

The  
**Outdoor  
Swimming**  
Society

# SWIMMING 10K TRAINING GUIDE

WRITTEN BY KATE REW & DAN BULLOCK



# SWIMMING 10K TRAINING GUIDE

Cover photography by [Niall Meehan](#)

---

**Life is enriched by doing remarkable things and if you're signed up to a 10 kilometre swim, like the Dart 10k, you are about to experience one of them.**

**But we don't just want you to complete the swimmers' marathon. We want you to enjoy it.**

**Which is why Kate Rew, Director of the Outdoor Swimming Society, and Dan Bullock, Director of Swimfortri, have updated this 10k swim plan to prepare you for the challenge ahead.**

**This guide provides:**

[Guidance on good swimming technique](#)

[A list of swimming drills to improve your speed and efficiency](#)

[A training plan template and example interval training sessions](#)

[Psychology of long-distance swimming](#)

**This guide is for front crawl swimmers who want to improve their swimming style and train for a long-distance swim.**

# GOOD SWIMMING TECHNIQUE: HOW TO SWIM BETTER

---

## We will cover:

Legs

Arms

Bilateral breathing

Body position

Timing

Over 10km, the key to a good time is a stroke that is efficient and relaxed. For many, swimming is instinctive, and their stroke improves just by feeling the water.

This section explains the theory of good swimming. We will help you diagnose the weak parts of your stroke to improve it. You'll have plenty of time during training to work on your swim faults and get yourself swimming faster, smoother, and more efficiently.

If you learn by doing rather than by thinking, you may want to move straight on to the drills section.

# GOOD SWIMMING TECHNIQUE: HOW TO SWIM BETTER

## LEGS

### AIM:

A gentle rhythmic leg kick that improves body position but doesn't tire the muscles by generating propulsion. On a longer swim only 5-10% of propulsion will come from legs – the smaller range of muscles in the arms creating a far more efficient paddle.

### Common problems:

- Not kicking at all
- Kicking too hard

### TECHNIQUE TIPS: Easy wins for better legs

**Keep the big toes tapping against each other consistently when you kick.** This stops you kicking too big and ensures your leg kick keeps within the profile of the body. The legs work closely together and should be relatively straight without locking the knee.

**Try to keep the ankles relaxed,** big toes turned inwards and kick the feet up to the surface of the water without splashing.

**Initiate the kick from the hip,** not the knee, so the legs are kept straighter. If the kick comes from the knee, larger muscle groups are engaged and you will lose oxygen and tire faster. A bent leg kick will also break your streamline. The ideal leg action is an alternating upward and downward motion with the ankles about 10-15cm apart.

**Kick with a higher frequency and smaller range of motion** to a rhythm of 123,123,123,123. With distance swimming, the leg kick is not really an ideal means of forward propulsion. What the swimmer is looking for is a kick that balances the stroke, and keeps the legs up in the water so they do not create drag.

### USEFUL DRILLS

#### LEGS ONLY WITH BOARD

# GOOD SWIMMING TECHNIQUE: HOW TO SWIM BETTER

## ARMS

---

### AIM:

A long stroke that moves a lot of water. The more distance travelled per stroke, the fewer strokes over the swim.

### Common problems:

- Too short a stroke
- Low elbows on recovery
- No pull
- Pushing the water down to bottom of the pool so you create a lift rather than travelling forward.

### TECHNIQUE TIPS: Easy wins for a better stroke

**Extend the arm** by keeping your hand and shoulder relaxed as your hand enters the water, with your arm extended and your stroke long (don't cut your stroke short by placing the hand in front of the head). Start rolling your body as your hand enters the water so your arm can reach full extension.

**Rotate the body** to enable a longer, stronger stroke that engages the bigger muscles of the back. Stand looking forward and keeping your head in position, rotate first the right shoulder to the chin, then the left. This is the kind of rotation you are aiming for in the pool, and it allows a longer stroke.

**Keep your elbows high on recovery.** Allow the hand to travel up the side of body, leading with the elbow, and allowing the hands to relax.

**Use your pull to take you forward.** A key part of your stroke is the pull: where you catch the water with your hand and forearm, and move past it. The hand motion you are aiming for is a subtle slither, not a big S-shape (otherwise you'll start moving sideways rather than forwards).

**Keep fingertips pointed towards the bottom.** This keeps the elbow high during recovery and keeps the palm facing the wall you are swimming away from this will propel you forward by pushing the water towards your feet rather than upwards which will reduce your speed.

