## CHRISSIE'S GUDETO GUDETO GUDETO THEOPEN THEOPEN VALER

For many aspiring triathletes, the swim poses one of the biggest challenges. Fortunately for you, four-time World Ironman Champion **Chrissie Wellington** is on hand to provide an exhaustive guide to the open water. In the first of a two-part series, Chrissie talks gear, mental preparation, race starts and swim skills...

PART1

y first race in 2006 was the National Sprint Championships in Redditch. I borrowed a wetsuit. It didn't fit. I got in the 14°C water. The gun went off. My wetsuit flooded. I couldn't get my arms out of the water, let alone swim, and had to be rescued by a kayaker. Not the most auspicious start to an age-group triatblop career. So when 220

an age-group triathlon career. So when 220 asked me to pen a definitive guide to openwater swimming, I was somewhat hesitant. Surely there are better people for the job, I asked? Like the orange lifeguard training dummy that generally lies at the bottom of the pool? Such claims fell on water-filled deaf ears.

So here you have it. This guide is a compilation of material from a wide variety of sources (many a lot more experienced than I, such as my coach, Dave Scott). Some of the information I gleaned through personal trial-and-many-an-error, with the gaps filled through extensive reading and researching. So, whether a novice, intermediate or advanced swimmer, I hope the following information provides you with top tips for coming out of the open water faster than you can say Michael Phelps, or at least 'swim cut-off time'.

#### **COMFORT FIRST**

BASDEN

G EARL

The open water can be a scary experience. There's no black stripe to follow and no side/ lane rope to hang onto. Aquatic creatures lurk beneath, two-legged creatures flail around you, the water can be choppy, it can be cold, it can be full of floating detritus. Yet open-water swimming can be a wonderfully liberating, fulfilling and enjoyable activity. And even if it isn't, it usually forms the first part of a triathlon race, so if you want to get onto the bike you'll need to be able to get through it!

You have to feel comfortable in open water before you can really enjoy it. And to feel comfortable, you have to understand both the water, yourself, and be confident that you can handle both the expected and the unexpected.

#### **BE HONEST**

Before entering a race, beginners should ask themselves the following questions: in the pool, do I grab the wall at each turn to get some rest or a little more breath? Can I stay afloat while coughing after swallowing a mouthful of water, or do I hang onto the lane rope? Can I keep swimming when I get a side stitch, calf or foot cramp? Have I managed to swim the entire race distance in training without collapsing in a heap? Can I swim underwater/with my eyes closed for a few seconds without feeling claustrophobic?

Think carefully about your answers, and if you're not confident in your ability to cope then maybe you should spend a little more time in the pool before you embark on your first race. If you've never swum a race in open water before, I suggest entering a sprint triathlon with more predictable conditions: a rowing lake such as the one at Dorney is ideal, or a river/canal swim with no/ limited currents. This will help build your experience and your confidence. Ocean swims, with waves, currents and tides, can pose problems and may not be the best option for a novice.

Obviously front crawl is the quickest way of getting from A to B, but doing front crawl is never compulsory. You can do breaststroke, backstroke or even doggy paddle, as long as you make the cut-off time. But don't go into a race with the attitude that someone will be there to bail you out in times of trouble. Yes, safety personnel are always on hand, but it's your responsibility to ensure you can complete the swim safely and under your own steam.

As with anything, practice really does make perfect. As obvious as this may sound, the best way to get used to swimming in open water is to swim in open water, both in training and by gaining experience in races. If you have a chance to train in the open water, take advantage of it. For safety, it's always a good idea to swim with others.

If you can't practise in open water, don't worry. This guide will give you tips for developing the skills that you'll need to be able to perform on race day. Enjoy the water!





It doesn't have to be expensive, but it has to be correct. Here Chrissie tells you what swim kit you'll need and how to make sure it remains in race-ready condition...

**SWIMSUIT** Mainly for training. It's worth investing in a swimsuit made out of long lasting, endurance fabric to prevent premature wear and unsightly bum cracks. Rinse your suit with warm water after each swim.

**GOGGLES** Find a pair you're comfortable with and allows you to see very well (spit is the best anti-fogging agent around). Make sure they're tight but not so tight as to cause pain.

Always inspect your goggles the day before your race: pull the straps gently and look for any wear and tear, especially at the clips where the straps are secured (sun, chlorine and moisture all add to the elements that can cause a strap to break, so keep your goggles dry and wrapped in a towel when not in use).

