

Sports Science Workshop - Timely Nutrition

Nutrition Department

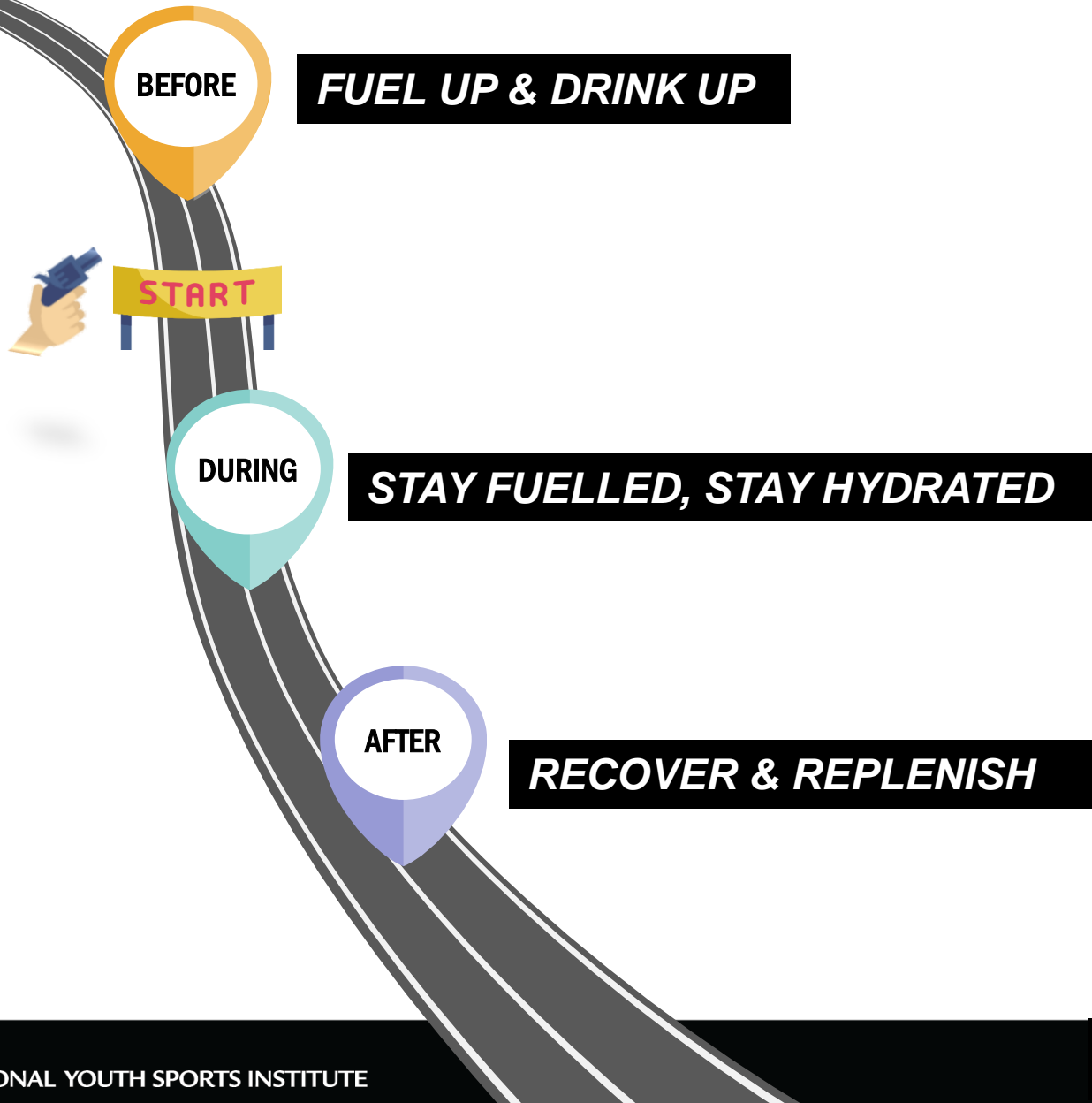
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Nutrition Goals



Key Nutrition Strategies #1: What To Eat?