---

### TECHNIQUE TIPS: Easy wins for a better stroke

**Finish the stroke.** Push the hand beyond the hip on the exit for a full extension at the back of the stroke. The hand movement under the water is from slow to fast.

#### USEFUL DRILLS

CATCH UP

BLACK LINE DRILL

SWIMMING WITH FISTS

FINGER TRAIL/SHOULDER TAP

SHOULDER TO CHIN

BLACK LINE DRILL

# GOOD SWIMMING TECHNIQUE: HOW TO SWIM BETTER

## BILATERAL BREATHING

### AIM:

A good steady breathing pattern that can be sustained indefinitely, with full underwater exhalation and bilateral breathing (so whichever way the wind and chop is going, you can still breathe comfortably).

### Common problems:

- Cannot bilateral breathe
- Not exhaling underwater which can lead to breathlessness

### TECHNIQUE TIPS: Easy wins for a better stroke

**Exhale underwater** in a nice long, slow, controlled exhalation, and inhale above. And underwater exhalation allows far more time for each breath, so you get more oxygen. A common mistake is to try to breathe in and out above the surface, which leads to breathlessness.

**Alternate sides** breathing every three strokes can be quite demanding. If you find it hard, breathe on one side for half a length, then the other, to keep the stroke somewhat balanced.

**Create a longer stroke.** With a longer swim stroke, you have more time to breathe.

**Rotate the head to breathe – don't lift.** With a good body position, flat on the surface of the water, to breathe you should rotate your head so your cheek is the on the surface of the water and the mouth is above water. If you lift your head out of the water your legs will sink, creating drag.

**Pivot around your outstretched hand.** One of the features of open water swimming is that you may need to rotate your head more to breathe above waves. If you pivot as your outstretched hand glides forward, you have more chance of clearing the surface of choppy water.

### USEFUL DRILLS

[BREATHING EVERY 5, 7](#)

[EXTENSION DRILL](#)

# GOOD SWIMMING TECHNIQUE: HOW TO SWIM BETTER

## BODY POSITION

### AIM:

Streamlined in the water, with as little resistance as possible. Think of a canoe – pointed and long at both ends, and horizontal. The ideal swimmer rolls in the water, rotating through the long axis and keep straight. This body position reduces resistance and leads to a more powerful pull.

### Common problems:

- Snaking through the water
- Not being horizontal in the water
- Having head high and low legs
- Not rotating from side to side

### TECHNIQUE TIPS: Easy wins for a better stroke

**Kicking the legs keeps them up in the water.** Kick from the hip, not the knees. Big kicks will knock you out of a neat, streamlined position.

**Rotate the body** Keep the body horizontal to the surface of the water and rotate around the long axis of the body. Keeping the upper body on its side, with the shoulder under the chin, for as long as possible through the stroke cycle is more energy efficient. When the shoulders are parallel to the surface there is more body mass submerged and you have to work harder to swim.

**Pull with more of a slither than a big S underwater.** Wild hands lead to a big leg kick and erratic body position.

**Keep head still when not breathing.** The head is like the rudder or keel; if it's moving your body will follow it. Keep it still.

**Keep elbows high on recovery.** A lot of people move along the pool in a series of left and right hooks, instead try to keep the elbow high so the hand traces its way up from the hip, up the side of the body, and drops in forward of the head. This will drive you forward, rather than losing momentum with sideways movement.

**Look forward without facing forward.** In open water do not look directly below as you have to look where you are going (by sighting) on a regular basis and lifting your head from the bottom is a very deep position to come up from. Adopt a midrange position where you can look forward but are not facing forward (which would drop the legs). From here it is easy to sight, and easy to breathe above choppy water where a bit more height is needed.

# GOOD SWIMMING TECHNIQUE: HOW TO SWIM BETTER

---

## BODY POSITION

**Grow tall and keep your body long.** When you perform a push and glide from a pool wall you will travel furthest when you are arrow shaped: legs together, upper arms tight to the sides of the head, toes pointed, hands on top of each other, head tucked into hands in line with your body. Carry this shape through to your swimming stroke, every time your legs and arms play outside of the narrow profile of your body you will be working twice as hard to move forward. Keeping your body straight, your kick neat and so on, will mean you can swim with less effort. In training drills, work to identify and reduce drag.

### USEFUL DRILLS

EXTENSION POSITION TORPEDO SHOULDER TO CHIN

FINGER TRAIL/SHOULDER TAP LEGS ONLY WITH BOARD

# GOOD SWIMMING TECHNIQUE: HOW TO SWIM BETTER

## TIMING

---

### AIM:

A long steady sustainable rhythm.

