

NUTRIZINE

Sport Ireland Institute's Performance Nutrition Newsletter



Welcome Note

Performance Nutrition Team

Welcome to our final Nutrizine edition of 2020, hopefully you find a nice mix of festive recipe ideas along with some interesting articles.

This month we have focused on all things 'gut' related, as a 'dodgy' gut is the last thing any athlete wants leading up to a big competition.

So why not have a look and see if there is anything that you think may be of relevance to you, or if you would like further information please do ask a member of the Performance Nutrition team.

As always, we are very interested to hear your feedback on our Ezine - what would you like to see more of, what can we do differently etc.

Some of you may have already provided feedback as part of our annual review, but if not, please do not hesitate to drop us a line with some suggestions using any of the email addresses below.

Otherwise, there is very little left for us to say, except that we wish you all a safe and happy Christmas, enjoy the break, and we are all looking forward to what will hopefully be a busy sporting year in 2021.

From all of the Performance Nutrition Team @ Sport Ireland Institute, Sharon, Laura, David, Grainne, Danielle and Ronán.

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'A DAY IN THE LIFE' - EVENTER SAM
WATSON

What's in Season?

Continuing on the theme of sustainability following Dr Kirstie McAdoo's presentation during our HPX Nutrition webinar series we have once again included Airfield Estate's monthly 'in-season' list, and a little reminder that a weekly menu plan and can be downloaded here: https://www.airfield.ie/stories_news/seasonal-meal-planner/

Some of Airfield's top tips from a sustainability perspective at this time of year include:

- Don't over buy - did you know that Irish shoppers waste 50% more food in Christmas week than they do during the entire rest of the year?
- Shop local - your entire Christmas dinner can be bought from Irish producers as all the food is seasonal to us here in Ireland.

WHAT'S IN SEASON IN DECEMBER?

FRUIT	SALADS	HERBS	VEGETABLES
Apples	Brassica salads	Coriander	Beetroot
Pears	Lettuce	Dill	Broccoli
	Peppers	Fennel	Brussel Sprouts
	Scallions	Mint	Cabbage
		Parsley	Carrots
		Rosemary	Cauliflower
		Sage	Celeriac
		Thyme	Celery
		Winter savoury	

Shallots
Pak Choi
Parsnip
Potatoes
Radish
Scorzonera
Spinach
Squash/ Pumpkins
Swedes
Turnips
Yacon



Recipes - Beetroot & Goat's Cheese Risotto



Adapted from the Hairy Bikers - Easy
- Takes less than 30 mins - Serves 4-6

INGREDIENTS

- 500g cooked beetroot
- 1 litre chicken or vegetable stock
- 2 tbsp olive oil
- 30g butter
- 1 onion, finely chopped
- 2 garlic cloves, finely chopped
- 300g risotto rice
- 1 large sprig thyme
- 100ml dry white wine
- small bunch fresh parsley, finely chopped
- small bunch fresh dill, finely chopped (optional)
- squeeze lemon juice (optional)
- salt and freshly ground black pepper

TO GARNISH

150g creamy goats' cheese, crumbled
50g Parmesan (or alternative vegetarian hard cheese)

METHOD:

1. Place half the beetroot with the stock in a food processor and blend until smooth. Pour into a saucepan and bring to a simmer. Finely chop the remaining beetroot and leave to drain in a colander.
2. Heat the oil and half the butter in a large casserole dish or saucepan. Add the onion and fry gently until very soft. Add the garlic and cook for 2-3 minutes. Stir in the risotto rice and thyme until coated in the oil and butter.
3. Turn the heat to high and pour in the wine. Cook for 1-2 minutes, or until reduced. Turn the heat down to medium and add a ladleful of the beetroot stock. Season with salt and pepper. Stir continuously until the liquid has been absorbed. Repeat until all the stock has been added. At this point the rice will have a creamy texture but still be al dente.
4. Beat in the remaining butter and the chopped beetroot. Stir through the herbs, if using, and check the seasoning, you might want to add a squeeze of lemon juice. Remove the thyme sprig.
5. Divide the risotto between four warmed plates and crumble over the goats' cheese and a sprinkle of Parmesan at the table.

