MAY 2020, EDITION NO. 2



NUTRIZINE

Sport Ireland Institute's Performance Nutrition Newsletter



Welcome Note

Performance Nutrition Team

We hope you enjoyed Edition No 1 of our newsletter, and are ready for all that Edition No 2 brings. It was great to get some feedback from what you would like to see more of and we will continue to add, and evolve as you suggest.

We have continued with our 'From Research to Reality' feature and this month it is all about sleep, from Ronan Doherty who is in the middle of his PhD studying the interactions of nutrition and sleep and the implications for athletes. Our recipe feature has expanded this month as requested and includes recipes from our partners the National Dairy Council and Boyne Valley.

As restricted movement continues we discuss in detail how our energy expenditure levels may have changed and how we can adapt our meals to match.

We hope you enjoy this edition, and as always, please do let any of the nutrition team know if you have any suggestions for our next edition, or would like to feature in next months 'A Day in the Life' feature.

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FROM RESEARCH TO REALITY -RONAN O'DOHERTY TALKS US THROUGH HIS RESEARCH INTO SLEEP

RECIPE OF THE MONTH

NEW FEATURE RECIPES FROM OUR PARTNERS THE NDC AND BOYNE VALLEY

SHOPPING LIST ASSEMBLY & MEAL PLANNING

'ENERGY EXPENDITURE - HOW OUR 'NEAT' HAS BEEN AFFECTED -LAURA MAHONY

BUILDING YOUR SHOPPING LIST

Wondering how to build a shopping list? Here are some simple tips

STEP 1. RECIPE SELECTION

Set some time aside each week to choose 3-4 recipes you know already, you find tasty and that will excite you after heavy training days

> Tip: BBC GOOD FOOD is a treasure trove of recipes for beginners to experts, weight makers to swimmers

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STEP 3. SPLIT YOUR LIST BY SECTION

Split your shopping list into 5 sections

- 1. Fruit & Vegetables this is generally the first section inside the door
- 2. Dairy
- 3. Meat
- 4.Condiments- oils, sauces, pastes, honey, vinegars
- 5. Dry Goods e.g. spices, herbs, tinned beans, grains, pasta, nuts & seeds





STEP 2. WRITE DOWN ALL INGREDIENTS

Write down the ingredients you need and the quantities that go into each recipe.

Tip: If a recipe makes 4 serves then batch it up and store in airtight containers in the fridge or freezer for later in the week.



STEP 4. PREP & STACK

Before putting all your shopping away start the preparation for the week.

- Clean and chop all veggies use sandwich bags to make up mixes for dishes
- 2. Dice meats and marinate if required

FOLLOW THIS 4-STEP GUIDE FROM DAVID TOBIN TO HELP BUILD THE PERFECT SHOPPING LIST

> Try follow these 4 steps to help build the perfect shopping list that will last you a full week.

Remember, in order to plan your meals for the week and have the necessary ingredients, you will need to set aside some time to plan your recipes and meals.



With Caroline O'Mahony and Ronan Doherty

Ronan is currently studying the interactions of nutrition and sleep and the implications for athletes as part of his PhD at Northumbria University. Speaking recently to Sport Ireland's Caroline O'Mahony, Ronan discussed his research in a little more detail:

CO'M: Can you give a brief outline of the study?

Ronan Doherty (RD): The study looks at sleep for athletes. Sleep is a key part of athlete recovery and within that we are investigating the implications and the interactions of nutrition with sleep. So how an athlete may incorporate certain things into their diet to help them sleep and help their recovery.

CO'M: What were the findings of this study?

RD: We found that there are a range of nutrients that interact with sleep. There are a range that help with sleep called tryptophan enriched proteins so things like milk, turkey, pumpkin seeds. Other things such as caffeine and alcohol can negatively impact sleep and larger food portions late in the evening or in that final meal of the day we know can affect sleep and reduce the amount of sleep people get.