I always go to a race with two pairs of goggles: a tinted pair for sunny days and a clear pair for dark days. I use practically new goggles in races, which I'll only have worn for one practice swim.

If you have a ponytail, tie it at the nape of your neck (so the strap is above the bulge).

**SWIM CAP** I use a silicon cap in training which, although more expensive, is much more durable than latex.

You will usually get given a specific, colour-coded cap to wear in the race. If possible, try the race cap on the day before, carefully stretch it a little if it feels too tight. You might consider placing your goggle strap under your cap to prevent any movement and/or loss during in the swim.

**SILICON EAR PLUGS** Very useful if you suffer ear infections and/or if the water is cold.

**LUBRICANT** Chaffing is a triathlete's worst enemy. It can occur in areas of your body that rub together, such as the underarm or between the legs, the neck/armpits while wearing a wetsuit or underneath the timing chip strap. It's often worse in the sea, where salt creates extra friction.

Vaseline is an easy solution, though it can cause wetsuit neoprene to deteriorate over time. If you do use Vaseline then applying it with a rubber glove or bag over your hand is a good idea (oily hands affect the catch in the swim). Many athletes use cooking spray for lubrication, in particular an American brand called Pam. There are also some great wetsuit-friendly lubricants around, and many come in a convenient roll-on stick.

FLIP FLOPS Buy some cheap, throwaway slippers/flip flops to wear down to the swim start; they'll keep your feet warm and prevent any cuts on sharp objects.

**WETSUIT** Wetsuits are made of a flexible and soft material called neoprene, which allows a

thin layer of water to sit between your skin and the suit. This water quickly warms up and the insulation keeps you warm. Of course, it's important that as little water as possible enters the suit and isn't being constantly replaced by cold water flushing through. This is why wetsuits should fit snuggly. In addition to warmth, wetsuits provide buoyancy, assist in form and technique, reduce drag and help protect against sharp objects and flailing limbs.

There are regulations about when you can and can't wear a wetsuit, based on the water temperature. But check with the race organiser as rules for this can vary. Above a pre-specified cut-off water temperature wetsuits aren't allowed, and you can either choose to wear only your race kit, a speed-suit over the top of your race kit (check the race-specific rules regarding use) or a swimsuit, which you may then need to change in T1 if you want to wear something different for the bike. If you choose to wear your race kit/tri-suit, remember that any pockets will fill with water and act like a drag belt, slowing you down.

**EXTRAS** Don't shave right before the race – razor burn and salt water, need I say more?! Make sure your nails are short – long nails rip through wetsuit rubber. If you have to have long nails consider wearing thin gloves when putting the suit on. And remove any jewellery – it's very enticing for someone to grab on to.

#### CHRISSIE'S GUIDE TO OPEN WATER

## **CHOOSING A WETSUIT**

#### FIT

Trying before buying is crucial when first purchasing a wetsuit and/or if your body shape has changed significantly. Remember that not all manufacturers use the same body proportions, so a medium in one may be totally different to a medium in another. There are women-specific suits, although I know of many women who actually prefer men's suits due to their body type.
Neoprene is a stretchable fabric that loosens with wear and relaxes in water, so make sure that the fit is snug when you first try it on. A properly fitting wetsuit will make contact over most of the area it covers, leaving as little space as possible between it and your skin. Special coatings are found on almost all tri wetsuits to reduce

 Thicker material is generally used in the chest, stomach and legs to help with buoyancy. The thinner and generally more flexible material should be around your shoulders and arms to allow for freer, unrestricted movement. Make sure you have a good arm reach.

 The neck shouldn't be too high or feel constrictive, although there should be a good seal to prevent the wetsuit 'flooding' with water (the same goes for the cuffs on the wrists and ankles).

• I often cut the legs of my wetsuits by an inch or two to make it easier to slip over my large feet in transition.

#### PRICE

• Suits range from an entry-level around the £150 mark through to top-end suits for £400 plus. I would opt for a mid-range wetsuit, unless your budget is very tight, and get a top-of-the-range wettie if your coffers are overflowing with cash.

• If you're on a budget it's worth looking into end-of-year or end-of-range bargains in the winter sales or considering an ex-hire suit. Major races like London actually operate their own hire suit service (wetsuithire. co.uk) and will let you keep the suit for the entire season for a fraction of the cost of buying it.

