

## **BALANCE OF POWER**

Patrick Devine

The sport of swimming rarely rewards the thoughtless use of muscular power. Most can float in a streamlined position, but when a limb is moved, usually for propulsion, the body reacts to where the streamlining is reduced.

Our ultimate speed is the result of a battle between the power of propulsion and the limitation of resistance. Don't you feel good when power is applied with maximum intensity? You might feel good but not go fast. When the balance of the body is disturbed it will react to re-establish equilibrium usually with a marked increase of frontal area and resistance.

Possibly the most important aspect of your swimming is to maintain balance and streamlining while performing the stroke. An increase in power will only increase speed significantly, if resistance does not increase. Unfortunately many swimmers follow every fad available, in an exaggerated manner, with their bodies oscillating all over the place.

In water, it is very difficult to be aware of the body's movements. While exaggeration is an initial aspect of skill acquisition, prior to polishing the performance of new movement, a good principle is to make the attempt in a small, slow, subtle manner that does not distort the body's balance.

Many parallels can be drawn from flight. A plane feels fastest when taking off and the wings are aligned for maximum lift. Vibrations, speed and power are felt as it leaves the airport. It is only traveling at about one third to half its cruising speed. When cruising, the wings are trimmed for maximum speed, not maximum lift. The power of the engine is not apparent and a smoothness and glide are experienced as it travels just below the speed of sound. How many of us look for the power and vibration, like the take off experience in our swimming, rather than the smoothness and streamlining of high-speed flight.

We rarely have the chance to watch an Albatross, but the Gannets can often be seen on patrol strongly gliding at high speed. Their power is directed towards core strength and occasional wing flap. By contrast the Humming Bird is all flapping and no speed. This comparison can be a lesson transferred to swimming. Just as an aeroplane is trimmed for speed, think of trimming your stroke to swim fast

While it is not proposed that you "Float like a Butterfly and Sting like a Bee", maybe thought should be given to "Float while you Butterfly".

Please try to maintain streamlining, keep your speed by minimizing resistance and question if your present stroke(s) achieve these qualities.

A better title for this article might be "The Power of Balance"