

# NUTRIZINE

Sport Ireland Institute's Performance Nutrition Newsletter



## Welcome Note

Performance Nutrition Team

Welcome to our latest Nutrizine edition - it seems like ages since our last edition. It was only in August, but it has been a very busy few months.

HPX Nutrition made the move from a live conference to an online webinar series. Hopefully some of you have tuned in over the past two weeks and have found the content to be of interest. As nutrition 'coaches' it is imperative that rather than just educating our athletes, we focus on how to change behaviours. Looking at capability, opportunity and motivation, is one such approach which Dr Dan Martin has had success with when working with professional jockeys and this is something we may return to in future editions of our ezine.

Economic and environmental issues are also major influences on our behaviours, so we are delighted to include some of Dr Kirstie McAdoo's top tips on how to eat more sustainably in this month's edition.

As always, we hope you enjoy this edition, and if you do have any suggestions for content for future editions, or would like to feature in our 'A Day in the Life' section, please do let us know.

### IN THIS ISSUE:

SUSTAINABLE DIET TOP TIPS

A SELECTION OF RECIPES TO  
KEEP US GOING DURING THE  
COLDER WINTER MONTHS

NEW SPORT IRELAND INSTITUTE  
RED-S INFOGRAPHICS

'A DAY IN THE LIFE' -JUDO  
ATHLETE MEGAN FLETCHER

HOW TO PERIODISE YOUR DIET

## What's in Season?

Following on from Dr Kirstie McAdoo's talk on how to shop more sustainably during our HPX Nutrition webinar series we thought the following resources might come in handy. They include the Airfield Estate's monthly 'in-season' list and weekly menu plan and can be downloaded here:

[https://www.airfield.ie/stories\\_news/seasonal-meal-planner/](https://www.airfield.ie/stories_news/seasonal-meal-planner/)

You can also watch the Nutrition webinar series in your own time via the videos which are up on the Nutrition section of the Sport Ireland Institute page:

<https://www.sportireland.ie/institute/performance-service/nutrition/hpx-nutrition>

### WHAT'S IN SEASON IN OCTOBER?

FRUIT	SALADS	HERBS	VEGETABLES		
Apples	Celery	Basil	Aubergines	Chard	Shallots
Autumn Raspberries	Courgettes	Chives	Annual Spinach	Chillies	Pak Choi
Blackberries	Cucumber	Corriander	Beetroot	Fennel root	Parsnip
Pears	Lettuce (Iceberg,	Dill	Broccoli	Kale	Potatoes
	Lollo Rosse, Red	Fennel	Brussel Sprouts	Khol-Rabi	Radish
	Oakleaf, Round)	Mint	Brassica salads	Leeks	Rhubarb
	Peppers	Parsley	Cabbage	Mushrooms	Spinach
	Scallions	Sage	Carrots	Onions	Squash/
	Tomatoes	Thyme	Cauliflower	Garlic	Pumpkins
			Celeriac		



### WEEKLY MENU PLAN

DATE \_\_\_\_\_

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
BREAKFAST							
LUNCH							
DINNER							
SNACKS							

Each week review your plan Will you cook the meal again? ✓ or ✗

### SHOPPING LIST

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# New RED-s Education Campaign

- If you are following the Sport Ireland Institute [believeperformachieve](#) instagram account you may have noticed the recent focus on RED-s which is based on the release of new infographics from the Sport Ireland Institute team.
- Leading this multi-disciplinary project was physio Julianne Ryan and she hopes that the resources create an increased awareness, help athletes make any necessary changes required and signpost people on for further help where needed.
- Keep an eye out for upcoming video Q+A sessions with members of the Institute team who answered a variety of questions posed by athletes via our Instagram page.



## Relative Energy Deficiency in Sport (RED-S) at Sport Ireland Institute

*Can you relate to any of the following?*

Recurrent injuries/niggles that you "can't get on top of"



Stress fractures/  
low bone density

Low mood or  
feeling irritable



Frequent illnesses:  
common cold and flu,  
always "breaking down"

Difficulty recovering after  
training: stiff and sore,  
taking longer to recover  
from training

Low/poor appetite

Low libido/drop  
in sexual function

Rapid weight loss



Decrease in performance:  
not hitting times etc.