Fuel = Petrol



Fuel = Glycogen



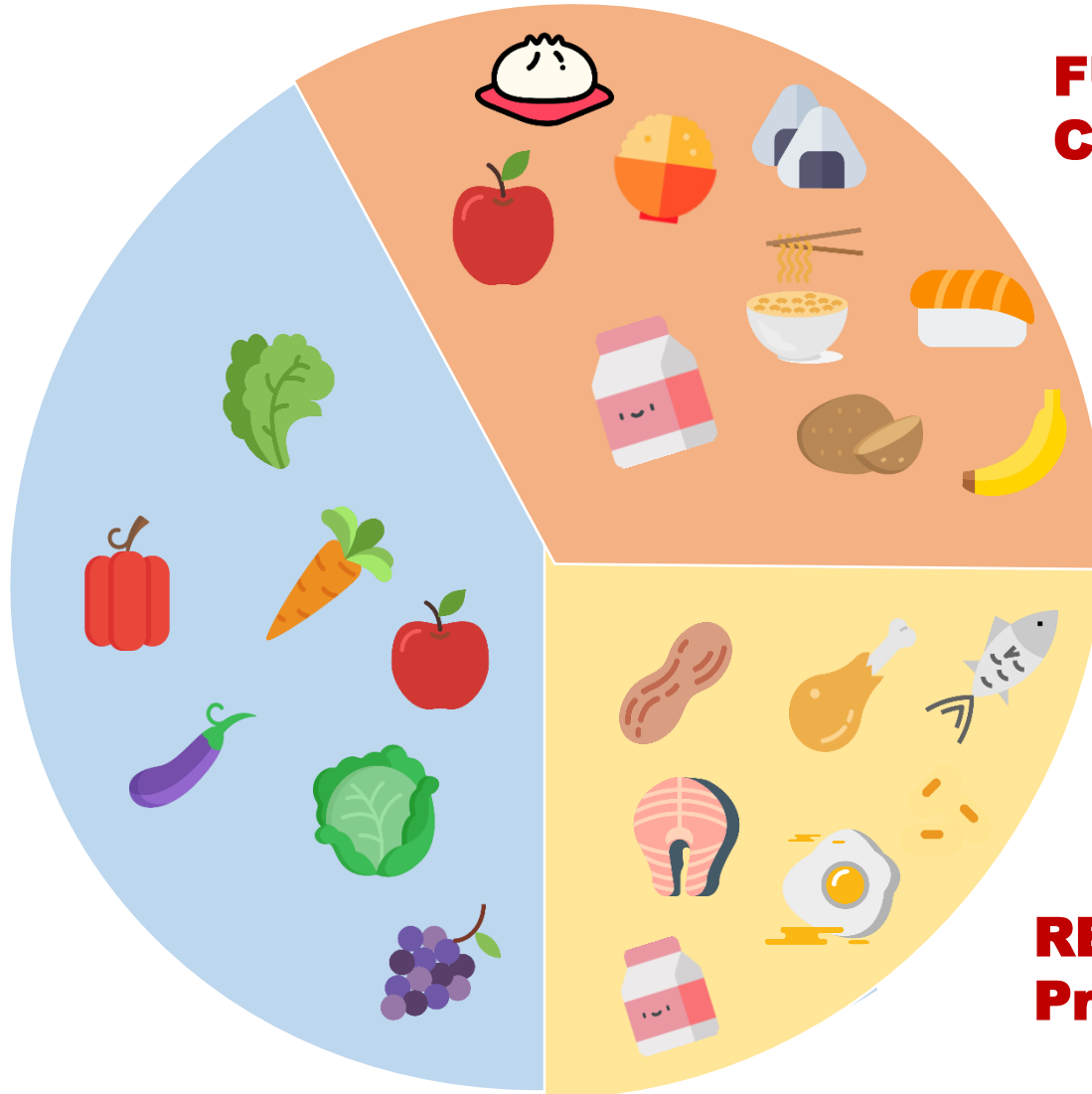
Carbohydrates

A Balanced Meal

**HYDRATE =
Fluids**



**FUEL =
Carbohydrates**



**RECOVER =
Fruits &
Vegetables**

