



Are your shoulders ready
for a great

SWIM STROKE?

TEXT BY KRISS HENDY |
PHOTOGRAPHY BY SHUTTERSTOCK.COM

I tend to treat swimmers and triathletes as two separate groups with regards to their physical conditioning. This may seem to you as a silly thing to say but regarding the type of programming, intensities and positions both groups are exposed to on a regular basis, there are a number of significant differences.

The most obvious difference is the sustained periods of time triathletes spend in the 'rounded shoulder-forward position', being 'aero' on the bike and commonly running with their shoulders rolled forward. Time spent in these

positions will unfortunately become habit and are only exaggerated by the slouched positions we assume in day-to-day life, at our desks, in our cars and on our phones.

As a result, one of the main concerns I have with the modern day athlete is their general inability to hold good posture - standing with feet straight, back flat, stomach tight, head neutral and palms forward (requiring external rotation of the shoulder). Athletes need to avoid the comfy and habitual position - arms crossed, back slouched and shoulders rolled forward.

WHERE DOES SWIMMING COME IN TO THIS?

The shoulder complex is designed to achieve the greatest range of motion of any joint in our bodies. This exceptional range of motion is supported by a complex system of ligaments that stabilises the whole structure, allowing it to withstand large external forces whilst accomplishing complex movement patterns.

Swimming requires a big range of overhead movement patterns. These movement patterns can be divided into two primary phases known as pull-

and 'faster' in the water, we need to mobilise and activate the structures that will make our stroke efficient and a lot more sustainable.

HOW CAN WE DO THIS?

I want to give you some exercises that you can start doing today that will improve your range of motion, bring balance to your body and will improve your overall performance.

BUT FIRST A QUICK TEST OF MOBILITY AND POSTURE -

This 'T-Spine' mobility exercise (see images below) that I get all my athletes/clients to perform during a warm-up quickly identifies key areas of weakness in the hips and upper back. Give them a go - full range of motion should see rotation through your thoracic spine, which allows you to open your chest to the sky with arms extended.

If you have poor range of motion (ROM) in your upper back and shoulders, and struggle to find full rotation on land, then how can you expect your body to get a strong pulling motion, with a good head and body position, a strong kick and the associated rotation when in the water?

In black and white - poor ROM will prevent you from executing an efficient stroke.

through and recovery, both which have varying degrees of internal and external rotation of the shoulder whilst circumduction takes place. A classic injury such as 'swimmers shoulder' is a result of micro trauma caused through repetitive activity, usually presenting itself as a 'rotator cuff' imbalance or injury. Tight shoulders and poor posture causes the shoulder to be pulled and rotated forward placing greater demand on the rotator cuff muscles and other shoulder stabilisers.

Whether it's a solo open water swim or part of a triathlon, swim training and racing requires a large amount of repetitive motion. Now, our bodies can put up with a considerable amount of misuse, absorbing poor mechanics and technique over long durations. However, in time your poor posture and lack of mobility will start to affect the mechanics of your body, in this case your shoulder, and cervical and thoracic regions (neck and upper back). Your movement will become compromised, structures will weaken and injury will inevitably occur.

Before we even consider strengthening the muscles that will make us 'stronger'

HOW WILL MOBILITY AND STABILITY BENEFIT MY SWIM?

- Free up the lats (wings) for optimal reach.
- Strong rotator cuff for the catch and pull (requires internal rotation).
- Increased ability to move your hand past your thigh on the pull/propulsion phase due to better internal rotation.

WHERE 'CORE' COMES IN:

- A better body position achieved through a strong core will help avoid that hip 'wobble' and arms crossing your mid line, wasting time and energy.
- Better posture helps develop good body roll in the water, which gives you a longer more powerful reach and streamlined stroke.
- Having a strong upper core helps attach your arm stroke to your body. Your body acts as one - with the rotation aiding your stroke rather than solely relying on your shoulder muscles.

SCAPULA RETRACTION:

Your 'scapulae' are your shoulder blades. Scapula retraction is the action of pulling your shoulder blades together - bringing them towards your spine. Good scapula retraction will stabilise your arm attachment to the body and strengthens your upper core. Now, we don't consciously retract our shoulders when we swim, but by spending time working on this out of the pool will ensure stability of the shoulder when under stress and prevent us from getting those nagging injuries.