Recipes - Roasted Brussel Sprouts with bacon and chestnuts



Adapted from BBC Good Food - Easy
- Takes less than 45 mins - Serves 8

INGREDIENTS

1 ½kg Brussels sprouts, trimmed

200g vacuum-packed chestnuts,
roughly chopped in half

200g smoked bacon lardons

1 tsp vegetable oil

METHOD:

- Heat oven to 220C/200C fan/gas 7. Bring a large pan of water to the boil, add the sprouts and cook for 5 mins. Drain and refresh in cold water.
- Toss the sprouts with all the other ingredients in a bowl and season with a pinch of salt and a good grinding of black pepper. Tip onto a large baking tray in a single layer. Put in the oven and roast for 30 mins, tossing halfway through, until the bacon is crispy and the sprouts are golden and tender.

Go Nuts About Your Guts!

By Grainne O'Higgins

The Gut is a powerful 3 letter word that each one of us should be well in tune with and, as an athlete, excited about!

The Gut, which is also referred to as the Gastrointestinal (GI) Tract, is a wonderful and complex organ in our body that is responsible for digesting and absorbing energy and nutrients from our food. It is made up of trillions of bacteria that contributes to our immune system, digestion, metabolism, risk of chronic diseases and mental health issues. Did you know that 70% of our immune cells live along the gut? So keeping our gut happy is actually really important.

Gut microbiota' (GM) is a term that refers to the bacteria that live in your gut and includes other types of microbes such as fungi and viruses. The more diverse your GM is, the better resilience you have to infection and diseases. The empowering thing about our GM is that we can influence it simply by how we treat it. And what is particularly exciting for athletes is that there is growing research showing the beneficial effects of exercise on gut health; One study found that the GM of elite rugby players was significantly more diverse than that of non- athletes.

This matters for athletes because increased microbial diversity is linked to better immunity and high resistance to Upper Respiratory Tract Symptoms (URTS) which can also have a knock-on effect on digestion, mood, and disease risk. With Tokyo Olympic Games just around the corner you want to maximise your immunity as much as possible to reduce your risk of illnesses and gut problems that can hamper your training and performance!

Another thought-provoking finding is that its been suggested the GM may influence athletic performance and having a more diverse GM may be more advantageous. This may be due to the GM playing a key role in reducing inflammatory responses and improving metabolism and energy expenditure during exercise.



Go Nuts About Your Guts!

What Does 30g Fibre per Day Look Like?

Include with Breakfast



1/2 cup (40g) Oats = 4g



1 Pear, Unpeeled = 5g

Include with Lunch


1/2 cup Four Bean
Mix = 6g

1/2 cup (cooked)
Brown Rice = 4g

1 Medium
Tomato (150g) = 2g

1 Handful Baby
Spinach (60g) = 1g

Include with Dinner


150g Sweet Potato
(with skin) = 4g


80g Broccoli = 3g



1.5 Button Squash = 1g

the.guthealthdietitian

Diet can play a big part in improving the diversity of our GM. A diet higher in fibre with less processed foods, is key and athletes should be aiming to consume the recommended 30g fibre per day.

Prebiotics are the fertiliser for our GM and they feed the good bacteria in the gut helping them to grow, so taking advantage of the naturally occurring prebiotics in food is the best way to feed your GM; examples of these foods include beans, lentils, garlic, onions, prunes and apricots. Fermented foods can also play a role in strengthening our GM as some contain probiotics which can further improve the diversity of our GM and may help to reduce the incidence, severity, and duration of URTS in athletes presenting with sub optimal gut health.

Unfortunately, the impact of our lifestyle on our GM is not always positive. Antibiotic use, sleep deprivation, high levels of stress and extreme dieting can disrupt our GM, contributing to issues such as gut distress and disturbed metabolism which can negatively affect performance. Boosting our sleep quality, reducing stress levels, and avoiding yo yo dieting can help restore any imbalance of the microbiota present within the gut. Taking a probiotic during antibiotic therapy and continuing for 1-week post antibiotics can decrease your risk of antibiotic associated diarrhoea.

