

Supporting Player Development through Positive Nutrition Behaviours

Nutrition support Ulster Regional
Development coaches



Factors influencing young people's nutrition behaviours



Social media

Nutrition messaging (+ & -'s)

Coaches / teachers/ support staff

Key source of nutrition information

Role models

Facilitate through provision/
schedule

Parents

Food provider

Key source of nutrition information

Social / cultural food norms



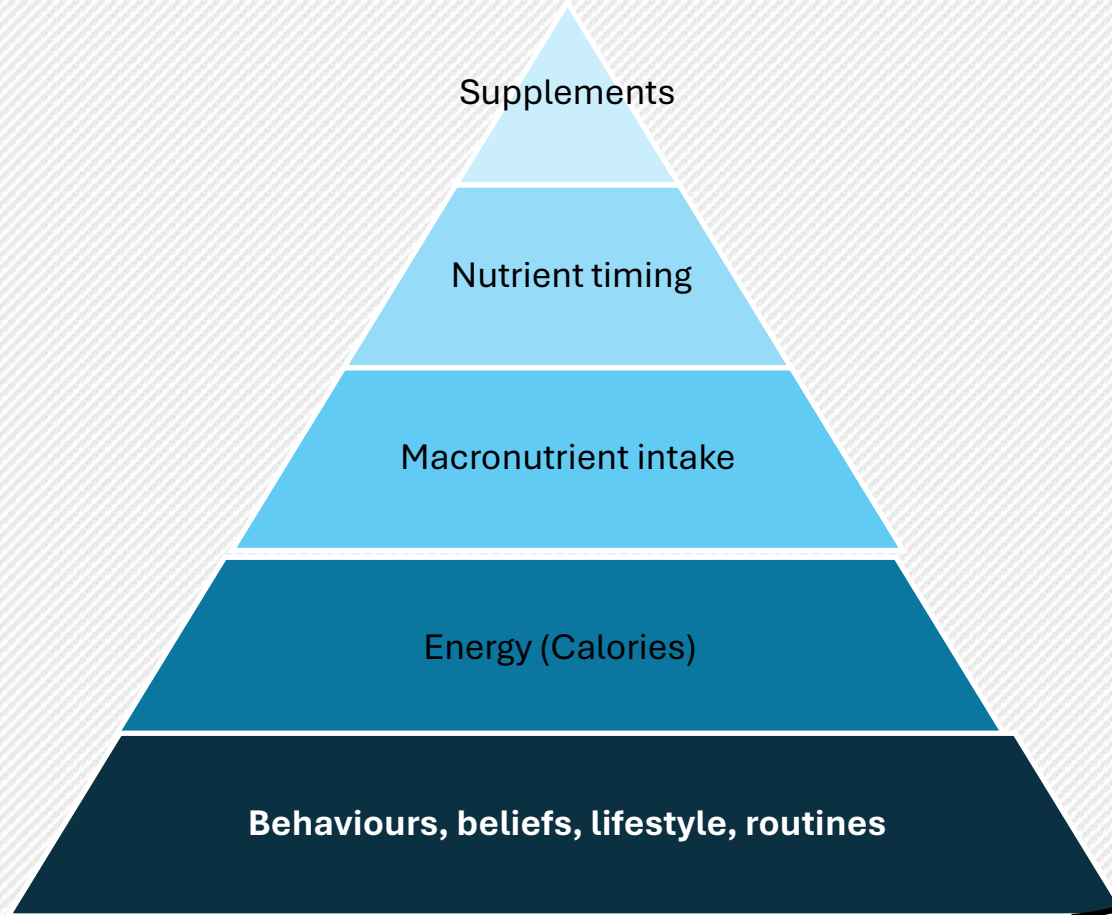
Friends

Social Influence on food choices

Canteen / school provision

Food availability / types of foods
provided

Nutrition- behaviours focus



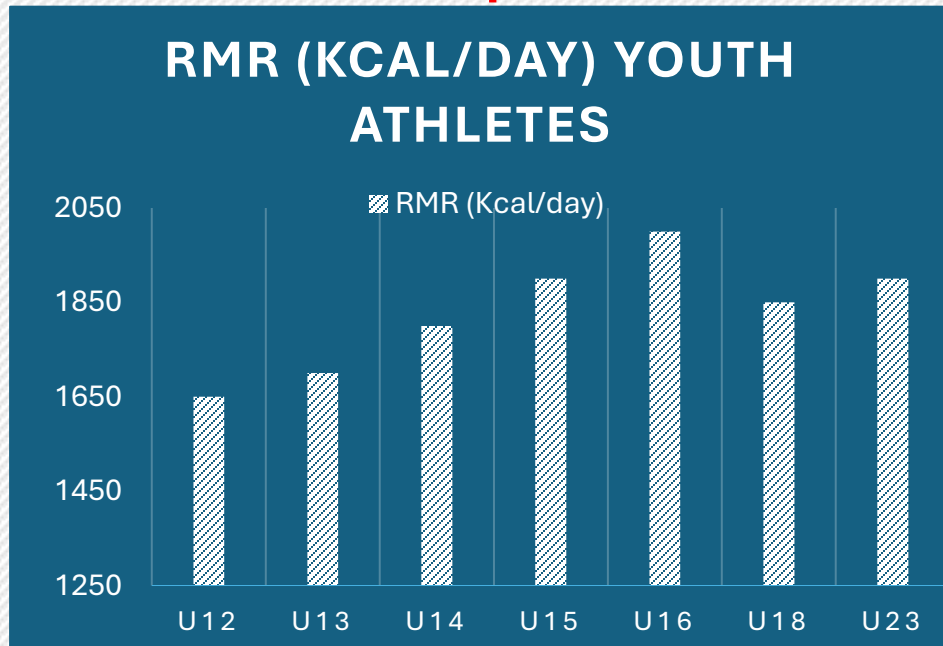
Helping young athletes build positive nutrition behaviours via:

- **Educating on good habits around exercise/ across school day**
- **Nudging / facilitating snack preparation**
- **Protected meal periods within school day**
