



# TOP TIPS TO OPTIMIZE YOUR RACE DAY NUTRITION





# Importance of Good Nutrition

Our bodies require a balance of carbohydrates, protein and fats to **SUPPORT** our daily functions. These macronutrients, alongside essential micronutrients (mainly from fruit/veggies) are what help us build our very own **POWERHOUSE**.

**Adequate Input: Output is the cornerstone of our diet:**

- **Supports** optimal body function
- **Determines** requirements for macronutrients and micronutrients
- **Assists** in manipulating body composition

Many think that **MORE** importance should be on the sport-based supplements we use to **support** our training pre, during and post an event. **HOWEVER**, supplements are **NOT** just the 'quick fix' to **improving** ones or **replacing** your diet.

Before considering adding in additional supplements to your diet, **ENSURE** you are having a **well balanced diet** packed full of carbohydrates, protein, healthy fats and fruit/veggies.

## How would you build a pyramid?

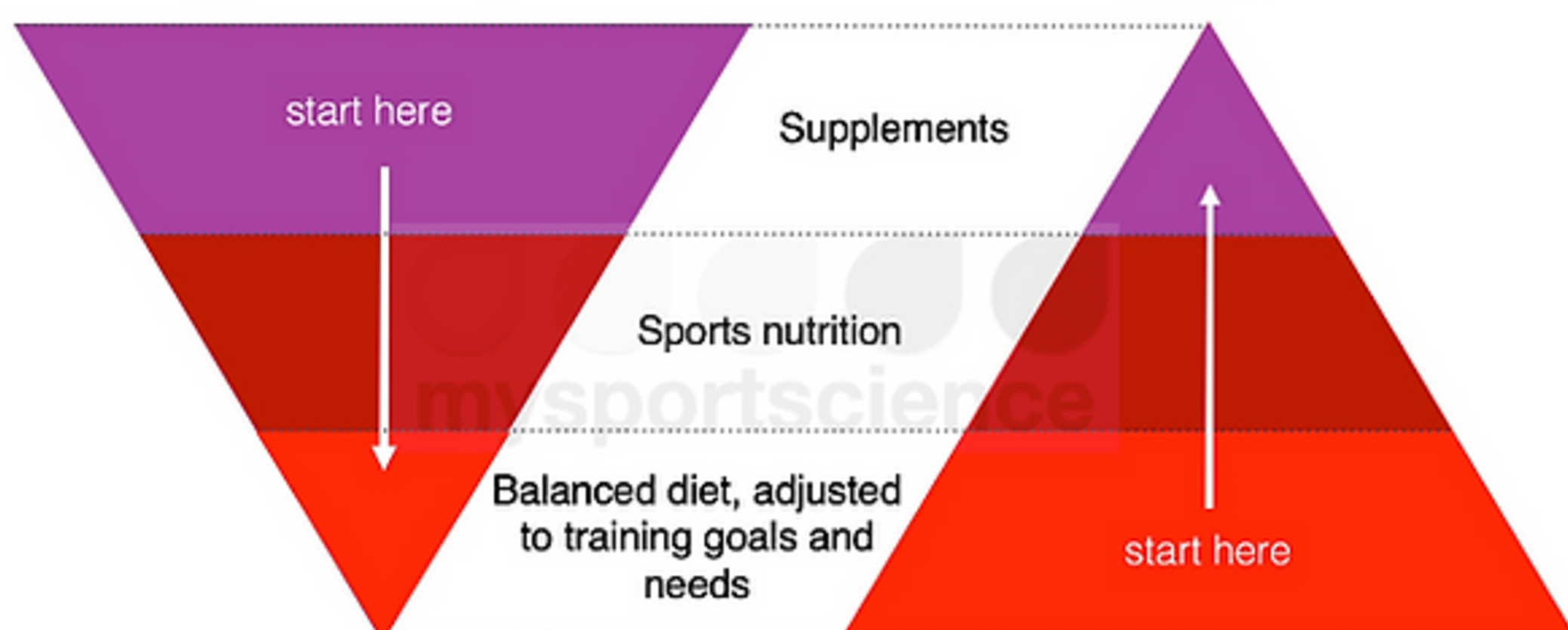


@jeukendrup

[www.mysportscience.com](http://www.mysportscience.com)

**The sports nutrition pyramid by many athletes, trainers, coaches and supplement companies**

**Evidence-based approach by sports dietitians and other experts**



Reference: <https://www.mysportscience.com/post/food-first>



# Why the Focus on Carbs?

Our bodies carbohydrate stores are the **limiting factor** for performance of prolonged continuous or intermittent high-intensity exercise.