### Common problems:

- Windmilling where the arms are performing as opposites
- Inefficient kick

---

### TECHNIQUE TIPS: Easy wins for a better stroke

**Work on rhythm and timing.** With your feet, aim for a nice steady 123 123 kick. With your arms, you are aiming for a near catch-up stroke, rather than windmilling.

**Practice near catch-up.** Take a stroke, and leave an arm outstretched in front of you. Let the other hand catch-up and rest on top of the outstretched hand before you start the next stroke. Practice this until it becomes familiar, and then move on to near catch-up, when you start to pull with the outstretched arm only when the other hand has almost caught up. The near catch-up style is the opposite of windmilling and is good freestyle timing.

**Pull slow to fast underwater.** Underwater the hand moves from the front of the stroke to the back in a slow to fast motion. This helps you hold more water. Too much power at the front of the stroke pushes the water you are trying to hold backwards, to the side and around the back of the hand.

### USEFUL DRILLS

[CATCH-UP](#)

[SCULLING](#)

[LEGS ONLY WITH BOARD](#)

# SWIMMING DRILLS: IMPROVE YOUR SPEED AND EFFICIENCY

---

**Use these drills in your training plan. You can learn a lot about your stroke just from practicing these drills – they provide useful feedback that will help you understand if you are improving your front crawl without a coach present. Practicing drills will make time in the pool pass more quickly and will make you a better swimmer.**

**Drills covered in this section:**

[LEGS ONLY WITH BOARD](#)  
[CATCH UP](#)  
[BLACK LINE DRILL](#)  
[SWIMMING WITH FISTS](#)  
[FINGER TRAIL/SHOULDER TAP](#)  
[BREATHING EVERY 5, 7 STROKES](#)  
[EXTENSION POSITION](#)  
[TORPEDO](#)  
[SHOULDER TO CHIN](#)  
[SCULLING](#)

**USING THE DRILLS**

1. All drills should be practiced over short distances with plenty of rest, before you start attempting longer drill sets. There is no benefit in practicing drills when you are fatigued.
2. The longer you spend on trying to build your new stroke the better it will be. If you find the drills difficult don't be afraid to mix them with front crawl.
3. When you return to front crawl remember to relate the key aspects of the drill to your swimming stroke.
4. Continue to practice the drills in warm-ups and cool-downs in your swim sessions – the idea is to make sure that your arm pull, recovery and rotation are happening correctly. You want to be able to swim your improved full stroke without too much thought.
5. When practicing the drills concentrate on one aspect of the stroke to reduce being overwhelmed.

# SWIMMING DRILLS: IMPROVE YOUR SPEED AND EFFICIENCY

---

## LEGS ONLY WITH BOARD

Hold a board, or outstretch both arms with your palms flat in the water, and kick. Keep the big toes tapping against each other as this stops you kicking too big, and ensures your leg kick keeps within the profile of the body.

Initiate the kick from the hip, not the knee, so the legs are kept straighter with the ankles a few centimetres apart. If the legs are kicking vigorously from the knee with the ankles flexed at 90 degrees, you are using a lot of strength to push the water in a direction that is not going to help you go forwards.

Kick with a higher frequency and smaller range of motion to a rhythm of 123,123,123,123.

The legs work closely together and should be relatively straight without locking the knee. Try to keep the ankles relaxed, big toes turned inwards and kick the feet up to the surface of the water without splashing.

A variation on this drill is **KICK ON SIDE, ARM OUT**. Lie on your side and kick a length of the pool with the bottom arm extended and the top arm at your side. Concentrate on feeling long.

# SWIMMING DRILLS: IMPROVE YOUR SPEED AND EFFICIENCY

---

## CATCH-UP

Catch-up helps you to improve timing and start the stroke from full extension.

Take a stroke, and leave an arm outstretched in front of you. Let the other hand catch-up and rest on top of the outstretched hand before you start the next stroke.

Variations on catch-up are:

**NEAR CATCH-UP** When catch up becomes familiar, move on to near catch-up, when you start to pull with the outstretched arm only when the other hand has almost caught up. This near catch-up style is the opposite of windmilling, where the arms are performing at opposites, and is good freestyle timing.

**ONE ARM CATCH-UP** Swum like regular freestyle, except one arm is stationary extended forward (front arm) while the other arm performs the stroke (working arm). When the working arm moves forward and catches up with the stationary arm, they change places. You can hold the caught-up position for 0, 1, or 2 seconds for differing effects. With no pause the arms are worked more, and with a longer pause the legs need to help more as you are pushing the flat (un-streamlined) body position forwards with the legs for longer.