- **reinforcing positive habits displayed within the group**

This is far more beneficial than providing calorie and macronutrient targets

Keeping Development in Mind

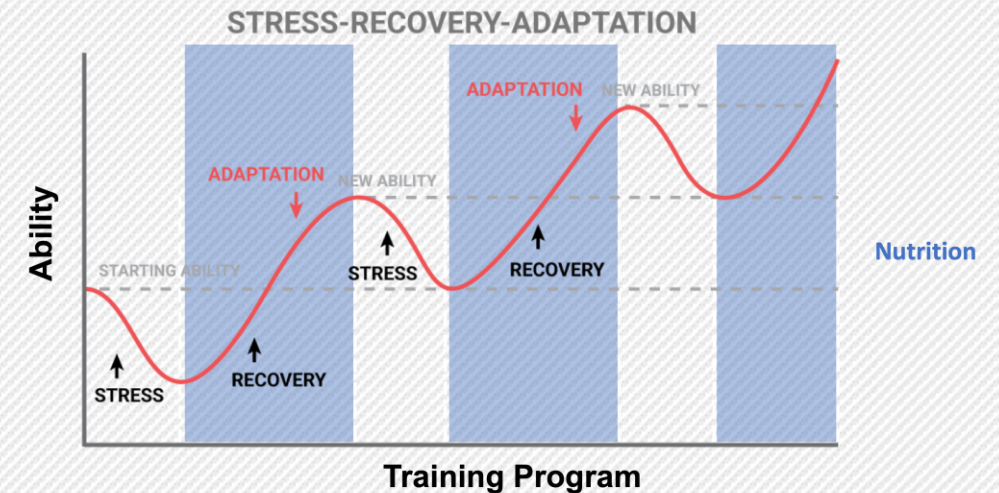
Energy demand of growth / physical development



- RMR = energy requirements of body to sustain normal function not including exercise needs. (Growth, maturation)-
 - Affected by body mass/ composition /maturation
- Importantly, we demonstrate that the largest changes in FFM and RMR typically occur between U12 and U16, demonstrating this is a key period for growth and maturation. *Hannon et al.,(2020)*

Stress / Recovery Balance

Adaptations from the stress of training to get better



WHAT YOU DO IN RECOVERY IS CRUCIAL TO GAINING ADAPTATIONS WITHIN YOUR TRAINING

Daily Nutrition Habits for young athletes



Good foundation

Daily Routine

Minimum of 3 Balanced meals

+ 1-3 snacks

Adjust choices based on need from training (fuel or recovery?)

