Recovery Strategies

https://www.youtube.com/watch?v=8RG4qfnaScM (8 mins recovery strategies)

- recovery strategies
 - physiological strategies, eg cool down, hydration
 - neural strategies, eg hydrotherapy, massage
 - tissue damage strategies, eg cryotherapy
 - psychological strategies, eg relaxation.

 research recovery strategies to discern their main features and proposed benefits to performance.

P234 Outcomes Text

- Read the snapshot 'The ten top recovery strategies for training and racing tips.'
- Then imagine a scenario where you are in training for a half marathon and will compete in a couple of weeks.
- Review the recovery strategies and select the 6 that you feel would be of most benefit.
- Rank your 6 from absolutely essential to least essential and then justify your ranking.

The importance of effective recovery

 Professional athletes and teams recognise the importance of effective recovery. Many have programs and software to monitor an athletes feeling of wellness, which can create alerts if an athlete is not recovering well and this may indicate signs of possible burnout or overuse.

Active recovery

Training fatigue

Time

Figure 7.17: The pace at which adaptations take place is increased by using positive recovery strategies.

Recovery Strategies (cont)

- If training programs do not allow for adequate rest and recovery, the athlete may develop symptoms of overtraining and burnout, which can lead to injury, decreased performance and a loss of desire and motivation to train and compete.
- Various strategies should be used throughout the training cycle, particularly in the hours and days immediately following intense training or competition.

Recovery Strategies (cont)

- Competition and intense training loads result in micro trauma to muscles, neuromuscular fatigue, psychological weariness and the depletion of fuel reserves and hydration levels. This is known as a catabolic state (a state of breakdown).
- Before athletes can resume normal training, their body must be restored to an anabolic state (a state of building), where they feel fresh and energised without feelings of pain and tiredness.
- Recovery strategies seek to return the athlete to an anabolic state as quickly as possible.

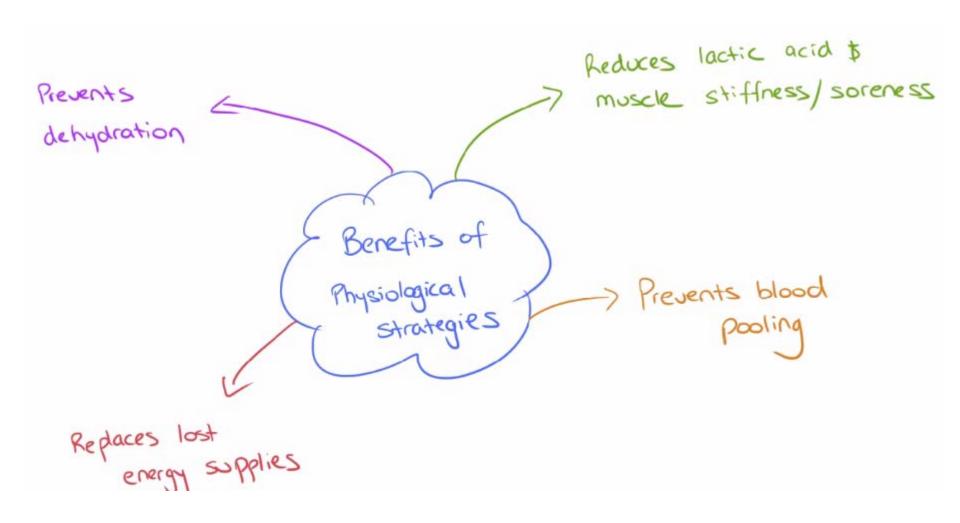
Physiological strategies

- Immediate cool down after physical activity, involving gentle movements (running and other dynamic limb movements) and stretching and mobility exercises help the body to recover quicker.
- A vital strategy to allow the body to recover quickly is to rehydrate and replace all fluids lost. This ensures the body is able to effectively transport nutrients and waste in and out of the body.
- The general rule is to drink 150% of the estimated fluids lost (best assessed by the loss of body weight following exercise).
- Electrolyte drinks may be useful if the athlete sweated very heavily due to high intensity or hot weather.

Physiological strategies (cont)

- Adequate nutritional intake after exercise is also critical to help the body return to its pre-exercise condition as quickly as possible.
- Particular attention should be given to carbohydrates and proteins to refuel energy reserves and protein to help repair muscle breakdown.
- Compression garments are also commonly used by athletes as they report they feel better by wearing them.

Benefits of Physiological Strategies



Neural strategies

- Both feelings of general fatigue and tiredness and specific fatigue in muscles can be relieved through a variety of strategies.
- Strenuous exercise affects the central nervous system and this may contribute to fatigue.
- The use of **hydrotherapy** (water) can soothe and relax sore muscles, help eliminate waste products and allow for gentle movements.
- This could involve a spas (with jets), contrast water therapy (switching between hold and cold water – plunge pools) and gentle exercise in water (pool).

- Relaxes muscles Reduces risk of - Soothes pain injury - Assits metabolic L7 Low impact recovery Accelerates blood flow

Neural strategies (cont)

- Massage is another strategy to promote relaxation of sore muscles, help remove metabolic waste products and relieve any tight knots in muscles and tendons.
- A qualified masseuse is ideal; however, self massage or the use of a foam roller can provide similar benefits.

Flushes waste Reduces products anxiety Benefits of Massage Minimises DOMS Improves flexibility Reduces muscle tension

Tissue damage strategies

- Pain and inflammation is common after intense sports involving some level of contact. Bumps and bruises can prevent an athlete from returning to normal training for days, which is not ideal in competitive sport.
- Cryotherapy is essential in promoting fast and effective relief from minor injuries such as hematomas or ongoing overuse injuries that an athlete may be managing.

Tissue damage strategies (cont)

- Cold water immersion (ice bath) is useful for immersing the whole body. This is common in heavy contact sports such as Rugby League.
- Specific application by using bags of ice with compression is still one of the most effective ways to reduce the pain and inflammation in a specific spot.

Reduces swelling, inflammation 3 pain Benefits of Tissue Damage Strategies Stimulates recovery Ly Brings fresh blood to the area

Psychological strategies

- To help an athlete relax they may:
- Listen to music, reading
- Meditate using visualisation, breathing exercises and other muscle relaxation techniques such as Progressive Muscular Relaxation, yoga
- Benefits of this helps to reduce tension which in turn facilitates both physiological and psychological recovery.

https://www.youtube.com/watch?v=AYOME4
 gmvg4 (4 mins AIS to replicate recovery centre)