

Race week and race day nutrition

Topics covered today

- ▶ Basic race week nutrition guide and info
- What nutrients to focus on for optimal sports performance
- HYDARTION
- Race morning nutrition and hydration
- During competition fueling and hydration
- Post competition nutrition



Race week nutrition info

- Carbohydrates are very important in race week however <u>carb loading</u> is not necessary
- You need to ensure you are getting in a variety of the <u>essential nutrients</u> required for optimal sports performance the week before a competition
- Getting in protein and carbs after all training sessions is vital in the week of a competition. This is to ensure you go into the competition in a anabolic state (build up state) not a catabolic state (breakdown state) and with enough stored energy
- Hydration in and around training is VERY important being dehydrated by just 2% negatively effects sports performance by 27%!!!

Essential nutrients required for optimal sports performance

- Carbohydrates
- Protein
- ▶ Iron
- Water and Electrolytes
- Good fats & Essential fatty acids (EFAs)
- ▶ Vitamin C and Zinc

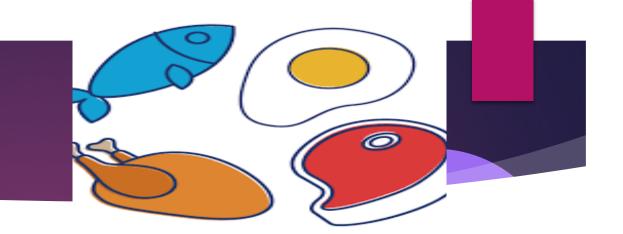


Carbohydrates

Why you need them

- Main source of fuel during exercise
- Decreased CHO intake = muscle fatigue & poor performance
- Glycogen stores need to be replaced after every session
- CHO carry protein into the muscle post workout & increases protein's ability to repair/ rebuild muscles by 36%
- CHO lower cortisol levels produced from exercise

Food sources



Why you need it

Protein

- Changes the body from a breakdown state to a build up state
- Repairs & rebuilds muscle after exercise
- Helps the body adapt to training load/ exercise and get stronger
- Required for all chemical reactions throughout the body
- Promotes sustained energy levels throughout the day
- > Supports optimal immune health

Food sources

- Grass feed/ free range meat Lamb, beef, chicken, turkey, pork, fish, salmon.
- > Free range eggs, quinoa or organic tempeh.
- Raw nuts & seeds & nut butters.
- Milk, yoghurt & cottage cheese.
- > Lentils, beans and legumes.

Iron

Why you need it

- Transport oxygen to all parts of the body
- Low iron levels are common in athletes and result in low energy and lethargy
- Hard training load increases red blood cell count which therefor increases iron needs
- Iron is lost via sweat
- ▶ Iron is vital for optimal immune function

Food sources

- Grass fed beef, lamb & pork
- Salmon
- Lentils, red kidney beans & black beans
- Black rice
- Parsley & green leafy veggies
- Cashews and almonds
- Dried apricots



Good fats



What they do

- Help access glycogen (CHO) stores from muscles
- Essential for hormone development and function
- EFA's increases blood flow to the muscle which aids in the removal of lactic acid
- EFAs transports <u>ALL</u> nutrients, electrolytes, water and fuel sources into the cells
- Reduces inflammation which reduces recovery time

Food sources

- Raw nuts and seeds
- Avocado
- Milk, Greek yoghurt, cheese & organic grass fed butter
- Olives & olive oil
- Coconut products oil, milk, yoghurt

EFAs:

- ▶ Salmon, trout, mackerel, sardines
- Hemp seeds/ oil & flax seeds/ oil
- Walnuts
- Chia seeds

Zinc & Vitamin C

Why you need them

- Both help protein with the repair
 & rebuilding of new muscles.
- Vit C enhances the absorption of iron & is a potent antiox that reduces inflammation.
- Zinc & Vit C (along with iron, Protein & EFAs) are vital for optimal immune function.