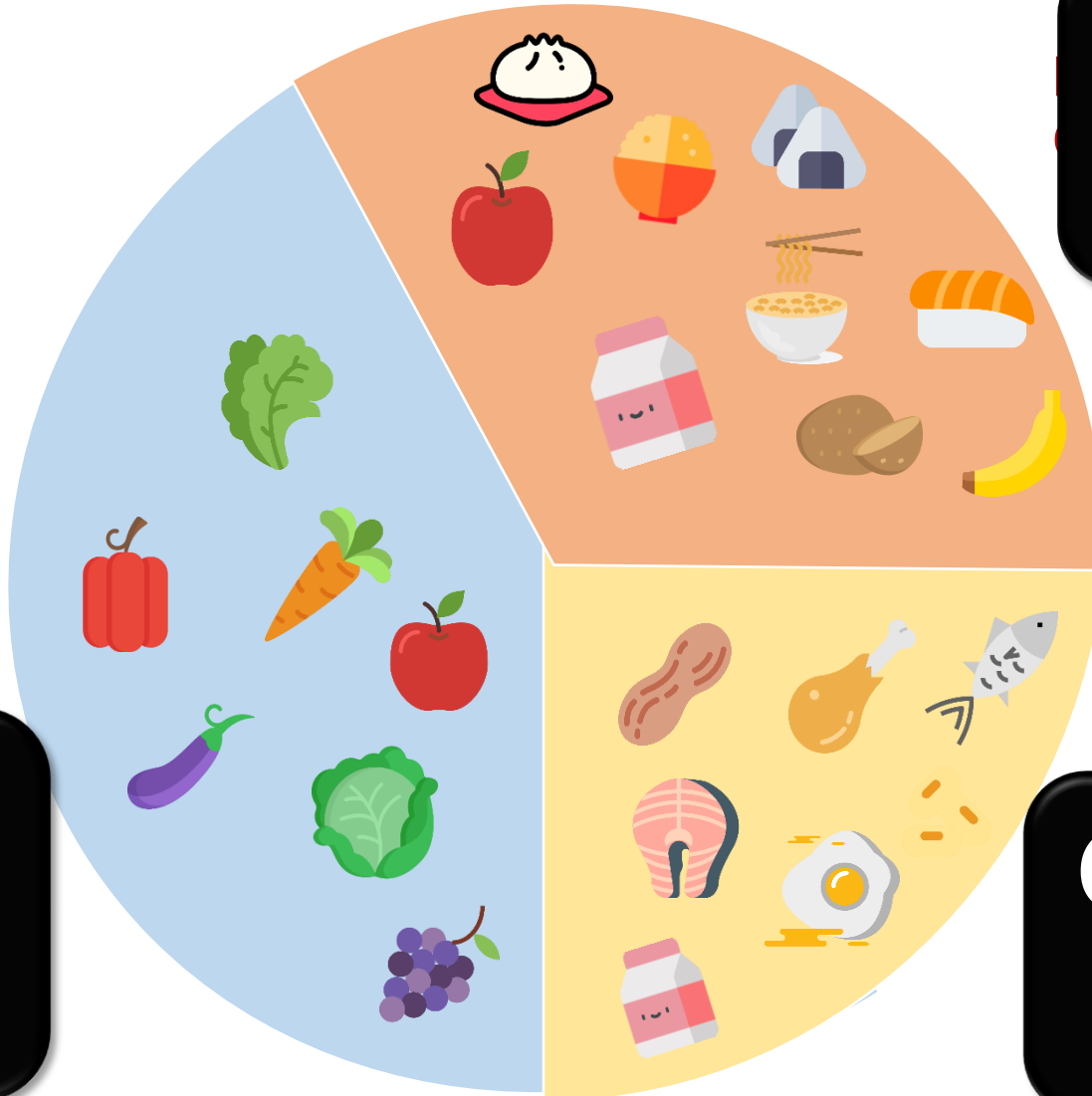
**REPAIR =
Proteins**

A Balanced Meal

**HYDRATE =
Fluids**



**GLOW
foods**



**GO
foods**

**GROW
foods**

Key Nutrition Strategies #2: How Much to Eat?