# SWIMMING DRILLS: IMPROVE YOUR SPEED AND EFFICIENCY

---

## BLACK LINE DRILL

If you cannot swim in a straight line in open water you will add significant distance to a swim as there are no lane ropes or black lines to guide you. Black line drill helps ensure that you are pushing water to the back of the pool and moving forward in a straight line rather than snaking.

If you can get a lane to yourself, practice swimming in the middle of the lane keeping the black line you directly beneath you.

With your spine on top of the line, swim with your arms wide of the body but keeping the hands on top of the black line.

Focus on a good catch, keeping your fingertips pointing down through the stroke, and sending the water backwards towards your feet.

Allow your hands to slither (rather than do an exaggerated S) as it will keep you moving forwards. Arms sweeping too wide or too far across the body will encourage snaking. Try a few of these strokes with your eyes closed.

# SWIMMING DRILLS: IMPROVE YOUR SPEED AND EFFICIENCY

---

## SWIMMING WITH FISTS

This drill helps to promote a better feel for the water, by engaging the forearm in the catch. Swim front crawl as normal, but with your fingers closed into a fist.

Vary the pattern and the number of strokes that your fists are clenched. When you unclench your hand, you should notice a difference in pressure on your hand – use this feeling to keep your hand holding water as you move through your pull pattern.

When hands are clenched, you should also try to press on the water with the inside (palm side) of your forearm – think of the lower arm, from elbow to wrist, as an extension of your hand.

A variation on this drill is **SPLAYED FINGERS** Swim with fingers open and splayed.

---

## FINGER TRAIL/SHOULDER TAP

The aim of this drill is to promote a high elbow recovery and to make you aware of your hand position during recovery.

Finger trail is swum like regular freestyle, except your fingertips never leave the surface of the water as your arm moves forward during the stroke recovery. Focus on good body roll and keeping your elbows pointed up. If the body is fully rotated, the elbow will be in the highest possible position for the hands to clear the surface of the water.

Variations on this drill:

**HAND HEIGHTS** Change how much of your hand stays in the water: fingertips, hand, and wrist, even your whole forearm.

**TAP** Tap your hand against your shoulder or ear as it passes your head.

---

# SWIMMING DRILLS: IMPROVE YOUR SPEED AND EFFICIENCY

---

## SHOULDER TO CHIN

Lie kicking on your back with your arms by your sides.

Keeping the head still, rotate your shoulders around to chin, and lift them to touch it when you are nicely streamlined on your side, letting the hips follow. Most people can get each shoulder close to the chin.

Kick for 6 beats, then return to your back for 3 beats, and bring the other shoulder to your chin. This works on rotation the length of the pool.

---

## BREATHING EVERY 5 OR 7 STROKES

Use this drill to promote bilateral breathing, balance the stroke and develop a more efficient and effective stroke. Swim front crawl as normal and breathe every five or seven strokes.

Breathing to both sides (bilateral breathing) will help balance the stroke and give you a more symmetrical swimming stroke that utilises the major muscle groups of the back and shoulders. You will also have a better chance of learning to swim straight.

When swimming outdoors you may want to revert back to breathing on one side only so that you get plenty of air into your lungs, or if wind and waves makes bilateral breathing impossible.

If this technique is mastered the stroke will stay balanced even when you are breathing every two or four strokes.

---

# SWIMMING DRILLS: IMPROVE YOUR SPEED AND EFFICIENCY

---

## SCULLING

Sculling is a hand movement a swimmer can practice to help improve their feel for the water and the ability to hold onto the water. This will help you pull the body through and over the hand keeping your distance per stroke high.

On your stomach, with arms stretched out, place your palms together and thumbs up. Rotate hands so that thumbs are down (with hands apart) and move your palms outward while pushing water out just past shoulder width. Rotate hands to thumbs up and push water back in (almost a figure 8). Feeling the water pressure with your hands and arms should move you forward in the pool.

Keep your face in the water during the drill, raising your head to breathe while kicking.

The intricate hand movements of an efficient hand pull are not really something that can be taught; you could never calculate and implement the precise movements in degrees. Sculling will help you work them out for yourself and strengthen your hold on the water.

The more you swim, the more natural feel for the water can become. What makes it so important for open water swimmers is that you may catch choppy water or sitting on people's feet drafting. If you practice to achieve a really good feel for the water then you should be able to make best use of an erratic swimming environment.

