



Sports Science Workshop - Timely Nutrition

Nutrition Department

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Nutrition Goals

BEFORE

FUEL UP & DRINK UP

START

DURING

STAY FUELLED, STAY HYDRATED

AFTER

RECOVER & REPLENISH



Key Nutrition Strategies #1: What To Eat?



Fuel = Petrol



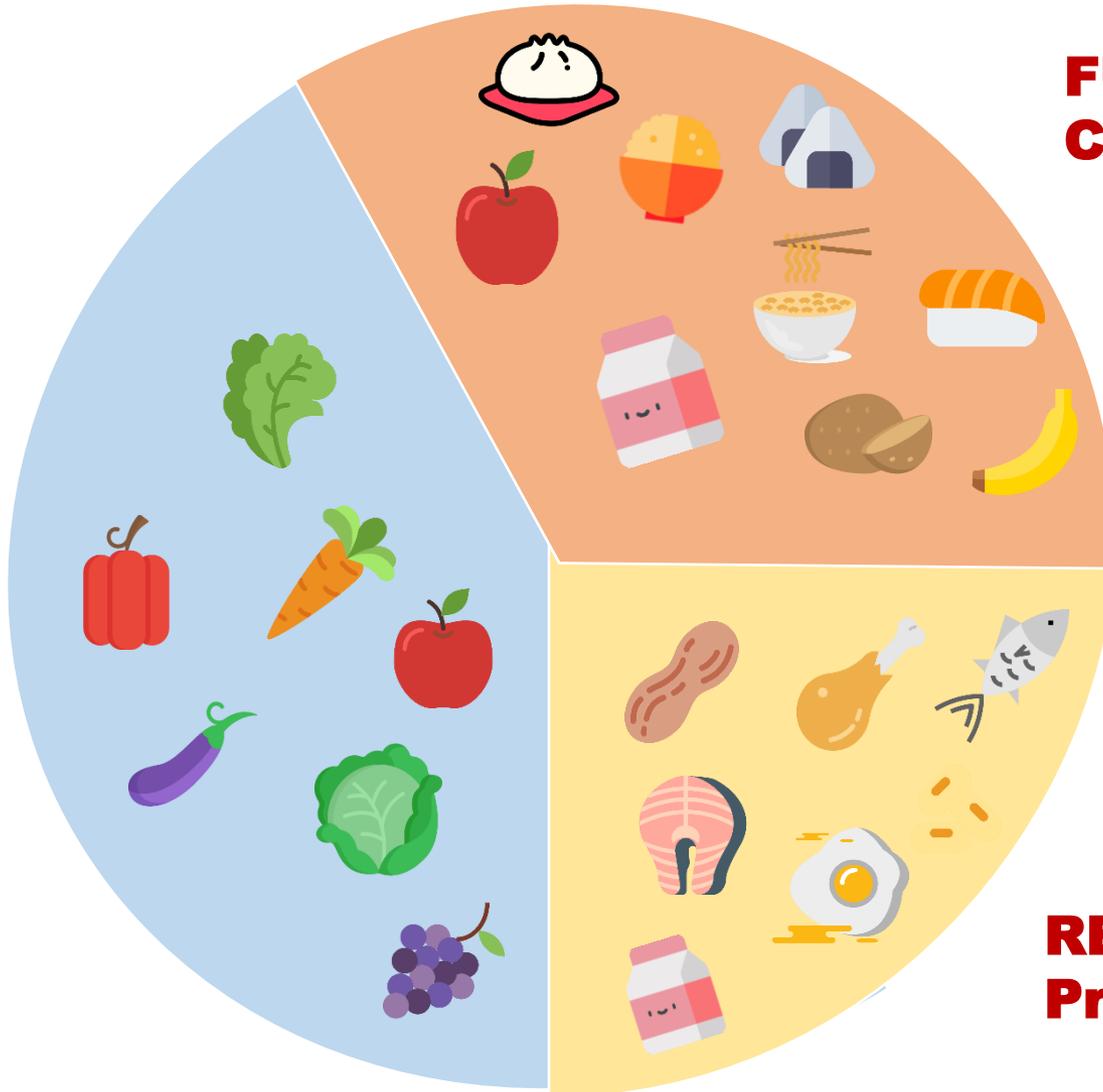
Fuel = Glycogen



Carbohydrates

A Balanced Meal

**HYDRATE =
Fluids**