No periods for >3 months



Disrupted sleep/  
lethargic



"I didn't really sleep... I was very  
anxious, moody, very, very  
regimented, and anti-social."

British male cyclist

**Low energy availability can contribute to the above signs and symptoms**

Ask yourself...

- ? Is there an imbalance between your training, nutrition and recovery?
- ? Are you getting your fuel in at the right time?
- ? Are you eating within 30-60 mins after training?



"My training sessions, race performances and general energy levels began to plummet. The motivation to become a competitive athlete was not as strong as it had been."

British distance runner

- Plan across a training week with fuelling/re-fuelling blocks
- Adjust your fuelling/nutrition around training schedule and intensity

"I began to feel antisocial, low in energy and failing in other aspects of my life outside running."

New Zealand steeplechase runner

# New RED-s Education Campaign

- There are 5 infographics in the series and we are featuring 3 of them in this month's ezine.



## Balancing Training, Nutrition and Recovery!

*Do you prioritise your nutrition on rest/recovery days?*

*3 hour hike, is this wise on your recovery day?*

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
8AM	Easy Run 20 mins	Easy Run 25 mins		Easy Run 30 mins	Easy Run 20 mins		
9AM		Core & Flexibility		Core & Flexibility		Mobility	
10AM			College	Psychology	College	Run; Intervals 50min Hard	3 hour hike
11AM							
12PM	College	College	Meeting friend for lunch				
1PM				College	Gym 60 min	Yoga	
2PM			Run; 25mins Recovery light				
3PM	Gym 60 mins		Gym 60 mins		Performance Review		
4PM			Physio		Run; 45 mins Tempo		
5PM	Mobility						
6PM	Run; 60 mins Moderate	Mobility				Movie Night	
7PM		Run; Intervals 50 mins Hard					
8PM							
9PM							
10PM	Bed	Bed	Bed	Bed	Bed	Bed	Bed

*Smaller recovery window means nutrition and rest should be of high importance*

*Make sure to refuel and stay off your feet as much as possible when out with friends to support recovery*

## Recovery Nutrition Checklist



- ✓ Adequate protein at each meal (20-30g)
- ✓ Food timing - avoid long periods of fasting! Eat every 3-4 hours
- ✓ Prepare for ALL training sessions i.e. bring recovery foods such as dairy-based products for bone health
- ✓ Proceed with caution when you see words like "heal, detox, cleanse" on food items or supplements that "promises quick results". Seek advice from your sports medicine team!

*"My improvements are down to the new training programme and eating more food. Eat more and you'll have more energy to train"*

