

# MIXING IT UP



When you can't train on the water there are alternatives to the dreaded erg. The GB Rowing Team Physiologists explain how cross-training can boost your rowing

BY MARK HOMER

It's Sunday morning and you plan to row 12km including 4 x 1000m flat-out – no problem. Unfortunately, Aeolus the god of wind has different ideas. Gale force 10 and a reported twister stand between you and your session. An ergo is the obvious choice – why not get in the gym and replicate the training programme on dry land? After a good winter's training, obstacles like bad weather can be frustrating. However, there are alternatives to the big grey trolley that could benefit your performance more than just making up the mileage.

Cross-training involves incorporating different modes of exercise into your training programme as a substitute for (in our case) rowing. This can be enforced, owing to injury or bad weather, or deliberate in order to improve a specific area of fitness quicker and more effectively than through rowing alone. The benefits of cross-training are numerous, but there are also some risks that should be considered before adding it to your schedule.

The most touted advantage of including a cycle, run or swim session is the reduced risk of injury, caused by one less rowing session per week. Reduced load through the lumbar and thoracic spine with a similar cardiovascular demand could increase the quality of your subsequent technical rowing training and lead to better training adherence over the course of a season.

Other advantages include improved 'athleticism' derived from increasing the range

of movements and skills performed, and possible improved neuromuscular adaptation from varying the cadence of movement patterns – such as the differences between cycling at 100rpm and rowing at rate 18.

Cycling is probably the most common cross-training option for rowers, with the main advantage being the length of session possible when compared to rowing. The reduced lumbar and thoracic load allows for three, four or even five-hour rides which can increase peripheral (long-term) adaptation to training, particularly through increasing the use of fat as a fuel source and subsequent sparing of carbohydrates. Also, it is hard to go far in this country without encountering a hill – which means most sessions include a mix of training intensities that increase the possibility of peripheral / central aerobic and anaerobic adaptation.

For serious training, owning your own bike is a necessity. Buying a bike can be a potential minefield though – so do seek professional advice before buying a Team Sky, full carbon time-trial machine that weighs less than your water bottle!

A bike fitting will provide you with frame dimensions that reduce your risk of picking up an overuse injury, and help guide a decision that should also be influenced by your environment (e.g. local road quality), riding experience and height and weight. A mountain bike can be a sturdy and more comfortable alternative to a road



Running: a potentially high impact option



Cycling: probably the most common cross-training option



Swimming: a great whole body workout



bike. Dodging Britain's motorists can be more dangerous than rowing on the Tideway, so choose your route carefully to avoid busy towns and cities. Riding in groups can also be tricky – you may get more physiological benefit from solo riding as there is no place to hide from the wind.

Running is another alternative, although the similarities between Mo Farah and your average rower are few and far between. Long limbs and forces up to three times your body weight channelled through the hips, knees and ankles can make this modality a challenge for open-weight athletes in comparison to their lightweight counterparts. A decent pair of shoes to compensate for your running style are essential (e.g. neutral or under / over pronation) – despite what you may have heard about the virtues of barefoot running! The softer surfaces encountered during trail running can make a big difference to your comfort during a run, while including hills on your route is a simple means of increasing intensity without having to run any faster. Another advantage of running and cycling is that they give you the option of enjoying some scenery while you train, as opposed to travelling backwards up and down that same stretch of river or lake that you know so well.

Because the whole body is used in rowing, alternatives that incorporate the arms as well as the legs will increase total energy expenditure and provide more specific physiological adaptation. Peripheral capillarisation (blood supply to the working muscles) and increased mitochondria production (the 'power stations' of muscle cells)

will occur in the smaller and less efficient muscle groups of the upper body.

Swimming is a great option, being both whole body and non-weight-bearing. Those with good technique can be inventive with sessions which incorporate all of the major strokes and various intervals and/or pyramids. Those barely out of armbands can still get a strong physiological stimulus from battling up and down the pool, but sessions should be altered to allow for the increased intensity

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required to stay afloat. If swimming really isn't your thing, then aqua-jogging is an interesting alternative. Flotation belts provide support in the water, allowing you to run 'on the spot' while working your arms against the resistance of the water.

Other whole-body sports are less accessible. Cross-country skiing is one of the best, but a high technical component and the general lack of snow and facilities in the UK make it a difficult prospect. Indoor ergometers such as the Schwinn bike or the Concept2 SkiErg can be found in various gyms.

With any of these training modes, your approach should start cautiously. A graded introduction will help avoid the pitfalls of anything from simply blisters to musculoskeletal issues associated with spending long periods of time in a 'new' position.

The need to adapt training due to injury is frustrating, but there are not many injuries that prevent any kind of training. Working around an injury often needs to be creative, and an upcoming article will discuss training during rehabilitation in more detail.

So there are cross-training options available to suit all. Incorporating new patterns into your programme should be considered alongside your available training time. If you can only train

three or four times a week, it is probably best to concentrate on rowing for the main bulk of your session. You could try incorporating an alternative exercise as part of your warm-up – a 15-minute run, or maybe a cool-down static bike. If you have more time available, then incorporating a weekly ride, run or

swim can provide an additional stimulus for improvement and an invigorating change to stimulate the mind. □

### MARK HOMER

Mark Homer has a BSc and an MSc in applied sports science from the University of Wolverhampton with three years' teaching experience in further education. He has worked as an exercise physiologist with the GB Rowing Team for seven years and supported the squads at the last two Olympic Games. Mark is currently studying at Liverpool John Moores University towards a PhD entitled 'The Determinants of Rowing Performance'.