Key Nutrition Strategies #2: How Much to Eat?



Body Mass and Stage of Puberty



TRAINING INTENSITY/LOAD

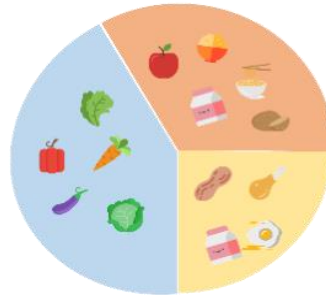


Duration of Training/Competition

LIGHT TRAINING



MODERATE TRAINING



HEAVY TRAINING



■ CARBOHYDRATES
■ PROTEIN
■ VEGETABLES



Training volume and intensity vary along the course of your training plan.
Fueling your workout or race should also be cycled according to the intensity of the day or event.
This ensure that you meet your needs for that day or event.

Light Intensity

Easy workout
Tapering
Weight Management



Moderate Intensity

Baseline
Typical day for most



Hard Intensity

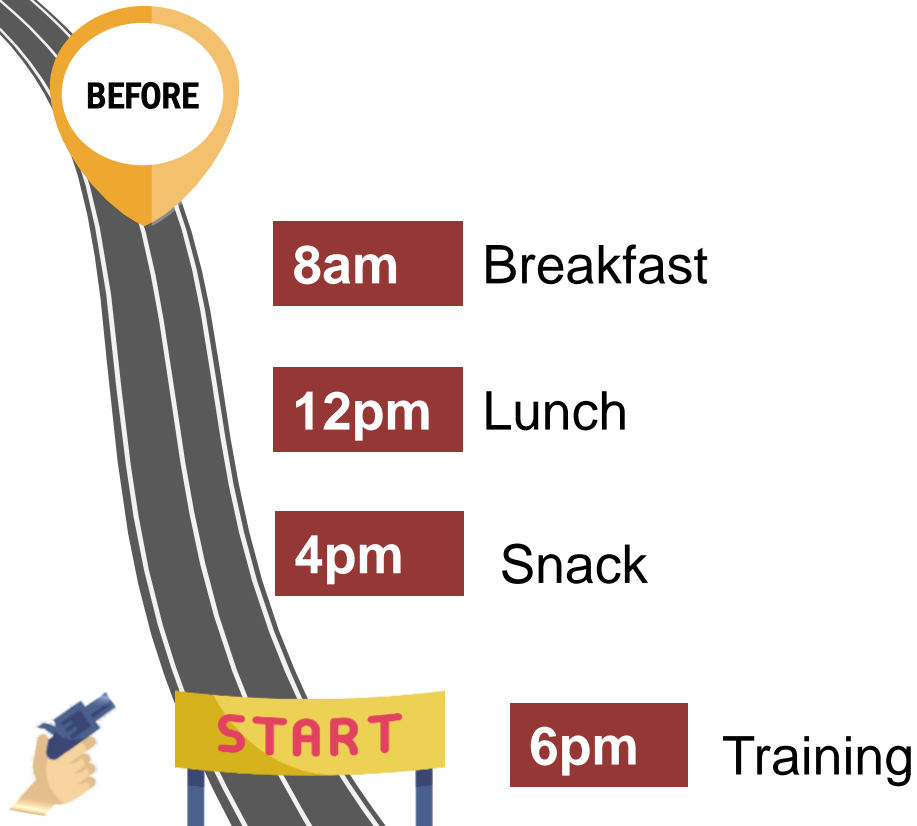
Competition
Two hard workouts



Key Nutrition Strategies #3: When to Eat?