#### SLEEVEDORSLEEVELESS

• Many of you will race solely in the UK and/or Europe where overheating on the swim is less of/not an issue, so a sleeved wetsuit will provide more warmth.

• As long as the wetsuit fits properly, 99% of the time a swimmer will be faster in a full wetsuit. And that's the key – the wetsuit must fit properly so as not to be constrictive around the shoulders and arms.

• Although you may be slightly more mobile in a sleeveless wetsuit, it can be hard to get a good seal around the armpit and shoulder, and hence there's an increased risk of water entering the suit as you swim, increasing drag, chaffing and exposure to cold water.

#### **METHODS TO AVOID THE COLD**

Wear a good quality wetsuit that fits snuggly but not tightly.
Pee in your wetsuit before the start.

• Wear two caps. You lose most of your heat through your head, and doubling up helps you to retain that heat. Make sure the allocated coloured race cap is on top. You could also use a neoprene cap beneath it if the water is very cold.

• Wear silicon earplugs as they'll help to keep your core temperature up.

• Practise in cold water in

the weeks before your race to prevent panic and hyperventilation.

#### • Go waist deep into the water, splash your face with water and slowly submerge your face to blow bubbles. This will help to alleviate the shock of the

of choice is Tyr's £1,280 Freak of Nature. But don't worry – you can buy a decent suit from £150

Chrissie's weapon

#### cold temperature.

• Some people like to keep their warm-up very short if the water is cold, while others prefer a longer warm-up to help them get used to the temperature. But this one really comes down to personal preference.

## **PRE-RACE** & RACE DAY

Water temperature, buoy locations, position of the sun and where to warm-up. Chrissie leaves no stone unturned when gearing up for the race start...

rior to your race make sure you're clued up on what awaits you. Surf the respective triathlon event website, look at the athlete's guide and course maps, and seek advice and insights from athletes who've done the race before.

For the swim, make sure you know the exact distance you'll need to cover and the type of open water you'll be swimming in. For example, canal, sea, river... Beginners, in particular, need to ensure they're able to complete the distance in the allocated timeframe before entering the race, but regardless of ability it's always good to be aware of the swim cut-off time.

The race rules are there for a reason – for your safety and wellbeing [see p45 for more on triathlon rules]. For the swim, read up on the rules regarding wetsuits (and clothing, in general) and water temperatures.

Consider what type of start it will be – deep water, beach or (rarely) a dive start. And whether it's a mass start (every athlete starts at the same time) or a wave start (when athletes are divided up, usually by age-group category). Finally, check your start time and find out where you can do a warm-up and for how long.

#### **KNOW THE COURSE**

If you get chance to swim the course prior to the race, ideal! But this is rare so, usually on race day, familiarise yourself with the swim entrance and exit, swim direction (clockwise or anticlockwise) and the location of (and distance between) the buoys. Also look for land-based landmarks before you take to the water. Work out whether the sun will be in your eyes and plan your goggle choice accordingly.

If it's a major event that uses a public stretch of water, like the sea, then you might get the chance to do a practice swim prior to the race. This can be invaluable in helping you establish sight lines and land-based markers around the course, and enable you to become familiar with the conditions, although these may change come race day. If you don't have this option, still find out about the water conditions, such as tides, currents, the ocean floor or hazards.

And, finally, know the lay out of transition: the swim exit, change tents, your bike rack, and the bike and run exits.

#### **MENTAL PREP**

**Every athlete will** get slightly nervous before a race. It's a sign of how much time, energy, commitment and emotion you've invested, and how much you care. It's vital that you focus on yourself and not on others around you, and that you concentrate on what you can control, rather than what you can't.

AUTO

**Spend 10 minutes** or so before your final warm-up – see right – to find a calm area to sit down, take deep, slow and rhythmical breaths and visualise the race. You may wish to use an iPod if you find music to be a calming/motivational tool. Fill your mind with positive thoughts, recall your motivations and inspirations, repeat your personal mantra, and picture yourself as strong, confident and successful in each of the three disciplines.

**Know that you** have done all you can to prepare. Try to seize the moment, enjoy your surroundings and celebrate being able to take part in an amazing race.





## **GETTING INTO YOUR WETSUIT**

**Leave plenty of time** to get into your wetsuit before the race start. While you may all have your own special way of donning the neoprene, here is my tried-and-tested six-step method...



