

TAKING CONTROL

Preparing for the Channel is a gruelling challenge, but it's not impossible with the right training. Swim Smooth's **Paul Newsome** – fresh from his own crossing success – shares some key pointers to start you off

▶▶ It seems fitting that I write this in a caravan at the Varne Ridge Holiday Park in Capel-le-Ferne, atop the famous white cliffs of Dover, while waiting for the call from my pilot that the weather and tidal conditions are in sync and it's a good time to attempt the English Channel. It could happen at any time – I've already had one false alarm, where rising winds forced us to postpone.

While we can't choose the weather and the tides for our crossing, we can control how we train and prepare, in the hope that all those hard-swum metres and little sacrifices along the way will amount to success. There are five main priorities that aspiring Channel swimmers must address:

- 1 Maintain an efficient technique that enables you to stay injury-free.
- 2 Develop a sound aerobic engine – converting from petrol to diesel.
- 3 Acclimatise to the cold.
- 4 Work out effective fuelling strategies for ultra-endurance swimming.
- 5 Keep a happy home /social /work /training balance.

1. EFFICIENT TECHNIQUE

Over the last three years I have averaged more than 35km of swimming per week: starting in August 2008 with 16km a week and building up to more than 70km. In order to remain injury-free during this time I have had to look closely at my stroke technique and ensured that whatever I am doing is not potentially injurious.

The biggest killer to any ultra-endurance event is lack of consistency in your training, which most often occurs due to hiatuses in training caused by injury or illness. More than 80 percent of all endurance swimmers will suffer some form of shoulder pain in their swimming lives (and when training for the English Channel it's pretty much a given) so it's about managing pain and fatigue rather than having brilliant weeks of high volume followed by big drop-offs. It is well worth getting a regular check-up with a local swim coach (preferably with video analysis) to ensure that your form in the water is not going to lay you low with injury down the line.



Routes can get blown way off course

PREVENTING INJURIES DURING ULTRA-ENDURANCE SWIMMING

- Avoid a thumb-first entry into the water. Excessive internal rotation of the shoulder joint is one of the leading causes of impingement.
- Avoid crossing-over in front of your head as your hand enters the water for the same reason as above.
- Avoid a strong press-down with a straight arm as you initiate your catch – the water should be pressed back behind you at this stage by bending the elbow.
- Avoid an excessive push or flick to finish the back of the stroke as this can cause excessive torsion in the elbow and result in a symptom called *medial epicondylitis*, known as golfer's elbow.
- Develop a bilateral breathing pattern for at least 80 percent of your training volume to help improve symmetry. This will also help with communication with your boat pilot on the big day.



Swimming into the sunset might look romantic, but it takes a lot of work

2. CONVERTING YOUR ENGINE

Having come from a very competitive Olympic-distance triathlon background, my physiology over the years has developed to being that of a high-revving engine, capable of sustained efforts at high intensities for up to two hours. To perform well at much lower intensities for significantly longer periods of time (in the region of 10-plus hours), I have had to totally change the way I train. For many endurance athletes this seems to come to them very naturally. For me, I had to really slow things down initially and tap into what I felt was a sustainable all-day pace, then train for at least 80 percent of my training volume at, or slightly above, this endurance threshold.

I had an initial goal of completing the 20km Rottneest Channel swim in February 2009 in less than five hours. To do that I needed to be able to swim very comfortably at just faster than 15 minutes per kilometre, or 1'30" per 100m. I started this first phase of my programme with simple sets like 4-6 x 1000m at exactly 1'30" per 100m pace, with 60 seconds rest between each.

Despite how easy this pace initially felt, I had to control the urge to push on faster. This takes a learned control of the type that is so beneficial during a Channel crossing. It's easy to get carried away and push on at the start of such a session without realising the ramifications of such an effort for later in the set. Get it wrong a few times (as I did) and you rapidly start to tune into that all-important skill of pace awareness.

Not only is this skill essential for the big day, but if you constantly make a hash of your pace in training, you'll never fully develop your aerobic "diesel" engine to its fullest.

Gradually, my ability to hold 1'30" per 100m, dropped to 1'28" per 100m, then 1'27", 1'26" and so on. Last week I completed an 18km training swim at an average pace of 1'21" per 100m (including drink stops), which was a good indication that this endurance threshold has been progressing nicely. It's not a fast process though and you should expect to plateau off at various steps in your development along the way. At these points seeking to go longer at this threshold point is key.

Aiding me in my development of an efficient pacing strategy have been a Wetronome pacing device for the pool and a Garmin 310 XT for the open water. In the pool I use the Wetronome to beep at me every time I should be at each 25m marker, This keeps me on track and works like a virtual training partner, spurring me on as I get tired.

TYPICAL TRAINING WEEK (FINAL SIX MONTHS)

Day	Session Detail
Monday	Very easy 2-3km swim including a range of drills to ensure good injury management, or rest day
Tuesday	Moderate 6-7km pool swim including drills and a solid 4-6km main set of 10-15x400m at 1'24" per 100m pace with 21s rest between each 400m (guided by my Wetronome).
Wednesday	Tough 9km pool swim all on a 43-45 second per 50m cycle, i.e. 20x50m, 10x100m, 5x200m, 2x500m, 1x1000m, 2x500m, 5x200m, 10x100m, 20x50m. The cycle time includes any rest, so the faster you swim the more rest you get. I would typically average 1'18" per 100m for these sets.
Thursday	Moderate 10km cold (15°C / 59°F) open water swim at an average pace of 1'24" per 100m, including drink stops every 2km for 15-20 seconds.
Friday	Steady 4-5km pool swim focusing on drills and technique work.
Saturday	Hard 8-12km cold (15°C / 59°F) open water swim in rough water, aiming to hold close to 1'20" per 100m.
Sunday	Goal session: 14 to 25km cold (15°C / 59°F) open water swim with paddler to practice food and drink stops every 2km.