**FUEL =
Carbohydrates**

**RECOVER =
Fruits &
Vegetables**

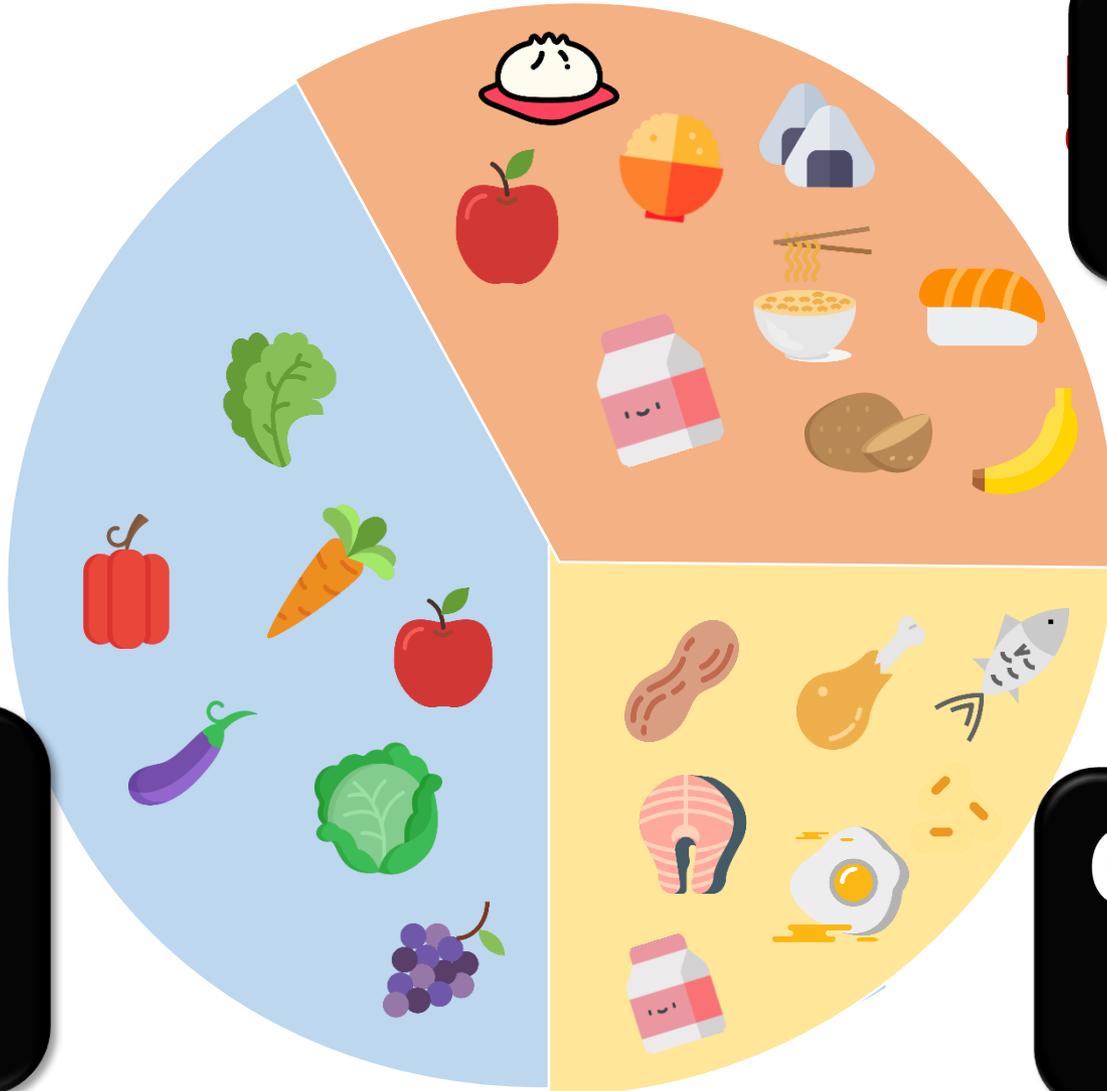
**REPAIR =
Proteins**

A Balanced Meal

**HYDRATE =
Fluids**



**GO
foods**



**GLOW
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

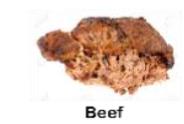
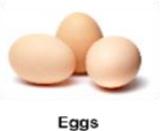
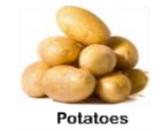
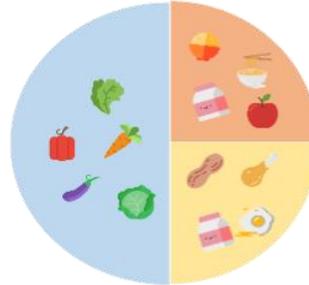