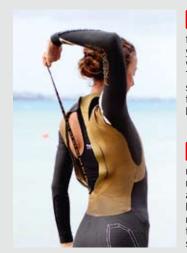
Put wetsuit n lubricant on any areas prone to chaffing. Prepare the suit by unzipping and rolling it inside out down to half a leg. Put your foot in a thin plastic bag and then slip it into the leg pulling the suit up as you go. Peel the bag off your foot and repeat on the other leg. This helps you to put the legs of the wetsuit on a lot more easily.



2 Pull the wetsuit up over your thighs; make sure it's pulled up snugly into the crotch. If your crotch area is sagging, the suit will be too tight at the shoulders and chest.

Bull the sleeves on over the arms. Make sure the armpit area is pulled up, similar to the crotch.





Pull the zip up, or get a friend to do that for you, and secure any velcro fastenings. The zip 'strap' should be under the fastening and hang over the top.

Bend forwards and make sure that any rolls of neoprene are worked out, by hoisting the material upwards towards the shoulders.





6 Put some extra lubricant around the neck, and at the bottom of the legs to help wetsuit removal in transition.

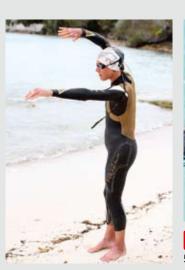
**I do my swim warm-up** at least 15 minutes before the gun. I do a swim warm-up and only a swim warm-up, as I want all the blood to be in my arms and not my legs. If you want to do a bike or run warm-up then obviously do that first.



enter the water I always swing my arms slowly (forward and back) to loosen them off.

Before I

2 Then work through some stroke patterns to activate the relevant muscles.





In the water, I usually do a 10-minute warm-up (with some 10-15-second speed pick ups) and then get to the start line 5 minutes before the gun to create a space for myself.



## **RACE START**

Open-water starts can be the most daunting part of any tri. But, with Chrissie's advice, it doesn't have to be that way. Here Wellie serves up her world-beating tips on controlled breathing, avoiding the melée, the dolphin technique and more...

es, the open-water swim start can be a daunting experience - there's no point suggesting otherwise but it's not nearly as hard, difficult or scary as you might imagine. Much of the anxiety comes from extrinsic factors in the aquatic environment around you - depth, cold, lack of vision and having other swimmers within close proximity. The key at the start, and during the race, is to avoid panting or holding your breath. Holding your breath increases anxiety further, things start to feel out of control and you may begin to panic. If you feel yourself becoming anxious, focus on intrinsic factors that you can control, especially calm and controlled breathing, long exhales in the water and smooth hand entry and arm strokes.

#### **START TYPES**

Generally, there are three different types of starts: deep water (floating), a beach start (on the beach, or ankle-to-knee deep) and dive starts (unusual in long and age-group racing). If you're not in the first waves/heat, watch the earlier waves to see the route taken to the first buoy. This'll give an indication of currents and the best line to take depending on experience.

Beginners should position themselves at the back or the side of the start group, to give themselves a clearer area of water and avoid the main melée. Yes, you may swim further than those who start at the front or middle of the pack, but you'll reduce the risk of panic or disruption. You could also delay your start slightly to allow the other swimmers to take off, giving you a clear space of water. Beginners should stick to the outside of the course over the inside because of the turns around the buoys, while experienced athletes should take the shortest distance to the first buoy.

#### **DEEP-WATER FLOATING START**



You will need to skull on the start line, your heels should to be close to the surface of the water and behind you, with your head up and forwards (but don't lift your neck too high).





2 I try to use wide sweeping movements with my arms and legs to create some extra space for myself. Athletes will jostle for position, and will creep forward in anticipation of the gun going off.

Be aware of what is happening around you, and as soon as the cannon sounds use a whip kick or side scissor kick to quick start your acceleration. This can be practised in the deep end of a swimming pool. Move into your normal swim pattern.



## **BEACH START**

**Beginners should simply** walk into the water as far as they can until it's deep enough to start swimming. Lean slightly forward to stop any waves knocking you over. More experienced triathletes will 'dolphin' to quickly move from shallow to deep water. My dolphin technique is as follows...



Get as good a run down from the beach to the water's edge as you can. Granted, you'll be doing this with a lot of people around you. But do your best to focus on your race and getting as much speed up as you can into the water.



2 Enter and run through the water until it reaches about knee-height. At that point, do a high-knee run, lifting your legs out of the water.



When the water is above knee-height, take a shallow dive or leap forward, gliding for a few yards under water (don't dive too deep), grab the sand with your hands to stop you being forced back by a wave, and bring your feet under your hands to prepare for the push-off.