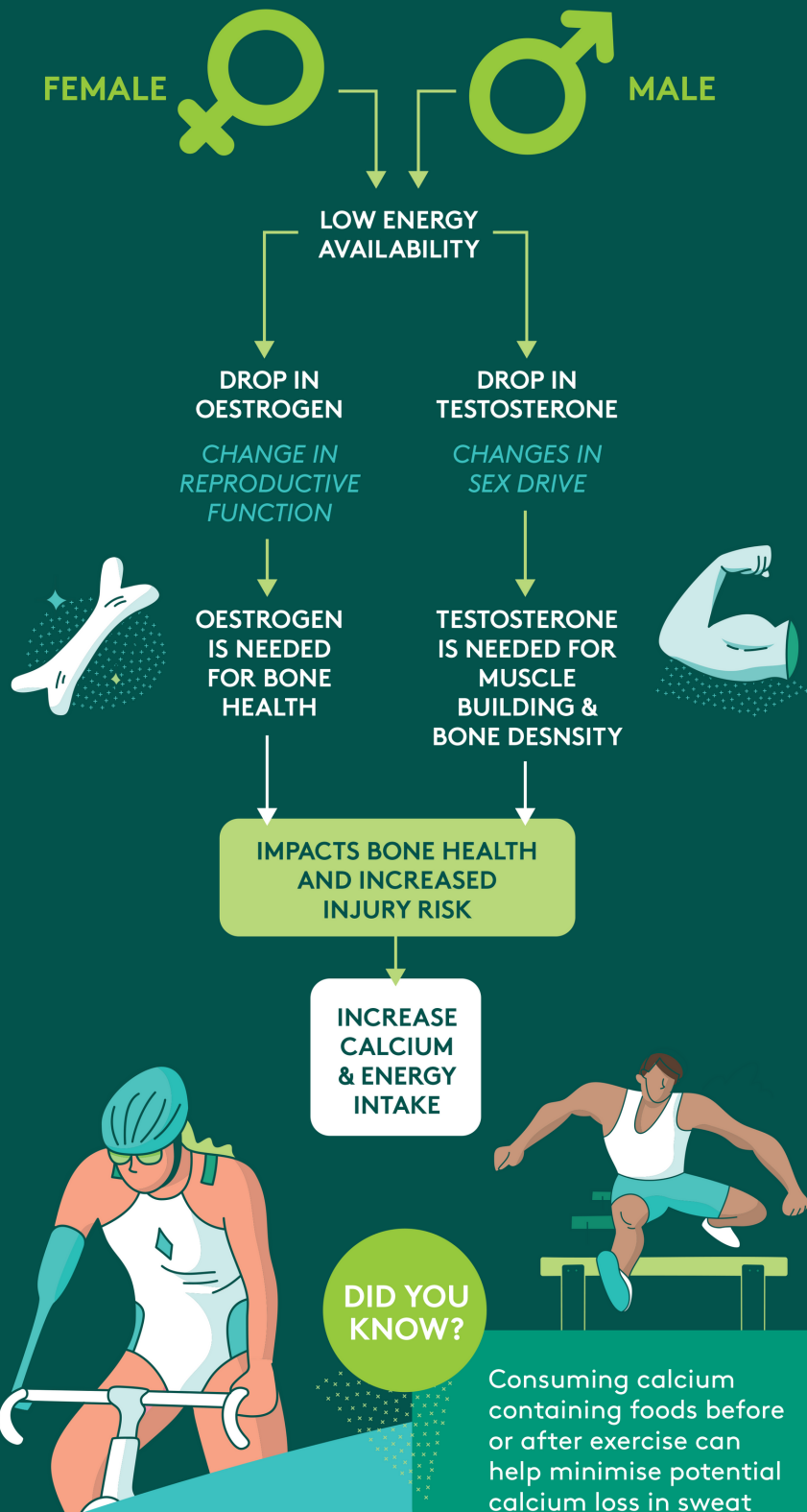
*Irish World Champion rower and multiple Olympian*



# New RED-s Education Campaign

- If you feel that you may be at risk of RED-S, or some of the signs and symptoms sound familiar to you, then please reach out to your coach, or any member of your support team that you regularly work with. They will be able to assist you in linking up with supports to create an individualised balance for your training and nutrition plan.

## Key nutrients for bone health and performance





In the final of our current recipe card series we bring you a lovely curried soup recipe as part of our partnership with Boyne Valley.

You may remember the other two recipe cards in this series which were our Chicken Noodles and Fake -Away Spice Bag - hopefully you have managed to try at least 1 of these recipes, remember if you do try any of them please do share your pictures via our Instagram account @BelievePerformAchieve or using the hashtag #fuellingirishsport



#### LEVEL OF DIFFICULTY



Simple

#### PREP TIME



15-20 mins

#### IDEAL FOR



Making and keeping in flask, perfect for getting the heat into you after training.

#### INGREDIENTS

Here's a list of ingredients that you'll need to get in and prep before getting started!