# SWIMMING DRILLS: IMPROVE YOUR SPEED AND EFFICIENCY

---

## SCULLING

Variations on this drill:

**BASIC THREE HAND POSITION SCULL:** Head first, prone body position, arms out in front. Face down with a gentle flutter leg kick for balance, then scull with your hands in three positions:

1. Hands outstretched in front, palms facing down, waving at the bottom of the pool
2. Hands outstretched in front, pivot from the elbow, palms down about 20cm under the water level again waving at the bottom of the pool. The movement here is to originate from elbow with a steeper sweep of the hands.
3. Hands pointing down, underneath the elbow. In this position you can make use of the steepest sweep of the hands as you get to push the most water back and forth.

**BASIC FEET FIRST SCULL:** Lie flat in the water, facing the sky, ideally no legs. With your hands by your side and palms facing down, waving at the bottom of the pool, scull so you move forward feet first. Use a pull buoy to help keep the legs up if necessary.

**TREADING WATER:** Practice keeping afloat in the traditional treading water position without using your legs. The hands will sweep in and out creating lift and helping keep you afloat. Keep the elbows in at the side and the forearms horizontal as the hands sweep out and back. Don't bend your wrists and ensure the arm movement is smooth and continuous.

**FORWARDS VERTICAL:** With the body upright, feet pointing to the floor (no kick) head above the water, hands out in front, fingertips down. An effective scull movement should see you move vertically forwards.

# SWIMMING DRILLS: IMPROVE YOUR SPEED AND EFFICIENCY

---

## SCULLING

**BACKWARDS VERTICAL:** In the vertical treading water position, hands out in front, fingertips up. An effective scull movement should see you move vertically backwards.

**CHAIR:** A good scull workout combined with an abdominal exercise. Head is above the surface of the water, hands and arms in front of the body, fingertips down. Bring the knees up into the chest. A vigorous scull motion should move you forwards. Be careful the scull motion does not become a breaststroke arm action in an attempt to create speed. This position is also a great opportunity to check on hand positioning and finger spacing as you will soon struggle if you attempt to scull in the chair position with your fingers too wide apart.

### Sculling tips:

When you return to a full stroke, remember that the ideal pull moves from slow to fast. This avoids the issue of water slipping around the hand if you pull too hard too soon.

Sculling makes use of the forearm as an extension of the hand to increase the surface area of the usable paddle. The motion comes from the elbow not the wrist.

Movements of the hands should be symmetrical between left and right, keeping constant water pressure around the hands.

Don't cup the hands leaving the paddle smaller than it needs to be.

# SWIMMING DRILLS: IMPROVE YOUR SPEED AND EFFICIENCY

---

## EXTENSION DRILL

Starting out, the body should be rolled on one side, one arm extended from the shoulder, reaching out in front of the body. There should be very little space between the head and extending arm, and the body should be in alignment from the tips of fingers to the toes.

Hold on one side for ten seconds, then switch arms with a single stroke while the body rotates to the opposite side, the other arm now leading in front.

Maintain a steady, relaxed kicking style for balance. You may want to use fins to start with.

Breathe every six to 10 kicks, then roll into one full stroke to take you onto your other side.

The key pointers are:

- Shoulder to chin rotation.
- Legs kicking softly, keep the scissoring to a minimum by thinking of only kicking on a vertical plane. The body rotation will take the legs slightly off – hopefully not too much.

Extension drill will help the body align better. An improved and symmetrical degree of rotation through the upper body will help lift the trailing shoulder clear of the water giving the neck a smoother passage when turning the head to breathe. The nice thing about this drill is that it constantly mixes the drill with the full stroke!

# SWIMMING DRILLS: IMPROVE YOUR SPEED AND EFFICIENCY

---

## TORPEDO

This is an excellent drill as it allows swimmers to focus on their full body rotation and kick without having to worry about timing and the pull and recovery phase of the arms.

Put your head in the water, eyes focused on the bottom of the pool, and no head movement other than when you rotate to breathe. Rotate your body around the long axis, rolling fully from shoulder to shoulder, hip to hip. The arms remain by your side, staying relaxed and loose.

The width, depth and frequency of the kicking does not change. As we are ideally trying to spend the bulk of our time swimming on our side, rotating from one side to the other with the pause coming as the body is fully extended, it is very important to be able to maintain a light steady kick as the body goes through its rotation. Any fluctuations in the kick will result in a poor body position and excess lateral movements that will create more drag and slow you down.

