

## HOBART AQUATIC MASTERS SWIMMING CLUB SKILLS AND DRILLS NOTES

### BUTTERFLY

**Butterfly challenges most swimmers like no other stroke. Here's why:**

- For part of the stroke you have to have both arms out of the water, at which time you are heavily reliant on your forward momentum and your kick to keep your upper body high enough to clear the water with your arms.
- The dolphin kick and associated torso undulation requires a lot of core strength and flexibility.
- You need to be flexible enough in your shoulders to simultaneously stretch your arms behind your chest (as if you were trying to get your scapulars to come together behind you – think how a butterfly brings its wings together behind its back). If you do not have this degree of flexibility you need to develop it (see the drills below).
- Butterfly stroke timing is critical. Get the timing right and the stroke flows. Get the timing even slightly off and the stroke becomes jerky and energy-sapping. The key to timing is precise synchronisation of your arm movements with your kicking rhythm.

#### Technical points

- **Kick 1.** Masters swimmers are permitted to use a dolphin kick or frog kick (breaststroke kick). There can be one or two dolphin kicks per stroke, but only one frog kick per stroke.
- **Kick 2.** If you are doing dolphin kick, your legs should be together and constantly moving. Eliminate any dead spots in your kicking rhythm.
- **Catch position.** Catch the water about shoulder width apart with your thumbs entering the water first. Avoid coming inside the width of your shoulders or starting well outside that width.
- **Recovery part of the stroke.** Your hands need only just clear the water as they swing forward. The higher they go the more energy is expended carrying them forward.
- **Underwater part of the stroke.** Your hands should move under water as if outlining a key hole – start shoulder width apart at the catch, sweep out through the first 1/4 of the stroke, bend at your elbows and sweep back in towards your midriff in the second 1/4 of the stroke, then push back and out of the water past your hips to commence the recovery part of the stroke. Your hands should be constantly moving.
- **Kick.** Your kick needs to be strong because you rely on it for propulsion, balance, and to support your upper body when both arms are out of the water.

- **Breathing.** You can breathe every stroke or every second stroke (or longer if you can). When you breathe, only raise your head far enough for your mouth to just clear the water. Your head should slightly nod up as you breathe and nod down as your arms are thrust forward.

### Training and drills

- **Set very modest distance goals.** For most swimmers, being able to swim up to 100m butterfly continuously is a big goal. It enables you to swim individual butterfly and medley events, and swim butterfly legs in relays. In training, be prepared to swim only very short distances as you build up to your target distance. This means doing very short butterfly repeat distances in training. You might start with only 10m, then gradually build to 25m then gradually extend to 50m.
- **Quality over quantity.** Only do quality butterfly in training. Do not persist with butterfly when you cannot maintain good technique and correct timing.
- **Improve your shoulder flexibility.** Stand in the middle of an open door, place your hands on either side of the door jamb level with your shoulders, and step or lean forward.
- **One arm drill.** With one arm extended, stroke with the other arm, breathing to the front. Swap stroking arms about every six strokes. This drill allows you to practise the rhythm of the stroke without rapidly expending energy. You can combine this drill with full strokes, for example 6 x right/6 x left/6 x both.
- **Breaststroke arms with dolphin kick.** Practise doing two dolphin kicks to one breaststroke arm cycle. This allows you to practice timing without expending effort. Combine this drill with full butterfly strokes 6 x breast/6 x full.
- **With fins.** Using fins is another way of practicing the stroke without rapidly expending energy. Short blade fins will allow a reasonably normal stroke tempo, whereas long blade fins will slow the stroke rate down.
- **Fast and slow tempo strokes.** It is useful to develop two butterfly gears, especially if you are aiming to swim butterfly beyond 50m. The slow gear allows for some recovery in each stroke cycle (this is achieved by adding a slight pause when both arms are extended in front) and the fast gear has no pause in the stroke. Practice switching gears by doing 6 x slow and 6 x fast strokes.
- **Kicking.** Practice kicking with a kickboard or training snorkel and develop a continuous, rhythmic kick. Also practise kicking on each side and on your back. Practice with and without fins.

## Visualise the stroke

- Watch competent butterfly swimmers to develop your mental picture of the rhythmic movement needed to swim beautiful butterfly. There are many videos on Youtube of expert fly swimmers.
- <https://www.wikihow.com/Swim-the-Butterfly-Stroke> This video provides a useful summary of the main features of butterfly.
- <https://www.youtube.com/watch?v=jd67PMrylT0&index=1&list=PLRYByPAz2bTK7bDjtfz6ynGr2x060iMYF> This is a slomo video of Michael Phelps. Note how his abdomen and hips undulate, and how the undulation flows through his whole body, not just below his hips.

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