



# Royal College of General Practitioners Midland Faculty Annual Education, Research and Innovation Symposium Thursday 18<sup>th</sup> April 2024

## **Abstract Submission Form**

PRESENTER'S DETAILS								
Title (Prof, Dr, Mr, Mrs, Miss)		Niss) <b>First</b>	First Name			Surname		
Miss		Rosie	Rosie		Rudin			
Miss		Louis	Louisa		Harris			
Department or organisation name								
Warwick medical school								
Category (please select)								
	Research - yes		Education Project			Quality Improvement		
Audit								
Presentation Preference (please select)								
I prefer an oral		I pref	fer a poster or Yes		I have no			
presentation only		poste	er presentation		presentation preferences			
		only	only					
DDECENTATION DETAILS (								
PRESENTATION DETAILS (max 300 words in total not including title or authors)								
Names of Authors			Title of Study					
Rosie Rudin			Exploring different interventions for Relative					
Louisa Harris			Energy Deficiency in Sport (RED-S): a systematic					
			review					
I am a student and wish to be considered for the student prize  Yes No								

## Background -

What's the problem you are tackling?

Relative Energy Deficiency in Sport (RED-S) is caused by an imbalance in energy intake and expenditure through exercise which leads to low energy availability. This means that the body does not have enough energy to support its physiological function. RED-S can affect both male and female athletes. In females, menstrual dysfunction, in the form of irregular periods, is a well-known consequence of low energy availability. This has led many to associate the condition with only menstrual dysfunction. However, other symptoms include poor bone health, altered sleep, hormone imbalance and worsened athletic performance. Although awareness of RED-S is improving, there is a need for the synthesis into the efficacy of current interventions, which this systematic review aims to provide.

#### Method

How did/will you do it?

Medline, Embase and Web of Science databases were searched using keywords and their combinations. Two independent reviewers screened the retrieved studies by title, abstract and full text. The Joanna Briggs Institute critical appraisal tool was used to assess risk of bias. Data was extracted into an excel spreadsheet and a narrative synthesis performed. The study protocol is registered with PROSPERO, an international database of prospectively registered systematic reviews in health and social care (CRD42023474552).

## Results (if applicable)

What did you find?

The search retrieved 982 papers and after screening, nine were eligible for inclusion. One of three studies investigating the increase in energy intake stated this was significant in menstrual recovery for those with low energy availability. Education, when used in conjunction with other interventions, may also be useful.

#### Discussion

Why does this matter?

RED-S is poorly understood, and little research exists into the condition and treatment. Despite this, increasing energy intake is essential in the management of RED-S and may be more effective when used alongside education and hormonal treatment. Future research is needed to allow better analysis of the efficacy of interventions due to the limited research available.

Please return this form by e-mail to <a href="https://www.wmrcgp2024@warwick.ac.uk">wmrcgp2024@warwick.ac.uk</a>

Closing date Monday 26th February 2024