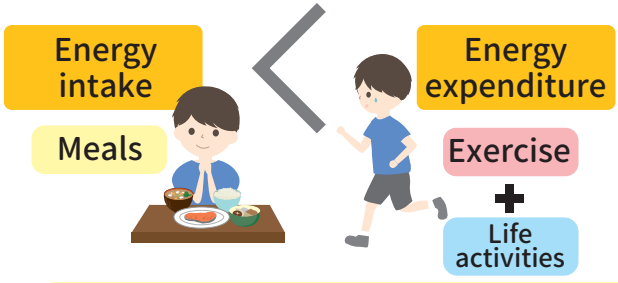
Sports Nutrition Tips

Athlete's Health Issues! What is Relative Energy Deficiency in Sports(RED-S)?



It is the energy deficient state where the total energy expenditure required for exercise and life activities outweighs the energy intake from meals. (Low Energy Availability)
It would affect health and sports performance when it becomes chronic.

When RED-S develops, body fat and muscles are broken down to compensate for energy

Source of Energy	Body fat	Muscles not used in exercise	Muscles used in exercise
	Break down	Break down	
Body Condition	Decrease in body weight	Decline in physical functions	No longer function as an athlete

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スポーツ栄養部会発行　NO.2208-1

Sports Nutrition Tips

Health Issues Triggered by RED-S

Adverse Effects on Vital Activities

- Immunity, Metabolism, Endocrine
- Blood, Bone, Menstrual Disorders



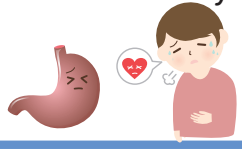
Psychological Changes

- Lowered concentration
- Irritation
- Depression
- Eating disorders



Hypoactivity of Organs and Tissues

- Digestive System
- Cardiovascular system



How can we prevent RED-S?

Get to know your required amount. When insufficient, increase the energy intake.

★If you can't eat a lot at once, don't push hard.
Gradually increase the energy intake.

Eg.... •Increase the amount of rice by one bite (15g) every week.
•Drink orange juice (100ml) instead of tea at dinner.



参考：理論と実践スポーツ栄養学
エッセンシャルスポーツ栄養学

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