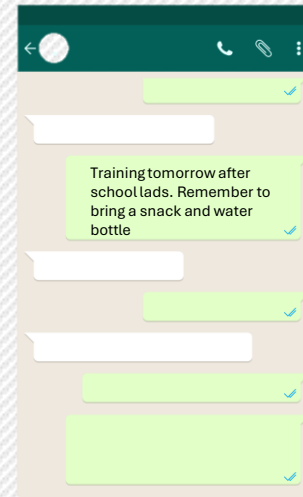
+ 500ml + of fluid with every meal + as needed in training sessions



Maintain a relatively similar feeding structure across the week

Use add in snacks and adjust meal portions based on higher energy demand days

Cue Good habits



Reminder to prepare snacks for around training days

Build slots into session plans (refuel / snack window)

Reward “performance behaviours”

Create an environment to promote good habits

Add “fuel” and “recovery” slots onto session plans

Thursday 17th Sept

SECTION	TIME	DETAIL	LOCATION	CONTACT	DURATION	TOTAL
1	Warm-up	Prep	AS Staff	0	10	
2	Skills	Planning & Prep	AS Staff	0	10	
3	Units	Planning & Prep	AS Staff	0	10	
4	Technical Scenario	AS Staff	AS Staff	1	10	
5	Team Prep	AS Staff	AS Staff	1	10	
6	Team Prep	AS Staff	AS Staff	1	10	
7	Units	AS Staff	AS Staff	1	10	

12 Forwards
6 Backs



Resources to share information of how to effectively meet nutrition needs

Provision (food / equipment) in the environment *
*We can help!



What does a good training day look like ?

1. **3 quality mixed meals** (2:1 Carb to protein on the plate + source of veg in each meal!)- breakfast often doesn't meet this criteria!
2. **2-3 snacks** – adjust choice based on when in the day (pre training / post training / pre bed) – **DEPENDS ON TRAINING VOLUME OF THE DAY**
3. Include **2-3 fruit portions** across the day – variation in colour
4. Include **2+ portions of dairy** for bone health
5. Consume **adequate fluids** with each meal + during training (2.5-4L per day)

Breakfast

Mixed meal
Include protein option
2 carb sources
Fruit / dairy

7.30 am



2 eggs + 2 toast + ½ tin beans + 300ml of orange juice

Overnight oats using Greek or skyr yoghurt + milk, berries, oats and honey

Smoothie: Greek yoghurt, milk, banana, oats, berries, honey

Porridge made with whole milk + additional glass on side + fruit

Mid morning

Snack + fruit
+
Fluids

10 am



2 pancakes + apple
Cereal bars / oat pots
Overnight oats
Milk + fruit
Flapjacks
dried fruit

Lunch

High Carb lunch
Quality Protein
Veg source

12 pm



Quick chicken burrito: 1 chicken breast, 250g bag or rice, 2 tortilla + sauce and veg

Mixed tuna pasta with 2 veggies

Sweet chilli chicken noodles

Leftover dinner from night before

Around training

Pre session

Post session

Carb focus (energy)

Cereal bar + banana
50-75g dried fruit
Flapjack
Quaker oat bar
Waffles / pancakes (2)
Bagel with jam

Recovery focus (Carb + protein + fluid)

Pint of whole milk + cereal bar
Milk based smoothie
Flavoured milk
Meat filled wrap / sandwich + fruit
Protein yoghurt pouch + cereal bar

Dinner

Recovery focus
High Carb
High quality Protein
High Nutrient

6 pm



Mixed meal at home + dessert pot / fruit side

Snack

Recovery snack before bed
(carb + protein)

