

RED-S Warning Signs & Prevention

Recognize Relative Energy Deficiency in Sport before it causes lasting damage.

ACCESS
Free resource

AUDIENCE
athlete / coach / parent

READ TIME
4 min

AUDIENCE
Athlete + Coach + Parent

WHY THIS MATTERS

Recognize Relative Energy Deficiency in Sport before it causes lasting damage.

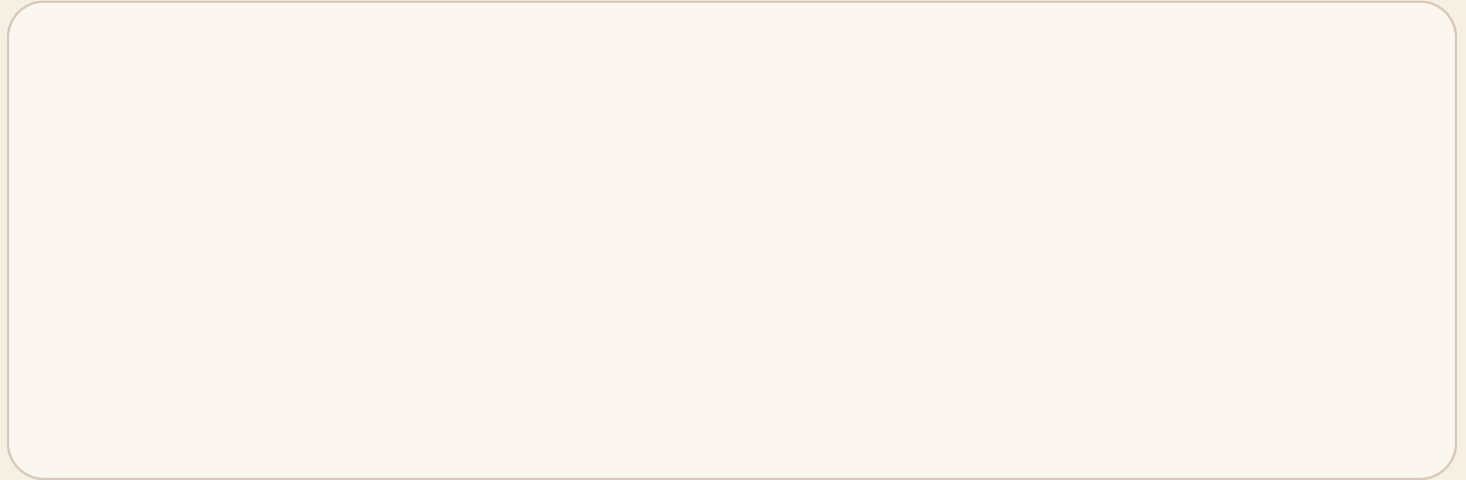


RED-S Warning Signs & Prevention

QUICK START

Start here

Recognize Relative Energy Deficiency in Sport before it causes lasting damage.



START HERE

RED-S begins when fuel does not cover training plus normal body function

- The body pays for underfueling by scaling back hormone function, bone building, recovery, and immunity.
- This is not just about food choices. It is about total energy availability across the week.

COACH RED FLAGS

Look for clusters, not isolated bad days

- Constant exhaustion, stalled progress, repeat illnesses, or slower recovery between sessions are common first signals.
- Recurring bone stress injuries or pain in low-risk areas should raise the urgency immediately.

VITAL SIGN

Menstrual function is one of the clearest windows into adequate fueling

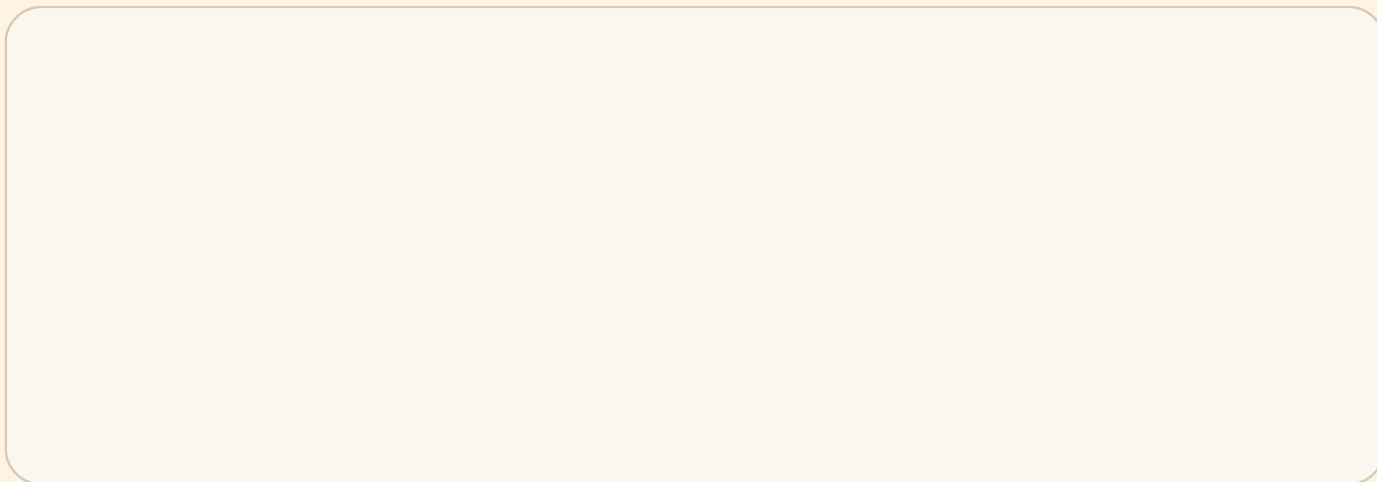
- A regular cycle is not a performance inconvenience. It is a health signal.
- Missing three or more cycles, cycles longer than 35 days, or no cycle by age 15 deserve referral. Use the referral chain inside a school for who to tell, and in what order.