Perform the same drill on your back. This variation of the drill benefits the same aspects of the stroke (rotation, kick, head position) and removes the task of having to rotate your head to breathe. This allows your focus to stay on rotating the body from side to side while keeping the head with a smooth and steady kick, in line with the rest of the body.

[Subscribe to Dan Bullock's Swim for Tri channel for training drill videos on YouTube Swim for Tri Channel](#)

# TRAINING PLAN: DESIGNING SWIMMING SESSIONS THAT SUIT YOU

---

**Swimming 10 kilometres is a big deal! For most people it is a similar challenge to running a marathon.**

Your aim is to swim three times a week with a short technical session, a fitness session and a long swim.

If you do not have the time in your week for a long swim or you dislike long swims you can choose to swim more frequently, say five times a week.

## SHORT TECHNICAL SESSION

Short technical sessions around 45 minutes a week focusing on drills and technique.

Use the Good Swim Technique section to diagnose your swimming weaknesses and the drills provided to work on body position, leg kick, arm pull and so on. For example, do four lengths of a drill, then two lengths of full stroke, building good technique in a drill. It can work to build your drills session around a weekly theme.

## FITNESS SESSION

Fitness sessions around 90 minutes a week, during which you may cover the same distance as a long swim with a focus on interval training.

A fitness session should be a traditional interval-based session (you push hard for a few lengths, take it easy for a few lengths, and so on). You could join Tri clubs and ASA masters swimming groups or swim fitness courses to boost your fitness training.

Being in a group is a great way to motivate yourself and it takes the pressure off – all you need to do is show up, and the session will be run for you.

# TRAINING PLAN: DESIGNING SWIMMING SESSIONS THAT SUIT YOU

---

## LONG SWIM

Long swims which will start at 2.5k and peak at 8k, 2-3 weeks before the event. Either a long continuous swim outside or steady-state swim in a pool where you should try not to touch the wall and keep it continuous.

### Enjoying your long swim

Some of the ways to make your long swim enjoyable are by swimming with others, swimming in a beautiful place and swimming outside. By the time you do your 8k swim three weeks before the event you'll be swimming for around two and a half hours, so it makes sense to find a way to enjoy it!

### Long swim training tips:

- 1. GET OUTDOORS!** Many outdoor swimmers will enjoy making at least a few of their long swims A to B swims in a river, sea or lake.
- 2. GET SOME COMPANY** Find other swimmers by joining your local outdoor swim group, see the Outdoor Swimming Society's [Wild Swim Groups web list](#) which feature swim groups by region hosted on Facebook or Instagram. Or use fitness apps such as Strava and Garmin to find others to train with.
- 3. SWIM IN A LIDO** A long one if possible. The less often you have to turn, the quicker the time will go.
- 4. VISIT AN OPEN WATER TRAINING VENUE** Here you will meet open water swimmers and triathletes and train in marked out courses (typically 1km-1 mile).
- 5. SWIM FOR A LENGTH OF TIME** Calculate how much time you are likely to take for your session rather than counting lengths – leaving your mind free to focus on your stroke and enjoying the feel of the water.
- 6. SPEND SOME QUALITY TIME IN OPEN WATER:** The more time you can spend in open water with a natural temperature, the better your acclimatisation will be for the day.

# TRAINING PLAN: DESIGNING SWIMMING SESSIONS THAT SUIT YOU

---

## SWIMMING SAFELY

You should be aware of the increased risks when doing a long outdoor swim, including getting cold, encountering watercraft and distance from the shore. These risks can be moderated with common sense; for example, by swimming with someone, wearing a brightly coloured hat, a tow float and swimming along the shore. See the Outdoor Swimming Society website's [Survive section](#).

You should refuel during sessions of an hour or more with energy drinks or gels.

---

## CROSS TRAINING

Pilates or yoga has a good cross-over effect as swimming is all about mobility and improving your range of motion will help your technique. Rowing is a great full body workout that incorporates many swimming muscles.

There are limited cross-over benefits from cycling and running as they use different muscle groups – although they will get you fitter.

# TRAINING PLAN: DESIGNING SWIMMING SESSIONS THAT SUIT YOU

## DESIGNING YOUR TRAINING PLAN AND FITNESS SESSIONS

[A printable version of this chart is available on the last page of this guide.](#)

Use this sample training plan along with other online resources to help design your own plan.