Despite exercise showing to have a positive impact on athlete's gut health, over 50% of endurance athletes complain of gut symptoms during endurance events such as cycling, triathlon and running which can lead to impaired performance and delayed recovery.

The cause of these symptoms are multifactorial and can come from blood flow being diverted away from the gut to the exercising muscles, leading to the gut slowing down and reducing its ability to digest and absorb food. Damage to the gut lining and leakage can also lead to the onset of symptoms.

Go Nuts About Your Guts!

Athletes need to also be aware that such symptoms have been found to be more prevalent in intensive competitions, hot and humid conditions and in athletes experiencing psychological stress, sleep deprivation and/or dehydration. The Olympic Games in Tokyo are expected to be very hot (>30°C) and humid (>70% relative humidity) and competing in such conditions are likely to expose athletes to these additional stressors, making them more vulnerable to developing gut symptoms whilst competing next Summer.

On a positive note, athletes will be relieved to know that there are prevention and management strategies in place to help optimise their performance during such severe conditions. We will discuss these in the next edition of this article.

UPPER ABDOMINAL SYMPTOMS	LOWER ABDOMINAL SYMPTOMS
Reflux/heartburn	Intestinal/lower abdominal cramps
Belching	Side ache/stitch
Bloating	Flatulence
Stomach pain/cramps	Urge to defecate (urgency)
Vomiting	Diarrhea
Nausea	Intestinal bleeding

Training the gut



The gut is extremely adaptable

Jeukendrup Training the gut for athletes Sports Medicine 2017



[@jeukendrup](https://twitter.com/jeukendrup)
www.mysportscience.com

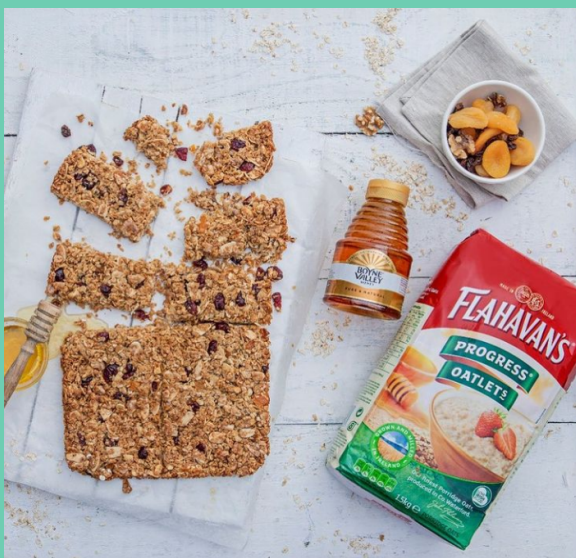
- 1** Improved gastric emptying
- 2** Improved intestinal absorption
- 3** Improved stomach comfort
- 4** Reduction of GI problems

Boyne Valley Recipes

- Our partners at Boyne Valley Foods have been creating some fabulous recipes over the past few weeks and we just wanted to share some of them here with you....
- Did you know that Boyne Valley group is home to over 20 food brands including @homecook_ie, @chivers_irl, @erin.soup @doncarlos_ie, @lakeshore and @lifeforce_ie? Their products can be used to create delicious recipes for any time of the day
- Here are just some of their most recent recipes, but do go have a look over at their individual Instagram pages for some more inspiration.
- Don't forget to like and share their recipe pages and of course if you do decide to cook up a storm in the kitchen using any of these products, do not forget to also share your creations on Instagram, add hashtag #fuellingirishsport and tagging @boynevalleyhoney and any of their other branded foods included in the recipe..



Make breakfast a time for feasting with this gorgeous Honey Roasted Pears with Balsamic Recipe



Enjoy your Flahavan's oats and @boynevalleyhoney on the go (or at your desk) with this mouth-watering recipe for an oat-based snack bar packed full of delicious fruits and nuts



Honey roast plum porridge with ginger and orange from @boynevalleyhoney

@Lifeforce_ie



3 Bean Chilli from @Lifeforce_ie



Almond butter pesto pasta from @Lifeforce_ie



Apple, Pear and Almond Butter Crumble from @Lifeforce_ie

A 'DAY-IN-THE-LIFE': EQUESTRIAN EVENTER SAM WATSON

Many thanks to Sam for taking the time to talk to us about all things nutrition this month.