BEFORE TRAINING

**Not more than 2 hours
without fuel!**

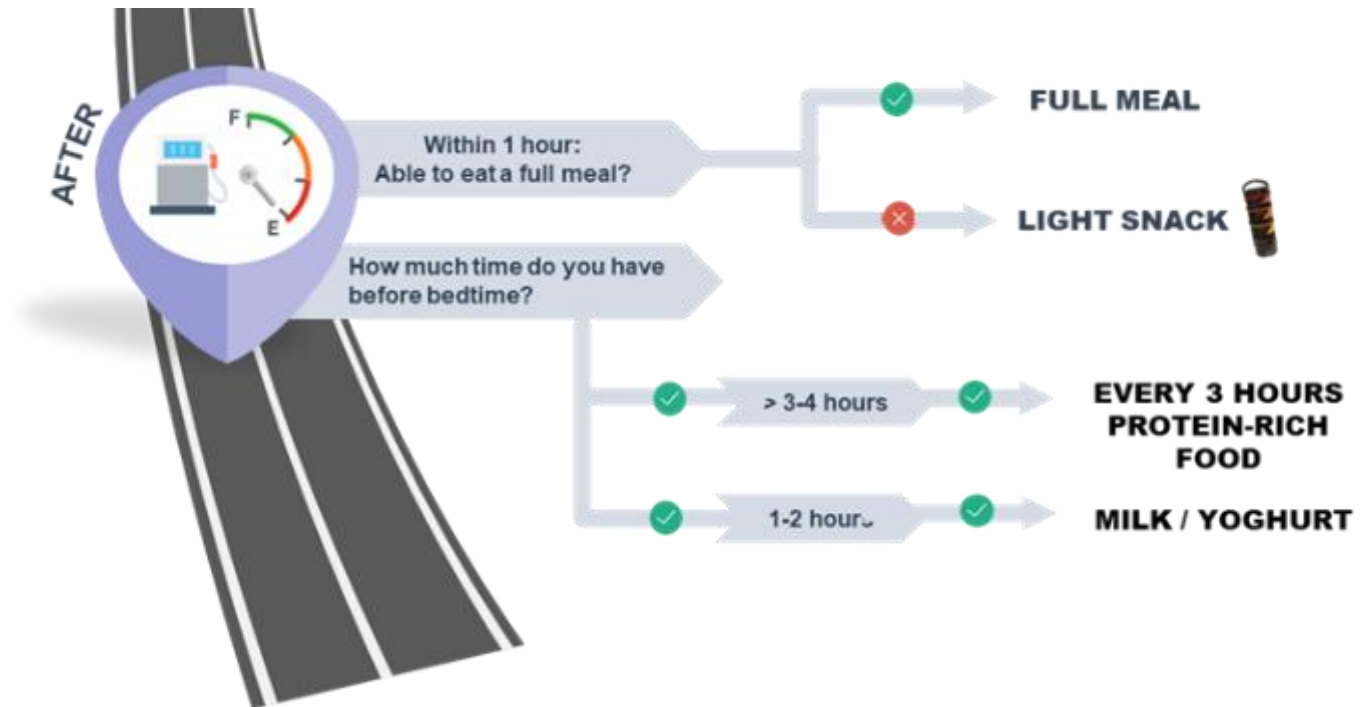


DURING TRAINING



AFTER TRAINING

- **Critical Window: 30-60 mins**



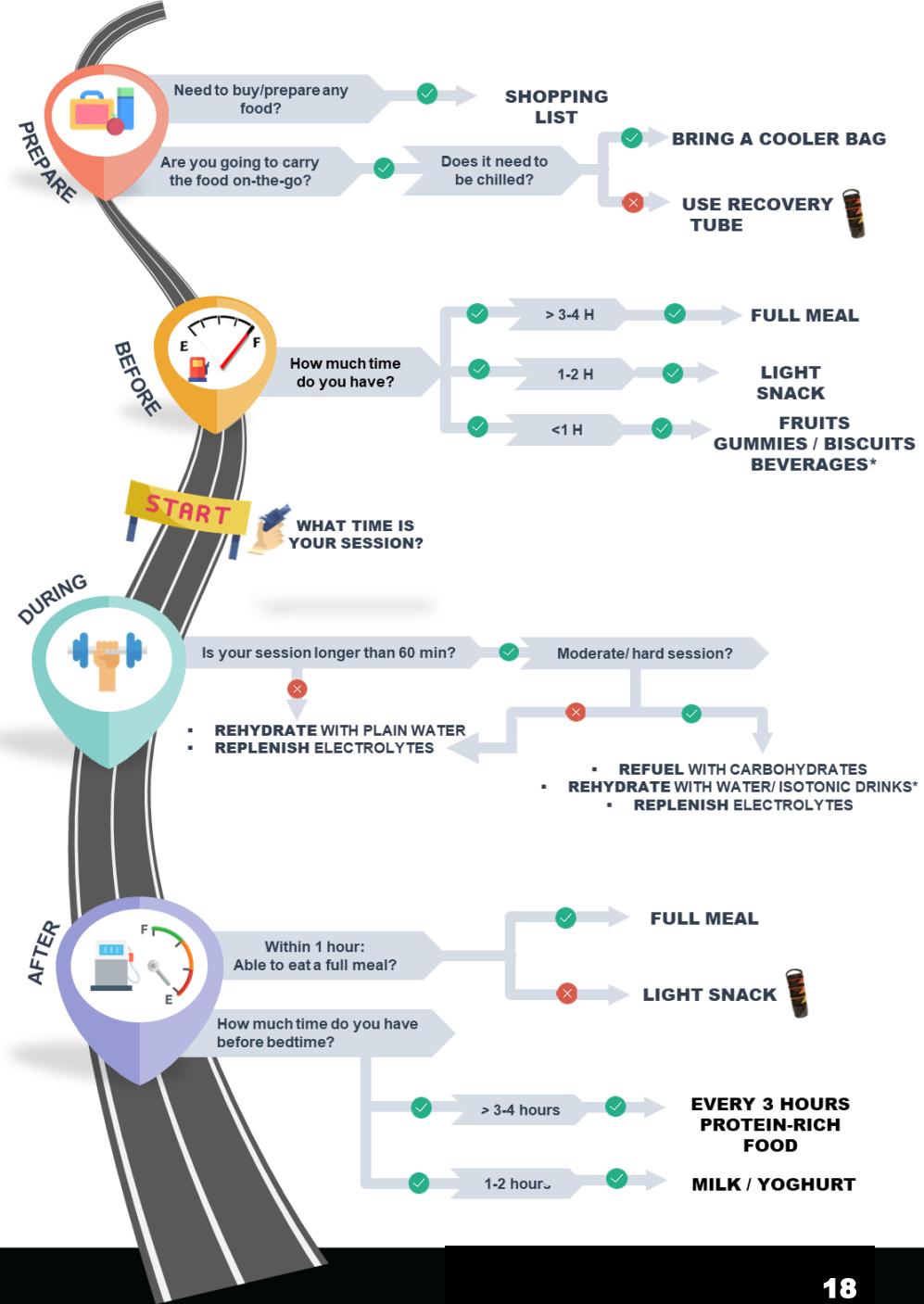
Planning & Preparing Ahead As An Athlete