TRAINING INTENSITY/LOAD



Duration of Training/Competition

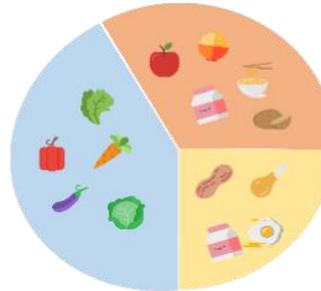
LIGHT TRAINING



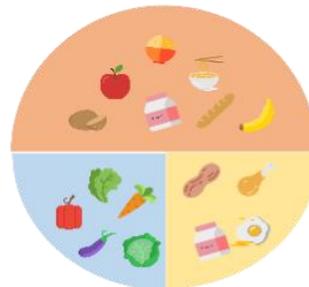
- CARBOHYDRATES
- PROTEIN
- VEGETABLES



MODERATE TRAINING



HEAVY TRAINING



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

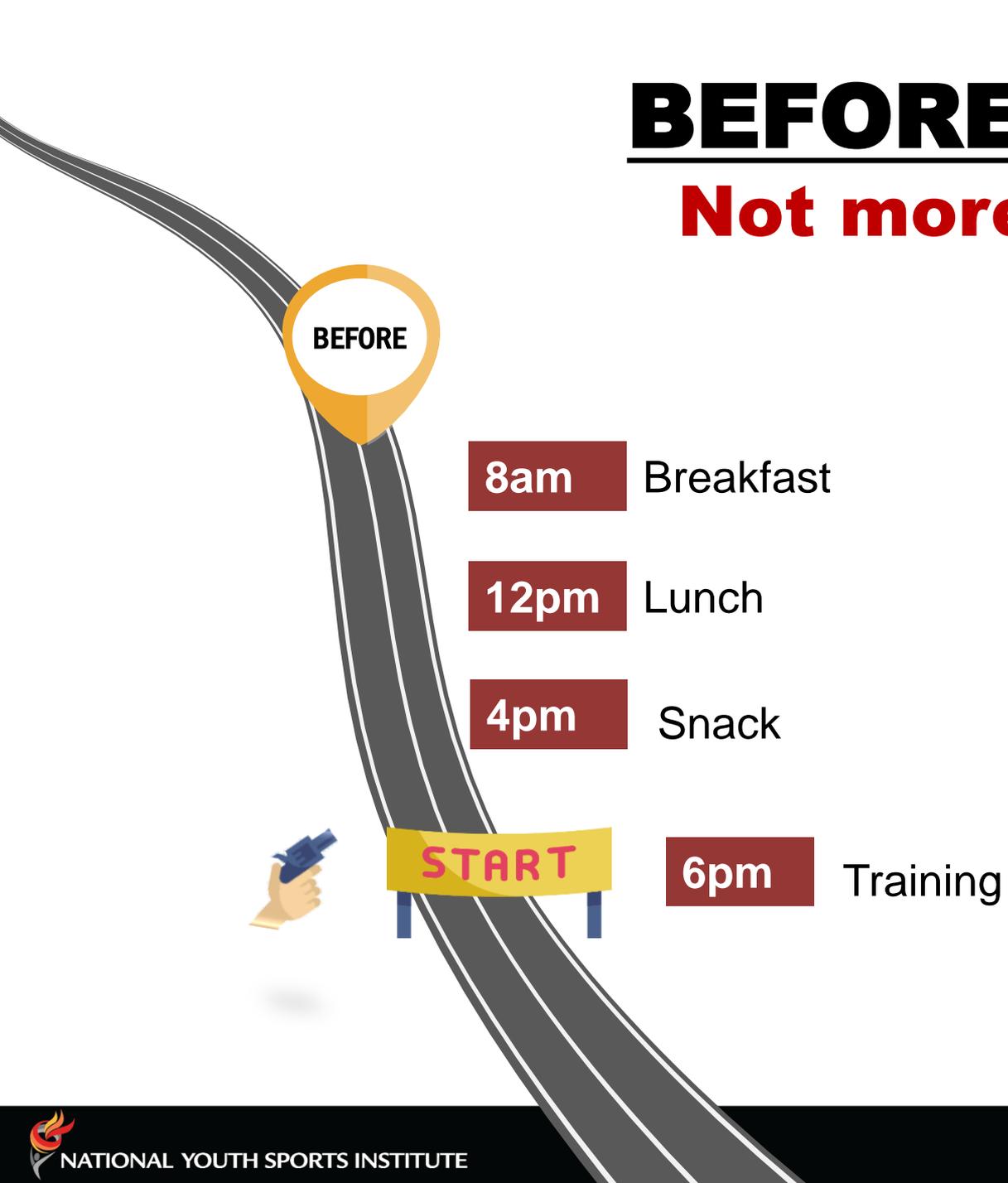
Competition
Two hard workouts



Key Nutrition Strategies #3: When to Eat?

