

Low energy **AVAILABILITY**

Information for athletes and parents



This resource aims to provide athletes and parents with guidance on how to identify low energy availability and the potential health and performance consequences this may have.

It's quite common to have low energy availability in aquatics but little awareness on the signs and symptoms. But knowing how to identify this early should help athletes get the support they need. This may be from a local GP, clinical psychologist, psychiatrist and/or a clinical dietitian, a charity or a private organisation.



> Identify



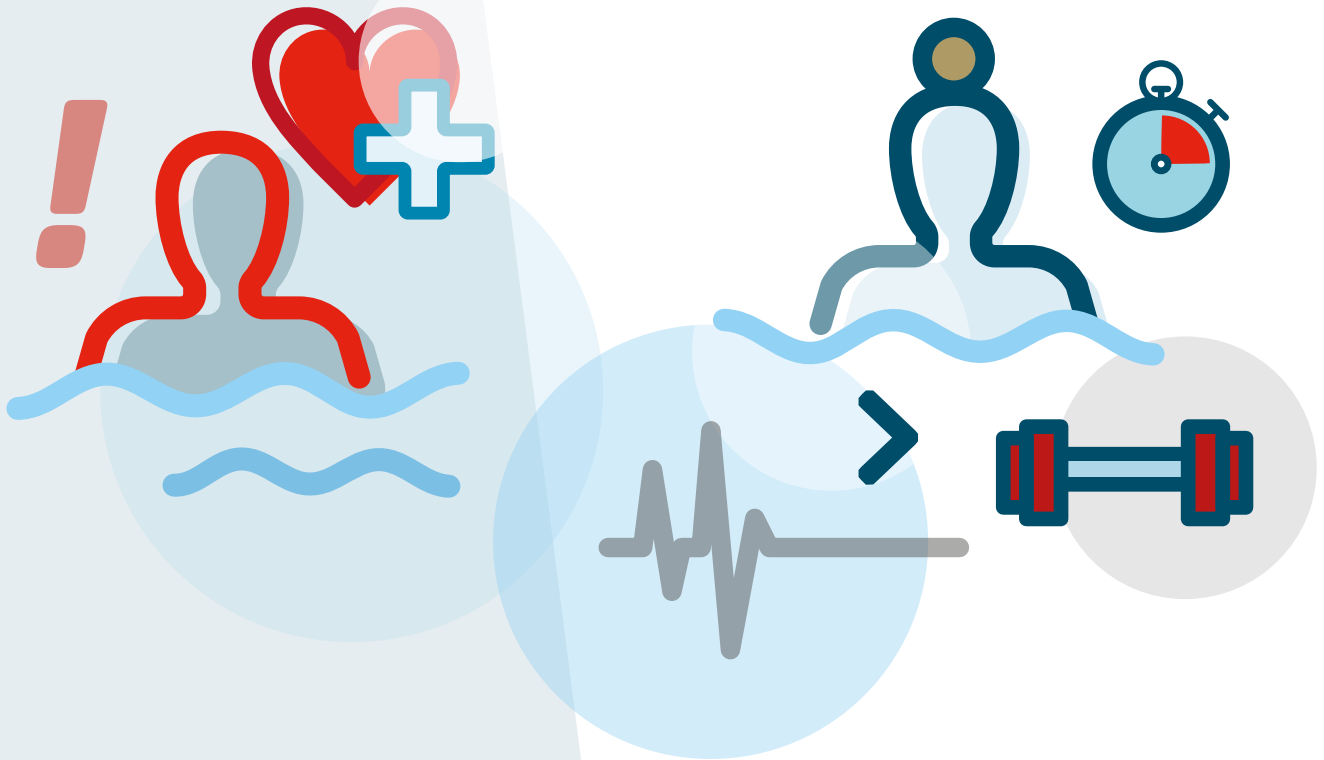
Identification of low energy availability

Low energy availability (LEA) happens when the body does not have enough energy to support all physiological functions needed to maintain optimal health, i.e. when there is a mismatch between energy in versus energy out. The body uses energy for exercise before using energy for crucial bodily functions, such as menstruation, bone development and growth.

LEA can be happening due to relative energy deficiency in sport (RED-S), overtraining syndrome, disordered eating or an eating disorder.

