

# Optimally improving your stamina

We need 3 good quality stamina sessions a week. High intensity games or training which lasts more than 30 minutes will count as a session. If however your game, match or ball work was not at the best pace you can manage. If you've still got something left in your tank. If you know your session was not enough, you know you need to do a Top up. You know your body. You make the call.

Run, Bike Cross train, Row.

## Basic Effective Methods

1. **1 min Work as hard as you can. Rest 2 mins. Repeat. Build up to 30-40 mins.**
2. **2 min Work as hard as you can. Rest 2 mins. Repeat. Build up to 30-40 mins.**
3. **3 min Work as hard as you can. Rest 2 mins. Repeat. Build up to 30-40 mins.**

Other Top up and Stamina Session Options. Ghost, Run, Bike, Cross Train or Row.

1. **Aerobic Intervals – High Intensity** – Up to 30 minutes. Mix up

30 seconds work then 30 seconds rest where you walk or go very slow.

60 seconds work then 30 seconds rest where you walk or go very slow.

Work at maximum speed you can manage. Set interval timer on phone app or watch to 30 second repeat to help your timing.

2. **Aerobic Intervals** – Up to 12 sets

2 minutes work at High Intensity – 90 % of your maximum pace.

Then walk or go very slowly until the intensity feels light and easy and you feel you can go again for your next 2 minutes of High Intensity work. Repeat.

Set interval timer on phone app or watch to 2 minutes to help your timing.

3. **Intervals that will simulate match situations** – Up to 30 minutes. Mix up.

15 seconds work then 15 seconds rest. Maximum pace.

30 seconds work then 15 seconds rest. High pace.

45 seconds work then 15 seconds rest. Moderate pace.

60 seconds work then 15 seconds rest. Moderate pace.

Set interval timer on phone app or watch to 15 second repeat to help your timing.

Note - (Ghosting – Be aware if you do a large volume of on court movement it may increase your chances of specific movement injuries. Don't do ghosting everytime)

Improving aerobic performance is not just doing things for longer durations, but the intensity you can sustain for longer durations. We used to run or use exercise equipment for long durations at a moderate continuous speed and intensity. This may be ok for an initial base of fitness out of season, but we know the benefits of this are low compared to exercise where we challenge the energy systems.

Gareth Thomas quote – 'When I played for Wales I was the fittest in the squad. Nobody could understand why, until they realised I used to push myself to the limits when no one else was watching'. 'Beat yourself before you can beat others'

# Training intensities and benefits to improve performance

## **70-80% Max Heart rate - Fitness zone – Works slow twitch muscle fibres**

Improves Aerobic pathways

Improves Oxygen transport in the body

Improves Aerobic glycolysis

This training zone enables us to work for longer at lower intensities using less energy.

Playing and training for longer durations is good for this attribute

## **80-90% Max Heart rate – Performance Zone – Onset of Blood Lactate**

Increased fast twitch oxidative glycolytic fibre recruitment

Improves Lactic acid clearance

Improves Anaerobic threshold

This training zone enables us to work more optimally at levels where our body creates lactic acid.

Playing and training at high intensities for 20 minutes plus is good for this attribute

## **90-100% Max Heart rate – Performance anaerobic Zone**

Increased fast twitch fibre recruitment

Improves Anaerobic pathways

Increases maximum oxygen transport

This training zone enables us to work more optimally at maximum intensity levels.

Sprint training is very good for this attribute.

We need to have all these attributes for squash.

We need to be able to play long matches.

We need to be able to work harder at times and maximally at others and be able to recover quickly.

We need to do a range of very high quality training sessions.