CO'M: Why is this study important to the Sport Ireland Institute? RD: Sleep is identified in research by athletes as an important recovery modality. We wanted to look at practical ways that we could promote athlete sleep and thus promote recovery.

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If an athlete is not getting enough sleep their recovery from every training session is hampered. They will start to see their performance suffer because they are not getting adequate recovery. We must look at other things as well, for example nutrition and other physiological recovery modalities. Everything comes together to impact their sleep, if they are not getting enough sleep their performance is going to be affected.

CO'M: Is this research only applicable to athletes? RD: No, the findings of this study can be applicable to the public as well. Everyone needs good sleep to function. Our day-to-day life will be affected if we are not sleeping properly. This information is tailored specifically towards athletes, we are looking at foods that they can consume and incorporate into their diet to promote sleep however, anyone can use this to help improve their own sleep.

CO'M: What are the top three takeaways for someone looking to improve their sleep?

RD: In brief, the top three things to remember are: 1. Caffeine can really impact sleep. We know that caffeine intake can increase how long it takes you to fall asleep and it affects the amount of sleep you get. Try not to consume caffeine after 4pm.

2. We know that high GI carbohydrate in the evening meal or the last meal of the day, dinner helps sleep and helps you fall asleep more quickly.

3. There are lots of other options as well such as kiwi fruit, tart cherry juice and tryptophan rich proteins so milk, pumpkin seeds and turkey. We also know that jasmine rice promotes sleep.





Recipe of the month - Lamb Kofta Curry

by David Tobin Prep Time: 15mins - Cook Time: 40mins - Difficulty: Easy Serves: 6

Ingredients:

- 500g lamb mince (use beef if no lamb mince
- available)
- 1 clove of garlic
- 1 x tsp fresh ginger, grated
- 1 x tsp chilli powder
- 1 x tsp garam masala
- 2 onions, chopped finely
- 1/4 cup fresh coriander
- 4 x Tbsp korma curry paste
- 1 x Tbsp oil
- 200mL Beef Stock
- 1 x 400g can diced tomatoes
- 2 x Tbsp Lemon Juice
- 190ml can of coconut milk
- 1/2 cup frozen peas
- Steamed Rice
- Steamed veggies, to serve.

Method:

- 1. Combine the lamb, garlic, ginger, chilli, garam masala, half the onion, coriander and 1tbsp curry paste. Shape mince into walnut-sized balls.
- 2. Heat oil in a non-stick fry pan, add the balls and cook until lightly browned. Transfer to a plate.
- 3. Add remaining onion to pan and cook over a low heat until soft and golden. Add remaining 3 tbsp of curry paste, stock, tomatoes and lemon juice. Cook over a medium heat and stir for 5 minutes. Add milk, return kofta balls to the pan and simmer over low heat for 15mins.
- 4. Add peas and cook for 2 minutes.
- 5. Serve with cooked rice and a side of steamed green vegetables.

#BELIEVEPERFORMACHIEVE

- @BrianGregan89 trying last months recipe: Turkey & White Bean Burgers
- Remember to tag us via our Instagram BelievePerformAchieve account if you do try any of our recipes!







by Laura Mahony

Snacks mean different things to different people and we will all have different energy requirements, so a peanut butter & jam topped porridge scone might be a perfect snack for a very active Eventer who's daily NEAT has not reduced very much during COVID-restrictions, but spiced chickpeas might be more suitable for someone who is confined to their apartment.

Other snack ideas include:

- Yogurt (or quark) & fruit (try adding kiwi's to help promote sleep - see sleep nutrient interactions)
- Cottage Cheese on rice cake with cherry tomatoes
- Beetroot Hummus on crackers
- Smoothies
- Homemade Protein Balls



OUR PARTNER'S

Some great meals and snacks can be created using foods from our partners, The National Dairy Council (NDC) and Boyne Valley Group (BVG). We are also regularly updating our Instagram

BelievePerformAchieve account with new recipe ideas, so do keep an eye on this.