**Some food need to be chilled:
Cooler bag is needed**

Practical Application #1: Planning Ahead

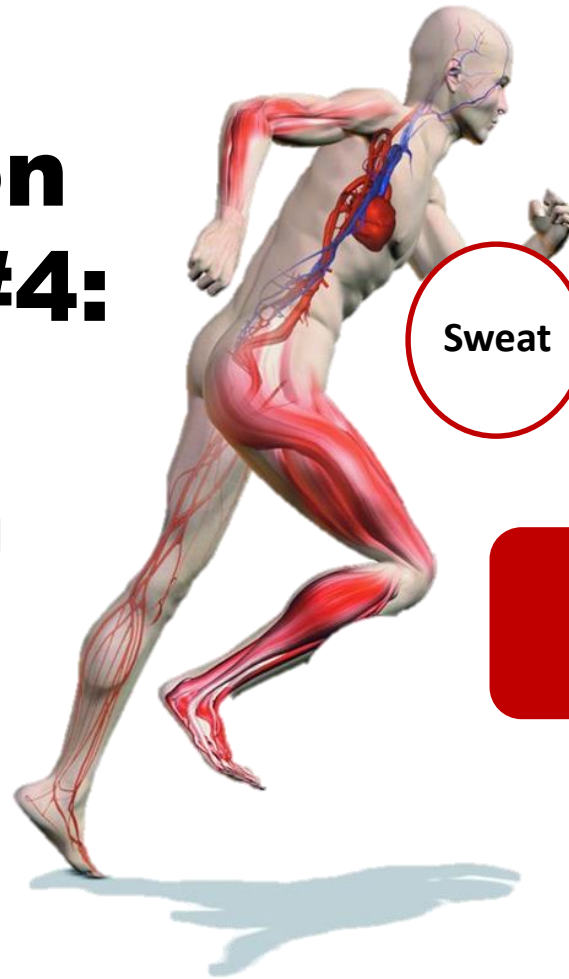


Practical Application #1: Planning Ahead as an Athlete

- Break into groups of 4-5
- Complete the table in booklet
- Use the flowchart & snack ideas to help you