BEFORE TRAINING

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



BEFORE

8am

Breakfast

12pm

Lunch

4pm

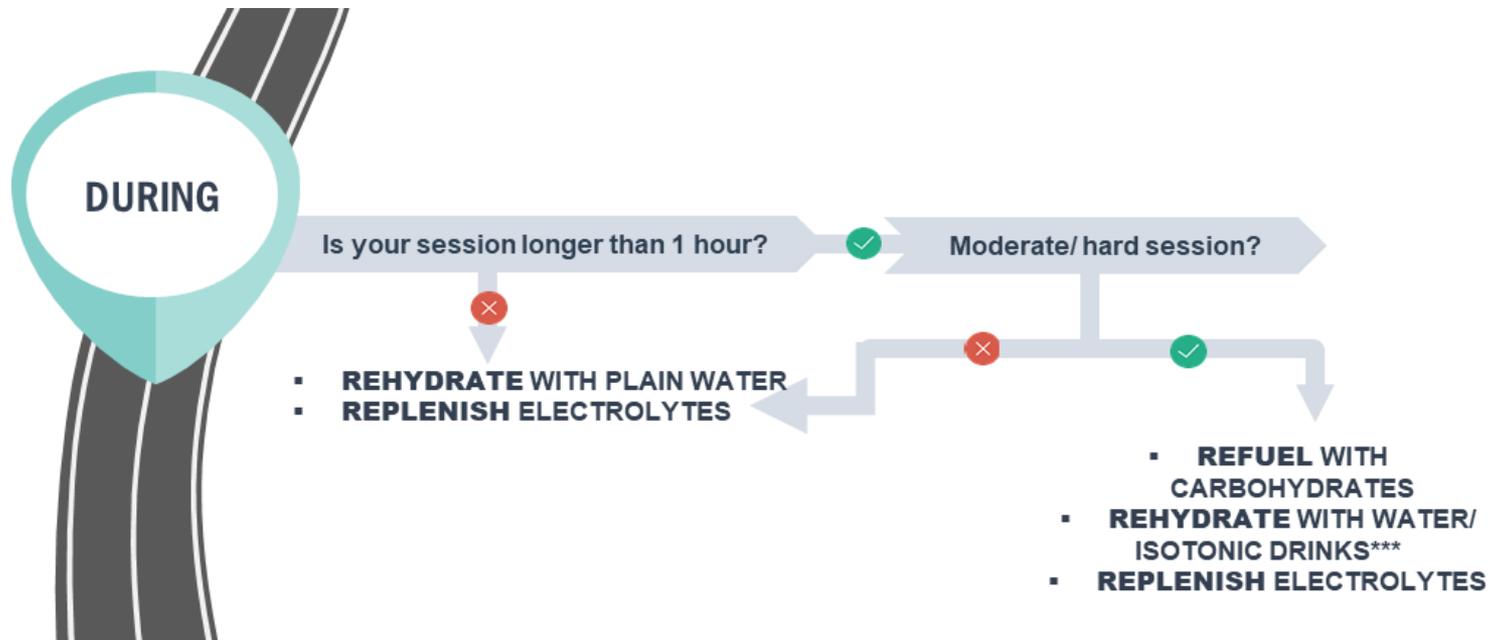
Snack

START

6pm

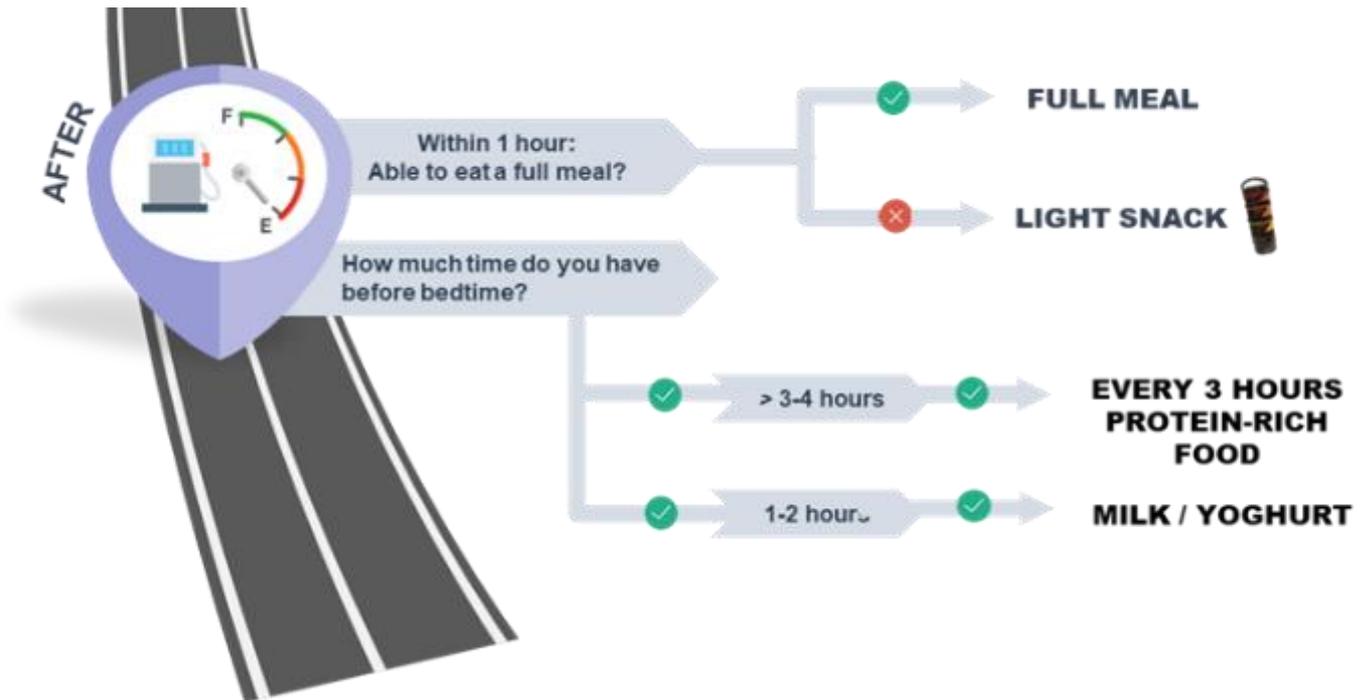
Training

DURING TRAINING



AFTER TRAINING