“ Poor Range of Motion (ROM) will prevent you from executing an efficient stroke. ” — Kriss Hendy



T-SPINE MOBILITY EXERCISE

This exercise will show you how much range of motion (ROM) you currently have in your upper back and shoulders.

The following exercises are a series of basic scapula retraction and stabilisation exercises:



1. THE SEATED ROW: This exercise is performed either using resistance bands or a weighted cable machine. Ensure you sit with your back straight and arms fully extended out in front, pull towards you squeezing your shoulder blades together whilst keeping your elbows in. Look to perform 3-4 sets of 8-10 repetitions with 45-60seconds of rest in between.



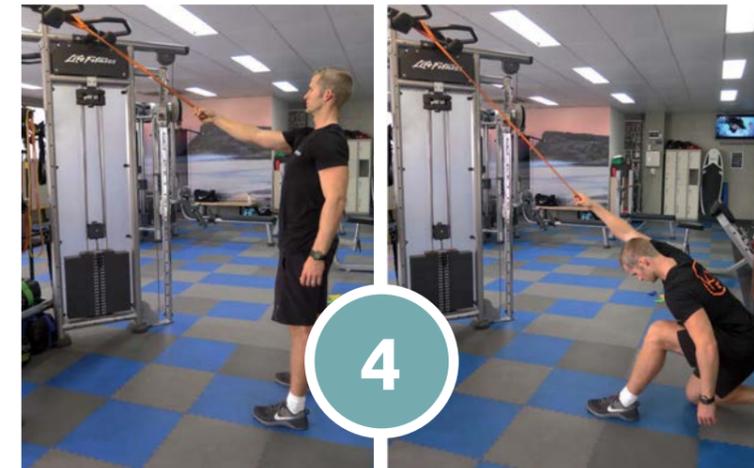
2. RESISTANCE BAND PULL APART AND RESISTANCE BAND LAT PULL DOWNS: Run through these Band Retractions shown in the pictures above, squeezing your shoulder blades together for 2/3 seconds. Stand up tall as you do it but keep your back straight - don't arch it. Hold your stomach in, your shoulders back and chest proudly forwards. We suggest you complete 2-3 sets of 8-10 repetitions.



3. RESISTANCE BAND ROTATOR CUFF INTERNAL AND EXTERNAL ROTATIONS: Rotator Cuff strength exercises should be tailored to the individual's current condition and ability regarding their range of motion. Resistance can be accomplished with different types of resistance, with common exercises using resistance bands or weights. I would tend to start with band work and then progress into heavier loads once they have gained a level of competency.

By doing these exercises before you swim, and even before you go to bed at night, you will help to rectify the bad posture that may have adopted at work. Over time this will get better and go a long way to reducing your chance of injury or impingement in the shoulder, neck and back muscles.

4. RESISTANCE BAND SINGLE ARM STRETCH: This is a fantastic exercise for opening up the shoulder joint and those 'lats' we talk about. Ensure to allow the resistance band to stretch out your shoulder and then sit back into it (see images below). Make sure you breathe through the stretch to allow your nervous system to relax into the stretch. Perform 1-2 sets of 30-45 seconds on each side.



To conclude, before we approach the more 'traditional' strength exercises that you may be expecting, we all need to take a step back and ensure we have a healthy level of mobility as well as stability in and around our shoulders. Only then can we look to develop strength endurance and power elements into our programming. **AT**

Kriss Hendy
Strength & Performance Coach

Seeing the need for better athlete education and understanding with regards to Strength & Conditioning for the Endurance Athlete, Kriss works with a variety of athletes from Age Groupers to Professionals, developing programs that support and heighten their endurance performance. Kriss is based in Byron Bay with his wife (Professional Triathlete) Polly Hendy. He has both a local & International client base that use his Online Strength Training Packages.

For further details or to contact Kriss:
www.khstrengthandperformance.com
Twitter: [khendy3](https://twitter.com/khendy3)
Instagram: [@kriss_hendy](https://www.instagram.com/kriss_hendy)

Kriss Hendy
Strength and Performance

Online Strength Training Packages for Endurance Athletes

Bringing the fundamentals of Strength & Conditioning to the Endurance Community



Strength Coach to Tim Van Berkel
3 x Ironman Champion
Australian 70.3 Champion

@kriss_hendy
Kriss Hendy Strength & Performance

For more information and online coaching visit:
www.khstrengthandperformance.com