9 pm



Greek / skyr Yoghurt with granola + honey

Eggs on toast

Pint of milk with toast

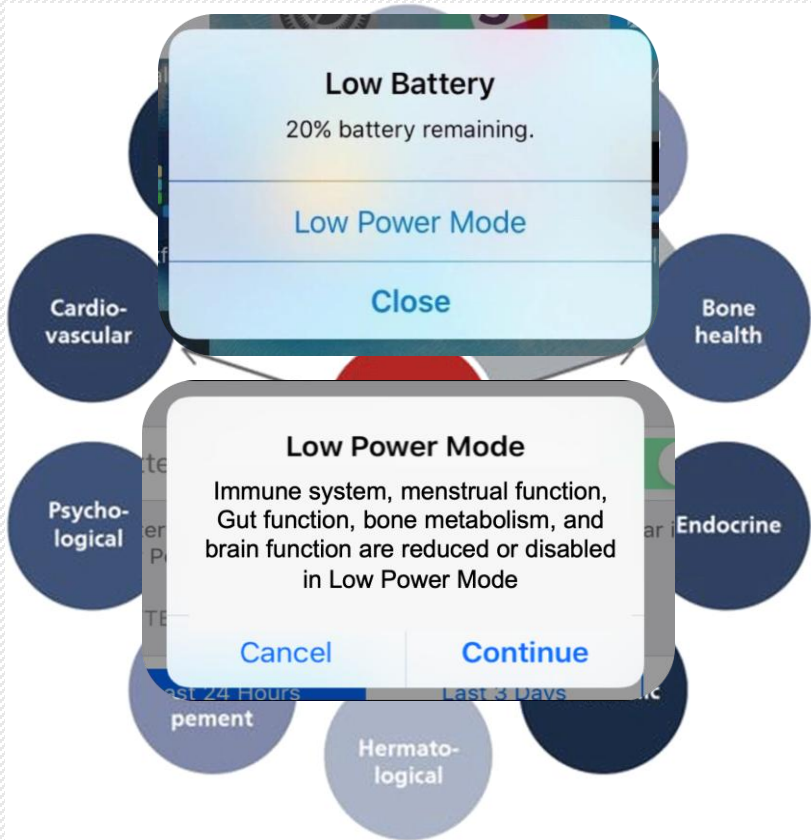
Smoothie

Why is it important that our athletes are eat enough?

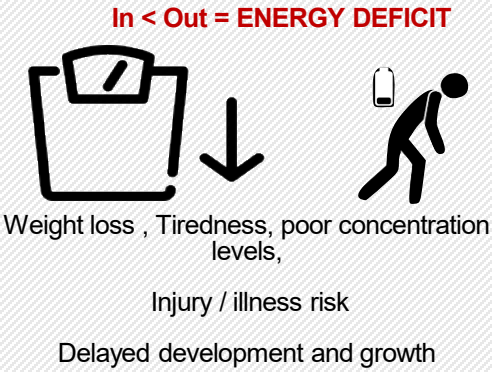
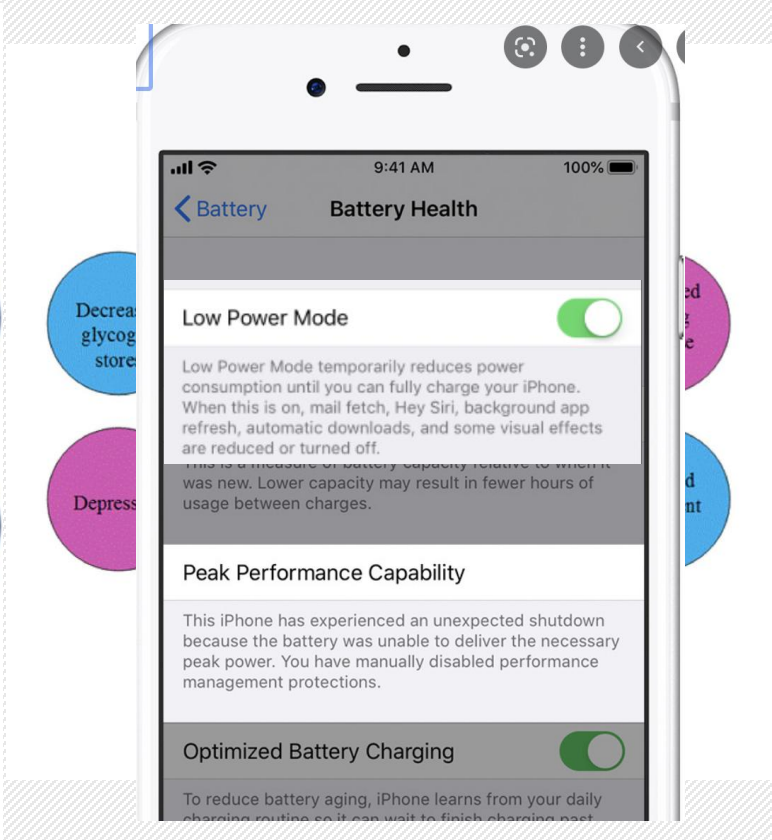
AVOIDING LOW BATTERY MODE