Vitamin C foods	Zinc foods
Citrus fruits Red capsicum Strawberries Kiwi Raspberries Blueberries Tomatoes Parsley Spinach Broccoli Brussel sprouts Cauliflower Paw paw	Red meat Pork Chicken Eggs Brown rice Raw nuts Cheese Pumpkin seeds Red kidney beans Garlic Flaxseeds Spinach
Melons Guava	

Water & electrolyte intake

- Water is essential during all exercise
- ▶ For every hour of exercise you will likely loss 500ml of water!!
- ▶ In 90mins of exercise you will lose at least 750ml 800ml of water!!
- ▶ Daily you want to aim for 1.5 litres 1.8 litres of water this is on no training days
- On training days aim for 1.5-1.8 litres of water plus an extra 800ml to make up for lost water in training!!
- ▶ Both water & electrolytes assist with a wide range of chemicals reactions throughout the body
- Electrolytes regulate the amount of water in the body & delegate where water is distributed to
- In training sessions if they are less than 90 minutes and you are not doing two sessions per day water only is totally fine as you will get enough electrolytes coming in through food
- At competitions having both water and a good quality electrolyte drinks to sip on is ideal
- Low water & electrolyte intake results in impaired muscle contractions, slow reaction time, cramps, fatigue and impaired sports performance

Day to day water intake

- Start each day with a large glass of water
- ▶ To ensure you drink plenty of water during the day between meals, carry a water bottle around with you & have it at your desk, but avoid chugging water at meals as this dilutes your digestive enzymes
- On non training days aim for at least 1.5- 2 litres
- If you drink soft drinks = 1 negative glass of water!!
- Always drink water in every training session!



Race morning nutrition

Food

- Don't try anything new for breakfast!
- Eat breakfast as soon as you wake up
- Good breakfast ideas to have are:
- Healthy pancakes see recipes in current & previous handout
- ▶ 1-2 slices of sourdough toast spread raw nut/seed butter & a sliced banana or strawberries or raw honey
- Any of the overnight oat recipes on the last handout
- Weet-bix with sliced banana & raw nuts/seeds or nut butter or Greek yoghurt
- Eggs on sourdough toast with or without some avocado
- ▶ **Afternoon session** get up have regular breakfast and then have an early lunch at about 11.00/11.30.
- Lunch focus on carbs rice, pasta, starchy veggies, sourdough bread, but also protein that you find easy to digest!!

Fluids

- As soon as you wake up have a large glass of water
- Don't have sports drink in the morning only start drinking this after your first race (to avoid blood sugar spike and then crash)
- You need to make sure you get to race day well hydrated so focusing on hydrating well in training and outside of it at all times is super important
- Avoid dehydrating drinks like soft drink and energy drinks in the week leading up
- Continuously <u>sip</u> on water on race morning take your water bottle with you everywhere!

During event nutrition

- Most athletes do not eat enough during a competition
- Every time you enter the water you use up stored energy so you need to replace this lost energy with a snack so you go into each race with 100% stored energy ready to go!
- Warm up, put your racing bathers on and then have a snack and sip on water
- After each race and cool down make sure you have a snack and sip on water & electrolyte drink or good quality juice
- Please focus on eating food not just drinking electrolyte drink or juice the whole time
- If you have a small break between races nibble on a small snack, if you have a longer break nibble on a bigger snack
- If you find it hard to get back to your food bag carry snacks in your jacket pocket!
- ▶ If there is a lunch break try to get a small/medium sized "meal" in – a salad and protein wrap or roll, rice/ pasta and veggies, brown rice sushi



ASADA/ Informed Sports approved good quality electrolyte drink brands

- SOS Hydration any of their products are fine. These are lower in carbs so could be a good option if just wanting to top up electrolyte levels after a big week or before a competition
- Pro4mance produrance endurance electrolyte drink - good in comps for carb intake and electrolyte intake
- Body Science BCAA and electrolyte blend. Good comps for carb intake and electrolyte intake
- Pure coconut water (Plain or with watermelon and or mango juice)
- Pure watermelon juice



Snacks ideas for competitions

- Fruit of choice whatever you enjoy eating is fine
- Veggie sticks have with dip or on their own or have celery sticks stuffed with peanut butter
- Dried fruit dates, figs, apple or apricots are best
- Trail mix nuts of choice, pumpkin seeds, chopped up dried fruit (above) or sultanas and shredded coconut, feel free to add in some dark chocolate drops too
- ▶ Bliss/protein balls/bars and or raw food bars see good brands in handout
- Carmen's or Red Tractor muesli bars
- ▶ Home-made muffins or banana breads see handout & go to Healthy Chef website for recipes
- ▶ Brown rice crackers with dip or nut butter or on their own is fine too
- ▶ A raw honey sandwich using sourdough bread OR jam and nut butter sandwhich
- Mountain bread wraps or sourdough rolls filled with salad and good quality ham or turkey OR sliced banana & raw nut butter/ raw honey
- Rice or pasta with veggies & cheese
- ► Tamara valley or Jalna pouch of purity kids squeezy yoghurts (if tolerated)

Post competition nutrition

- Post event eating should be similar to post training eating. Sometimes you might not feel like eating at this time but it is very important for recovery.
- Need to eat within 30 minutes of getting out of your final cool down swim – if not sooner!
- If you can't get a main meal in within 30 minutes you must have a post exercise snack to tie you over till you eat a main meal
- Post comp main meal: focus on carbs, protein, good fats and antioxidants (colourful foods)



Recovery Nutrition – this is the most vital time in an athlete's day to get their nutrition correct!

