



SPORT SCIENCE WORKSHOP

NUTRITION & HYDRATION



Macronutrients

- Carbohydrates
- Protein
- Fats

Measured in *grams (g)*

FUEL
with
carbohydrates

Group competition:
In 30 seconds, write down as many types
of carbohydrates you can think of!

What to Eat?

FUEL
with
carbohydrates



REPAIR
with
protein

Group competition:
In 30 seconds, write down as many
sources of **protein** you can think of!

What to Eat?

REPAIR
with
protein



Micronutrients

- Minerals
- Vitamins
- Etc.

Measured in *milligrams (mg)*
or micrograms (mcg)

What to Eat?



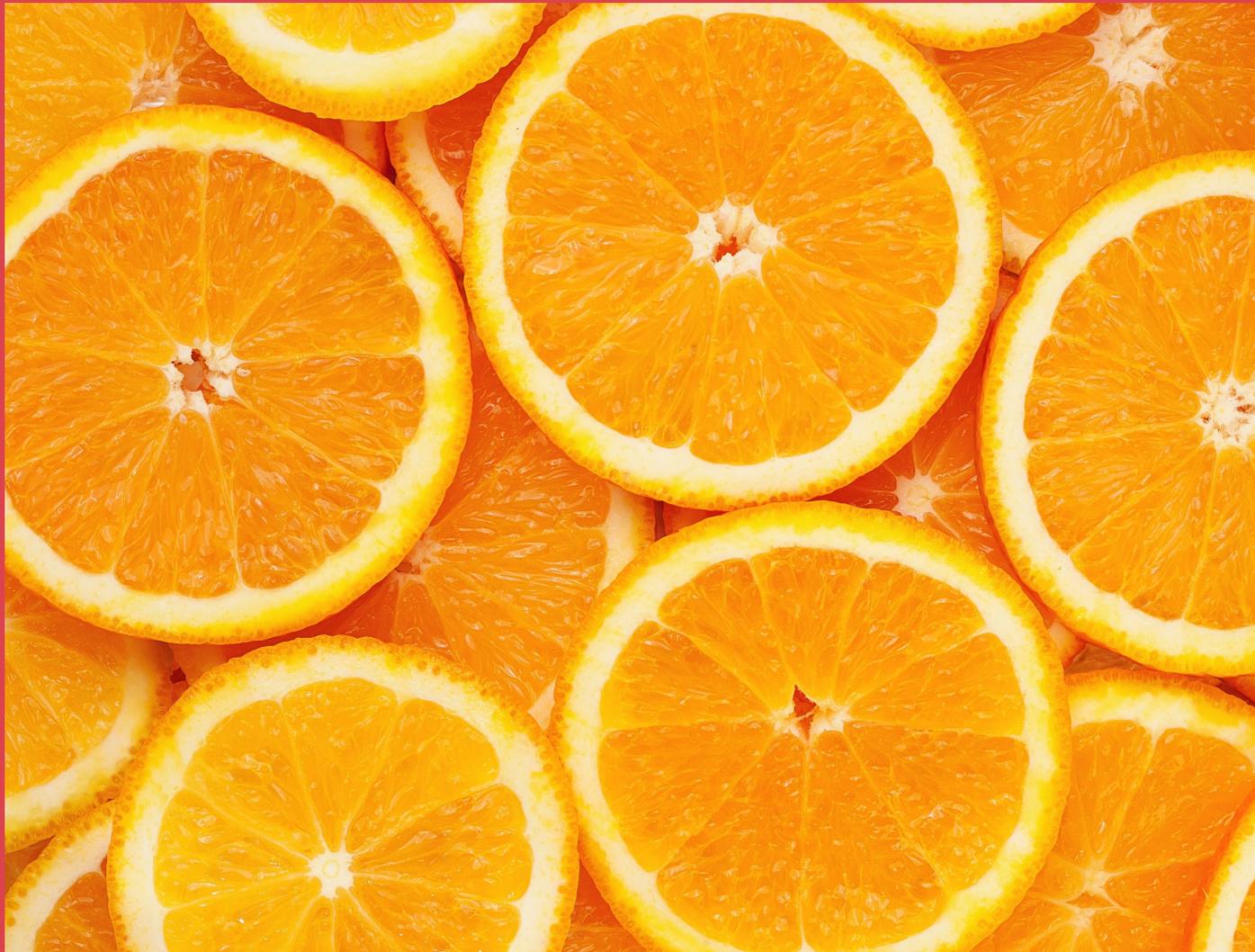
Yoghurts are rich in calcium.

What to Eat?



Berries are rich in antioxidants.

What to Eat?



Oranges are rich in **Vitamin C.**

What to Eat?



Soybeans are rich in **iron**.