Lets hope they turn out better than my attempt at Semolina & Stewed Rhubarb. Hopefully Sharon's RicePudding turns out better, #oldschool #alternativerecoveryoptions





Instructions

to cool

1. Preheat the oven to 180C.

2. Place the rhubarb into an oven proof dish. Pour over the sugar. Place the orange slices on top. Cover with foil and bake for 25 minutes. Sprinkle with the orange blossom water and leave

3. Place the rice, milk, chai tea bags and sugar in a saucepan. Bring to the boil on the hob. Turn down to simmer slowly for 30 - 40 minutes, only leave

the tea bags in the milk for ten

4. Stir occasionally to ensure it doesn't catch on the bottom. Spoon the rice pudding into bowls, top with some rhubarb and scatter with toasted

minutes before removing

almonds. Serve right away.



Chai Rice Pudding with Roast Rhubarb

by Lilly Higgins on www.ndc.ie/recipe/

2 tbsp sugar

can reshare

Ingredients checklist: 500 g rhubarb, chopped into 3" pieces 120 g sugar 1 orange, thickly sliced 100 g toasted flaked almonds or pistachio nuts 75 g pudding rice 375 ml milk 2 chai tea bags

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OUR PARTNER'S

Caroline Gunn, Sport & Wellness Manager and Registered Nutritionist @NDC_ie provided us with the following recipe for you to try at home during isolation as part of our #oldschool recipes. Don't forget to send your creations to our BelievePerformAchieve Instagram account where we







LEVEL OF DIFFICULITY



Difficult

by Laura Mahony **PREP TIME**



30 mins

IDEAL FOR



When you fancy a take-away, opt for this deliciously fresh and tasty homemade Spice Bag 'fake-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/4½oz fresh fine BREADCRUMBS or OATS finely pulsed in handblender ½ 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 RAPSEED OIL 1 RED PEPPER (sliced) 1 GREEN PEPPER (sliced) 1 SMALL ONION (sliced) 1-2 tablespoon of MCDONNELLS SPICE BAG MIX Original or

Chinese 1 RED CHILI (sliced into rings) 2-3 SPRING ONIONS (thinly sliced)

> SEE REVERSE FOR NUTRITIONAL DETAILS & HOW TO MAKE IT.



We have been working hard alongside our partners at Boyne Valley to create some interesting recipes for you. We are delighted to bring the first of these here to you today - we look forward to you trying out this dish, and if you do, please do share your pictures with us and use the hashtags #BelievePerformAchieve and #fuellingirishsport





Especially looking forward to @michaelaw57 attempting this recipe as she did tell us she was looking forward to trying a homemade spice bag!





Makes food Taste Great Spice Bag Fakeaway Takeaway



Simply follow the steps below to create your own delicious Spice Bag fakeaway!

METHOD - GOUJONS

1. Preheat the oven to 190C/375F/Gas 5. Oil two baking trays with vegetable oil.

2. Mix the breadcrumbs / oats and cayenne pepper in a shallow bowl. Season, to taste, with salt and freshly ground black pepper. Place the flour in another shallow bowl.

3. Dip the chicken pieces in plain flour, then in the beaten egg and finally coat in the breadcrumbs. Shake off the excess and lay the chicken goujons on the oiled baking tray. (The process is easier if you keep one hand clean of egg for dipping the chicken in the flour and breadcrumbs.)

4. Drizzle the goujons all over with more of the vegetable oil.

5. Bake in the oven for 30-35 minutes, turning once. Remove from the oven when completely cooked through and golden-brown all over.

METHOD - WEDGES

1. Preheat the oven to 190C.

2. Use regular or sweet potato, wash well, chop into chunks (skin on), place on baking tray, season and sprinkle with oil.