Use your feet to push forward at an angle so you break the surface. Then take a breath and dive just under the surface of the water again. When 'dolphining'. keep your head tucked between your outstretched arms with your biceps squeezing your ears. When it's deep enough, start swimming.



# **SWIM SKILLS**

### PACING

**Pacing is critical** no matter what your ability, and you need to assess your strengths in relation to the race distance. When competing at an Olympic- or sprint-distance race, the swim pace tends to be higher, and the outcome of the swim is more critical to your overall success than if you're racing a long-course event. Here's what to do...

t's important to remember that pool swimming can be very different to open-water swimming, in terms of strategy, pacing and technique. For triathlon swimming we need a technique that is both fast and efficient, allows us to best cope with the often chaotic conditions of open water, that is not easily disrupted by other swimmers and that also enables us to conserve energy for the bike and run to follow.

As a beginner, I'd suggest starting out, and staying, at a steady and relaxed pace. Starting out too hard on the swim will cause your heart rate to 'spike' or shoot up to anaerobic levels, leaving you in oxygen debt at the onset of the race and forcing you to try and 'catch your breath' during the 'settling in' period.

If you find yourself panicking, try not to immediately flip over onto your back and take large gasps of air. This can cause hyperventilation, causing your heart rate to quickly increase and dizziness. Instead, stay face-down, turn your head to get a good breath of air, then put your face in the water, and focus on blowing bubbles at a steady rate in order to regulate your breathing and calm yourself.

If you want to stop, slowly twist your head to the side, breathe, lift your head out of the water, and either do a few strokes of breaststroke or tread water. Then take long slow breaths, look around, find your bearings and slowly start swimming again when you feel ready.

More experienced swimmers should swim hard for the first 200m to place yourself within a fast swim pack. This means about 75-80% of your maximum 50m effort. You can then settle into your 'race pace', which you would have determined, and internalised, in training. It's therefore key that you use training sessions in the pool to know your race pace and rhythm.

#### **TRAINING TIP**

For Ironman training I like to do 40 sets of 100m (so just over the 3.8km race distance) at my race pace with short recovery. If my race pace is 1:20-1:21mins per 100m, this means doing 40 x 100m coming in on 1:20-1:21mins going off a 1:25min send off. I try to hit the same time for every repeat, rather than starting out fast and then fading towards the end of the set. This enables me to 'internalise' my race pace, and also gives me the confidence that I can complete the distance at that sustained pace.

**It's also important** for more advanced swimmers to practise fast starts. This may mean doing a short warm-up, and then 8-12 x 25m sprints, or 5-6 x 50m sprints, with about 5-10secs recovery to replicate the need to go hard for the first 200m of the race (and accelerating out of turn buoys). You can then follow this with some race-pace swimming.

## BREATHING

**Breathing plays a** vital role for all swimmers and triathletes looking to improve their speed and efficiency. Get it right and you'll swim faster and easier. Get it wrong and you'll add time and fatigue. The key to improving the breath cycle lies in timing your exhalation and inhalation to coincide with the correct head and body movement. It sounds complicated but it's not. Knowing when and where to take air on board and a little practice is all that's required to improve.

### THE BREATH CYCLE

Relaxed, deep inhalations and long, full exhalations leads to a smooth rhythm. And remember to try and keep your face and neck as relaxed as possible. Here's how I roll...







#### THE HOLD

• It's important to hold your breath for the first part of the stroke until your hand is almost in line with your chest.

• At this point, you can begin to release a little air from your nose, but not too much. The full exhalation comes later in the stroke.

• Keep your head still and pointing downwards. The hold is all about letting your arms and legs do the work.

#### THE EXHALATION

• Turn your head smoothly from the centre line to the side just after the roll has begun. During this

 movement, begin to exhale the rest of your breath.
 Blow out through your mouth in the same way that you'd blow into your hands to warm them up on a

Your head turns with – and at the same time as –

your body. It shouldn't turn before and nor should it turn separately. Keep one side of your face in the water during the rotation.

• Notice the leading arm is already extending into the next stroke and there's a body roll initiated during the stroke's push phase.

#### THE INHALATION

• Your inhalation begins after a final blow to clear the airway once your head has turned to the side.

• If you're in a streamlined position and carrying a reasonable amount of momentum, you'll be able to breathe into the dip created by the bow wave around your head.

