

HOBART AQUATIC MASTERS SWIMMING CLUB SKILLS AND DRILLS NOTES

FREESTYLE

Key features

- **Synchronisation.** Every part of your body is contributing to the stroke, and all movements need to be synchronised. If there is one movement that is not synchronised it will affect all other movements by forcing them to compensate.
- **Balance.** Your body needs to be balanced and stable whilst your arms stroke, feet kick, torso twists and your head rotates. Many swimmers swim freestyle in a constantly unbalanced state and therefore waste energy.
- **Streamlined.** You need to reduce drag by keeping your whole body streamlined, as if you were swimming within a narrow tunnel. Long and narrow is faster than short and wide.

Technical points

- **Stroke timing** - glide and balance with your lead hand. Allow partial catch-up with your recovering hand (about level with your head before commencing pull with the other hand). This allows you to maintain balance while your recovery arm is at its most destabilising point out of the water.
- **Streamlining** – long axis rotation with hips as the pivot and no extraneous movement inside or outside your train tracks (the imaginary parallel lines at the width of your shoulders down the length of your body).
- **Bent elbow above and below water** – above for balance (keeps your centre of gravity higher by keeping your hand below the height of your elbow), and below for power and streamlining. Shoulders stay high (hunched up towards your ears), not hyper-extended at the catch point (this is a weak start position for initiating your pull).
- **Synchronised kick and stroke** for balance and power – just like walking or dancing. Stroke and kick are complementary – you cannot have one going smoothly without the other going smoothly as well.
- **Deep catch** – from entry, your hand extends forward and downward. This prepositions your hand for the pull phase. A shallow catch means the first part of the pull is just a downwards press – not good for your shoulders.
- **Pull phase engages hand, wrist, elbow and shoulder joints** – shares the workload across all the joints. Get your fingers pointing downwards as soon as possible in the pull phase by bending at the wrist. Reach over the barrel.
- **Simple, minimal and lateral head movement** to breathe. If your balance and synchronisation is sound, your head movement can be a controlled, minimal movement. A simple head rotation to the side does not compromise the alignment of your spine.
- **Speed** - hand acceleration during the pull phase generates speed but does not compromise your technique.

Training and drills

- **Slow motion swimming.** See how slowly you can swim. Any rushed movement is probably covering up a flaw in your technique. Swim slowly and think about every aspect of your technique (sequentially, not all at once).
- **Full catch up.** Develops patience in your leading hand as it glides forward and downward. Try it with a snorkel. Once full catch up is mastered, try three quarter catch up (this will be close to your new normal stroke timing).
- **Six beat and two beat kicking.** Practise six beat kick at moderate swimming pace (three kicks per stroke). Make sure the kick tempo and force is even (no dead spots in the kick rhythm). Then practice two beat kick (one kick per stroke) at a moderate swimming pace. Make sure the kick force is even on left and right.
- **Sculling.** Develop feel for the water and elbow engagement.
 - Vertical scull with feet crossed, using hands only to stay afloat. Massage the water with lateral movements. Try it with one hand only.
 - Half body scull with hands moving out and back adjacent to shoulders, and elbows high in the water. Best done with a snorkel. Develops bent elbow pull.
 - Front scull, with both hands extended to the front at the catch depth, elbows slightly bent. Small lateral hand movement. Best done with a snorkel.
- **Breathing drill.** Imagine you have an eye in each ear, and when you rotate your head to breathe, that ear-eye is looking directly down at the black line. Challenge yourself to keep the lower lens of your goggles submerged as you take a breath. Your sight point should be directly to the side, not behind you, towards the front or towards the ceiling. In the pool, you navigate below the water (that's what the black line is there for), not above it.
- **Snorkel swimming.** Swim with a snorkel so you can concentrate on aspects of your stroke without being distracted by breathing. See where your hands are catching the water. Snorkel swimming also helps you find a comfortable head position.
- **Pull buoys and fins.** Do not use them as a tool to compensate for flaws in your technique. Using them in that way only reinforces the flaws. A pull buoy is used to immobilise your kick so your upper body has to work harder, and is ideally combined with an ankle band. Fins are used to add resistance to your kick, so that you can develop a powerful kick that engages your hips, thighs, knees, calves, ankles and feet. Short blade fins enable you to kick at about normal tempo, whereas long blades slow down your tempo and place greater strain on your ankles and calves.

Visualise the stroke

- Watch great freestyle swimmers to develop your mental picture of the rhythmic movement needed to swim balanced, streamlined, powerful freestyle.
- This video highlights the key features of the stroke:
<https://svpford.wistia.com/medias/0q4an4pfb2>