Name: Sam Watson

Age & Where are you from / living: 34 and living in Carlow for the past 20 years

Sport: Equestrian, eventing



Proudest achievement to date in your sport:

I had two tough World Championships in 2010 and 2014, but on my 3rd attempt in 2018 I was first out for the team and we won a team silver. Ireland's last World Championship medal before that came in 1978 where my Dad won individual silver, so it was a nice moment seeing him in the airport when we landed..

Any other nutrition related info that you want to tell us about yourself, e.g. favourite meal / likes/dislikes etc.

When you grow up on a farm you develop quite an appetite. I love food and enjoy cooking it when I have time at the weekends. Porridge is the one thing I've never warmed to.

What is your favourite dish/food to cook? Would you like to share the recipe with us?

I like my Wok as it's a one-dish meal and is really handy when I'm living out of my lorry (like a camper van) which I do for about 10-15 weeks of the year for the international events. A prawn stir-fry is a favourite, it can do it with or without noodles/rice depending on whether I need the carbs or not. Lots of fresh crunchy veg like peppers, mange tout, bean sprouts, carrots (julienne) and broccoli are great. I'm a fan of spring onion and some coriander (stalks chopped finely, the rest as a garnish). Then you can play with the flavours after that. Chilli and lime is great if you want something punchy. Honey, sesame and cashew nuts work well if you're looking for sweetness or need extra protein in there. Soy sauce instead of salt for me. Sesame oil is a winner too. Works well with chicken, beef or duck too. It's not so much a recipe as a DIY cooking experiment.

Biggest challenge when it comes to nutrition on competition/event day?

I don't push my body to the limit physically. I have a 10-minute anaerobic phase, but my horse works harder than me. As the driver, I need to be focused, sharp, balanced, and reasonably fit and strong. But every extra ounce of weight I carry that I don't need is an unnecessary burden on the horse. So my challenge pre-competition is to be as light as possible without jeopardising mental or physical performance. If I'm riding a small horse in wet, heavy ground conditions (or extreme heat), then my priority is to get an efficient boost that will get me to peak through the 10-minute phase. Excess weight from being over-hydrated will likely cost me penalties in those conditions.

A 'DAY-IN-THE-LIFE': EQUESTRIAN EVENTER SAM WATSON

We would then love if you could include a 'typical day's' food diary for us, including pictures and telling us a little about your day, e.g. if you had training, if so what time etc.

07:00 – Espresso, homemade porridge oat muffin with jam & peanut butter if I'm not cutting weight

09:45 – I've ridden three horses (2hr15min) by now. Reward is a two-egg omelette with cheese, chorizo and spinach. Big mug of tea (horse-folk love a cuppa).

12:30 – Another three horses (2hr15min) done and that's my time in the saddle done for the day. Soup plus a chicken salad or prawns on brown bread. Another bucket of tea after.

15:30 – I've been at a desk for 2hr30mins (I started a sports data analytics company in 2015). Coffee and then a couple of rice-cakes with jam and peanut butter is a well-earned snack.

17:45 – After another 2hrs at the desk I grab a cup of tea and head out to do 1hr30mins of coaching.

19:30 – I'd love to run earlier in the day, but it is jammed with horses and work, so I do 30mins now, followed by a quick shower and then dinner. If I had bread at lunch I might have salmon and veg. If not, I'll have something like sweet potatoes, steak & broccoli. Ice-cream for dessert – absolutely love it.

I live at my training centre (farm) and work from home, so I get to see my two boys (aged 6 and 7) throughout the day on my breaks. But the 12 hours from 07:30 to 19:30 have very little room for wastage. Plenty of diversity (athlete, data analyst, coach, Dad) which keeps me fresh and energised. I'll snack on fruit and carrots without thinking if I'm on a call, and if I'm cutting weight then my poor family are ordered to remove 'bad snacks' from the house as my willpower will drop when I'm hungry.

