



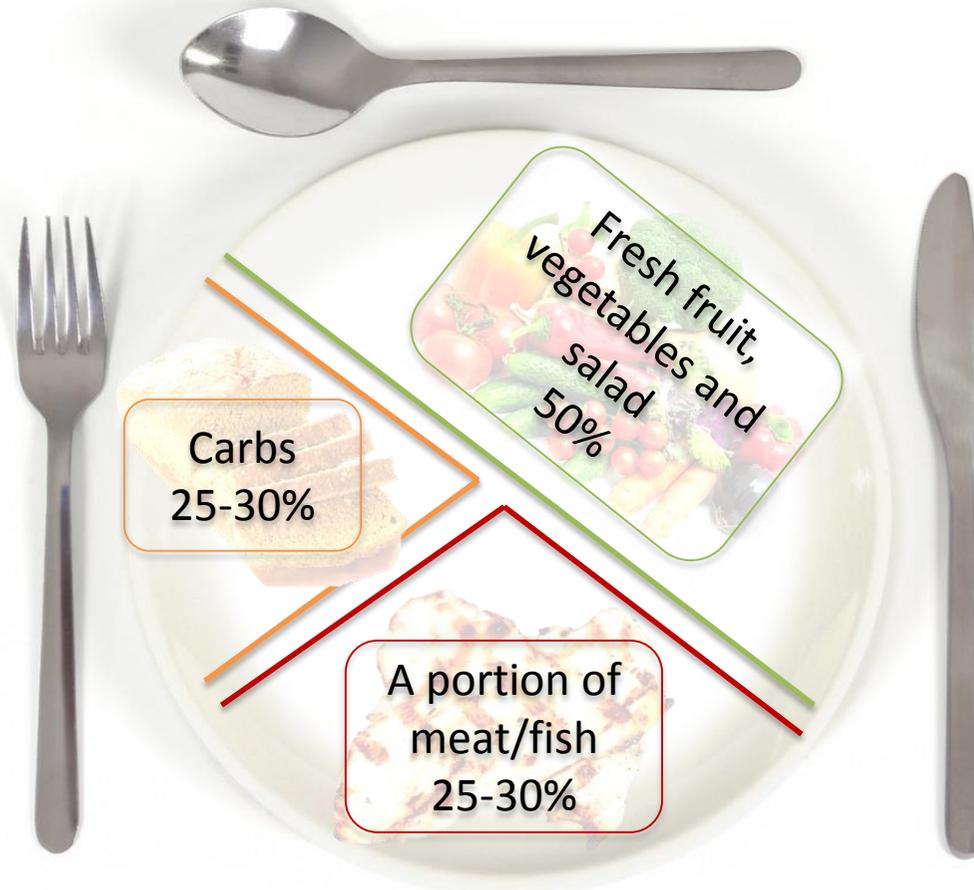
England
Rugby

England Performance Nutrition

Considerations for Referees

A balanced diet

A Balanced diet is the baseline for your nutrition – this should be manipulated depending on: (1) Performance goals, (2) Individual goals.



(1) Pre-Game

Make sure the body has enough **carbohydrates stored (glycogen)**. The stored carbohydrate is the predominant fuel used during matches

Approx. **6g.kg BW** is enough to **fully** store your body of carbohydrates (e.g. 80kg referee = 480g)

These foods should come from **white foods**, more **sugary snacks** and **easily digested** sources.

i.e. White pasta, bread, fruit juices, flapjacks, potatoes, white rice, muesli, granola, couscous



-36 hrs

At breakfast you need to **replace** liver glycogen lost during sleep. This is about **100-110g of carbohydrates**.

Simple and easily digested carbohydrates are absorbed and stored quicker, which makes them ideal for a game day breakfast.

i.e. cereal, fruit juice, chocolate milk, toast/bread, pastry and fruit.