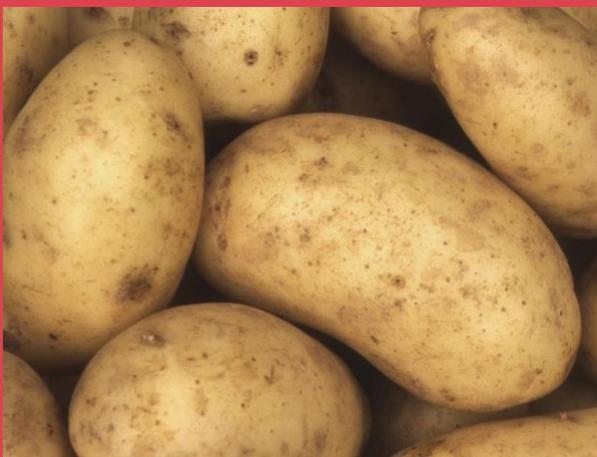
What to Eat?



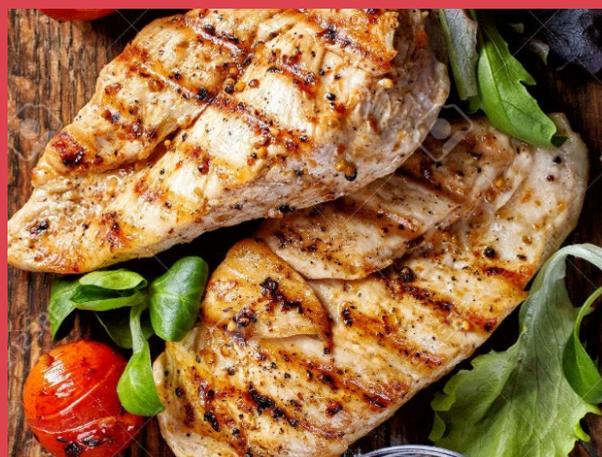
Dark chocolate is rich in **nitrates**.

What to Eat?