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





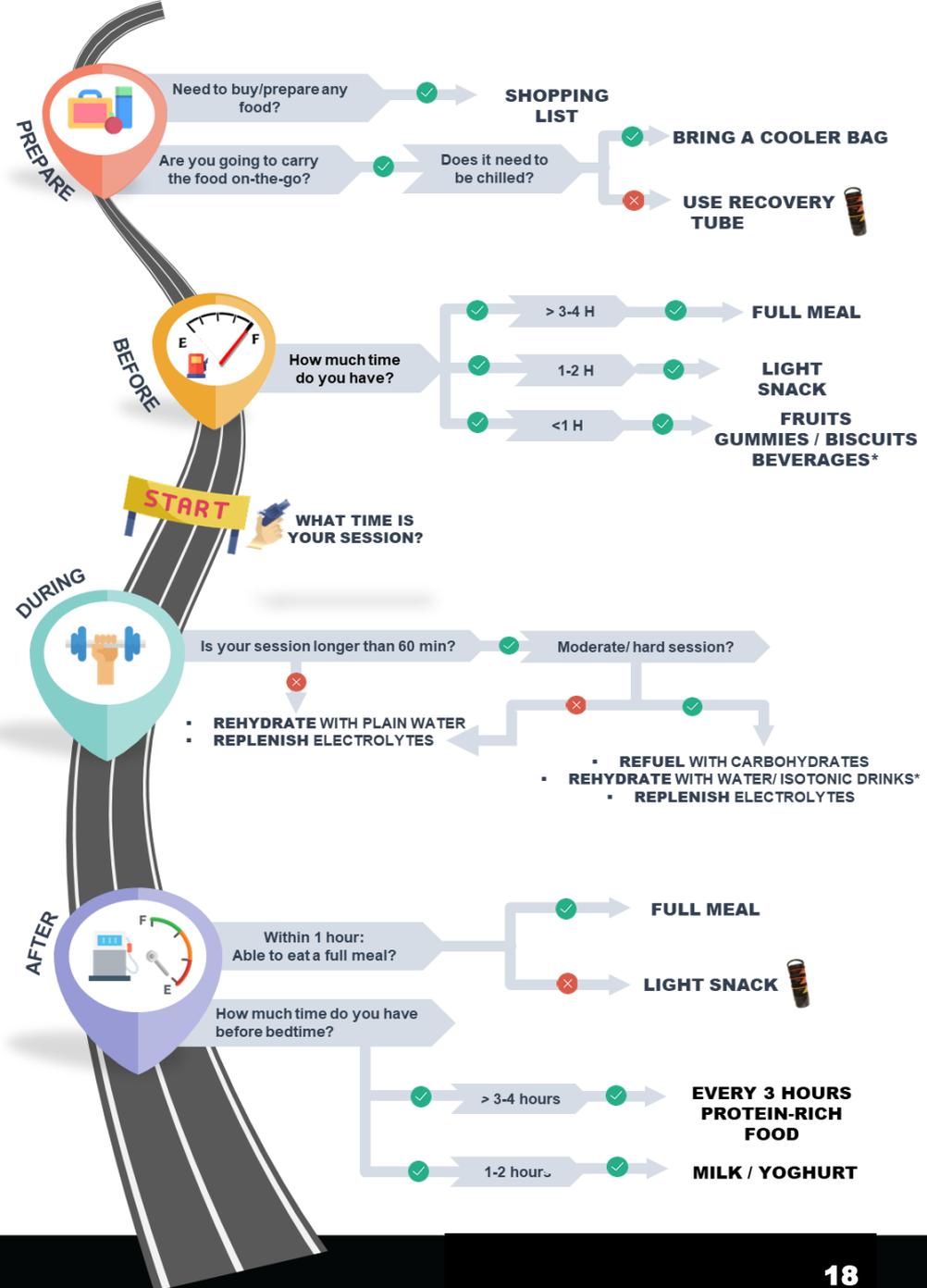
Planning & Preparing Ahead As An Athlete