WEEKS TO SWIM	LONG SWIM AVERAGE TRAINING DISTANCE TO SWIM ONCE A WEEK	90 MINUTE FITNESS SESSION	45-60 MINUTE TECHNICAL SESSION (emphasis on drills and skills)	SWIM = TOTAL SWIM DISTANCE & TIME	NOTES
13	2.5km				
12	3km				
11	3km				
10	3km				
9	3.5km				
8	4km				
7	4.5km				
6	5km				
5	6km				
4	6.5km				
3	8km				
2	7km				
1	5km				

# TRAINING PLAN: DESIGNING SWIMMING SESSIONS THAT SUIT YOU

---

Endurance swimmers can struggle to construct enjoyable, testing swim sessions that help improve their technique, speed and stamina. While you may know the basics – warm-up first, work hard, warm-down – you may not know how to put together varied training sessions that will seem fresh and enjoyable after weeks or months of repetition.

To ensure that your sessions are giving you the best chance of physical improvement it is important to stick to a proven, solid session structure. Within the framework here there are elements that can be switched around and altered, such as drills, sets and exercises, so you can design your own sessions using well-known training principles.

A 90 minutes swim training session could be broken down as follows.

## Warm-up – 15% of the session (13/14 minutes)

The warm-up should be based around easy swimming to mobilise your muscles and encourage blood flow.

The warm-up often starts on dry land prior to getting in the pool for either a training session or race. Like a warm-up before a run, the idea is to warm and loosen the body ahead of a period of intense activity.

Usually this means an easy swim, predominantly front crawl (FC) or backstroke with some light drills thrown in. Swim aids such as paddles should be avoided due to the increased resistance they provide in the water.

# TRAINING PLAN: DESIGNING SWIMMING SESSIONS THAT SUIT YOU

---

Fly arms and breaststroke kick are also not usually used in the early parts of a warm-up due to the higher intensities they require. While you should be getting your heart rate going, you shouldn't be pushing it up too far at this point.

## First sub-set – 25% of the session (23 minutes)

This is an extension of the warm-up to build heart rate (HR) levels or to introduce some skills that need to be practiced while fresh.

## Main set – 40-50% of the session (between 36-45minutes)

This is a sustained period where your heart rate is elevated.

For the main set focus on the swim training plan, whether that is endurance, speed, technique, or a combination of all three. Exercises will be performed in a number of ways to promote these elements.

There are several training methods that can be used to promote and develop these aspects. While all should not be used in the same session, mixing them up will ensure that your time in the pool is well spent and never dull. Some of the more popular exercises and training variants are as follows.

## Interval sessions

When attempting a session, there are several ways the efforts can be increased to help elevate your heart rate. Four key areas are adjustable to make the session more intense and productive.

---

# TRAINING PLAN: DESIGNING SWIMMING SESSIONS THAT SUIT YOU

---

First, the distance of the repeats you swim. For example, if in week one you attempt 4 x 200m, by week four you should be attempting 4 x 300m. An example of an interval swim would be giving yourself 2 minutes to swim 100m front crawl in the first week, before attempting another repeat.

As your fitness improves you'll get more rest as you swim each 100m faster. After several weeks the interval might come down to 1:50 minutes.

The number of repeats swum may also be increased, adding to the intensity of the session. In the first week you may only make 5 x 100m on your interval before reaching exhaustion.

The following week you might aim for 8 x 100m on the same interval. The aim time is the final variable that can be manipulated. You might decide on 8 x 100m front crawl with an interval of 2 minutes but a target of 1:45 minutes, meaning you get 15 seconds rest before starting again. After four repeats at this pace the effort might be too much and you slip to 1:50 minutes. These are the benchmark times and efforts you should bear in mind and record on your training plan.

With a few weeks training hopefully you would improve and can try the 8 x 100m front crawl with an interval of 2 minutes with a time of 1:45 minutes. If you make the set, you might increase the number of repeats to 12 or bring the interval down to 1:50 minutes that'll encourage you towards a target of 1:40 minutes.

Your target time is often worked out using your best time and the percentage of effort needed for a particular set.

# TRAINING PLAN: DESIGNING SWIMMING SESSIONS THAT SUIT YOU

---

## Heart Rate (HR)

Instead of a time-based target, you could (with a heart rate monitor) base your fitness session intervals on heart rates. Your interval could also be HR-based leading to a set such as 8 x 100m front crawl with a target of 80% of your max HR and a resting period interval down to 60%.

This means that when you finished your 100m swim, you can check your HR to ensure it was 80% of your maximum. You would check it repeatedly until it fell to 60% of your maximum HR.

