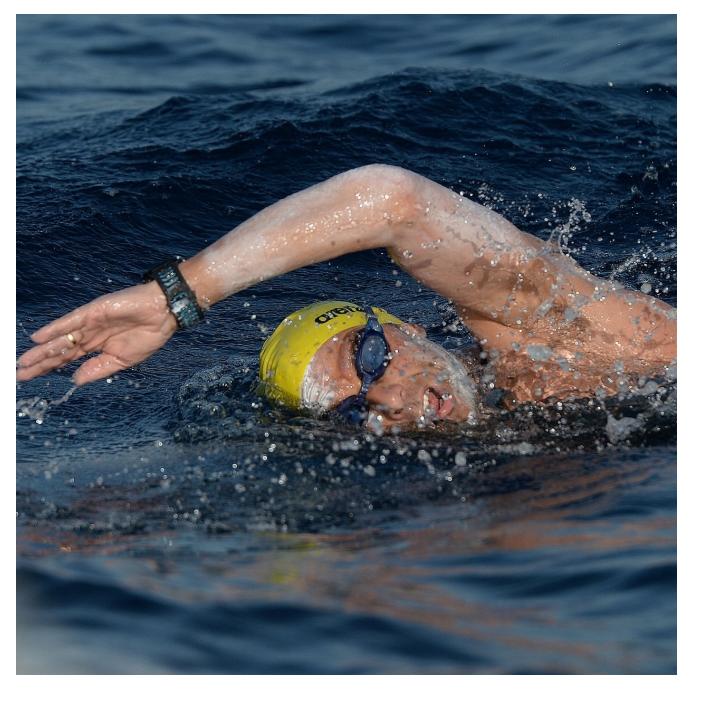






### SWIM GUIDE





**GETTING STARTED** 

### GETTING STARTED 10 TOP TIPS

### 1. Performance athlete

If you want to be a better swimmer tomorrow than you are today then it's time to call yourself a performance athlete and start making the right mental affirmations to commit to the training you need to do to develop.

### 2. Have a routine

Your body likes to work hard. Give it a routine and it will adapt and start to become fitter. Get used to being an athlete in training & being organised with sleep, food, fitting in the training, stretching and exercises. Plan each day and think ahead to fit it all in!

### 3. Safety first

Swimming in open water requires respect. Look at the technique and tips in this guide but always seek the advice of a professional before training on your

### 4. Technique focused

We've included some basic tips on swimming technique in this guide. Focusing on technique is key for success.

### 5. Monitor your energy

Swimming can sometimes but a real strain on the body. Remember recovery is critical and be prepared ot cut back if you need to to keep energised and enjoying the training.

## GETTING STARTED 10 TOP 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 some 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.

### 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 & recover

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

### 10. Keep it social

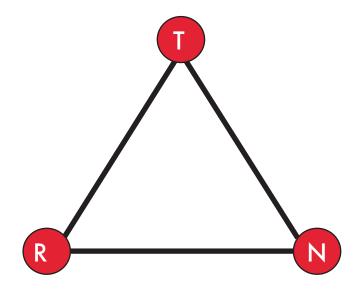
Endruance sport can be very sociable. You will find it easier to keep the consistency of your training if you can link up with others prepared to train with you.

### GETTING STARTED 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 considered as much focus and attention. As you increase your training keep the triangle in balance by improving your nutrition by ensuring you listen to you 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**

You training and conditioning 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 you blood, bones and immune system healthy.



THE TRAINING

## THE TRAINING GLOSSARY

### Rest

To help your body cope with the workload, rest is going to be as important a part of your training schedule as the swimming itself. Listen to your body and take heed of any warning signs. If you feel fatigued even before you've stepped in the pool, find yourself thinking up excuses not to train 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 Sessions**

To see improvement without breaking down, you' Il need some recovery sessions. These should be nice and easy and you should feel relaxed. You should be breathing easily. You should be training in the 60-70% range of your Maximum Heart Rate (MHR). Using a swimming Heart Rate strap will give you the reading at the end of the session hence you can estimate your pace for these sessions. If in doubt about your intensity check your session with your coach. Recovery swims also help with the removal of the waste products which accumulate in your muscles after harder efforts.

### **Threshold Sessions**

Threshold sessions are probably your most valuable workouts. They are completed at a controlled brisk effort, about 80-85% of your MHR. Using a swimming Heart Rate strap will give you the reading at the end of the session hence you can estimate your pace for these sessions. If in doubt about your intensity check your session with your coach. Tempo/threshold swim sessions, improve your lactate threshold (the speed above which your body struggles to cope with the lactic acid created by burning energy without oxygen, your economy and aerobic capacity.

### **Interval Training (IT)**

Intervals help to boost specific race pace speed and involve swimming 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.

### Warming Up/Warm down (WU)

When you are going to do any faster training such it is important to warm up gradually. A 10-15 minute easy swim, lets your muscles warm up and improve their range of movement.

