

Butterfly (Basic)

The following “Stroke Concepts”(Freestyle;Breaststroke;Butterfly; and Backstroke, are abbreviated and mostly taken from articles by Professor Boomer, University of Rochester, who is a biomechanics specialist.

.According to Prof Boomer we have been swimming the fly, as a stroke too far down our bodies. We are getting our rhythm in the fly on the power section of the stroke, when the hands are moving towards the mass centre and not away from it. What I like to see is the arm stroke being moved up your body so that you can keep more body length, a better balance, a freer recovery and then use your legs as propellers...

One of the things that we are doing incorrectly is not locating the inscull of the fly at the same place that we locate the inscull or second sweep of the breaststroke. We tend to let our flyers sweep down and insweep towards the belly button. What is really happening in swimming is that you are trying to make your hands stationary front to back, and run your body over those paddling units. When you allow your hands to inscull too far down your body as your body is riding over, there is no way for your hands to escape. In the freestyle the ticket is to evade the hands with the hip. In the fly the ticket is to evade the hip with the hands. If you get way down there with your hands, you are going to get stuck pushing down past the hips; it takes all the mass and puts it on the wrong side of the balance unit; drops the hips, and puts the shoulders in the wrong position for recovering the arms’

When talking about balance, the term ‘T’ is used; this means the area described by a line drawn from armpit to armpit and an intersecting line drawn from a slightly extended chin to the sternum. Pressing this area onto the water – not diving down – and relaxing the mid section ‘unloads ‘ the hips, allowing them to ride to the surface, and places the body in a horizontal streamlined position, without the hips being kicked up there. The kick is only for propulsion.

This movement, and the emphasis placed on the ‘landing zone’ is the same for both fly and for breaststroke. The head/face, arms and “T” must land as a unit.

Points to remember:

- Do not dive down in front and develop a deep undulating pattern, the various forms of resistance are multiplied.
- As in breaststroke do not pull outwards, drift down and outwards (flair) – then take a high elbow catch and pull hard towards the sternum; the push comes under the chest. Anchor the lats and slide the body over your hands, fingers pointing down. Remember not to get your hands past your hips: the outswEEP (recovery) must fit in here; after the push the hands sweep upwards and outwards, allow your elbows to exit first, followed by your forearms and hands, which must be thrown over the water. Let your hand recover little finger upwards, back of the hand towards the water, then your elbow will not catch the water.
- If you keep your head in line with your spine and are properly balanced at the landing zone, you will skim under the surface with water running over both surfaces of your body to reduce the resistance.
- Breathing patterns: Normally it would be two strokes down and one breathing stroke.
- For longer distances some swimmers alternate the pattern to suit themselves. For many years I have advocated breathing to the side, exactly as in freestyle. And I

am not surprised to see that the famous Aussie coach Forbes Carlile in a paper "*Breathing Actions in Butterfly*" now advocates side breathing. Our reasons are not the same.(I have found that it is almost impossible to change swimmers to breathing to the side if it has not been taught from the beginning)

- I believe; that when swimmers breathe to the front they are inclined to push down on the water, to lift their upper body. Especially learners, who develop this as a bad habit. The catch, pull and push, should be going backwards. Keep low on the water, don't lift your head, simply turn it to the side; any side, keep your ear or one goggle in the water. This way you can breathe as you please, and as often as you please, and to any side that you please, without affecting the rhythm or the flow of the stroke. However this technique is a matter of opinion.
- The kick; as has been said, is for propulsion, not for kicking the hips or butt up on the water. The first kick should come in, just before, or, as the arms hit the water; not a moment later or the balance and rhythm will suffer. The second kick will happen just before the arms exit on the recovery. The kick should whip up and down; knees bent to straightening on the down kick, and straight on the up whip, using the buttock muscles for the lift. Do not let the feet break the water on either kick. If you test the validity of this with a kick board, and you are kicking properly; you will see the difference, even though the amplitude of the kick is smaller, it fits the rhythm and is more effective.
- Butterfly is not brute strength. More and more we are seeing the 'dance' in the stroke. Little girls can do it beautifully when properly taught.