This style of training is highly individualised and would potentially cause some issues if done in a lane with four swimmers taking different approaches.

## Build swims

A build swim involves increasing pace and effort gradually throughout the duration of the assigned distance. You could either do this time-based or with effort levels. For instance, 6 x 300m build front crawl. The first 100m of the 300m should be at 60%, the second at 70% and the third at 80%.

For a time-based build swim, you could improve by approximately 5 seconds per 100m for the duration of the 300m. Despite differing effort levels between 100m, the 300m swim is continuous (the rest period will be taken after 300m). If there's a large wall-mounted clock to the side of your lanes you might be able to check your split times.

# TRAINING PLAN: DESIGNING SWIMMING SESSIONS THAT SUIT YOU

---

## Reducing/descending sets

A reducing set would mean that repeat after repeat gets quicker than the previous set. Targets could be assigned as either time-based or effort-based, depending on your preference.

For instance, if your main set is 4 x 200m front crawl, from 60% to maximum, the first set would be swum at 60% effort, the next at 75%, the third might be 85-90% and finally you'd finish the last at maximum effort.

From a time-based point of view, you should aim for specific target times. Now you'd reduce hitting 2:40 minutes on the first 200m, 2:30 minutes on the second, 2:20 minutes on the third and to finish with your best effort. A challenge might even be set that could be to try and break 2:15 minutes.

## Second sub-set – Optional, no more than 10% of the session (nine minutes)

This can be added to start a longer, more technical warm-down depending on the intensity of the main set. Sometimes this second sub-set will be used specifically for sprint work.

## Swim-down/cool-down – No more than 10% (five to 10 minutes)

Easy swimming at the end of the session is vital, as it aids recovery from a tough training session. It usually takes the form of a sustained easy swim to help remove the lactic acid build-up in the body and return HR and rates of breathing back to normal levels. A training session would always finish with a 200-400m cool-down, perhaps longer if the session has been especially intense.

# THE PSYCHOLOGY OF LONG-DISTANCE SWIMMING

---

## Cold water acclimatisation

It's the perfect season to go open water swimming. Substitute the technique session every time for being outdoors. A wetsuit takes getting used to, however, it provides safety and comfort. If you can mix wetsuit and skins swimming when in open water you will acclimatise better.

A resource to inform and inspire your open water swims is [The Outdoor Swimmers' Handbook](#) by Kate Rew

## WHILE TRAINING

Keep a training log of kilometres swum on a weekly basis, then if you hit a low patch you can look at what you've accomplished, this is a good psychological boost to keep you training.

Don't panic if you can't swim for a week. The body is quite adaptable and versatile, if you can still build to the bigger numbers you have lengths in the bank, a week of being ill is not going to evaporate all that training.

If something starts to twinge RICE (Rest. Ice. Compression. Elevation). If something is repeating you need to get technique checked, as good technique minimises stress on body. If you think of how many repetitions over the 10k you don't want to be loading joints incorrectly. Don't run the risk of long-term damage – if something feels wrong, adjust your stroke, take a rest, get your technique checked with a local coach, see a physio or get a sports massage. Try to manage it and work with it; be sensible.

## THE SWIM ITSELF

Visualise the 10k swim course. Compared to swimming in a pool anything outdoors is infinitely more interesting – so look forward to the swim, enjoy the scenery and the atmosphere. When you compare it to time in the pool counting tiles, the natural beauty of it is likely to make the distance fly by.

If you need, roll on your back for a few strokes and soak up some sun, there are very few marathon runners who don't stop and walk now and then. Relax and enjoy it! This is the key to a good long swim.

Remember some pain is inevitable, but suffering is optional. Chances are you can do the 10k without any issues, however, if you do have any problems, try focusing on your stroke, your technique, the other swimmers, or your chosen charity. Anything but the question: shall I stop now? Tell yourself you can do this. Feel proud.

[Kate Rew, Dan Bullock and the rest of The OSS team.](#)

WEEKS TO SWIM	LONG SWIM AVERAGE TRAINING DISTANCE TO SWIM ONCE A WEEK	90 MINUTE FITNESS SESSION	45-60 MINUTE TECHNICAL SESSION (emphasis on drills and skills)	SWIM = TOTAL SWIM DISTANCE & TIME	NOTES
13	2.5km				
12	3km				
11	3km				
10	3km				
9	3.5km				
8	4km				
7	4.5km				
6	5km				
5	6km				
4	6.5km				
3	8km				
2	7km				
1	5km				