GD (Breakfast)

At this point, you should be fully glycogen loaded. It is **important** to keep your **blood sugar levels high**

Sip/consume small amounts (mouthfuls) of **high sugary** drinks/foods every **30 minutes**

i.e. jelly babies, wine gums, sports drinks, energy gels, energy bars.



KO -2 hrs

Kick Off

(2) Tailoring Through Training

Gainers

For those looking to build muscle mass, **it is important to be in a continual calorie surplus**

You need **protein every meal/snack**, equating to 0.3g.kg BW (~25-30g)

Carbohydrate intake depends on the amount of exercise you do on the day. Aim for **4-5g.kg BW** and manipulate depending on exercise in the day. **Be smart and choose 'slow release' options** (brown rice, brown bread, sweet potato options).

Maintainers

For those looking to maintain body weight and muscle, it is important to adequately match the demands of your day.

You need **protein every meal/snack**, equating to 0.3g.kg BW (~25-30g)

Carbohydrates should follow the rule of "**only consume if you know you're going to use it**". Generally this would be about **3g.kg BW**, however manipulate depending on daily exercise load.

Losers

For those looking to loose body fat and maintain muscle mass.

Very important to maintain **protein** intake. **Every meal/snack**, equating to 0.3g.kg BW (~25-30g).

Only consume carbohydrates when necessary. To loose fat mass, generally, you need to be in a **calorie deficit**, this we can do by dropping carb intake. Aim for **~2.g.kg a day**, manipulate depending on daily exercise load.

"6 meals a day . Eat every 3-4 hours . Eat to your own Goals"