- 3 tablespoon of DON CARLOS OLIVE OIL
- 2 PARSNIPS, cut into cubes
- 4 CARROTS, cut in cubes
- 1/2 BUTTERNUT SQUASH (about 200g), cut into cubes
- 1 ONION chopped finely
- 1 CELERY sticks chopped finely
- 2 GARLIC (with skin on)
- 2 VEGETABLE STOCK CUBES
- 20g **MCDONNELLS ORIGINAL CURRY SAUCE** powder
- 1 tsp chopped FRESH THYME
- 150ml MILK or CREAM (optional)
- Season with SALT and freshly ground BLACK PEPPER



#### Nutritional Profile (per portion - serves 4)

Calories	246kcal
Carbohydrate	27g
Protein	5g
Fats	10g



**McDonnells** MAKES FOOD  
TASTE GREAT

# CURRIED ROASTED CARROT & PARSNIP SOUP

## HOW TO MAKE IT

7 simple steps to create this deliciously warming soup.

1. Preheat oven to 200c / 400f / Gas Mark 6.
2. Place the butternut squash, parsnip, carrots & whole garlic cloves in a roasting tin toss in 2 tbsp of olive oil and cook for 25-30 minutes until golden brown and tender occasionally shaking to evenly cook .
3. In the meantime, add the remaining olive oil to a medium size pot and gently fry on a low heat onion, celery and thyme and curry powder for five minutes.
4. Add the stock cubes in 1.2 litres of water and then add the roasted vegetables, squeeze the garlic from the cloves.
5. Simmer for 20 minutes.
6. Then puree with a hand blender until smooth.
7. To serve, stir milk (or cream), into soup.



@MCDONNELLSCURRYSAUCE



## LEVEL OF DIFFICULTY



Simple

## PREP TIME



15 mins

## IDEAL FOR



Quick in-between sessions lunch or to make a more substantial recovery meal simply add an extra nest of noodles per portion.



## INGREDIENTS

Here's a list of ingredients that you'll need to get in and prep before getting started!

80g of **MCDONNELLS ORIGINAL CURRY SAUCE** or **MCDONNELLS CHINESE CURRY SAUCE** powder  
380ml of WATER  
2 NEST OF EGG NOODLES (thin or medium)  
2 LARGE CHICKEN BREAST FILLETS, cut into strips  
160g FROZEN PEAS  
Bunch of SPRING ONIONS finely chopped  
2 tbsp. SUNFLOWER OIL for frying

## Nutritional Profile (per portion - serves 2)

Calories	529kcal
Carbohydrate	49g
Protein	42g
Fats	17g



## LEVEL OF DIFFICULTY



Difficult

## PREP TIME



30 mins

## IDEAL FOR



When you fancy a take-away, opt for this deliciously fresh and tasty homemade Spice Bag 'Take-away'.



## INGREDIENTS

There are 3 parts to the prep of this delicious meal. Preparing 1. the goujons 2. the wedges and 3. Combining with your Spice Bag mix. It sound's like alot of prep but it's sooooo worth it.

Here's a list of ingredients you'll need to get in and have ready before getting started!

## FOR THE HOMEMADE GOUJONS

125g/4oz fresh fine BREADCRUMBS or OATS finely pulsed in handblender  
1/2 tsp CAYENNE PEPPER (optional)  
SALT and PEPPER, to taste  
4 large boneless and skinless Irish CHICKEN BREASTS, cut into strips  
50g/2oz PLAIN FLOUR  
3 medium free-range EGGS, beaten  
2 tbsp LAKESHORE RAPESEED OIL  
2 tbsp. SUNFLOWER OIL for frying

## FOR THE WEDGES

SWEET POTATO or ROOSTER POTATO cut into wedges  
2 tbsp LAKESHORE RAPESEED OIL

## FOR THE SPICE BAG

2 tbsp LAKESHORE RAPESEED OIL  
1 RED PEPPER (sliced)  
1 GREEN PEPPER (sliced)  
1 SMALL ONION (sliced)  
1-2 tablespoons of **MCDONNELLS SPICE BAG MIX** Original or Chinese  
1 RED CHILLI (sliced into rings)  
2-3 SPRING ONIONS (thinly sliced)

SEE REVERSE FOR NUTRITIONAL DETAILS & HOW TO MAKE IT.

