

DO YOUR SHOULDERS DISRUPT YOUR TRAINING?

Looking at your recovery and catch technique is the key to preventing shoulder injury.

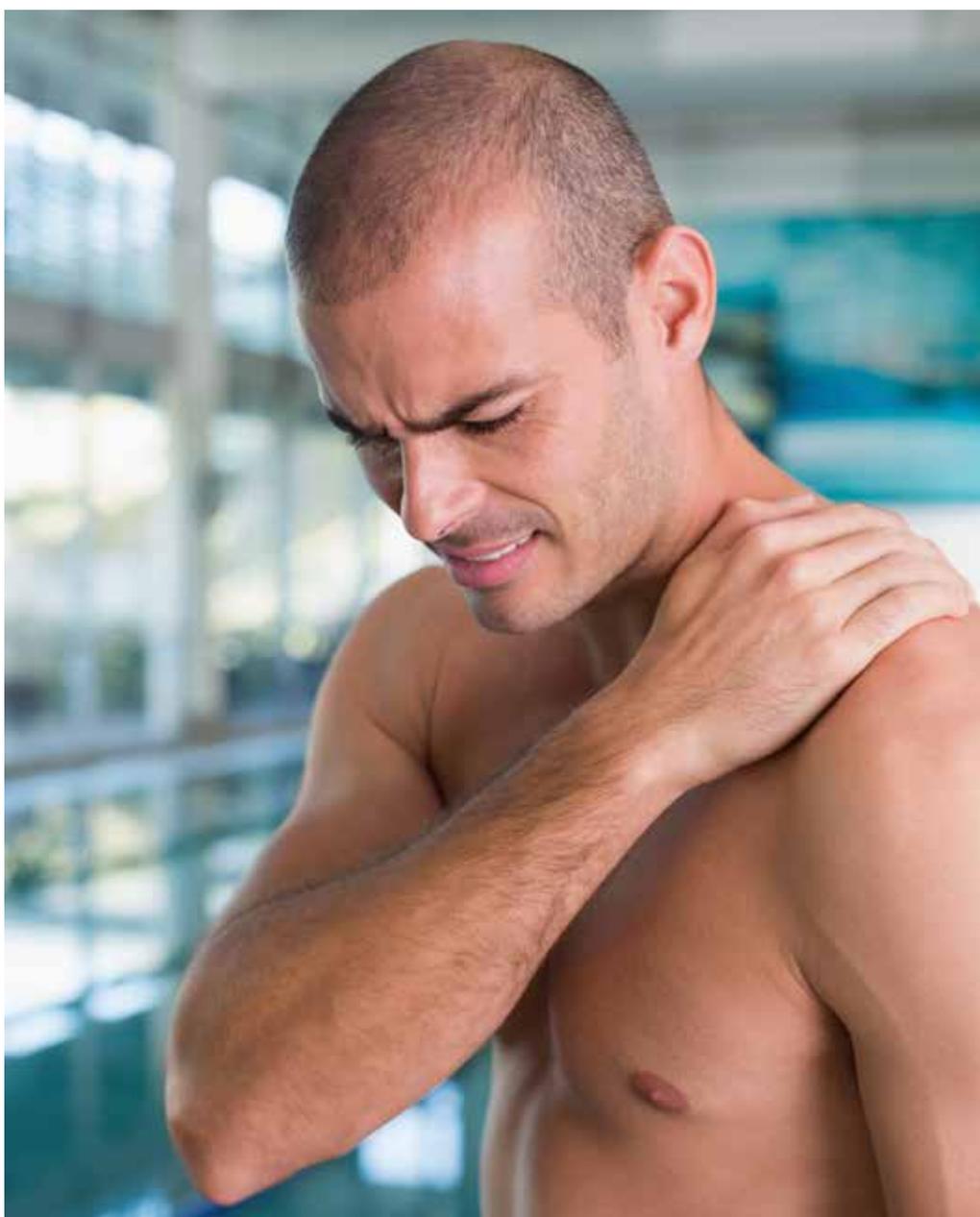
By Tracey Baumann and Emma Levy

Shoulder injury is a very common experience amongst freestyle swimmers. This is especially the case in the long-distance swimming community for those looking to achieve big goals such as marathon swims or channel swims, but it can also affect swimmers who regularly swim shorter distances. It's very frustrating, as you may have to miss a few swims while you wait out the pain, which could include withdrawing from planned events, or it can lead to longer interruptions, swapping the water for dry land rehabilitation. So, what can you do to avoid shoulder injury?