LOW ENERGY AVAILABILITY is when there is a **mismatch** between **your energy intake (diet)** and **the energy used in exercise**, leaving inadequate energy to support the functions required by the body to maintain optimal health. If this happens for a prolonged period of time it can lead to some of the impact associated with RED-s

HEALTH



PERFORMANCE



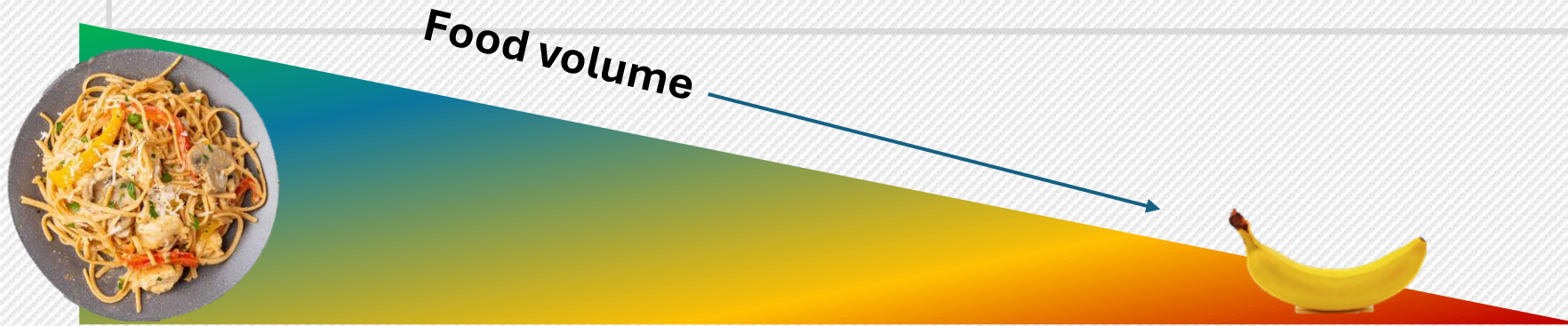
SIGNS

- Noticeable weight loss
- Lack of/ irregular menstrual cycle
- Irritable / mood swings regularly
- Fatigue / constant tiredness
- Repeated injury / bone injury
- Avoidance of eating in social areas
- Strong Labelling foods / food restriction
- Obsessive over body weight / shape

SOLUTIONS

- Not always purposeful – education can help!
- Speak to parents if seeing behaviours suggesting athletes may be struggling with this
 - School council support
 - Advised to speak to Doctor/ nutrition support

Development – Fuel to Perform



-3-4 HRS

CARBOHYDRATE RICH MEAL
Slow energy release

-2 HRS

CARBOHYDRATE BASED SNACK
Quicker energy release

START

HYDRATION

- Poached Egg (2) on Toast (2) + a banana & orange
Juice(300ml)
- Skyr yoghurt (150g Pot), granola, banana and honey + 500ml
of Water
- Tuna, mayo and sweetcorn and a jacket potato (large) +
water
- 2 chicken sweet chilli wraps + mixed fruit pot with honey +
squash 500ml

Bagel with Jam + squash

Handful of Dried fruit

2 thick slices of banana soreen loaf

Cereal bar/ flapjack

Hi juice squash (homemade energy drink)



Performance Fuelling Principles

Adapt meal and snack choices
based on your training / activity
schedule

Last Meal > 2 hrs before training

Use **liquid and snack based carbs**
to increase fuelling close to training
sessions (<90mins Pre)

Consume adequate fluids before
and during training sessions
ALWAYS

Post Exercise / Match Recovery



Support restoring function and nutrients lost from the game

REFUEL (CARBOHYDRATES), **REHYDRATE** (FLUIDS) AND **REPAIR** (PROTEIN).