**VO<sub>2</sub> max** is the **MAXIMUM** rate of oxygen your body is able to use during exercise

- A **HIGH** VO<sub>2</sub> max means that your body can better handle **aerobic** fitness activities such as running

During such higher exercise intensities like **running** (70% VO<sub>2</sub>max), **carbohydrates** help to **support continuous** exercise. Therefore in marathon races it is important to ensure your carbohydrate stores are **efficient** to support your run, especially when tackling those hills!

## What happens if low?

Prolonged, sustained or intermittent high-intensity exercise is improved with high carbohydrate stores.

- **LOW** carb stores are associated with
  - Fatigue and ↑ perception of effort
  - Reduced work rate
  - Impaired skill and concentration

## Carb Loading... When should I start?

Yes we want our bodies glycogen (muscle carb stores) to be sufficient but these stores don't need to be extremely high.

- For trained individuals this can be achieved by eating carbohydrate rich for **2 days prior to a race**, whilst reducing glycogen use (reducing training)
- Because **training is reduced -> energy expenditure is reduced**,
- Your carb sources can be made up from **both food and liquids**. (Example lcm bars, powerade)
- Studies show that for trained individuals, in the **24-48hours** lead up to a race a carbohydrate intake of **5-7 g/kg.bodyweight/day** is sufficient.
- My advice? **PRACTICE** your carb load. There is still time to give your carb load a trial and test how it sits in your stomach on the days leading up to Sydney Marathon. If you have a long run planned for the weekend try testing out increasing your carbs for the later end of the week.



# Carbs to Fuel Exercise

## Pre-Race Morning (2-3hours)

Eating 1-4hours?: 1- 4g/kg BW

Large bowl of muesli or porridge  
oats (made with own choice of  
milk), drizzle of honey

## What to choose?

Simple carbs are digested & rapidly  
broken down to glucose.  
Glucose is transported quickly as  
energy to muscles during races.

## Up to 60minutes before?

25-30g carbs

Important to eat 1 hour before exercise  
especially when you will not be able to  
consume carbs during exercise.

Toast(x1) with jam, banana  
& 200ml juice.