# Nutrition Periodisation

By Sharon Madigan

So does your food intake change depending on your training or it changes because you don't have enough time or haven't thought about what you are going to eat or drink? You have considered how you need to change up your training but have you considered how you need to match the nutrition requirements to these different phases.

It is amazing that athletes are all aware that protein requirements are increased during a hypertrophy phase in the gym and increase it accordingly. The same needs to be done with carbohydrates and energy (calories) when the aerobic load and training load increases.

Nutrition periodization is the term that describes matching your nutrition intake to your training sessions. Your goal is to fuel each training session sufficiently to perform to your full potential and to recover quickly enough to be ready for your next training session, whether that's later the same day or the following day. This means planning when and what you will eat both before and after training sessions. But it isn't just about consuming as much starchy and sugary carbohydrate as possible to fuel your glycogen stores. Making sure you have sufficient protein and healthy fat is also important, particularly to keep your muscles, bones and joints healthy and your immune system in good working order.



Infographic from YLM SportScience.com

And don't forget to add several servings of vegetables and fruit to ensure you have sufficient vitamins to support your various metabolic processes, such as energy creation.

Eating a diet full of nutrient rich foods is part of supporting your training with effective nutrition. Eating at the right times to support workouts and recovery is another. The third concerns the amount



# Nutrition Periodisation

that you eat, and this needs to change throughout the season in line with your training volume. During your base training period, with low intensity workouts, you won't require as much carbohydrate as in your subsequent 'build' period when you increase intensity. This is largely because most of your workouts will take place in the aerobic training zone where you can call on your fat stores for additional fuel. Whereas high intensity work uses the anaerobic energy system more frequently and calls upon your muscle glycogen stores for quickly available carbohydrate.

Nor will you need as many calories as later in the season, as you are burning fewer calories while training at lower intensities. So eating less starchy and sugary carbohydrate at this time is the way to go, while keeping your intake of protein, healthy fats and nutrient-rich vegetables and fruit at a similar level year round.

Tips for consuming fewer carbs at this time include:

- Having smaller portions of potatoes, rice, pasta, noodles, etc with your meals
- Eating a smaller amount of bread and cereals.
- Not eating too many energy bars as snacks
- Avoiding cakes, biscuits, pastries and sweets
- Matching your use of sports nutrition products to the intensity of your workouts – for example you are likely to have a lower requirement for energy gels per hour during a three hour moderately paced ride than one which includes periods of hard interval training.

If you are looking to drop body fat a little, the base training period is the time to do this. Restricting calories, particularly carbohydrates, during the build and peak periods could compromise your training.

As your training ramps up, increase your carbohydrate intake proportionately but be careful to make quality choices that will maximise your nutrient intake. Pre-training is the time to take on board sugary carbs which will give a fast release of energy, eg juices, white bread, rice cakes. Post-training, choose wholegrain breads, wholemeal pastas, quinoa and oats for slow release energy. Use starchy vegetables like butternut squash and sweet potato to add nutrients to your diet, and remember that beans and lentils are sources of carbohydrate as well as plant protein.





## Recipe of the month - Nepalese Chicken Curry

by Keshu Shrestha (see A Day in the Life by Megan Fletcher) - Difficulty: Easy

### Ingredients:

8 Boneless chicken thighs  
4 garlic cloves minced  
Thumb size grated ginger  
Red onion finely chopped  
3 tomatoes chopped  
2 tsp cumin  
Half tsp chilli powder  
1 tsp turmeric  
Half tsp salt  
5 Cardamom pods  
4 Star anise  
Spring onions  
Coriander  
Tablespoon olive oil  
Basmati rice

**Note** - You can play around with the amounts of these ingredients to make it hotter or have different flavours.

### Step 1

Add the oil to the heat, after a few minutes once it has started bubbling add the cardamom pods, star anise, onions, ginger and garlic. Allow to slightly brown.