Why you need to eat ASAP after training

- Food will change the body from a catabolic state (breakdown) into an anabolic state (building)
- Need to replace used glycogen (energy) stores
- Need to eat food ASAP to reduce cortisol levels for optimal immune, good gut bacteria function and for iron absorption
- Focus on carbohydrates and some protein food sources
- Females need to eat with in 30 minutes of finishing training & males within 45-60 minutes
- Females need more on protein after training than males, because of higher levels of progesterone
- Need to replace fluid and lost electrolyte

Post training & competition food ideas

- ▶ Eggs, sourdough toast with some tomato/ avocado / goats cheese
- ▶ Leftovers from last night's dinner
- A smoothie (see example recipes in handout)
- Squeezy yoghurt pouch (see good quality brands in previous handout)
- A slice of sourdough toast with raw nut/seed butter and sliced banana
- A slice of sourdough toast with vegemite & avocado with a smoothie
- ► Greek yoghurt, muesli/granola and fruit (can pack a little tub with you)
- Large handful of trail mix -almonds, cashews, pumpkin seeds, dried cherries/dates/apricots and some dark chocolate drops
- A super hero muffin see recipe in handout
- A breakfast, lunch or dinner meal
- ▶ 1-2 bliss/ protein balls (Home-made or see brands in handout)
- ▶ Home-made muesli bar or a Carmen's or Red tractor muesli bar
- If you want chocolate milk now is the time to have it, also have a handful of almonds too!

Key nutrients & foods to build a nourishing post comp meal

FIBRE rich carbs

- A mix of colourful veggies
- Fresh fruit
- Brown, red, black or wild rice, basmati rice
- Quinoa any colour
- Legumes lentils, chickpeas, beans
- Rye sourdough/spelt bread
- Traditional rolled oats
- Barley, Freekeh, amaranth buckwheat
- Raw nuts & seeds

PROTEIN

- Grass fed beef or lamb
- Free range chicken, turkey
- White fish or oily fish
- Free range eggs
- Organic tempeh
- Legumes lentils, chickpeas, beans
- Raw nuts & seeds & nut/seed butters
- Good quality protein powder
- Plain natural/Greek yoghurt
- Plain cottage cheese

GOOD FATS

- Oily fish salmon, mackerel, trout, sardines
- Avocado
- > Extra virgin olive oil
- Olives
- Hemp seeds/hemp seed oil
- Cold pressed coconut oil or plain coconut milk/yoghurt
- Plain Greek/natural yoghurt
- Feta or goats cheese
- Grass fed butter/ghee
- Raw nut/seed butters

Post competition dinner ideas

- Meat/tempeh & veggie stir-fry with black or brown rice
- Pasta Bolognese (with lots veg)
- Casserole/ slow cooked meal/ dahl serve with coloured rice or mashed potato and veggies
- Salmon, sweet potato mash & veg
- Chili con carne with brown rice, avocado and fresh herbs (The healthy Chef online has a great recipe).
- ▶ Meat skewers, veg & black rice.
- Stuffed sweet or white potato with chickpeas, veggies and cheese
- Poke bowl or buddah bowl with a mix of veggies, rice or quinoa, some protein, guacamole & some legumes or edamame
- Veggie pasta bake that has lots of veggies and some protein like meat or legumes in it



Summary

- ▶ Focus on getting all key nutrients coming in in race week and every week to help improve sports performance & recovery!
- Practice hydrating properly throughout the day and at training sessions
- Don't try anything new on race day practice all the food and fluids you will be consuming on race day before hand!
- ► Eat more while at competitions every time you enter the water even just for a cool down you deplete your glycogen stores!!
- Refueling as quickly as possible after a competition is just as important as refueling after a training session!!



becstone.com.au/haileybury

- Please visit the link above to download this power point presentation and handout
- ▶ Thanks for tunning in ⊕