EXAMPLES

Glass of Milk + Banana

Glass of Flavoured Milk

Yoghurt + granola Pot + Water

Mixed berry smoothie made with Milk

Biltong, Water + a banana

Pre made Sweet chilli chicken wrap + water

Chili Con carne, Rice & greens + water

Turkey Mince & mixed veg pasta Bake + squash

Beef Stirfry + Asian Slaw + water

Beef mince burritos + mixed peppers + Squash

Greek yoghurt, Frozen berries & honey

Skyr yoghurt pot + small handful of granola

Homemade smoothie

Boiled eggs on toast

Glass of flavored Milk

Cottage Cheese on toast



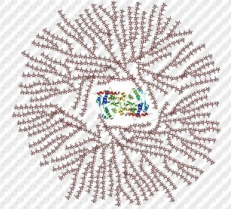
Principles of Match Day-1 Nutrition



Filling the Tank



Muscle is like a sponge & Carbs are the water (muscle glycogen)
We want to fill our muscle carb stores in preparation for the Match



Total

50-60% of daily intake from Carbohydrates

Increase Carb portions at meals times

Timing

Add in 2 extra Carbohydrate rich snacks across the day

Type

High-quality Carb rich food sources

Pasta, Rice, Potatoes, Breads

Choose liquids to help



RULE OF 3

3 QUALITY MEALS

2-3 CARB RICH SNACKS

FEEDING EVERY 3 HOURS ACROSS THE DAY



Practical strategies to increase carbohydrate intake

Portion size



Meal add ons

Sides



1/2 naan bread/ garlic
bread/ wrap

Dessert



Muller rice / custard / fruit
yoghurt pot

Liquids



Pure fruit juice/
Smoothies/ sport drink

Snack choice / frequency

Add in 1-2 more snacks in day
Choose carb rich



Example Higher Carb meals

Example Meals

Evening Snacks (high carbs)

Beef Mince burrito:

100g lean beef mince cooked with fajita seasoning with peppers and onions, add **1 bag of microwave rice** into the pan then serve over **two tortilla wraps** with toppings.



Chicken pesto pasta with garlic bread



Large portion of pasta, with 1 cooked chicken breast mixed in then add two tbs of pesto in and mix. Serve with 2 slices of garlic bread.

Hoisin chicken or beef noodles



100g of beef mince or sliced chicken breast cooked with onions and peppers. Season with 1 tbs of soy sauce and 120g blue dragon stir fry sauce pack (eg hoisin and garlic). Boil **two nests of noodles or 300g of fresh noodles** and then drain and mix through the meat and veg mix.

2 bagels with jam / honey + butter

2 slices of extra thick toastie bread with jam/ honey + butter

Bowl of porridge (75-100g = 1 cup of oats) with banana and honey. Made with milk

Large bowl of cereal with milk

Innocent smoothie (500ml) + cereal/ oat based bar

2-3 large butter milk pancakes (can toast and top with honey or choice of topping)