Nutrition Strategy	Planning Needed
Before training/competition	
2-4 hours before: Proper meal	
30-60 minutes before: Light snack	
During training/competition	
Adequate hydration	
Additional carbohydrates if needed	
After training/competition	
Immediate – 2 hours: Consumption of proper meal with adequate carbohydrates and protein	
Every 3 hourly: Consumption of high-quality protein	
Before bed: Casein-rich food item	

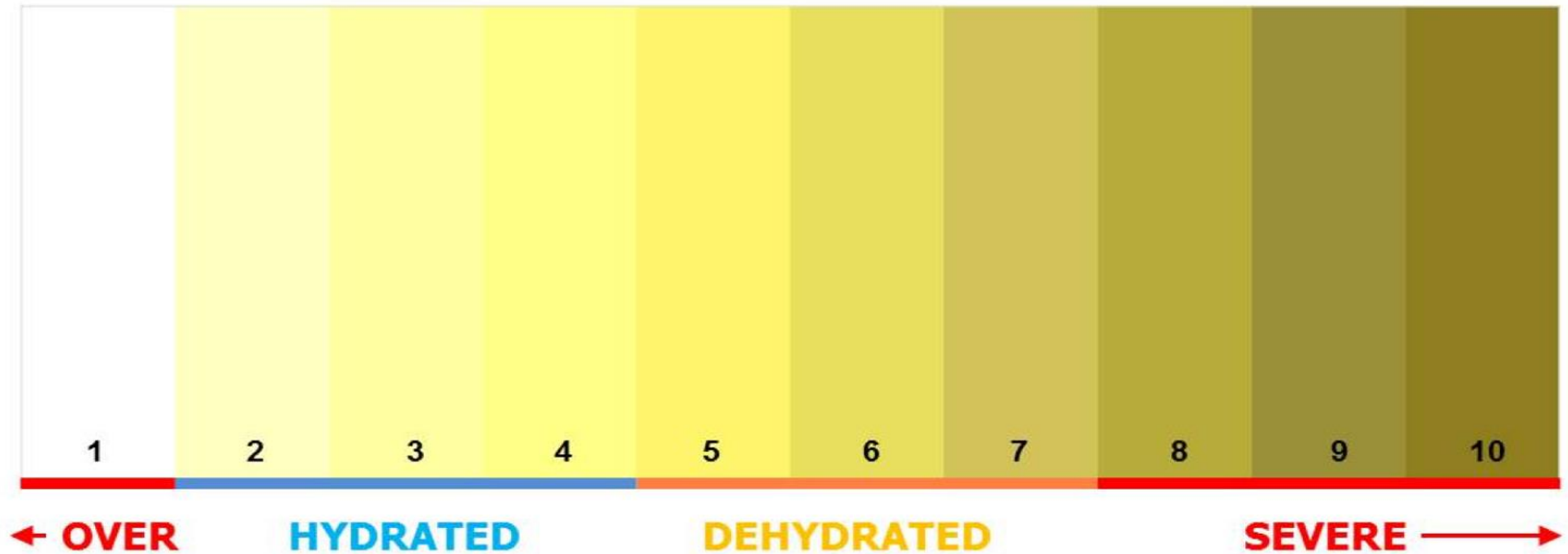
Key Nutrition Strategies #4: Preventing Dehydration