## What about Pre/During exercise?

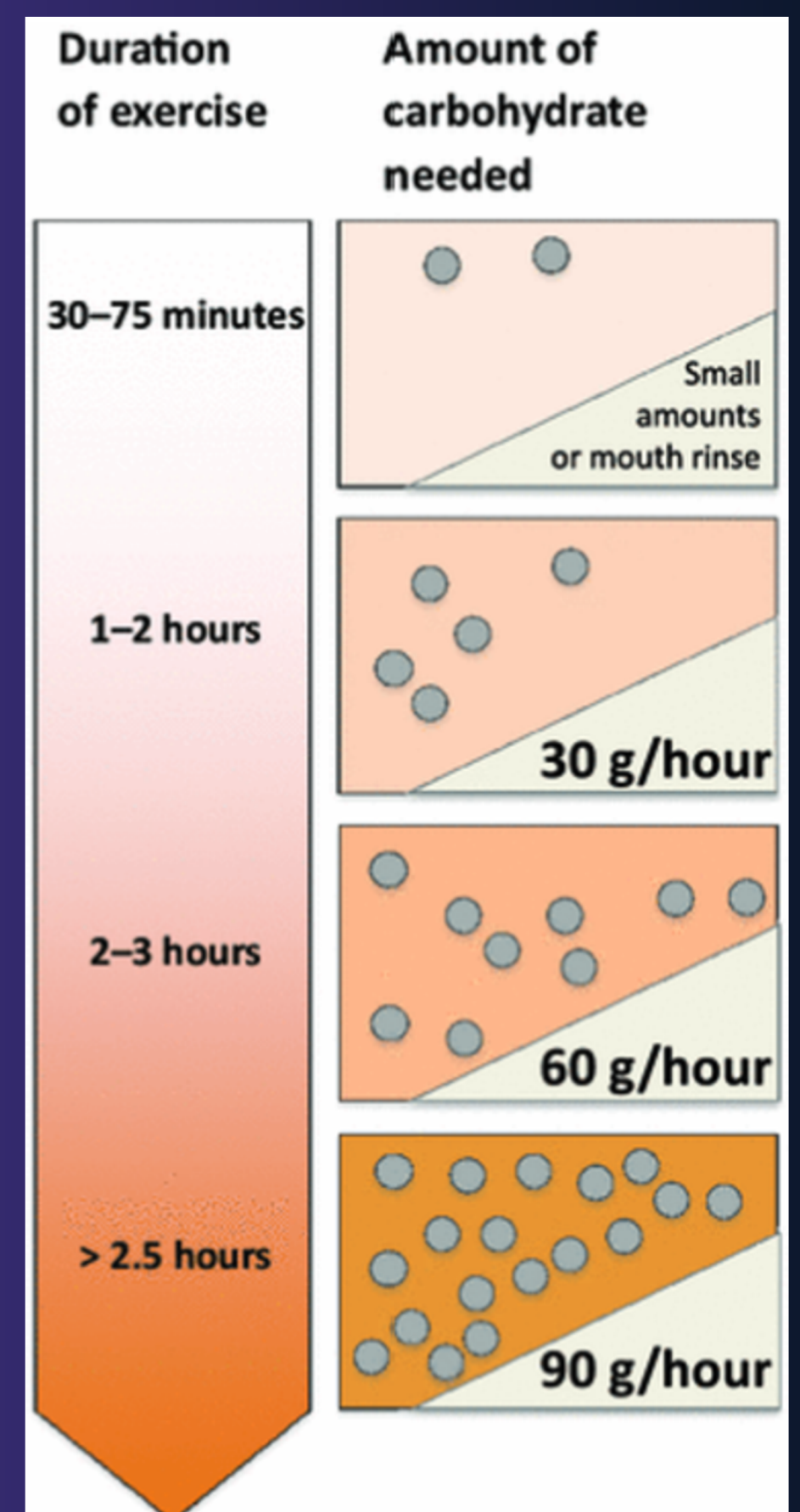
Choose carb-rich foods, low in  
protein, fat & fibre.

Fat, fibre & protein can slow the  
digestion of carbs and may cause  
stomach upset during exercise.

## During exercise:

>1-2hours: 30-60g/hr (Single-Carb like glucose):  
500ml Sports Drink, 1-2 Energy Gels, 1 banana

>2hours: 60-90g/hr (Multi-Carbs like Glucose &  
Fructose):  
1L Sport Drink,  
3-4 Energy Gels (Multi-Carb)





# What Type of Carbohydrates?

## PRE: The Day Before

- 3 main meals and snacks as required (carb-based)
- Carbohydrates should aim to make up ½ your plate.
- Aim to keep well hydrated (7-8 glasses of water)

Eating **MORE** carbs intake = **NOT** eating more.  
Emphasise on **carbohydrate sources** and **reducing fat** intake the day **before** Sydney Marathon.

## PRE: 2-3hours

### Balanced Meal:

- Low/High Fibre carbohydrates
- Lean protein source
- Small amount of healthy fats

## PRE 30-60minutes

25-30g carbs

### Snack:

- Low-fibre (High GI) carbohydrates
- Low-fat foods
- Low fibre and Low fat will help minimise gastrointestinal issues





# Top Tips of Optimizing Race Day Nutrition

## Pre:

- **24-48hours Day Before Race:** Eat well balanced meals, with focus on carbs (making up  $\frac{1}{3}$  to  $\frac{1}{2}$  your plate) to provide good stores of energy for your muscles.
- **2-3HOURS before:** Choose low-fat, low-fibre carb-based meal the morning of the race. Fat and fibre can slow digestion and can lead to upset stomach during exercise.
- **30-60minutes before:** Feel you need a top up? Aim for 25-30g carbs before the start line. Example a LCM bar, banana, energy gel.