### Step 2

Push the onions, garlic and ginger to the side of the pan. Add in the chicken thighs to the middle of the pan. Place them flat and turn until slightly brown on both sides.

### Step 3

Mix the salt, cumin, chilli and turmeric in a bowl, sprinkle over the chicken making sure to cover both sides. It should create a nice brown cover for the chicken.

### Step 4

Add in the tomatoes, stir in well. Cover the pan with a lid and allow to simmer for 20 mins, stirring a few times.

### Step 5

Take the lid off the curry to allow it to reduce. In this time you can make the rice to give the curry a good 10 minutes to thicken.

### Step 6

Chop the spring onions and coriander. Sprinkle over the top of the curry to give it its final touch



**SPORT  
IRELAND  
INSTITUTE**

# A 'DAY-IN-THE-LIFE': JUDO ATHLETE MEGAN FLETCHER



Many thanks to Megan for taking the time to talk to us about all things nutrition!

Name: Megan Fletcher

Age: 31

From: Wokingham, currently living in the UK, based at the University of Bath.

Sport: Judo -70kg

## **Proudest achievement to date in your sport:**

My proudest moment was winning my first Grand Prix medal in 2019 in Tel Aviv. After being just outside the medals for a few years it really was the most incredible feeling to finally be stood on that podium. I feel even luckier that it was the start of many more! Hopefully one will be gold really soon.

## **Difficulties (if any) encountered during COVID-19 Restrictions from a nutrition perspective:**

I think the difficulties have probably been very similar to many athletes during lockdown. Limitations on training was a huge problem to try and tackle, particularly with us being in a contact sport. We have managed to work around it the best we could. Luckily I have had my brother (even if was flung around like a rag doll with him being 100kg) and my boyfriend (volunteering as tribute like an absolute legend) as training partners which has been so so lucky and like gold dust in such difficult times.

## **Main nutrition focus / priority areas:**

Even though I'm in a weight-making sport I have had to make a conscious effort to gain weight in recent years. After always sitting around 69kg/70kg we decided we really needed to add some extra muscle to contend with the heavier girls in my category. With the help of Sharon and changing my perspective around fuelling sessions big gains have been made with me definitely feeling the positive effects on the competition mat even if weight cut is a little harder than I was used to! A big change in focus around nutrition was to think about fuelling the day before for the sessions the next day e.g. Sunday afternoon/evenings become an all you can eat in preparation for Monday's sessions. Adding in a second breakfast and always eating before bed have been key in helping me gain the extra kg's I needed.

## **Biggest Challenge:**

My biggest challenge on competition day has been trying to eat enough in balance with my nerves. Throwing up before my first fight had happened a few too many times with huge amount of nerves (which let's be honest, is never a nice way to start the day!) To get around the struggle to keep breakfast down we have tried a few things but settled on a smoothie of milk, protein, peanut butter and banana to start me off.

On top of this it's all about the snacking and trying to top up through out the day as often as possible with what ever I can keep down. This would be post warm up, between matches, by adding in carb gels, caffeine gums and any foods that can be taken in small doses that would keep me going. I have found a hugely positive impact to my energy levels and performance since making the little but massively important additions! Particularly on the longer competition days where you can be in the arena for up to 10 hours!

## **A typical day (training & food):**

First breakfast - seeded toast with Nutella/peanut butter or overnight oats or porridge

Second breakfast (on my drive to training) - smoothie with milk, protein, banana, berries

9am Session 1 - core stability and mobilisation 45 mins

Snack - Piece of fruit and a cereal bar

10am Session 2 - strength transition 60mins in the gym then on the mat

Lunch - jacket potato with beans and cheese

Pre session - coffee with a cereal oat bar

Session 3 - randori (sparing) 90 mins

Snack - protein shake with a piece of fruit on the drive home

Dinner - homemade Nepalese curry (recipe thanks to Megan's boyfriends Mum - see recipe of the month)

Pre bed snack - yogurt with oats, nuts, honey