• Ensure your head doesn't turn too far to breathe and that there's a slight angle, as though your head is propped up on a small pillow.

### **BILATERAL V ONE-SIDED**

The question of bilateral (breathing to both sides) versus one-sided breathing is the subject of controversy among coaches. One-sided breathing is – surprise, surprise – when you only breathe to one side. Bilateral breathing is usually done every three strokes (counting both arms) so your breathing alternates from left to right. But equally it could be done every five or even seven strokes. Bilateral breathing does help to balance out your stroke, as well as create symmetry in your back and shoulder muscles. However, it's important to remember that we're distance swimmers, and hence need to ensure sufficient oxygen intake by taking regular breaths. For many swimmers, bilateral breathing can result in oxygen debt.

I breathe on one side – every second stroke to the right. I would suggest that you follow a pattern that feels natural to you, but even if you do favour one side you should still practise bilateral breathing in training, as you may need to breathe to your less dominant side during the open-water swim. For example, to help with navigation, avoid chop, waves or glaring sun, or to prevent another swimmer hitting you as you breathe. More experienced swimmers might want to keep an eye on their competitors and therefore be able to respond to attacks and accelerations.



#### THE RETURN TO THE CENTRE LINE

• Your inhalation should be completed just at the point that your recovering arm is approximately halfway through its recovery action.

When the recovering arm comes into line with your head, you should return your head to the centre line with your body as it rolls back into position.
 While the arm recovery and head return is

happening, the underwater hand should not have yet passed the shoulder.



**THE EXTENSION INTO THE NEXT STROKE** • Extend your arm straight ahead in front of your

 The natural roll of the body is carried over so that the left side of the body now rotates upwards.
 This facilitates the drive in the stroke and the arm recovery on that side.

#### **TRAINING TIP**

As a distance swimmer, drill work is important, but you also need to include longer sets of continuous 200, 400 and even 800m reps to ensure you can maintain technique and pace over longer distances. Also, swim in the morning to replicate the start of a race.

**Intermediate and advanced** swimmers should practise hypoxic breathing in training. That is, taking fewer breaths to work up oxygen debt and preparing yourself should such a situation arise in open water (for example, if it's very choppy). Do 6 x 100m, breathing every three strokes on the first lap, every five on the second, every seven on the third and every nine on the last.



## **STROKE TECHNIQUE**

**In open water** the stroke needs to be faster, shorter and continuous to minimise the disruption of our forward progress. An overly-long stroke (with a long glide) can be less efficient because of the introduction of dead spots and pauses. It's therefore important to have a faster turn-over in open-water swimming.

If you're doing a half or full Ironman you may wish to vary your arm movement slightly over the course of the swim, to ease the pressure on your muscles. This doesn't mean erratic changes, but alternating between high and low recoveries or the depth of your pull can help to relieve tightness.

If you do get kicked, punched or swum over in the swim, try not to retaliate. This will simply waste much needed energy. Instead focus on retaining your body position and yes, you guessed it, relaxed breathing.

• Unless you're turning your head to breathe, your eyes should be focused towards the bottom, rather than looking forwards (which lifts your neck and can cause your legs to sink). • You should have a flattish and wide hand entry, with little or no glide/reach. It's important to keep your hand relaxed and your fingers slightly apart. • A high elbow provides a strong anchor for the catch phase. Swimming in choppy conditions may mean that you need to use a higher arm recovery. If it's too low, your hand could enter the water too early or be hit by a wave unexpectedly, causing you to unbalance. You can also use your arm recovery to wriggle your fingers to relax your arms and increase the blood flow, especially if the water is cold.

• The backwards pull should come straight to the side (rather than an 's' shape under the body). Maintain a hyperextended hand at the end of the stroke (as it is when you try and lift your body out of the pool, leading with the heel of the hand) to increase the length of the 'propulsive zone' and a guick recovery.

• While some swimmers are strong, frequent kickers, this is not absolutely necessary in open water. But an 'effective kick' is still important. You should kick mainly from the hips: keep vour ankles loose and turn your feet slightly inwards. The downbeat of your kick should only be chest deep and the upbeat should just break the surface of the water with your heels. Your kick should keep your legs high enough to give you a good body position, it should be low drag and low effort so it minimises energy use.

NEXT ISSUE CHRISSIE TALKS SIGHTING AND NAVIGATION, TURNING ROUND BUOYS, DRAFTING AND EXITING.