WHILE WE CAN'T CHOOSE THE WEATHER WE CAN CONTROL HOW WE TRAIN AND PREPARE

I set the Garmin to beep at me every 500m in the open water to break down the longer swims into manageable chunks, thinking only ever about the next 500m. When I get home I'll download this data to see how and where I could have improved that particular swim. ▶▶

I think it's just as important (if not more so) to identify a skeleton structure for your weekly training that you can stick to throughout your programme and build upon as you develop your fitness and endurance, rather than have some super-sophisticated looking periodised programme.

I'd aim to take an easier week every three to four weeks and a very light or rest day at least once per week, but other than this don't get bogged down too much in the details. Consistency is always key. A basic, achievable programme is going to be much more beneficial for you than something with all the bells and whistles that constantly seeks to throw your day-to-day schedule out of the window.

Aim for no more than 10 percent increase in volume a week and gradually build your way up without rushing it.

FIND YOUR ENDURANCE PACE

To select your own base endurance pace from which to commence your programme, I would suggest training three to four times per week for 45 to 60 minutes per session for a period of four weeks before attempting a continuous and well-paced 3,000m swim. This doesn't need to be a full-on time trial, just a good, controlled effort. What is your average pace per 100m for this? Use this pace as your starting point for your longer intervals, re-testing every six-eight weeks over 3,000m at the same level of perceived exertion and adjust your target pace accordingly.

THE BIGGEST KILLER TO ANY ULTRA-ENDURANCE EVENT IS LACK OF CONSISTENCY IN TRAINING CAUSED BY INJURY

3. ACCLIMATISATION TO THE COLD

In addition to putting on weight (see page 32), and prolonged exposure to cold water, there are three main tricks to help you acclimatise properly:

- 1 Apply a lanolin and Vaseline mix to your body, especially around your abdominal and kidney region, which will help create a barrier between you and the cold.
- 2 Walk slowly into the cold water and focus on controlling your breath as you do so. Take your time. Slowly bend over and splash your face two or three times with the water and then on your chest. The receptors that initiate the shocked gasping response to cold water (which can be fatal) are all centred around your eyes, so splashing here first will help reduce this natural response.
- 3 Only allow yourself to acknowledge how cold it is after you've taken your first 30 strokes. Tell yourself you only have to do these first 30 strokes and then see how you're going. By this point you're usually OK anyway – it's the mental block that occurs before getting in that is the hardest thing to overcome.

"A DEAD BRAIN'S A GOOD BRAIN"

In most of my squad coaching sessions I aim to make the sessions fun and enjoyable with a good bit of variety, however the Channel swim requires a certain mindset. To quote Philip Rush (world record holder for the triple crossing of the English Channel in an amazing 28 hours 30 minutes): "a dead brain's a good brain". As such, many of the sets that I have completed during my weekly training are all fairly boring, where it's just me against the clock aiming to hold form, rhythm and consistency without over-thinking things. This is absolutely imperative for success.



Photo © Swim Smooth



A strong support team is crucial, and Paul (second from right) had his ChannelDare crew

4. EFFECTIVE FUELLING STRATEGIES

The best piece of advice is to try a variety of different foods and drinks in a variety of different situations and see which works best for you. Personally I alternate every 30 minutes with a stop for:

250ml Gatorade (providing ~15g carbohydrate)
250ml Gatorade, water, coke or Ribena and 1x25g GU carbohydrate gel (providing a total of ~35g carbohydrate)

The general rule of thumb is to take on 600-800ml of fluid per hour plus 1g of carbohydrate per kilogram of body weight per hour. This for me would be 800ml and about 80g carbohydrate, but you can see that I'm falling short of this by some 300ml of fluid and 30g of carbohydrate per hour. This seems like a lot, however, having experimented with the recommended intake, I found I was becoming too bloated and actually failed to finish an Ironman event in 2004 from effectively over-eating.

Use this calculation as a starting point and then work either slightly up or down depending upon your needs, practising and recording your response during training. While you might not need as much fluid, due to lower perspiration rates in the water (especially cold water), chances are you might need to increase your carbohydrate intake at times with supplementary foods as your body will be working hard to keep itself warm.



Don't let photographers distract you from taking on fuel

Photo © Swim Smooth



Photo © Swim Smooth

5. KEEPING IT ALL IN BALANCE

There's no denying that when training over such a long period for a specific event that you have to work very hard to maintain a good balance between your home, social, work and training life. You're going to be tired and grumpy at times and this can have a negative impact on the rest of your friends, family and colleagues. Take time out by planning regular weekends off from swimming, and always remember that you're doing this because you want to achieve such an amazing goal that very few others have ever achieved. No one is forcing you or holding a gun to your head.

Training for the English Channel has made me able to swim further and faster – knocking 41 minutes off my 20km time – than ever before. I can honestly say that I've thoroughly enjoyed the challenges of training for this event and haven't lacked the motivation or desire to train like I have at times with other events.

It's such a unique thing to train for. Just the process of changing my body type to cope with the cold and converting my triathlete's petrol engine to a long-distance swimmer's diesel one has been so new that I've learnt a lot about myself and how I handle training stress.

Learning how to zone-out during longer swims and to realise that every session that I do is just part of the bigger picture rather than a make or break situation has been key.

All in all, I believe I have learnt better patience and control, and even a better acceptance of myself and my capabilities. Training for the Channel has been a great thing to do. ●

Paul Newsome finished his Channel crossing in rough and windy conditions on 9 September in 12 hours 14 minutes and 23 seconds. Congratulations from all at H2Oopen!