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

Practical Application #1: Planning Ahead



Practical Application #1: Planning Ahead as an Athlete

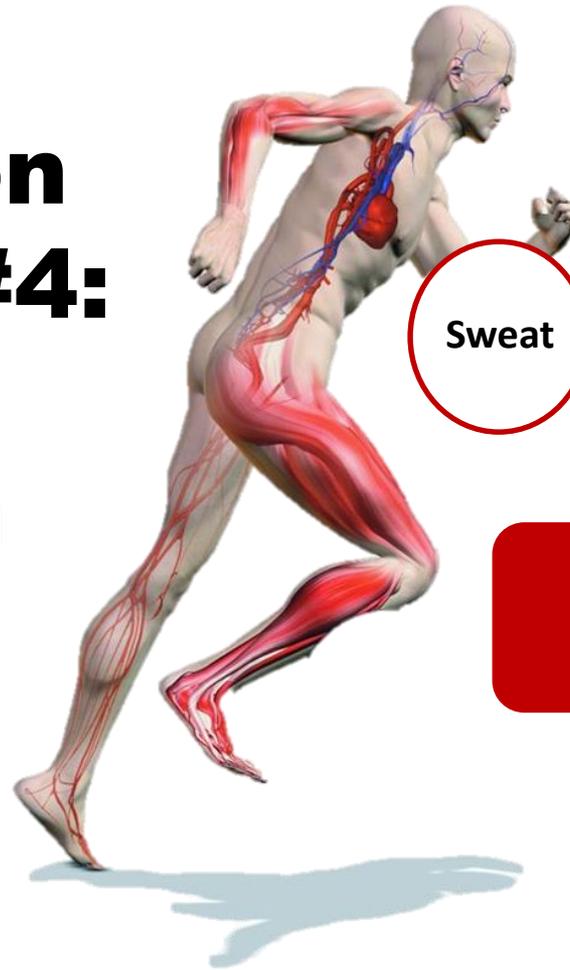
- Break into groups of 4-5
- Complete the table in booklet
- Use the flowchart & snack ideas to help you

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: Caesin-rich food item	



NATIONAL
YOUTH
SPORTS
INSTITUTE

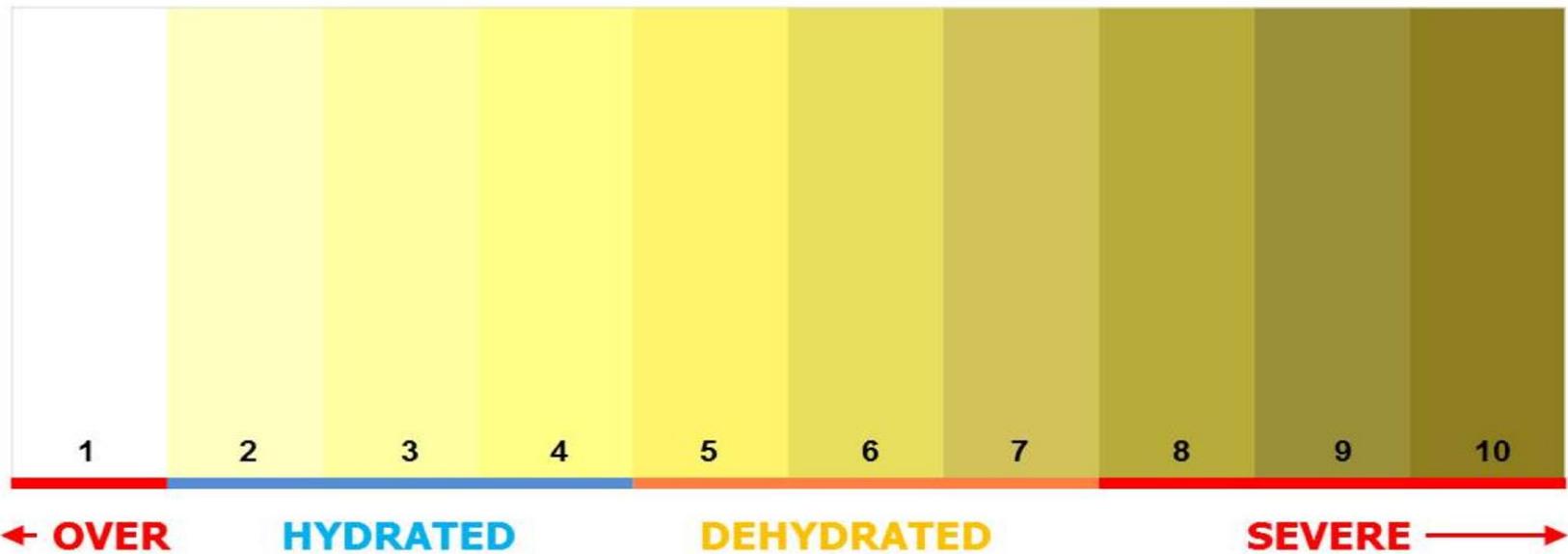
Key Nutrition Strategies #4: Preventing Dehydration



