



PERFORMANCE



SPORT INSTITUTE NETWORK
RÉSEAU DES INSTITUTS DU SPORT

ENERGY AVAILABILITY

Energy availability (EA) is the amount of dietary energy remaining for essential functions (heart, brain, bone, etc.) after accounting for the energy expended during training.

WHAT YOU SHOULD KNOW

LOW EA:

Low EA occurs when there is a mismatch between obtaining adequate fuel for energy demands or when energy demands have increased without adjusting EI. Over time this results in negative consequences for both health and performance. This can be both intentional (to modify body composition, making weight for competition) or unintentional (junior athletes moving to senior programs, heavy training blocks, travel, illness, etc.).

OPTIMIZE EA:

Plan your energy intake to reflect changes in your training load and training/competition schedules. Include EA monitoring into your regular monitoring routine (i.e. menstrual and reproductive function, health and injury status, fatigue state, mood changes, food habits and behaviour changes).

SYMPTOMS:

- Feel tired most of the time
- Not seeing progress in training- Have a reoccurring injury or an injury that does not heal
- Have difficulty maintaining healthy iron stores
- Experience multiple colds/illnesses during the season
- Unable to maintain or increase lean tissue
- Feel irritable and/or unable to focus and concentrate
- Changes in reproductive function/hormones
 - Females: irregular or absent menstrual cycles
 - Males: Lowered sex drive

SUMMARY

Optimal fueling for training and competition requires careful and strategic planning. Athletes need to be aware of how low EA may impact their health and performance goals. Talk to your sport science team and/or coach if you are struggling with managing your EA. If you have access to a Sport RD connect with them directly for guidance in this area.