Breakfast

Snack

Lunch

Snack

Dinner

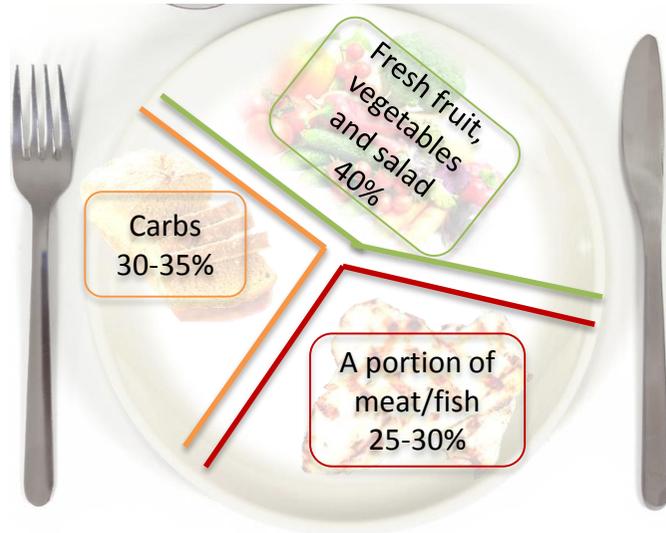
Snack



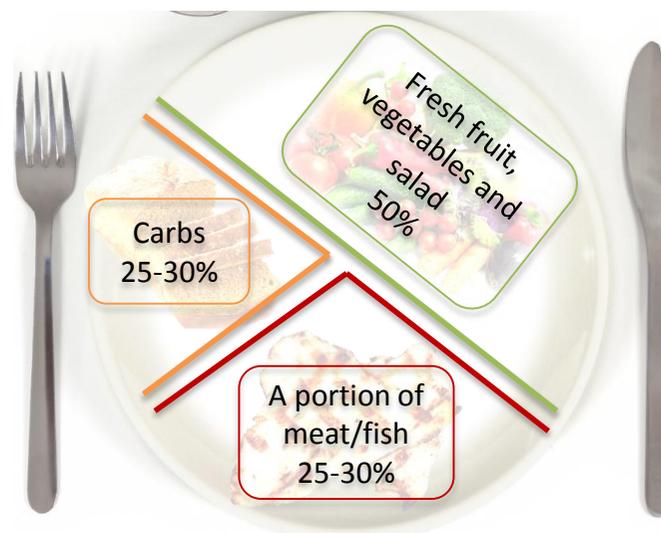
(2) Tailoring - Summary

A balanced diet is the baseline for your nutrition

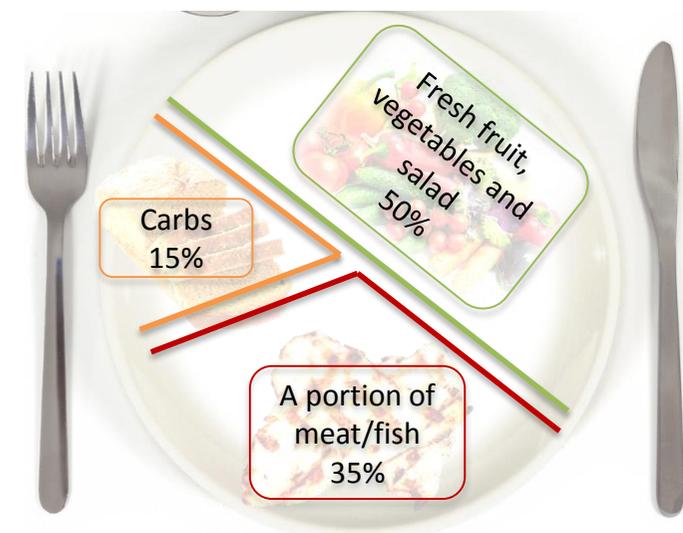
Gainers



Maintainers



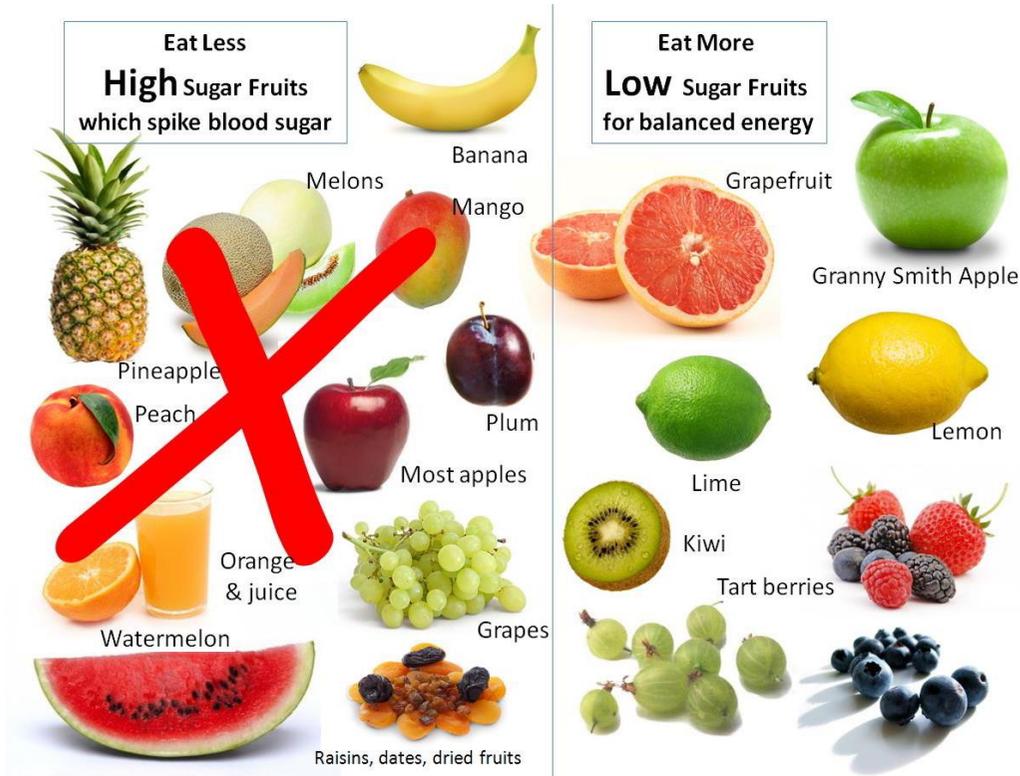
Losers



Never sacrifice vegetables/salads. Manipulate calorie intake from carbs. Make sure protein intake is consistent.