WATCH FOR

What to watch before it becomes a crisis

Performance drop-offs, stress injuries, menstrual disruption, and persistent fatigue rarely show up as isolated issues.

- Under-fueling is often quieter than coaches expect.
- The best first move is usually a food-plus-screening conversation, not a supplement guess.
- Parents and coaches should hear the same short message.



Performance and training

- Workouts feel harder than they should
- Recovery between sessions gets worse, not better
- Pace or power declines even while training load stays high

Food and behavior

One bad week does not equal RED-S.

Skippping meals or cutting carbs while training hard

Fear around "bad" foods

Fixation on body composition

Guilt after eating or anxiety about fueling

Refer now if any of these are true

RED-S is usually best handled with a team: sports medicine, sports dietitian, and mental-health support when needed.

Missing 3 or more cycles after previously regular periods

A stress fracture or repeat bone-stress history

- Rapid weight loss, food restriction, purging, or extreme food fear**
- Performance decline plus fatigue that does not improve with rest**
- Mood changes or anxiety that are clearly affecting eating and training**

Quick checklist for the next conversation

If two or more of those are off, the next move is referral, not more motivation.

- Is the athlete eating before practice?**
- Is there a real lunch and an afternoon snack on school days?**
- Has training gone up without intake going up with it?**
- Have periods changed?**
- Has there been a recent stress reaction, stress fracture, or persistent shin pain?**

Go deeper next

- When recovery starts sliding, look at total intake: Adolescent Runner Nutrition
- If iron and fatigue are part of the picture: Iron Questions: A Food-First, Clinician-Routed Guide
- If you need help deciding when to escalate: When to Seek Professional Help

QUICK REFERENCE

Key targets to keep in view

Use these as planning anchors when you turn the manual into weekly actions.

WELL-FUELED

enough energy for training and health

Treat this as a decision anchor, not a trivia stat.

RISK ZONE

under-fueling the training load

Treat this as a decision anchor, not a trivia stat.

IMMEDIATE REFERRAL

2+ major red flags

Treat this as a decision anchor, not a trivia stat.

COACH TAKEAWAYS

Coach reminder

These are the cues worth repeating before the week gets busy.

- ☐ What to ask: Has your period changed, have you had stress injuries, and do you feel like recovery is getting worse?
- ☐ Are you skipping meals, restricting carbs, or feeling anxious around food?
- ☐ What to stop: Stop body comments, public weigh-ins, and praise for visible restriction.
- ☐ Do not tell an exhausted athlete to train through obvious RED-S signs.
- ☐ Who belongs on the team: Sports medicine physician, sports dietitian, parent or guardian, and mental health support when needed.
- ☐ Early referral protects both performance and long-term bone health.

WHAT TO DO NEXT

Use it this week

I care more about your health than the next workout.

BOTTOM LINE

RED-S is not a phase to outwork.

RELATED TOOL

Iron protocol

Turn warning signs into action.

Source topics: Mountjoy M, Ackerman KE, Bailey DM, et al. IOC consensus statement on Relative Energy Deficiency in Sport (REDs): 2023 update. Br J Sports Med. 2023;57(17):1073-1097. • Thomas DT, Erdman KA, Burke LM. Position of the Academy of Nutrition and Dietetics, Dietitians of Canada, and the American College of Sports Medicine: Nutrition and athletic performance. J Acad Nutr Diet. 2016;116(3):501-528. • Clénin GE, Cordes M, Huber A, et al. Iron deficiency in sports: definition, influence on performance and therapy. Swiss Med Wkly. 2015;145:w14196.