# THE TRAINING swim technique tips

- 1) Aim to feel a 'surge' forward over your hand in the water in conjunction with a well streamlined body position.
- 2) Try breathing to both sides i.e. every third stroke to help balance your stroke. It is very useful to be able to breath to both sides as you may need this if it gets choppy in open water. In the race itself breathing every second stroke is recommended so one trick in the pool is to breath to the left going down the pool and to the right coming back up the pool. Whilst swimming ensure you fully exhale under the water before turning your head to the side to breathe.
- 3) At a more advanced level your should aim to be able to swim slow, medium and fast, yet still take a similar number of strokes per length. Speed should not mean a lot more strokes.
- 4) When swimming a steady 400m in a 25m pool, count strokes on lengths 4,8,12 and 16. When this stroke count starts to remain constant it is a good sign that the mechanics of the stroke are not tiring you out.
- 5) The stroke should never feel so rushed that you are uncomfortable when trying to get a breath. It is not easy to relax until your technique improves allowing more time for more air.
- 6) Kick your legs! Not necessarily for propulsion but to keep your hips and legs high in the water and improve your body position. Kick from your hip with straight legs especially as you kick up to the surface. Small efficient kicks are the best way to achieve this.
- 7) Think about where your kick originates from? Knees or hips? Try not to bend the legs as you kick up, aim to lift a straight leg up to the surface with the Glutes rather than the hamstrings.
- 8) Aim for general relaxed state and a feeling of being very comfortable in the water. Being able to exhale under the water and inhale above the water and feel very much in control of this action.
- 9) As you get fitter aim for the ability to start 'even splitting' or at some point 'negative splitting' your longer swims. This means covering the second half of a swim faster than the first.
- 10) The ability to use a central snorkel without a nose clip is a great sign that you are relaxed in the water.

### THE TRAINING Swim tips

### Warm Up

Don't get in the pool and begin swimming lengths before you are warmed up. Start your session by completing a few mobility drills and then gliding or very easy swimming. This gets the blood flowing and your body gets used to the temperature and feel of the water.

### **Practice Your Breathing**

After you've done some gliding, try going on your side and getting some breathing practice. Breathing is the key to a successful stroke alongside remaining relaxed

### Check The Swimming Pool Session Times

Book and choose the best time slot for you! Many swimming pools now have allocated sessions when the lanes are sectioned off. Outside of lane sessions you could be weaving in and out of other swimming pool users which can be really frustrating!

### Look After Your Kit

You should wash your swimming gear thoroughly after each swim to ensure that you are getting rid of the chlorine. This will help to prolong its life and also prevents hygiene issues.

### **Choosing Your Gear**

Choose carefully and make sure you aren't just buying what looks good but what is actually practical. Take advice before purchasing swim suits, any wetsuit if open water swimming and various training aids. Fins and many other pieces of kit can be great for training technique but get expert tuition on how to use them and develop your stroke.

### Get A Plastic Box For Your Gear

Go to any of the DIY warehouses and buy one of the plastic tubs that you use for home storage. Throwing wet gear into one after a swim is a lot more sensible than putting it into a sports bag, especially if open water training.

### Wear A Swimming Cap

Regular use of a heavily chlorinated pool or swimming outdoors can affect your scalp and on occasions make it sore. Avoid this by wearing an inexpensive cap — it can make all the difference, improves hygiene and can help with speed.

### **De-Mist Your Goggles**

Goggles are an essential part of swimming correctly and they can mist up if they are not looked after. Get some de-misting fluid or mix equal parts of liquid soap to water and spray the googles before each swim. Change your goggles to fit with the light and pool conditions. This can be even more important if swimming in open water where visibility is reduced. Take advice from an expert retailer before purchase. Make sure the goggles remain comfortable and don't move...being able to wear a pair for over an hour without issues is essential..

### THE TRAINING Swim tips

### Think hydration and fuel

This may sound obvious but many swim sessions are early morning. Snack on good carbohydrates before a longer session and be sure to have eaten well the day/evening before. Take a sports drink poolside or to the lake and sip on this throughout a longer session. Consider taking gels in swim sessions if training for long event as maintaining energy levels within the session and on event day is essential. Also focus on maintaining electrolytes to avoid cramping and further dehydration issues.

### Recovery is key

Training alongside a busy life can be tiring and there will be days when everything catches up with you. Never be frightened to drop a days training or reduce volume if fatigue has hit. Building endurance is not an exact science and its consistency over weeks and months that counts alongside you listening to your body. Focus on good sleep and always try to eat healthy meals with good snacks between to retain energy for building fitness. Get your recovery strategy right and you will get fitter!

### Easy days and hard days

Focus on mixing the efforts levels in training each week. Try not to always swim or train at the same intensity. There should be a mix of the odd harder days balanced along-side longer easy effort days to build endurance and some lighter recovery sessions. This change in stimulus builds fitness and true endurance avoiding excessive fatigue and overtraining.