## During:

- For the event if going to be running for more than 60 minutes, can take on additional carbohydrates (30-60g carbs/hour) Example 1-2 energy gels, 5-6 red frogs.

## Post:

- Eat a meal rich in protein, carbs, fat with your daily veggies serve. Carbs will help restore your muscle's stores whilst protein will help repair the muscles after working hard.

## Hydration:

- **Pre:** Aim to stay well hydrated in the lead up to your race. The morning of important to sip on water (aiming for 500mL in the hours before the race)
- **During:** Make sure to keep note of water stations and top up as you go by. If it is warm or you are a sweaty runner could include electrolytes in your water vest.
- **Post:** Aim to rehydrate early after finishing the run. If you're an extra sweaty runner can consider taking on an electrolyte based drink.

## REST is Key:

- Aim for adequate sleep night before the race of 7-9hours



# CARB-BASED EXAMPLES

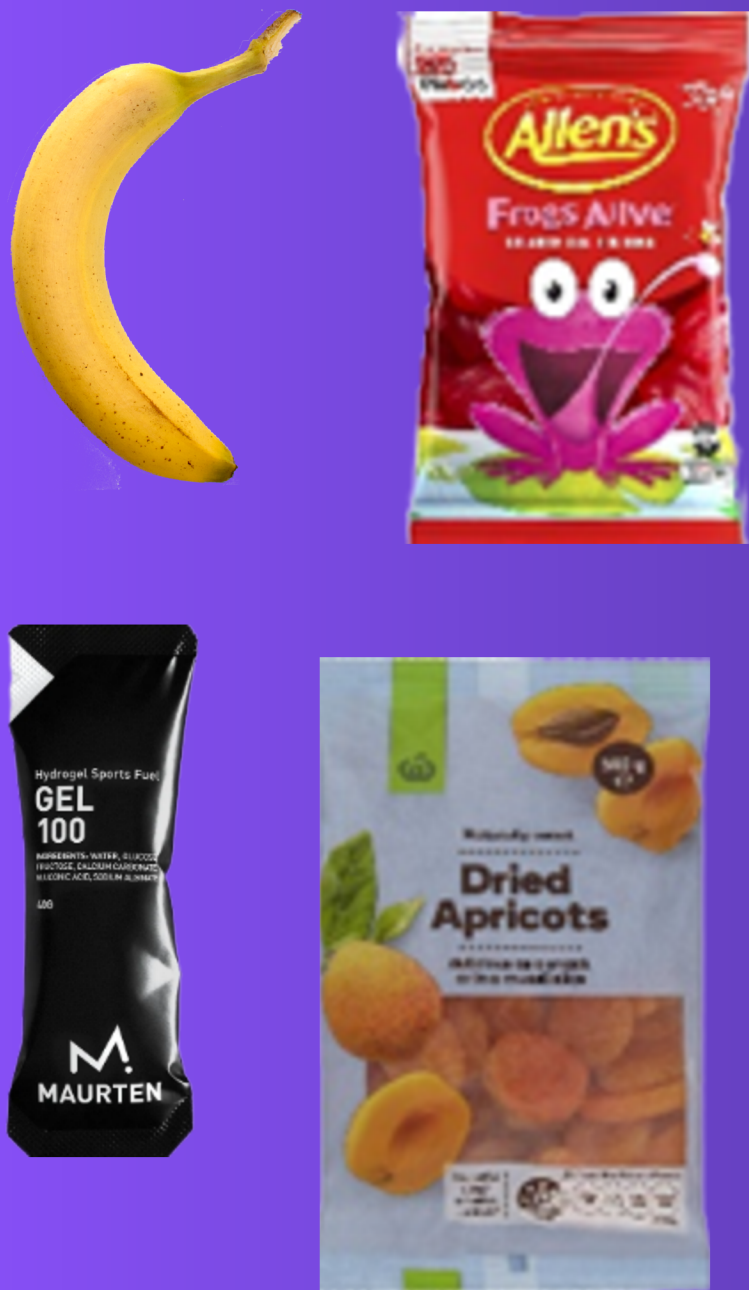
PRE: 2-3Hours



PRE 30-60minutes



PRE 15-30minutes



DURING



POST