How to cut

Fructose as a sugar does not cause a high spike in insulin and therefore is not the 'main' contributor to fat gain. However, it is still sugar and can create fatty liver disease.



Be SMART

If you are a **weight 'looser'** be smart and choose fruits that are low in fructose and sugar. This is a way of **manipulating your carb intake.**

Try to pick fruits that are **similar in colour** but with **lower sugar levels** i.e. a peach for a grapefruit.

This way, you are ingesting less sugar, but are still ingesting similar vitamins and minerals.

Weight 'maintainers' and 'gainers' try to pick smarter options. However, this is not as big a problem for you. Just monitor your intake.

Snacks for travelling

Protein



2 X 170g tubs



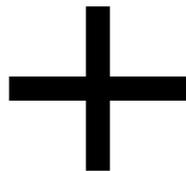
300g tub



1 pack



2 handfuls



Carbs



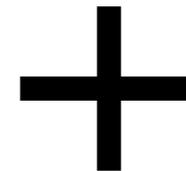
1 banana



1 bar



3 or 4 slices/cakes



Hydration

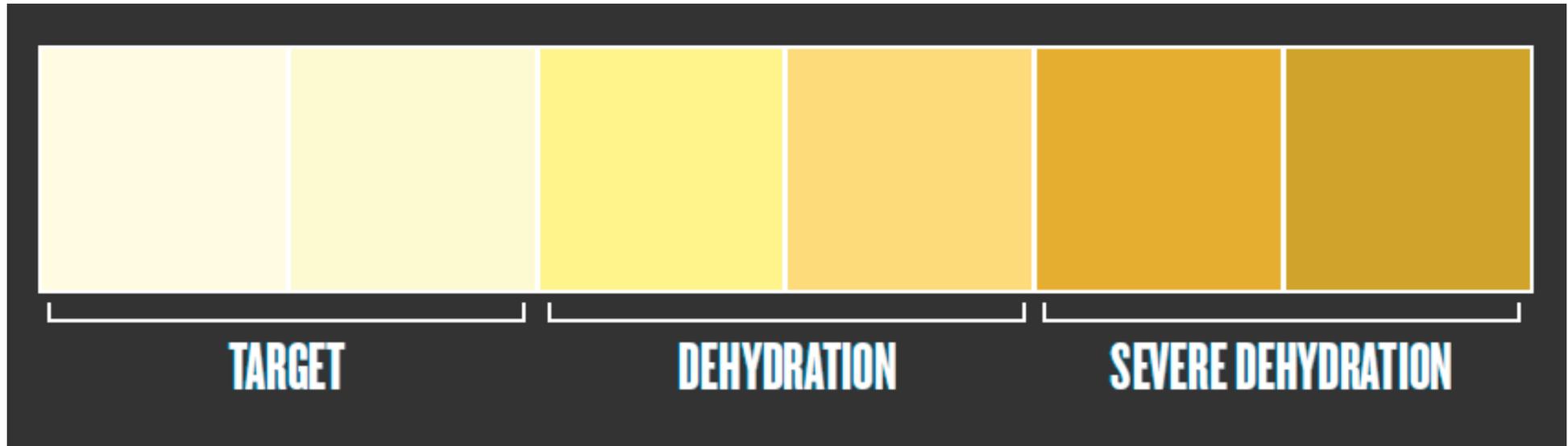


250-350ml

1 from each section

Hydration

Monitor your urine colour regularly



Performance =



This is where performance will be at its best. Sip water little but often to maintain.

Performance =



Performance may or may not be effected. Consume ~200 ml of water and then continue to sip little but often.

Performance =



Performance is effected. Headaches, nausea and ↓ in concentration. Drink ~300-500 ml within half an hour and then sip little but often. Monitor urine closely.