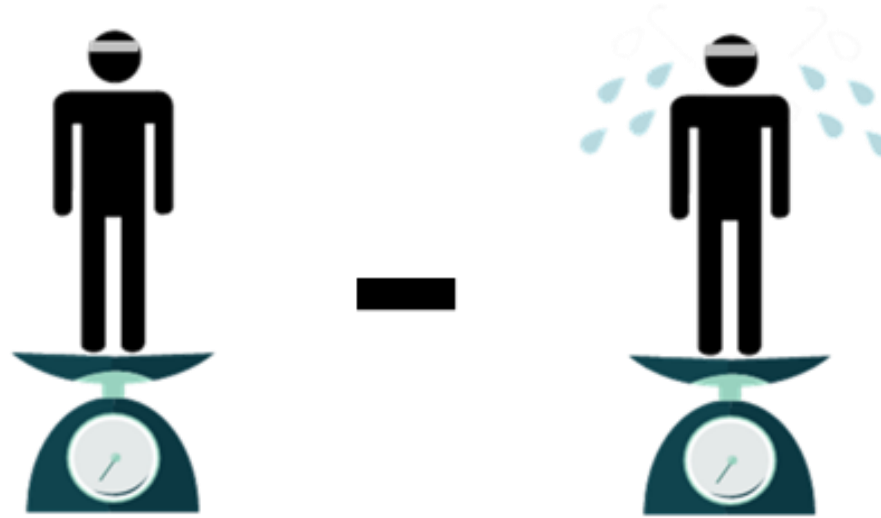
Sweat

Lose water

CHECK YOUR HYDRATION



DEHYDRATION



Pre-training weight

Post-training weight



If more than 2% weight loss

Try it out!

Pre- & post-training weight

My pre-training weight	60
My post-training weight	58
% body weight loss	3.3%

FORMULA:

$$\frac{[\text{BEFORE Weight}] - [\text{AFTER Weight}]}{[\text{BEFORE Weight}]} \times 100\% =$$

MONITOR YOUR HYDRATION STATUS



SET SIPPING GOALS

9AM
10AM
11AM
2PM

4PM

9AM
10AM
11AM
2PM

4PM

Source
of energy



Fluid + Electrolytes
Helps with hydration

When do you really need sports drinks?

During brief
training
(<45 min)



Sustained high
intensity training
(45- 75 min)



Endurance
training
(1 – 2.5 hours)



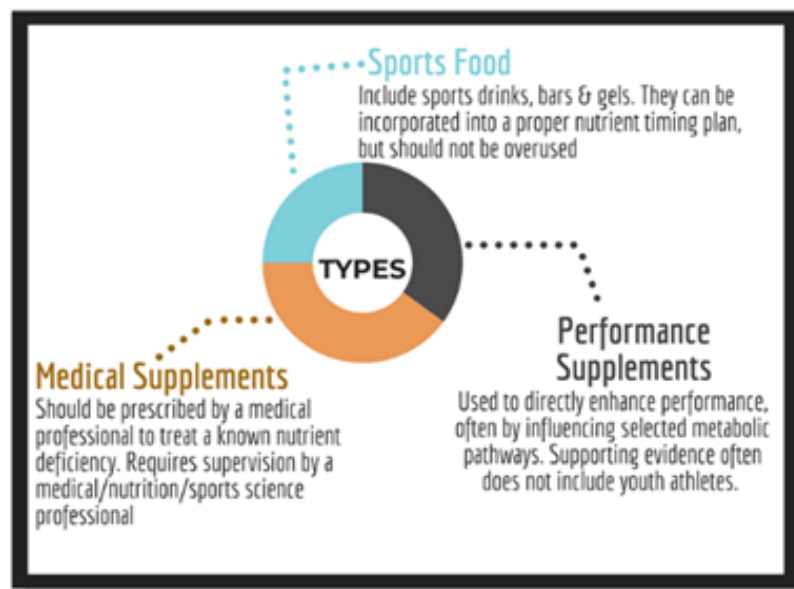
Ultra-endurance
training
(>2.5 – 3 hours)



- If required, take sports drink in sips
- Overconsumption of sports drinks may result in excess energy intake

SUPPLEMENTS

Supplements are NOT encouraged for youth athletes, and should not be consumed unless necessary. Know the different types, and the risk involved.



Estrogenic Endocrine Disruptors – only 1 part of the danger!

THE END