150-200g of fruit yoghurt (eg onken) + large portion of granola mixed on top

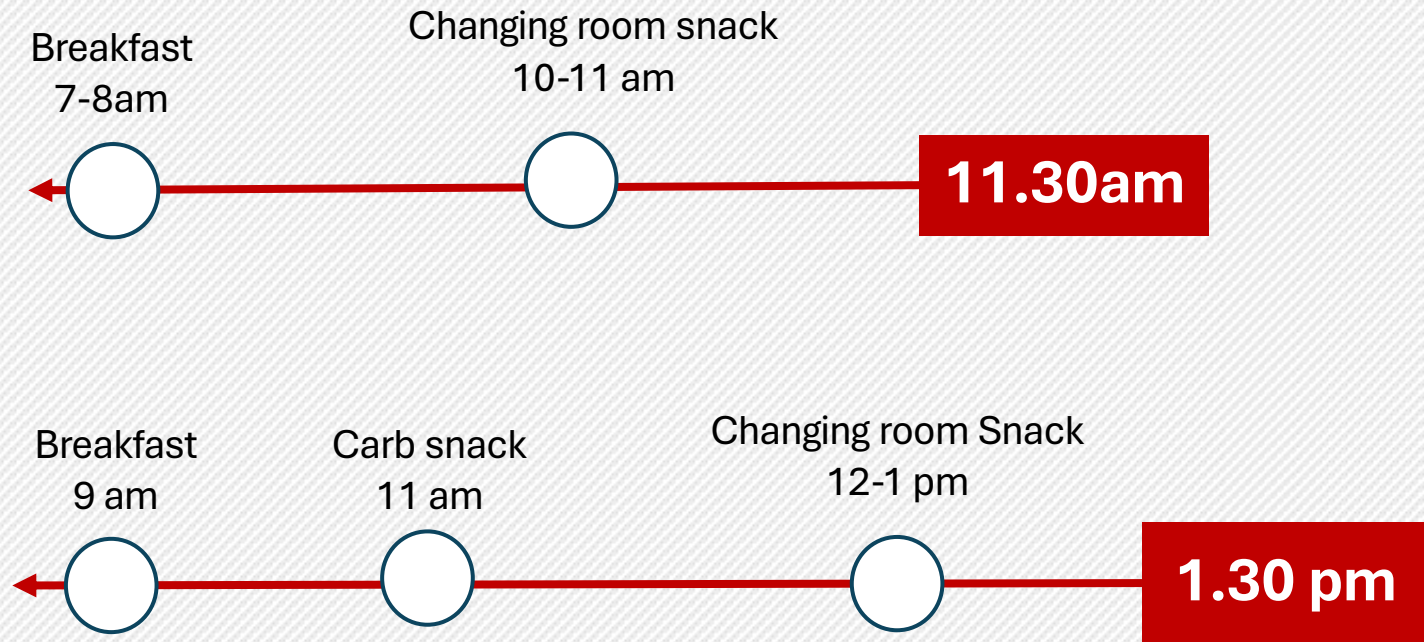
400g tin of rice pudding + drizzle of syrup

High energy smoothie: 1 banana, 3-4tbs of oats, handful of frozen berries, generous squeeze of honey, 300ml of milk or flavored milk)

Match Day – Fine tuning the engine

Targets

- Top up energy stores which have been depleted overnight
- Last meal 3-5 hrs out from Kick off
- Low fat, protein and fibre in pre match meal
- Hydration is **key** to avoid early onset of fatigue



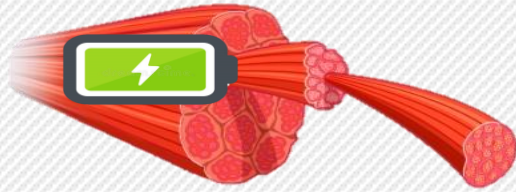
If players struggle with savoury meals closer to game adjust choices! Sweet/ liquids can be easier to digest!

Example breakfasts

- Large glass of milk + 2 giant pancakes (sunblest) toasted with honey / jam added
- 200g Greek yoghurt + 1 cup of granola added + Sliced banana and honey on top (***eat before or bring in a tub !***)
 - 1 cup of oats made into porridge with whole milk topped with banana and honey
 - 2 eggs with 1 toasted bagel with butter +1 banana + 300ml glass of orange juice
- **Smoothie milk based:** 300ml of milk + 3 tbs oats + handful frozen fruit + 1 banana + tbs honey! (blend and bring with you!)
- **Smoothie Juice based:** 300ml fruit juice + 3 tbs oats + handful frozen fruit + 1 banana + drizzle of honey. Blend and bring with you!
- **Overnight oats (Chocolate) :** 1 cup of oats (100g) + 2 tbs hot chocolate drinking powder + 2 tbs of natural yoghurt + drizzle of honey + 200ml of milk + berries or fruit of choice . Mix all in tub the night before and bring with you!
- **Overnight oats (Biscoff) :** 1 cup of oats (100g) + 2 tbs of vanilla yoghurt + drizzle of honey + 200ml of milk + 1 heaped tbs of Biscoff melted in microwave added + fruit of choice

During Matches

Delay the onset of fatigue from impacting performance



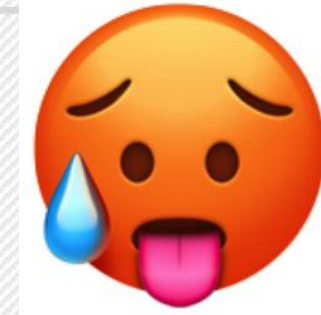
Smaller energy reserves in the muscle



Increased likelihood of running out of energy



Increase reliance on carb rich snacks (halftime)



More impacted by environmental conditions



Increased likelihood of becoming dehydrated in hot environments



Increase reliance on cold fluids/ cooling strategies to maintain body ideal temp



Supplement stance – why do we push “food first”?