First we need to consider what causes it. Which parts of the stroke have the potential to trigger shoulder injuries?

ARM RECOVERY

When we observe people swimming, we see many different examples of the arm recovery. Some arms are very straight, extending directly behind the body, then following a big arc over the water and entering at full reach in front



THE KEY TO SAFE CATCH MECHANICS IS ALL IN THE SETUP, WHICH BEGINS BEFORE YOU EVEN ENTER THE WATER, WHEN THE ARM IS STILL IN THE RECOVERY PHASE

of the swimmer. We sometimes see a very tight arm recovery, where the swimmer is trying to keep their hand as close to their body as they possibly can; they might be imagining that this will make them more streamlined, apparently forgetting that being

streamlined above the water will not aid them at all, while streamlining underwater is essential. Finally, I often hear talk of a high elbow, resulting in swimmers trying to lift the elbow as high as they can to create an aesthetic of a high elbow above the water similar



Pull or catch?

1. Stand up and go to the nearest door handle, put your hand on the handle and pull the door towards you. What happens to your elbow?
2. Standing beside a table put your hand on the end and apply pressure to send your body forwards past it. Observe the movement pattern that your arm and elbow make.

to what we often see in elite swimmers around the world.

Indeed all the above patterns will definitely lead to shoulder injury, because they prevent the correct movement of the scapula (shoulder blade), leading to misuse and/or overuse of small muscles around the shoulder (the rotator cuff).

CATCH

This is often overlooked as a potential cause of shoulder injury. Many swimmers spend much of their time training or working on their catch mechanics, what they often refer to as their 'pull'. In our previous article we explored some of the many pool toys that encourage swimmers to spend an awful lot of time focusing on their 'pull' in the water.

Let's consider the difference between a 'pull' and a 'catch'. Stand up and go to the nearest door handle, put your hand on the handle and pull the door towards you. As you do this, observe the movement that your arm, and particularly your elbow, makes. You will almost certainly have noticed that as you pulled the door towards you your

elbow dropped down towards the floor. Now go towards the end of a table or a kitchen counter; standing beside it put your hand on the end and apply pressure to send your body forwards past it. Observe the movement pattern that your arm and elbow make. I can almost guarantee that when performing this action your elbow stayed in its high position and could not drop (see above). This rehearses your 'catch' shape, where your scapula and shoulder are safe when you apply pressure.

Our brains associate certain movement patterns with certain words, and therefore when we use the word 'pull' in swimming our brain will execute the movement pattern that is wired with the word, often resulting in a dropped elbow in the pool. And no matter how hard we try to overcome this, the connection between the brain and that word is often stronger. This results in poor joint mechanics that stroke by stroke cause more damage in the shoulder joint and scapular area than we realise. Until we do. Applying that much pressure in the 'pull' movement puts an enormous strain on the very unstable joint of the shoulder.

EXPERT ADVICE

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AVOIDING SHOULDER INJURY

So where should you focus your attention to minimise the risk of shoulder injury? The key to safe catch mechanics is all in the setup, which begins before you even enter the water ie when the arm is still in the recovery phase. You need to work on both.

If you ensure that your joints are connected and in a safe position they will keep you injury-free, and as a bonus your ability to connect with the water will improve, resulting in faster swimming without the fear of injury.

If, like many freestyle swimmers, you are struggling with shoulder pain or injury, it may be time to seek out your nearest coach. They can provide an in-depth under and overwater video analysis of your stroke to find out what improvements are needed, along with guidance on how to make those improvements. Ask your coach to pay particular attention to your arm recovery and your catch set up and pathway. Working on these two elements of your stroke could be the answer to getting to and through your next event without injury. 🏊‍♂️