### Use X training...it works!

We definitely recommend working on your core muscles for strength and even seeing a PT or conditioning coach for specific swim /dry land training work if you are serious. Our core routine will help you build core fitness retaining good technique for longer whilst reducing injury risk. Consider adding just a couple of 20 minute core routines a week as a mini circuit as indicated in our plans.

### Consistency is key for endurance

We know life will sometimes take over and sessions might be missed. Set a realistic training load and routine each week and then aim to stick to it if you can. 3 swim sessions a week over a few months will build greater fitness than 6 sessions week one (as you were keen) then 1 session the week after due to exhaustion and a lack of motivation. Consistency is the biggest variable in building endurance to swim well alongside good recovery.

### Find a group and consider expert tuition/coaching?

If really keen to build better technique and swim with others then we suggest finding a good local coach or group. An experienced coach can knock huge chunks of time off your swims. If your swim event involves open water then we definitely advise a few sessions in open water to get used to the demands and environment. Sessions with an expert coach in this area can build confidence and again assist with technique, safety and routine. Check with your club buddies for advise about local swimming coaches.

### THE TRAINING

### Open water swim tips

Open water safety, training and event day

You are lucky enough to be surrounded by beautiful seas. Join swimming groups to practice open water swimming.

### Get a Wetsuit

If you don't have a wetsuit, you should definitely invest in one. Make sure it is fitted correctly and speak to industry retail experts for best advice on style and warmth. Not only will it keep you warm, but more importantly it will provide extra buoyancy, helping to keep you on top of the water and making it easier to swim. This can really boost confidence.

Be sure to swim in it a few times also before any big event. Perhaps try a few sessions and one of your bigger swims in open water and in the wetsuit.

### **Goggle Selection**

Goggles come in in all shapes and sizes as does our weather! They also come in a variety of colors but choose the right pair for your event and the conditions always. When it comes to swimming outside, making the proper goggle selection will make a big difference to vision safety and confidence in the water.

Selection is determined based upon the weather conditions. For example, on a cloudy or rainy day, you may choose to wear goggles with clear, light blue or yellow lenses. These options will help brighten up your surroundings and make it easier to see. On the contrary, if it's a bright and sunny day or if you're swimming in the morning and the sun may rise while you're in the water, "mirrored" or "smoke" lenses are your best bet. Speak to your local retail expert for best advice on purchase.

### Warm Up (10-15 minutes)

We recommend you warm up before all warm up before all of your training swims and race day should be no different. It is a good idea to get in the water (if permitted) prior to your wave going off or session starting to warm up. Give yourself 10 minutes to get warm. Not only will this help get your blood flowing and prepare your body to swim; it will also give you a chance to become comfortable in the water gradually.

Walk in slowing, wade a bit, get a feel for the temperature and take a peak to see what the visibility is like under the water. This will all help give you reassurance and make you feel more confident of the conditions and surroundings.

### THE TRAINING

### Open water swim tips

### Think fuel & hydration

This may sound obvious but with longer swims, especially over a mile in distance, fuel becomes a real issue along with hydration. Yes, it is definitely possible to dehydrate in when in water!

Avoiding cramp is also key and therefore retaining your electrolyte balance becomes important. Eat a good carbohydrate focused snack or light meal an hour or two before a longer swim session or event and make sure you are hydrated before you start. Consider using sports drinks with electrolytes and energy in very long swims of 5k-10k and taking on fuel. Have mini breaks to allowing this will be key. Even consider gels to boost energy uptake along the way every 20-40 minutes.

There are many great brands on the market but try the drinks and gels in training before the event day.

### Finally....

Relax and enjoy the open water experience. The more relaxed you are the better you will swim and try to embrace the feeling of freedom. Take your time, always stay safe and fuel well.



STRONG & INJURY FREE

### STRONG & INJURY FREE KEY STRETCHES

### **Glutes**

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



### **Lower back**

Lay on back. Bring one leg up to chest and rotate to lower 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.



### Hamstring (origin)

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



### Quads

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



### Hamstring (belly)

Lay on 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.



### **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.



## STRONG & INJURY FREE KEY STRETCHES

### **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.



### Key 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.

## STRONG & INJURY FREE 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 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 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.



## STRONG & INJURY FREE 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.

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





ENERGY, VITALITY & ADAPTATION

### ENERGY & ADAPTATION NUTRITION & RECOVERY

### **Balance the triangle**

Nutrition is one of key elements of our training triangle. 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 science and research so here we cover just the basic tips to keep you running strongly!

### Never hungry, never overfull

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

### 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.

### **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!

### **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.

### **Depleted runs**

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

### ENERGY & ADAPTATION NUTRITION & RECOVERY

### **Monitor your health**

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

### 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.

### 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.

### 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 up 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.

### 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 back off and take an extra rest day and adapt your plan if needed. Consistency is vital!