FUEL
with
carbohydrates



REPAIR
with
protein

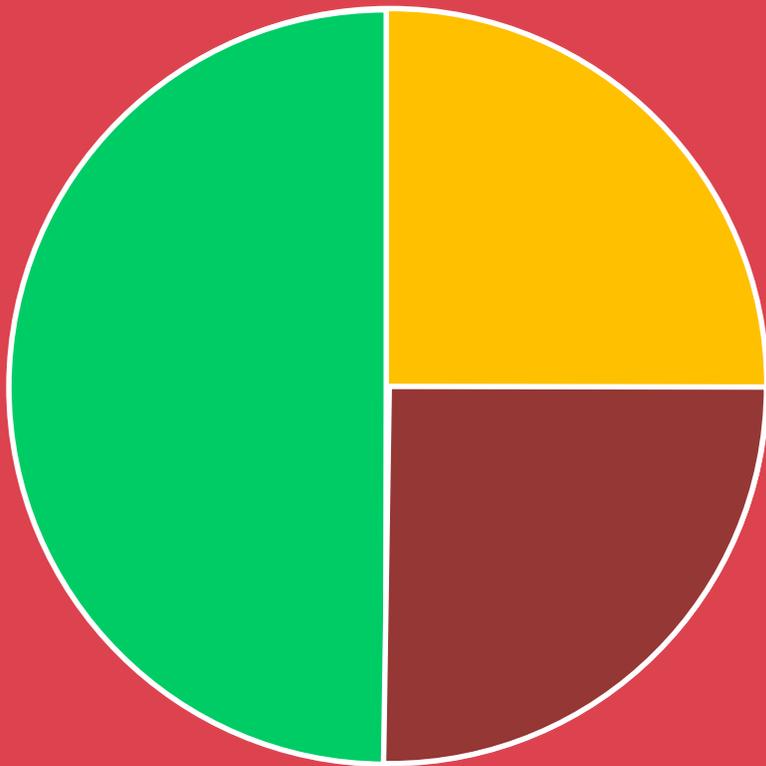


RECOVER
with
vegetables/fruit/
beans/nuts

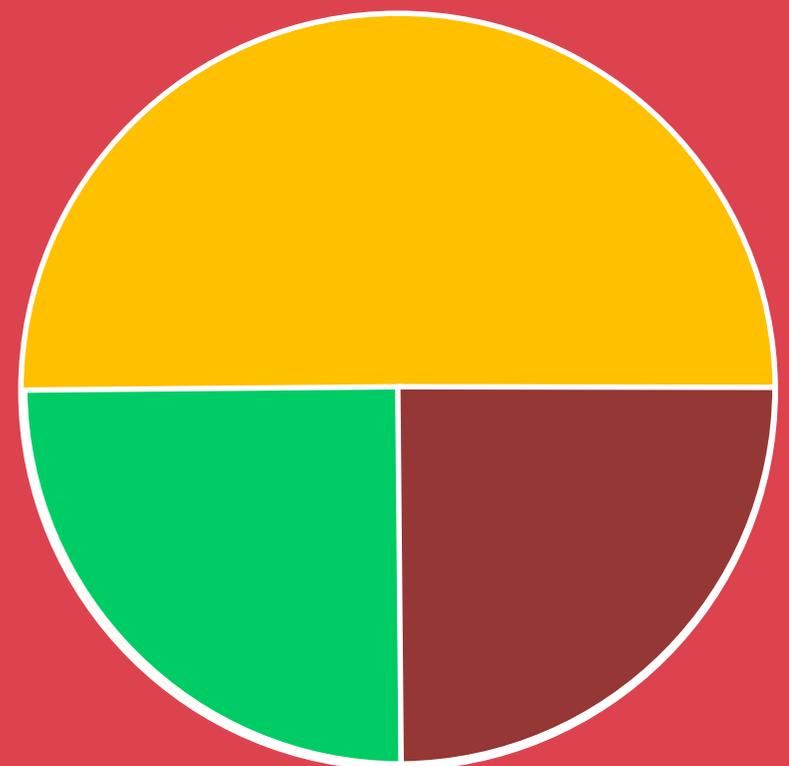


How much to Eat? –Portioning

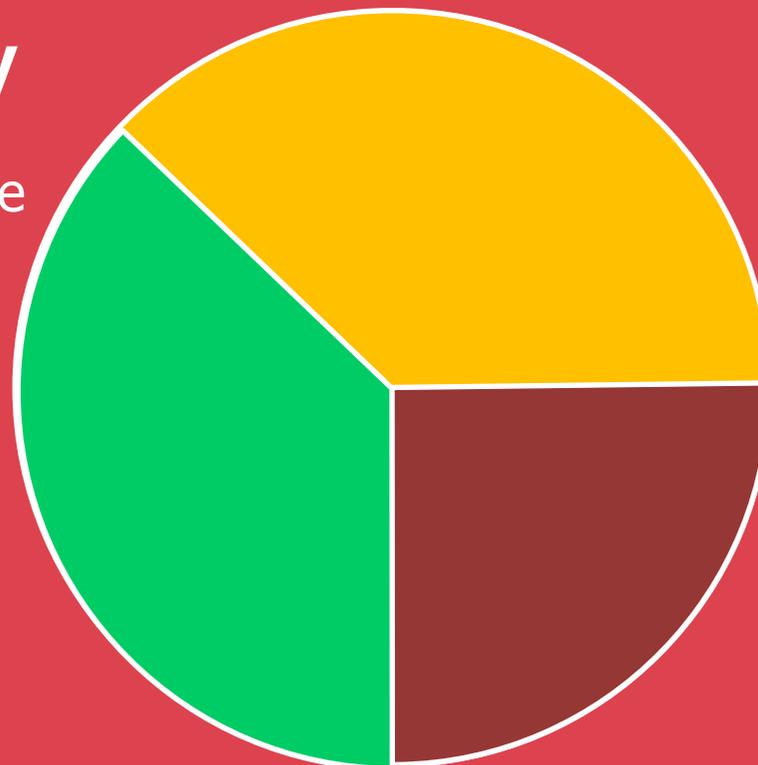
Fill your plate according to the day's exercise intensity



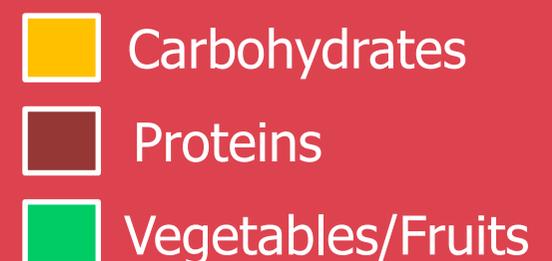
Light intensity
Easy workout/
day without exercise



High intensity
E.g: Competition days



Moderate intensity



HPB Calorie Calculator



When to Eat?

Before exercise

3-4 hr before

- Full meal

1-2 hr before

- Light meal
e.g. smoothie, cereal, peanut butter bread

0.5-1 hr before

- Light snack
e.g. Fruits, nuts, cereal bar

During exercise

<1 hr duration

- Rehydrate (plain, cold water)

>1 hr duration;
high intensity

- Replenish electrolytes (every 15 min)
- Refuel with carbohydrates (e.g. banana)

After exercise

Within 30 min,
max. 1 hour

- Full meal
- If not, chocolate milk

Rest of the day

- Milk/yoghurt
- ABC (Apple, Beetroot, Carrot) juice

Hydration & Dehydration



Pre-training weight

-



Post-training weight

=

Water lost

>2% reduction in weight indicates dehydration!!

Consume electrolytes if you are:

- Exercising longer than 1 hour & sweating a lot
- Living in a hot climate

*overconsumption of sports drinks may result in excess energy intake!



Learning points:

1. Have variety in your diet from day to day, for different sources of nutrients
2. When you eat & what you eat can affect your athletic performance
3. **“You can’t out-train a bad diet.”**

Thanks for your attention!

Questions?