

## SHOULDERS GET OLDER

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Some Masters are amongst the first generation of people to exercise for an entire lifetime. Shoulders bear the brunt of all this swimming. As people age, their bodies and shoulders will inflame more easily. A swimming stroke that produced speed and no pain at an earlier age might cause trouble later. The stroke might need to be continually modified for the body to accommodate aging and prevent injury. Consider swimming with a variety of stroke options so the pressure on the shoulder is not focused continually at particular points. It may not be possible to copy the “state of the art” stroke without causing inflammation trouble.

It is difficult to give general principles but consider these:-

- a. Enter gently and use the forward hand for water line length. Catch well into the stroke.
- b. Recover over the water in a gentle manner. Use body roll to achieve high elbows.
- c. Tuck chin comfortably rather than looking ahead tortoise style.
- d. Use deep abdominal muscles to help harness the core and support the body rather than just the back muscles alone.
- e. Rotate body with hips, shoulders and ankles roughly in the same plane.
- f. Full power is only applied for a zone of the stroke and eased at the extremities.
- g. Develop a smooth flowing stroke rather than stop-start.

The following are tips to ease shoulder strain not necessarily to swim faster. Please don't exaggerate any stroke modification.

### **Freestyle:**

Maintain your centre line and rotate around it. Recovering upper arm should be in line with chest and not hyper-extended. The hand should gently enter the water. If the shoulder crunches during recovery try the straight arm recovery “like Michael Klim”. The conventional thumb first entry can overload the shoulder so try entering the water middle finger first. Don't catch immediately at entry as it will overload the shoulder. Use the front hand after entry for waterline length then catch later through the stroke where power can be applied with less strain. A three quarter catch up stroke lets both shoulders to work in unison and the recovering shoulder supports the power of the other one. The pull through should be near the body with elbows near the surface. Pulling deep can overload the shoulder. If the pull is taken back to full extension the shoulder is also overloaded. When the hand finishes the stroke near the thigh, body rotation allows the recovering arm to move sideways away from the body. If the body is flat and not rotated, the exit will strain the shoulders. Have a look at my recent article “Core strength, breathing and posture”. Don't stretch the neck by looking too far forward.

### **Backstroke.**

Body posture and rotation are important. If the sternum is pushed down into the water the body will rotate more freely and take a strain off the neck and shoulders. The pull is around the sides and the hands near the body. Again the ankles, hips and shoulder rotate in much the same plane. Entry of hands feels to be at about “5 minutes to 1”. If the body is flat at hand-entry, the shoulder will strain as the hands search for depth. Body rotation eases that strain. Catch is delayed until the hands progress to almost opposite the shoulder. The same principles as

freestyle apply at the end of the pull. Please don't pull to full extension. Body rotation allows the hand to exit with a side way motion. If it is comfortable, let the shoulder brush the ear during recovery.

### **Breaststroke.**

Many people have the urge to start the pull with all the energy they can muster. When the arms are at full extension, I suggest the "out sweep" is gentle (little finger up) until the hands are outside the shoulders where they "catch". This is a stronger position for the shoulders. The "in sweep" is the power play. Then the hands scull over so the thumb is up and accelerate down and inwards then rise up under the chin and recover quickly near the surface to the front. Please think in terms of a gentle out sweep and a powerful in sweep. Working too hard on the out sweep and trying to back sweep the arms is hard on the shoulders with little speed benefit. The resistance caused may be greater than the power gained.

### **Butterfly.**

So many people swim a "Ballistic Fly" that is hard on the shoulders. Please take the time to develop a "Float and Flow" stroke with two kicks to each arm stroke. A strong floating core will allow you to apply your arms and kick where you wish to use them rather than using one uncontrolled spasm to each stroke. The arm action rather than being like a paddle wheel is near the body and shallow. The first movement is a gentle out sweep and the catch is as the hands come into the in sweep. I believe the arm action is like a breaststroke underwater "split stroke" but without a pause. It is important to finish the arm stroke with the hips high. In the recovery the arms move just over the water with the hands moving out around and forward like a rowing oar recovering. Lifting the hands and shoulders a long way out of the water on recovery strains the shoulders incredibly. Slow down and try to learn gentle butterfly.

Feel your body and your shoulders through out the stroke. If you find unpleasant pressure on the body, try variations to ease that pressure. Focus on swimming smarter and better. If you have serious shoulder problems seek proper help. But remember the imperfections in your stroke caused that trouble. Seek to modify your stroke so that it doesn't happen again.





