## SWIM COACHING BRAIN - SWIM PROGRAMS 1 - SPEED DEVELOPMENT

## www.swimcoachingbrain.com

P.A.C.E. System Level	Description	Feels like	Speed Relative to Target Race Pace	Used for
P or PACE 1	Practice and Preparation Pace: 50-60% of Target Race Pace.	Easy, relaxed.	SLOWER THAN TARGET RACE PACE	Recovery, drills and skills.
A or PACE 2	Air-robic Pace: 70- 80% of Target Race Pace.	Easy to moderate.		Endurance development.
C or PACE 3	Competition Specific Pace	Hard – challenging.	TARGET RACE PACE	Race specific practices with race specific speeds, skills, techniques and breathing.
E or PACE 4	Electric Pace	Fast - explosive.	FASTER THAN TARGET RACE PACE	Speed development.

## PACE CHART FOR SWIMMING PROGRAMS

All Swim Coaching Brain programs use **TARGET RACE PACE** for the measurement, monitoring and management of training intensity. Unlike other measurements of training intensity, pace is simple to measure and not subject to variation, subjective opinion, inaccuracies and inconsistencies.

It is also future focused, i.e. it is focused on you achieving your future racing goals and your training is specific to matching your competition schedule.

To find your own training paces:

- 1. Determine your own target time for your next swim meet, for example 1:20 for 100 backstroke.
- 2. Calculate 50%, 60%, 70%, 80% and 100% of that speed.
- 3. Use those speeds to set your own swimming training paces.
- 4. As you achieve your target race goals, re-calculate your training paces.

## **Eight Key Principles of Speed Development in Swimming:**

- 1. **Train fast to go fast** train the way you want to race and include speed development training *every* week and in all cycles of training.
- 2. The faster you want to go the more relaxed you have to be! The only difference between swimming slow and swimming fast is the speed. Speed has nothing to do with gritting your teeth or tensing your muscles or pulling / pushing harder in the water: the faster you want to go, the more relaxed you have to be.
- 3. **Only fast is fast.** 90% of your best is not fast. 95% of your best is not fast. Only 100% is fast. You don't get faster by doing your speed workouts at near to best speed. You get faster by training faster than you ever have before.
- 4. **Think fast to go fast.** Get yourself mentally ready for speed training by thinking about speed. Focus on words that give speed meaning to you like "explode", "drive", "power", etc.
- 5. **Wall to wall speed.** The fastest swimmers in the world usually get to top speed before their opposition. In other words their acceleration is critically important. They also have great finishing speed and often will swim over their opposition in the final few metres. If you are practicing speed, work on it wall to wall: maximum speed starts maximum speed finishes.
- 6. **Quality Not Quantity.** The aim of speed development workouts is to develop speed. Increasing the number of repeats to achieve an increased in workout volume at the expense of the quality (speed) of the workouts will only develop the ability to swim slowly more often.
- 7. **Maintain Skills / Technique and Legality at Speed** Going faster does not mean a compromise on skills, technique and legality (i.e. legal dives, starts, turns and finishes).
- 8. **Take a Mid-Session Break**. The name of the game is speed. There is no point doing lots and lots of mediocre swimming when you are aiming to develop real speed. Take a mid-session break. Eat something like a piece of fruit or a Sports Gel. Drink some water or juice or Sports Drink. Take a shower. Do some stretching. Do whatever it takes to recover and get ready to go fast again.

Speed	Warm Up	Skill	Speed Set 1	Recovery	Speed Set 2	Swim Down
Development Workout Number					2	
1 3000 METRES	300 Free PACE 1 200 Back PACE 2 100 Breast PACE 1 4 x 25 Fly on 50 PACE 3 100 Free PACE 1	4 x 50 kick on 1:15 PACE 2 4 x 50 pull on 1:15 PACE 2 4 x 100 on 2:00 kick 50 / pull 50 PACE 2	6 x 50 metres on 1:45 as 20 metres best stroke PACE 1, 30 metres PACE 4.	300 Free PACE 1. 5 minutes of stretching pool side. Drink. Eat 1/2 piece of fruit.	4 x 50 metres as 40 metres PACE 4, 10 metres PACE 1. Walk back to the start.	400 as 50 Back / 50 Breast (long glide) PACE 2 200 IM PACE 2 200 Free PACE 1
2 2500 METRES	16 x 25 Medley order on 30 PACE 2 300 as 50 back / 50 free PACE 1	4 x 200 on 3:15 as 100 Kick PACE 2 / 50 Pull PACE 1 / 50 kick PACE 3	8 x 25 metres on 1:30 as 15 metres PACE 4, 10 metres PACE 1.	3 minutes hot shower. 1 minute cold shower. Repeat the above twice. Drink water or Sports Drink. Eat ½ piece of fruit.	4 x 100 metres on 2:30 as 15 metres PACE 4, 70 metres PACE 1, 15 metres PACE 4.	4x 100 Free on 2:00 first two at PACE 2, next two at PACE 1.
3 3100 METRES	100 Back PACE 1 200 Breast PACE 2 200 IM as 100 IMs PACE 2	16 x 50 on 1:15 as 4 x (50 Kick / 50 Pull / 50 Drill / 50 Kick) PACE 2.	8 x 100 on 2:30 as 15 metres PACE 4, 70 metres PACE 1, 15 metres PACE 4.	200 Free PACE 1. 5 minutes of stretching pool side. Drink. Eat ½ piece of fruit.	8 x 8 strokes of Fly no breathing PACE 4. (Easy swim back to the start). Rest 60 seconds then repeat.	12 x 50 Alternating 50 Back PACE 1 / 50 Breast on 1:30 PACE 2. 100 Free PACE 1.
4 2900 METRES	200 Back PACE 1 8 x 50 Medley Order on 1:30 PACE 2 200 Free PACE 1	4 x 75 Kick on 1:45 as 25 PACE 2 / 25 PACE 1 / 25 PACE 3	12 x 100 metres on 3:00 as 40 metres PACE 4, 60 metres PACE 1.	5 minutes of stretching pool side. 200 Back PACE 1. Drink. Eat ½ piece of fruit.	6 x 15 metres PACE 4. Easy swim back to the start. Rest 60 seconds then repeat.	300 as 4 x (25 Back / 25 Breast / 25 Free) all at PACE 1.
5 2600 METRES	150 Back PACE 1 16 x 25 Medley order on 40 PACE 2 150 Breast PACE 2	4 x 25 Pull on 30 PACE 1 4 x 25 Kick on 30 PACE 2 4 x 25 Pull on 30 PACE 2 4 x 25 Kick on 30 PACE 3	12 x 50 metres on 1:45 as 30 metres PACE 1, 20 metres PACE 4.	2 minutes of stretching in a hot shower. 1 minute in a cold shower. 200 Back PACE 1. Drink. Eat ½ piece of fruit.	4 x 75 metres on 2:15 as 15 metres PACE 1, 25 metres PACE 4, 30 metres PACE 1.	100 Free PACE 2 100 Back PACE 1 200 Free PACE 1