at a 'controlled discomfort', of about 80-85% of your MHR (maximum heart rate), you'll only be capable of uttering a couple of words to your training partners. Tempo/threshold rides or intervals improve your lactate threshold, your riding efficiency and aerobic capacity (your body's ability to utilise oxygen). All this helps to improve your endurance performance.

▶ Interval training

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. Typical examples might be 10 x 2 minutes at 9/10 effort with 60 seconds recovery, 5 x 4 minutes of sustained hard riding in a big gear with 90 seconds recovery, or short bursts of between 20 and 40 seconds at maximum intensity. If you are training for a long distance event hard interval training is used sparingly in our plans and you'll see it appear as you sharpen up the final weeks of your training.

▶ Easy and recovery rides

These sessions are your opportunity to practise your bike handling as well as getting in an additional aerobic session. Recovery rides are your easiest efforts of the week (alongside warming up and cool down). The goal is to work at 5-6/10 and finish with your body feeling better than when you started. Generally easy rides or efforts around interval sessions should be 6-7/10 in terms of effort, focusing on technique, consistency and remaining able to fully communicate. Carrying out some of this riding before breakfast helps to teach

your body to metabolise stored fats as an energy source – very important for long races and sportives.

▶ Hills

Whether or not you will be tackling big hills on event day including hill training into your plan will help develop your strength and muscular endurance. Our plans include a mix of short hard hills or longer steadier efforts depending on the event your training for.

▶ Rest

You get fitter as you rest and adapt. Listen to your body. If you feel fatigued even before you've got on the bike, find yourself thinking up excuses not to ride 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.

▶ Cross training

Cross training includes both cardio vascular training off the bike such as running, swimming and elliptical training and also strength and conditioning. Our plans suggest supplementing your cycling with other forms of exercise to get you strong and mix up your training stimulus. This guide includes some key conditioning exercises you can do at home.

Safety and bike handling

Starting

- Engage both brakes.
- Position one pedal in the 2 o'clock power position.
- Put all your weight on this pedal; then release the brakes.
- Stand up on the pedal and simultaneously ease yourself back onto the saddle.
- Keep your grip on the handlebars firm but relaxed so you will not wobble.
- As you gain speed, shift to higher gears.

In motion

- Use small adjustments of the handlebars and leaning your bike to correct your line.
- Look up and ahead rather than staring at your front tire.
- Do not weave in and out of parked cars as you ride along. Hold your line and ride with authority – DO NOT UNDERTAKE.

Stopping

- Free one foot if you use toe clips, straps or clipless pedals.
- To slow, apply both brakes evenly. Your front brake actually accounts for 70% of your braking power.
- As you slow, shift down a few gears to make it easier to start up again.
- Just as you come to a complete stop, turn the handlebars slightly away from the side you step down. The bike will lean slightly to this side, making it easier to step down.
- Step down off the seat and put one foot down. You will find that one side is more natural than the other.
- As you are stopped, reposition your pedal into the power position so that you are ready to start again.

Descending

- Be sensible about the speed at which you can remain safe and in control.
- Avoid sharp breaking – stay smooth, relaxed and anticipate what is ahead. Keep your centre of mass low on the bike.
- Don't lean your body into the corners – the bike leans a little, not you.
- Be aware cars will come at you around corners. NEVER sacrifice safety for speed – take blind corners slowly. Slow in advance of corners, not half way around.



Safety and bike handling

Scan and signal

- Relax or remove the hand on the side you are scanning to avoid turning the handlebars as you scan.
- Slightly tighten your grip on the other hand for balance and control.
- Briefly turn your head to look over your shoulder to scan behind you. You may need to do this a few times.
- Let others know what you plan to do before you do it. Hand signals are a vital communication tool. Always signal your intent when turning, changing lanes and changing position within the lane. Make your signals definite, bold and clear.



Group riding

Riding in a group or close to other cyclists brings unique dangers but also advantages. We would strongly suggest looking at joining a local cycling club or group to experience good group riding etiquette and safety. Here are just some of the basics:

- Stay consistent and smooth – try to avoid making dramatic movements or sudden changes in course.
- Communicate clearly both verbally and visually with hand signals.
- Look forward and maintain your focus on what is coming up, without getting too distracted by other riders around you. If you notice a danger such as a pothole or a car, communicate this to others in the group.
- Share the lead – don't just sit in draft for miles on end – take your turn at the front of the group.

Final tips

- Consider joining British Cycling and getting insured.
- Make yourself seen with high visibility clothing.
- Always wear a helmet and gloves.
- Practise using cleated shoes before you head onto the open roads.
- Consider a local cycle proficiency group or training.
- Read the highway code and understand your position related to pedestrians, other cyclists and motorists.
- Never cycle through red lights or on pavements where their use is solely for pedestrians.
- Avoid undertaking and always be aware that lorries, buses and many cars have a huge blind spot when turning, particularly turning left.

The key stretches



Glutes (maximus and minimus)

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



Hamstring (belly)

Lay on your back. Keep one leg on the ground. Raise your other leg, holding the back of your 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, then lower your knee to the floor using your opposite arm as a weight. Keep one leg straight and both shoulders on the floor. Your other arm should be straight out at shoulder level.

Stretching – a guide



Quads

This can also be done lying on your side in a straight line. Grasp the top of your ankle with the same side hand and bring your heel to your backside. Your hips should be pushed forward.



Hip flexors

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



Calf (soleus)

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

► 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.

Never stretch cold muscles. The main benefit for cyclists is stretching after training.

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.

Strength and conditioning



The finger crusher

Get into a sit up position, find the natural arch in your back, place your hands under the arch, engage your lower abs and pelvic floor and push your spine down on to your hands, trying to crush your fingers into the ground.

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.

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



Plank

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

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.

Strength and conditioning



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.



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 cycling cardiovascular training such as swimming, running, 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 ride or cross training it just works as hard as you ask it to. You can really boost your fitness with addition of 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 training 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 on the bike due to a cycling specific niggle or mechanical issue you can recreate some of the key sessions in the plan using cross training. Of course its not going to replace your 6-7 hour long ride but your smaller

mid week sessions and even some of the 'threshold' or 'interval' training can be completed as 'XT'.

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

Nutrition and hydration



Balance the triangle

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.



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 your 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 rides

In some of our plans you may see the occasional ride 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.

Fuelling your rides

One of the great things about cycling events is that they are much easier to 'fuel' than running. We would encourage you were possible to take on solid foods when out riding. Energy bars, bananas and even small sandwiches can all be great options. Gels, energy drinks and sweets can be a top up but should not form the bulk of your fuelling in training or on event day.

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.

Nutrition and hydration

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 of the rides that felt good, noting down 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 the bike 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.



Thank you

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

When your training gets tough, just remember that every step is helping people affected by dementia. It's thanks to inspiring people like you that we are able to help those who need it, fund groundbreaking research and campaign to make dementia the priority it should be.

If you need anything at all, please do get in touch with the team on **events@alzheimers.org.uk**, and we'll be delighted to help you!

We'll be in touch again soon, but until then – keep cycling!

Best wishes,

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