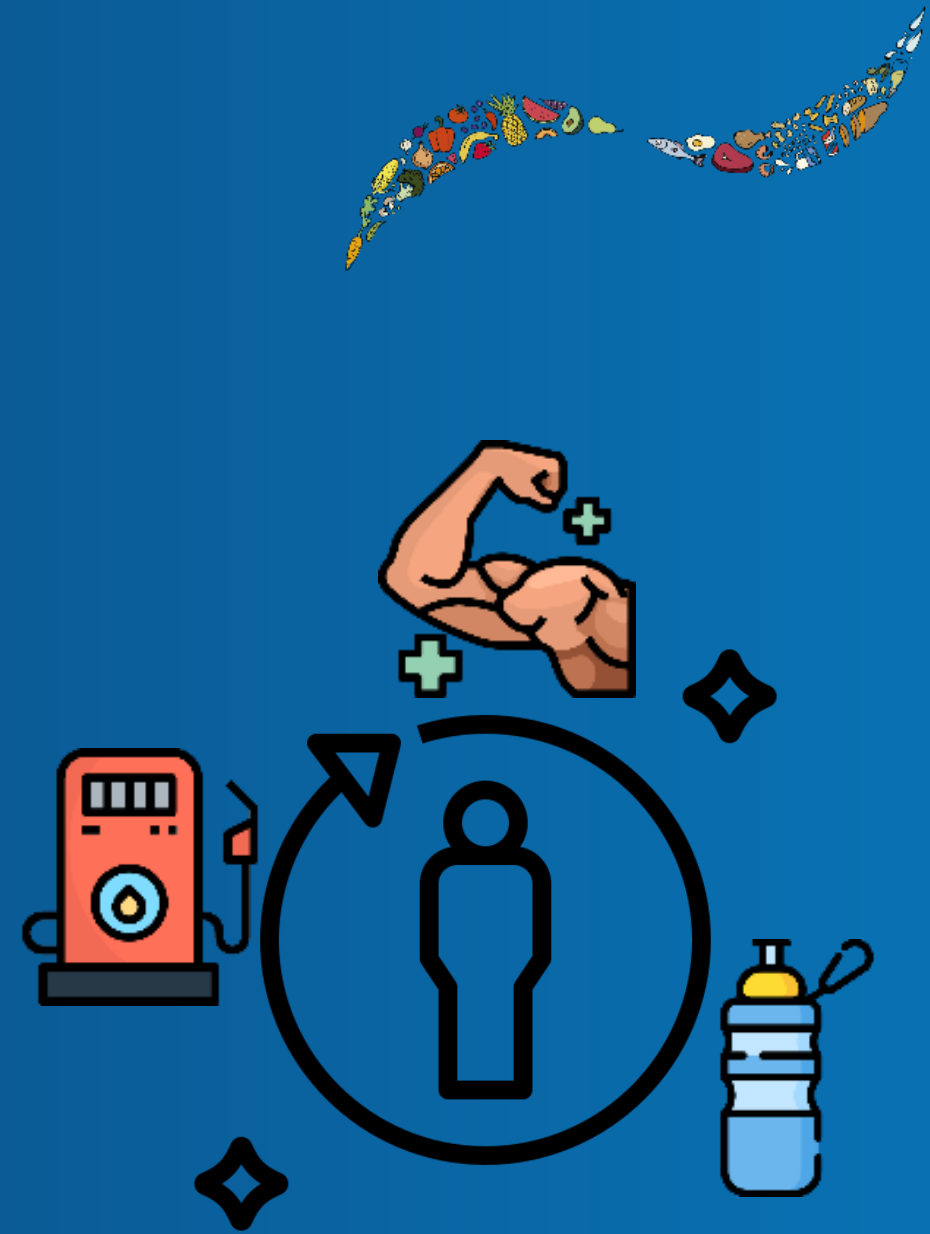
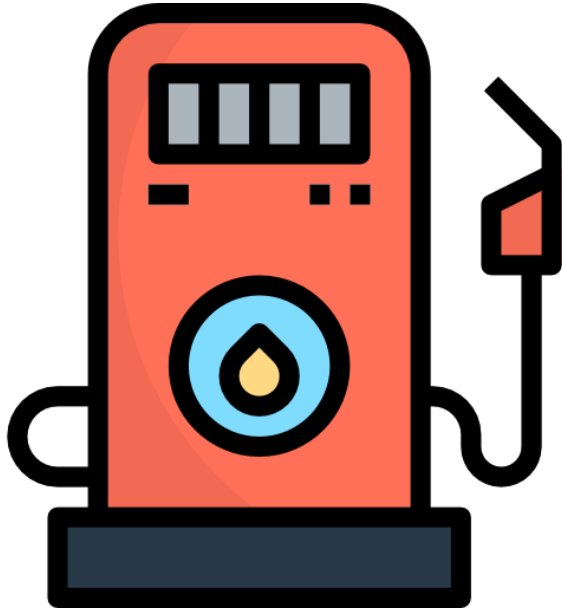
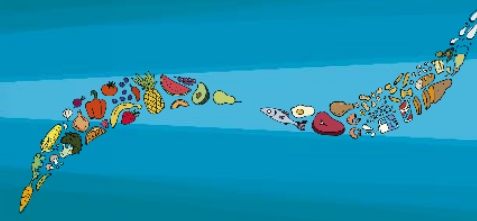


3Rs OF NUTRITION RECOVERY

Want to optimise recovery between sessions,
day-to-day or week-on-week?
Here we highlight the key areas of nutrition to
focus on – the 3Rs of **Refuel**, **Repair** and
Rehydrate.