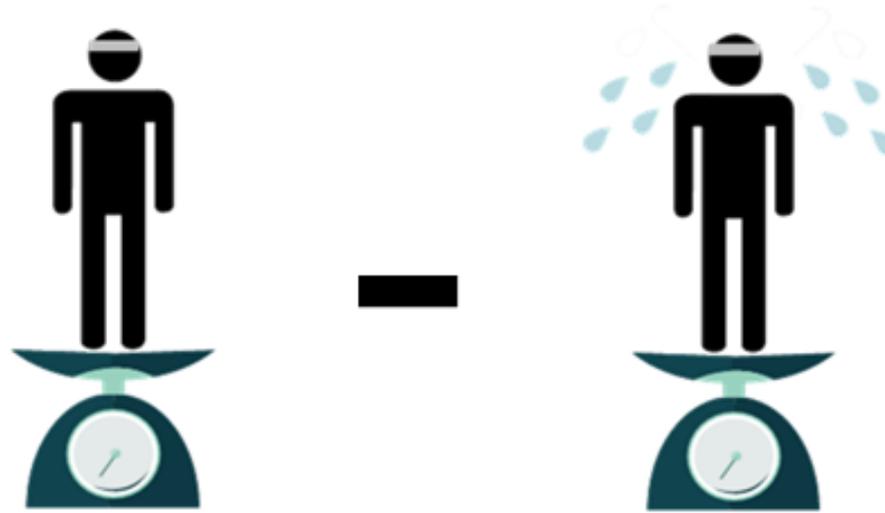
Sweat

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



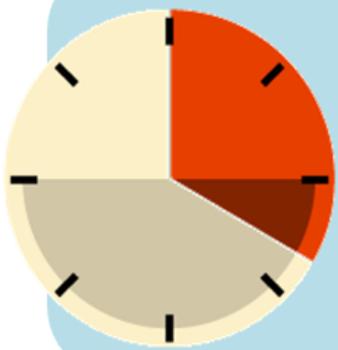
9AM
10AM
11AM
2PM
4PM

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)



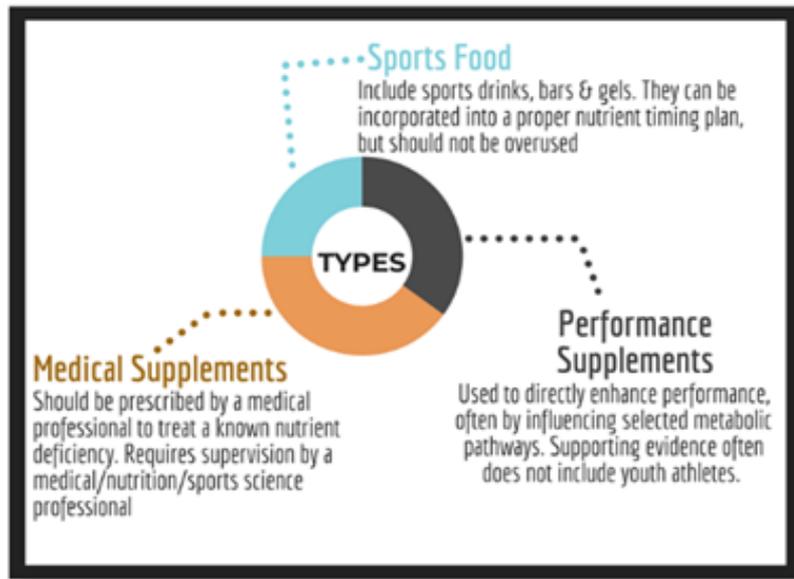
Ultra-endurance training (>2.5 – 3 hours)



- 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