Anaerobic training

Anaerobic Training

- Detailed advice available at :

https://offtheblocks.info/technical/guide-anaerobic-training/

- Examine which aspects of Anaerobic Training we include in our programs and why
- Consider how appropriate these methodologies are
- Ensure age, ability, event & developmental differences are all met
- Foundation work to prepare for senior swimming

Anaerobic Training within an Age Group /Youth Program

- All energy systems are trained collectively
- Age group swimmers need to maintain a very high level of Aerobic capacity
- Capillarisation and Cardiovascular development must not be compromised
- Anaerobic training is achieved with Race Pace emphasis
- Anaerobic sets should be used sparingly with age groupers & be shorter than for Senior athletes
- Consider monitoring with Effort levels stroke counts' as well as times

Responses to Anaerobic training

Responses differ according to

- Age
- Gender
- Body Type
- Physical Development
- Event
- Psychological readiness to train

Types Of Anaerobic Training

4 Key Types of Anaerobic Training

- Lactate Production
- Lactate Tolerance
- Lactate Removal (Secondary Removal Sets)
- Lactate Buffering (Utilisation)

Lactate Production

Short Swims – Long rest

Challenge swimmers to hit full speed and maintain this

Stroke / Event specificity is required

Total distance of set circa 600m

Examples :

- 3 x (3 x 35 @ 90 + 100m easy) target time 100m PB or first 100m of 200m race split
- 6 x 50m @ 90
- 2 x (2 x 15 @ 60 , 2 x 30 @75, 2 x 60 1:45 , 1 x 100 loosen @2:00)

Lactate Tolerance

Short Swims – Long rest can include active rest

Challenge swimmers to hit full speed when fatigued

Stroke / Event specificity is required

Total distance of set up to 600m

Examples :

- 6 x (100m @ 3:00)
- 2 x(1 x 50m from dive first 50m split , 2 x 100m at middle 100 split , 1 x 50m push last 50m Pace 100 loosen)

Lactate Removal

Actively Training the body to remove lactate

Used as a second set following production or tolerance sets

Best achieved using Kick

Use of spike speed bursts is effective

Examples :

- 6 x 50m Kick @ 2:00 maximal effort (fins) 3 x 100m fast to easy , 4 x 75m last 25m maximal effort
- 2 x(50m kick fast@70 , 150m Kick @ 2:00, 50m Kick fast@70, 150m pull @ 2:00)
- 2 x (3x100 kick @2:00 fast to easy, 3x100 swim fast to easy)

Lactate Buffering (Utilisation)

Actively Training the body to use & reduce lactate from the blood

More likely to be used training for 400m & above

Requires well developed VO2Max

Examples :

- 3 x (1 x 50m Off Blocks , 100m @ 2nd 100 pace, 1 x 100 @ 3rd 100 pace , 1 50m last 50m pace 1 x 200 recovery)
- 3 x 100 @1:45 Thresh , 2 x 300 @ 1500m pace , 2 x 200 400m pace 1 x 100 best effort

Summary

- Anaerobic training is 1 part of a balanced program
- Gain an understanding of the Science that underpins it – but work out how it benefits your athletes rather than getting too worried about correct scientific terminology
- Introduce it gradually when introducing to your program for the first time