3Rs OF NUTRITION RECOVERY



REFUEL

Replacing the carbohydrate energy reserves which were depleted from training



REPAIR

Begin the process of repairing the muscle tissue that was damaged during training



REHYDRATE

Replace fluids that were lost from sweat in training

WHAT IS RECOVERY??



2 simple questions can help direct your recovery needs...



**WHAT ARE YOU
RECOVERING
FROM?**

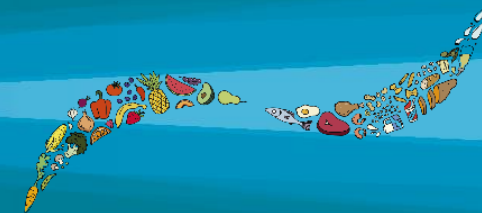
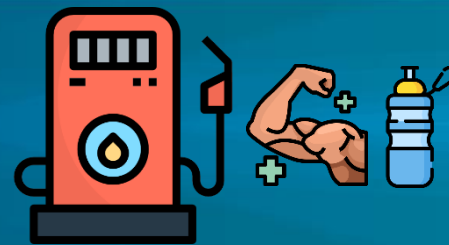
Consider the demands of the training session – the type, intensity and duration.

**WHAT ARE YOU
RECOVERING
FOR?**



How much recovery time do you have? What are the restrictions over this time? What session do you need to be ready for?

REFUEL...



Glycogen Storage

Muscle: ~300g

Liver: ~100g

60-90min Mod-
High Intensity
Exercise

AIM

Refuel glycogen reserves so they aren't limiting in the subsequent training session

MAXIMISING REFUELLING RATE

Up to **1.2g/kg Carbohydrate per hour** for
4 hours post-exercise

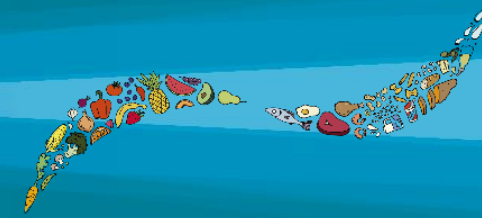
BODY WEIGHT	CHO/h	Total CHO
50kg	60g	240g
60kg	72g	288g
70kg	84g	336g
80kg	96g	384g

The **rate** of glycogen replenishment is **faster** in the hours **post-exercise**.



Therefore it is **advisable** to consume **carbohydrate** in the **post-training meal/snack**.

REPAIR...

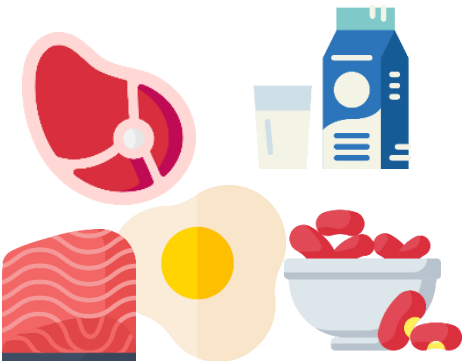


Exercise-induced Muscle Damage (**EIMD**) is a trigger for Muscle Protein Synthesis (**MPS**)

MPS is **elevated** for **12-48h** post-exercise



Consuming **protein** is also a trigger for **MPS**



AIM

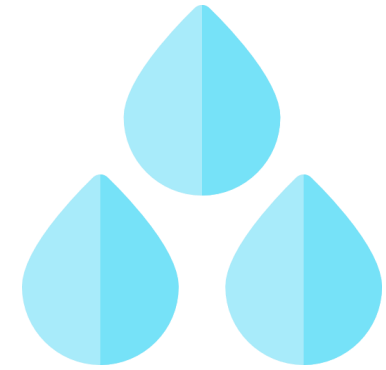
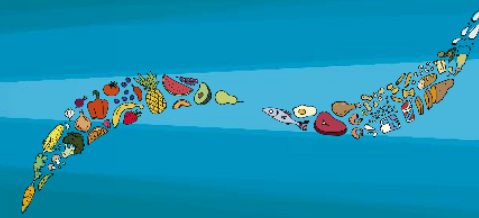
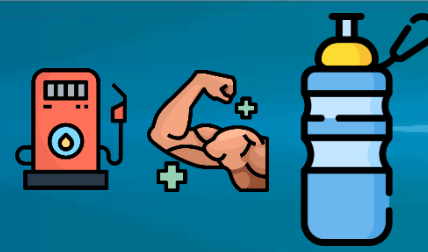
Combine the MPS-stimulating effects of exercise and protein intake to maximise muscle repair and growth

~1.6 g/kg/day
of protein to
optimise muscle
repair and
growth

~0.3g/kg of
protein to
maximally
stimulate MPS in
a meal

Address **total daily** protein intake **first** and in doing so incorporate protein in the post-training recovery meal/snack

REHYDRATE...



Sweat loss during training can result in **dehydration** if the rate of fluid **loss** is not matched by the rate of fluid **intake**

Small amounts of dehydration may be tolerable but will **compromise recovery** and **performance** if **ignored**



Start every training session in a **euhydrated** state in order to minimise the chances of dehydration impacting performance

AIM

Replace lost fluids from sweat to avoid post-training dehydration and enter the next session in a euhydrated state

MONITOR HYDRATION STATE THROUGH BODY WEIGHT

Ingest **150%** of the fluids lost in the 5h post-exercise

Body weight before (kg) – Body weight after (kg)
x 1.5 = Fluid requirement (L)

Pre: **70kg**

Post: **69kg**

Net Loss = **1kg**

1kg x 1.5 = **1.5kg**

1.5kg = 1.5L fluid
to be consumed