Policy stance : IRFU

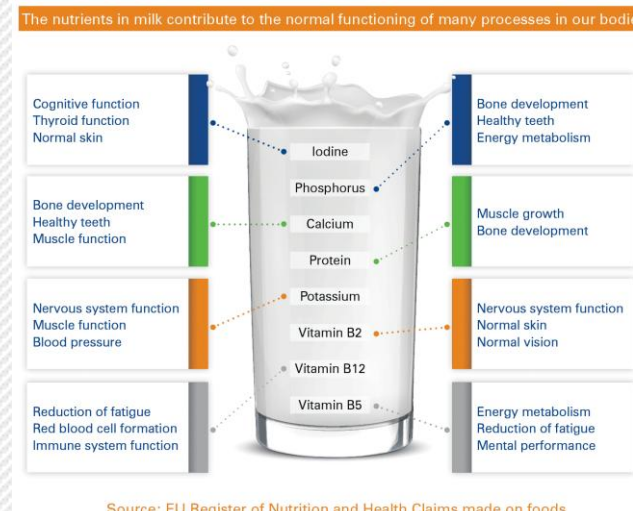
IRFU Recommendations

Sports Supplements and the Young Rugby Player

1. Young rugby players should focus on good eating and drinking practices to support optimum performance. Fact sheets to support this are available through the IRFU website www.irishrugby.ie/eat2compete
2. The use of protein supplements should not be recommended by schools, coaches, teachers or others involved in the training of young rugby players.
3. The IRFU strongly advises against the use of nutritional ergogenic aids (Table 2), in particular creatine, in young rugby players under 18 years of age.
4. Young rugby players with medical conditions (for example diabetes, asthma, coeliac disease and nutritional allergies) should receive appropriate medical and nutritional advice to assist their optimum performance.

Food is greater than the sum of its parts

Whole foods contain far more than just its main macronutrient



It's a quick fix than can worsen habits



Skipped breakfast – replace with a shake

Replacing Fruit/ Veg / Fibre with a pill = low fibre intake affecting gut / bowel health = increase risk of immune issues.

Replace milk / Dairy with protein powder = Low calcium intake – increased bone fracture risk in contact sport

Poor manufacturing – are they even getting what it says on the bottle?

Top Tips for Away Day meals / Snacks

TRANSPORTABLE MEALS

Overnight Oats

½ Cup of oats
2 tbs of Greek yoghurt
200ml of milk
1 banana sliced
1 tsp of honey
1 tbs of mixed nuts/ seeds

Mix in Tupperware
Leave overnight



Smoothie

½ Cup of oats
300ml of milk + water (as needed)
1 banana
½ cup of frozen fruits
1 tbs of mixed nuts/ seeds

Blend and enjoy



Chicken wraps

½ chicken breast shredded
1 tbs of sweet chilli
2 tortilla wraps
1 tbs of Mayo
Handful of baby spinach

Make into wraps



Ham Pesto Pasta

100g of Ham (4 slices)
3-4 servings spoons
cooked pasta
1 tbs of pesto
Sliced peppers and tomatoes

Cooked pasta & mix everything together



HIGH CARB SNACKS



Banana



Flapjacks



Fruit/ Malt Loaf



Dried fruit

HIGH PROTEIN SNACKS



Milkshake



baby bel (2-3)



Cooked Chicken skewers



Biltong



Skyr Yoghurt

FLUIDS

Milk (Protein + fluid)



Diluted Hi Juice
(Carbohydrate + fluid)



Water

Sport drink (matches only)



TIP



Cooler lunch bags can keep food safe for trips!