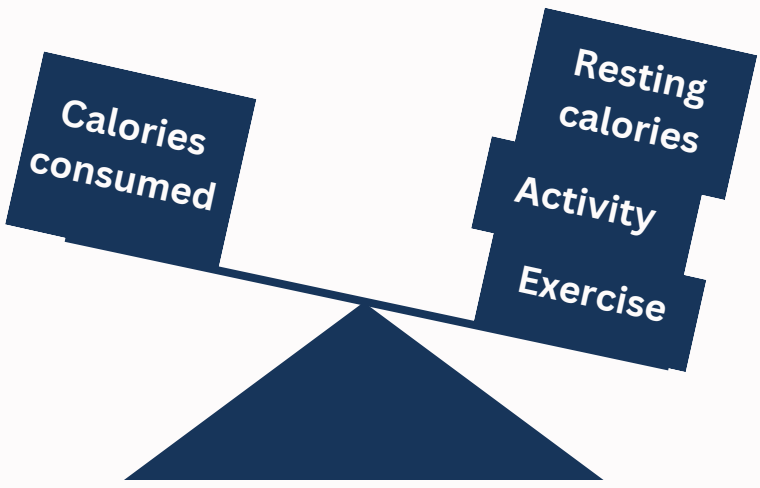
RED-S

Can affect males and females

'Relative Energy Deficiency in Sport' is a significant health condition that affects performance. It is caused by a mismatch between energy intake and expenditure.



Energy is used for many things besides just your sport-specific training (work, study, socialising, walking the dog). Low energy availability means the body is unable to perform all its functions effectively resulting in a range of health & performance consequences. Similar to a phone running in 'low power' mode, the body can continue to function with RED-S, but at a much lower capacity.

RECOGNITION

SIGNS and SYMPTOMS

- Illness and injury
- Repeated rib bone stress
- Menstrual irregularity
- Erectile dysfunction

- Performance
- Strength and stamina
- Recovery
- Immunity
- Moods

- Sex drive
- Metabolism
- Judgement
- Coordination

WARNING SIGNS

- Performance decline or plateau (or difficulty adapting to training)
- Mental Health: irritability, depression, anxiety, low motivation, poor sleep quality
- Persistent or recurrent injury (soft tissue or bone) or illness (colds/infections)
- Attitude changes: to food/rest/exercise
- Hormonal changes: *missing/abnormal menstrual cycle, reduced libido, loss of early morning erections

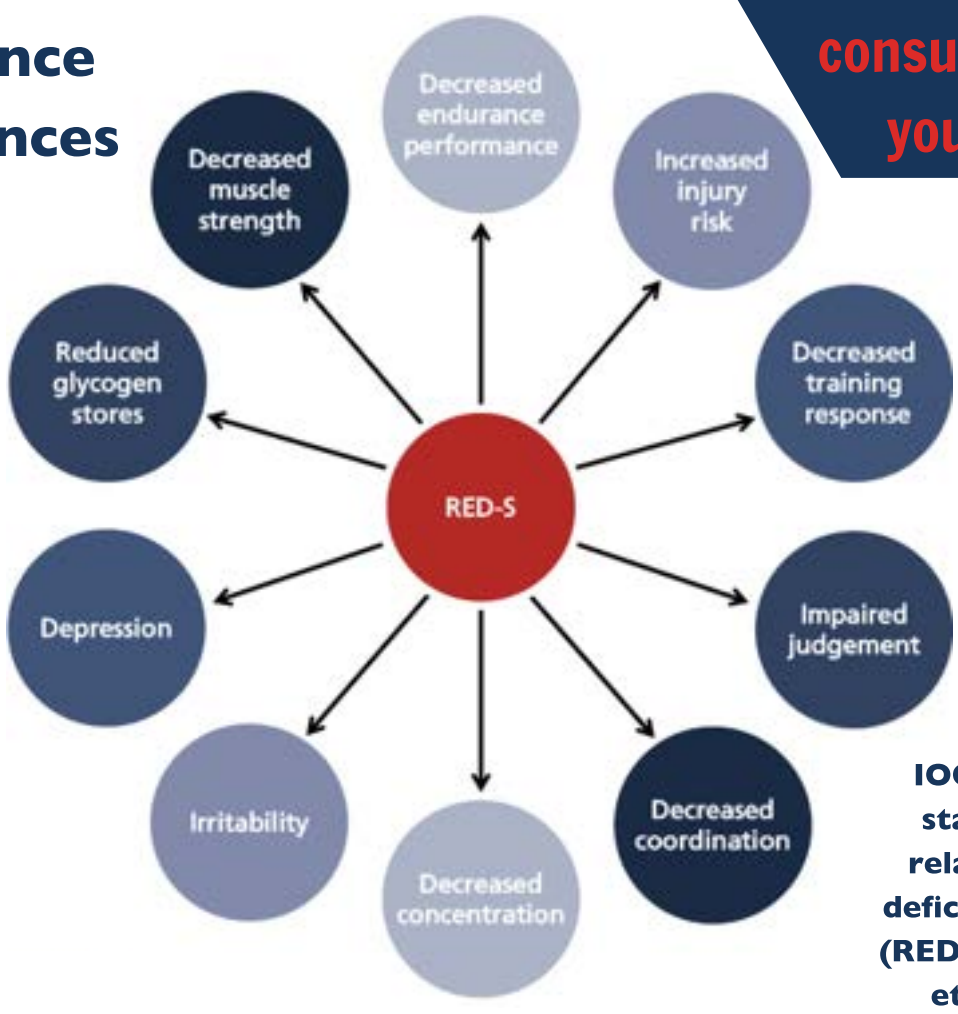
*IT'S NEVER NORMAL TO STOP HAVING PERIODS WITH TRAINING

Having natural regular periods is a barometer of health and well being. If you haven't started having periods by age of 16, or have missing or irregular periods, this should be investigated as soon as possible, ideally by a Sports Doctor. Having a withdrawal bleed on the Contraceptive Pill is not the same as a natural period and can mask the symptoms of hormonal imbalance and low energy availability.

RED-S

If you think you have symptoms of RED-S, book a consultation with your doctor

Potential performance consequences of RED-S



IOC consensus statement on relative energy deficiency in sport (RED-S). Mountjoy et al., (2018)

PREVENTION

The key to preventing RED-S is ensuring adequate energy intake and recovery in relation to daily activity AND exercise needs.

Low energy availability may occur due to a misunderstanding of energy requirements or as a result of intentional changes in eating habits. Things to consider:

- Training volume across a week, month and year can be significantly different with regard to energy requirements – energy intake should be modified to reflect this.
- Fuel well before training by consuming a carbohydrate-based meal or snack.
- Consume a well-balanced meal containing carbohydrates, protein and vegetables as soon as possible after training.
- Ensure you are eating enough meals and snacks throughout the day. Eat at regular intervals and avoid excluding foods or food groups unless you have a medical reason.
- Avoid unhelpful (or unscientifically supported) sources of nutrition or training advice, including social media accounts which promote unrealistic comparisons. Instead, focus on working with the body you already possess.

Disordered eating and clinical eating disorders

Eating disorders are complex, significant medical conditions. Detecting problems at the earliest stage improves recovery and reduces the risk of long term health consequences. More information about the signs and symptoms of eating disorders can be found at: www.b-eat.co.uk

RED-S recovery outcomes can be significantly improved with early identification and treatment.

For more information on relative energy deficiency in sport, go to WWW.RED-S.COM

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