Below are brief definitions of what these are:

RED-S	Impaired physiological factors causing impairments of metabolic rate, menstrual function, bone health, immunity, protein synthesis and cardiovascular health.
Over training syndrome	Performance decrement lasting over two months, maladapted physiology (psychological, neurological, endocrinological, immunological systems), and an additional stressor not explained by other disease.
Disordered eating	Food related behaviours that falls below the threshold for recognised eating disorders (EDs) but may still affect someone's physical, mental, or emotional health.
Eating disorder	An eating disorder is a mental health condition where you use the control of food to cope with feelings and other situations. A doctor, clinical psychologist, psychiatrist and/or a clinical dietitian who works with other disciplines in a team approach should be accessed to ensure the best outcomes for those with a eating disorder.



Health consequences you may notice

- Cardiovascular
Faster heart rate at lower intensity
- Gastrointestinal
Bloating and constipation
- Decreased immune function
More coughs and colds
- Menstrual function
Stop having periods
- Bone health
More stress fractures
- Endocrine
Feeling stressed
- Reduced metabolism
This could affect your energy levels
- Low red blood cell count
Fatigue quicker
- Slower growth/development
Take longer to progress
- Psychological
Low mood and anxiety

Performance consequences you may notice

- Less muscle strength
Weaker
- Worse endurance performance
Swimming slower than usual
- Increased injury risk
Less time training
- Poor training response
Less reward for more work
- Impaired judgement
Not listening to your body
- Less coordination
Unable to execute skills
- Reduced concentration
Making mistakes
- Irritable
Falling out with teammates
- Depressed
Low mood
- Lower carb stores
Less energy for training

Spectrum of eating behaviour



Optimised nutrition

Safe, supported, purposeful and individualised nutrition practices that best balance health and performance

Disordered eating

Problematic eating behaviour that fails to meet the clinical diagnosis for a eating disorder

Eating disorder

Behaviour that meets DSM-5 diagnostic criteria for a feeding and eating disorder



An important task is to identify those who have RED-S as a consequence of disordered eating and eating disorders (both together not separate things) and at the same time prevent those with simple LEA/REDS progressing to something more serious such as disordered eating and eating disorders (linear progression not separate categories).

Know the first signs of an eating disorder

The charity Beat have created resources to help spot the first signs of eating disorders. Download this [here](#).

Eating disorders. Know the first signs?



Lips

Are they obsessive about food?



Flips

Is their behaviour changing?



Hips

Do they have distorted beliefs about their body size?



Kips

Are they often tired or struggling to concentrate?



Nips

Do they disappear to the toilet after meals?



Skips

Have they started exercising excessively?

If you're worried someone you care about is showing any signs of an eating disorder – even if they're not on our list – act quickly and get in touch. We can give you the answers and support you need to help them on the road to recovery as soon as possible.

Don't delay. Visit beateatingdisorders.org.uk/tips



> Seeking support

Speak to your coach, team manager, support staff or welfare officer

If you feel comfortable to do so, speak with your coach, team manager, a member of the support staff or your welfare officer.

They will not be in a position to diagnose the cause of the low energy availability, but they will be able to support you with identifying the signs and symptoms, and signpost you to the appropriate help.

This may be your local GP or a charity such as **BEAT**.



Seeking support from a GP

If you're concerned that you may be displaying signs of low energy availability and its associated causes such as disordered eating or an eating disorder, make an appointment with your GP straight away.

- The sooner you can get treatment, the better. You can ask for a double appointment to allow yourself more time.
- Take a supportive person with you if you'd like. Some GPs may ask to speak to you alone for some of the appointment, but your supportive person can come back to discuss next steps together.
- Give your GP as much information as you can. It may help to write down your symptoms and any concerns beforehand, so you don't have to think on the spot.
- Ensure you include details of your training programme (e.g. hours per week, distance covered, pool and land work) when speaking to your GP.
- Even if a GP has experience working with people with disordered eating or eating disorders, they may not necessarily understand the sport specific demands.
- It is therefore important to show the high amount of energy that may be expended. It may sound like you are eating enough, but you may be using a lot of energy in the pool for training sessions each week.
- Find more information and supporting resources on disordered eating and eating disorders on the Beat website [here](#).

> Self-help

Self-help information

- Beat is the national charity for eating disorders and has an informative website with practical resources and a helpline.
- Whilst waiting for formal support and potentially a diagnosis for an eating disorder, emotional support is available from different organisations, which can be found on the **Beat website**.
- The Centre for Clinical Interventions (CCI) has produced resources to assist in providing interventions for mental health problems such as depression, bipolar, social anxiety, panic, self-esteem, procrastination, perfectionism, and eating disorders. The resources provided on this website aim to provide general information about various mental health problems, as well as techniques that focus on a cognitive behavioural approach to managing difficulties.



Find support

- Support services for disordered eating and eating disorders that are available in your local area, click [here](#).
- You can also use the **Beat Helpfinder**.