3. Place in pre-heated oven and cook for 35-40mins OR if you have an air-fryer use this.

METHOD - SPICE BAG MIX

1. In a large wok over a low heat drizzle in the oil.

2. Fry the onions, peppers, chillies and toss.

3. Lower the heat add in Spice Bag Seasoning Mix and toss.

4. Throw in all the cooked chicken and chips

and toss for 30 seconds.

5. Add in the spring onions (add in more spice if required).

6. Keep tossing for 30 to 60 seconds.

Serve and enjoy!!!

Nutritional Profile (per portion - serves 4)

Calories	608kcal
Carbohydrate	41g
Protein	52g
Fats	24g



What's all this 'NEAT' talk about?

Laura Mahony

Our bodies use energy for different functions. Total Energy

Expenditure (TEE) is made up of a number of different components, see Figure 1. Firstly, just to stay alive, for our hearts to pump, lungs to breath etc our body uses what we call our Basal Metabolic Rate (BMR). This makes up the majority of our TEE and is different for everyone. It depends on body size, body composition, genetics etc. Then, we all have a small component called Thermic Effect of Food or TEF, a relatively small, but stable, contributor to our total energy expenditure. This is the energy the body uses to break down the food we ingest into its individual components e.g. amino acids, glucose, short chain fatty acids etc.

The next component is our Activity Energy Expenditure (AEE) and this can be broken down into 2 sections. One is our exercise component, and you, athletes will be aware this is very individual and variable, and will change on a daily basis depending on the type of training session, intensity and duration of session. Hence why us performance nutritionists are always reminding athletes to plan food intake according to your training diary/schedule.

The final part of the TEE jigsaw is the other component of AEE and this is called Non-Exercise Activity Thermogenesis, or NEAT. This is all non-exercise related physical activity such as walking to the shop/car, going upstairs, standing, doing the hoovering, cleaning your room, walking to the coffee shop, fidgeting etc. It is unsurprising given the nature of the current COVID-19 restrictions that NEAT has reduced considerably amongst most people. There is no longer the opportunity to walk to and from the coffee shop; shopping is limited to once per week; all nonessential journeys are on-hold, so simply walking to your car, and from carpark to destination, and back are all gone.

A caveat must be included for those who are no longer commuting and have an extra 3-4 hours to do extra physical activity, my daily stepcount hasn't been this high (on a continuous basis) since I walked the Camino!

So how do you adjust your nutrition to take into account this reduction in NEAT? Practical examples are detailed below, but in essence we are talking about smaller portions and reduced snacking, as per infographic below.



Figure 1 - Components of Total Energy Expenditure (Reproduced from PEScience.com)

PRACTICAL EXAMPLE

60kg Female endurance athlete on a high training load day

Pre-COVID restrictions typical day: College am, walk to bus, walk around campus, return walk from bus to home. Drive to training group, training session, home, food, recover. Meet friends pm.

Current typical day (COVID Restrictions): Extra 1hr in bed, study at home, food at home. Training session on own within 5km radius. Food & recovery. Zoom call with friends.

PRACTICAL EXAMPLE

60kg Female endurance athlete on a high training load day Pre-COVID restrictions high training load day: Target: 5-7g Carbs/kg BW, 1.6-1.8g Protein/kg BW, 1g fats/KG BW = 300-420g Carbs, 96-108g protein, 60g fats = 2172-2652kcal

Current typical day (COVID Restrictions): Target: 3-4g Carbs/kg BW, 1.8g Protein / kg BW, 1g fats/kg BW = 180-240g Carbs, 108g protein/kg BW, 60g fats = 1692kcal - 1932kcal

Pre-COVID Restrictions Sample Food Diary

Breakfast: Porridge made with milk, added honey & almonds + yogurt and berries Snack: Banana + rice cakes with peanut butter Lunch: Large jacket potato with tuna, cheese & salad Post training: 500ml Chocolate Milk Dinner: Chicken Pasta Bake Pre-bed: Weetabix & milk Current-COVID Restrictions Sample Food Diary

Breakfast: Porridge made with milk, added honey & almonds + yogurt and berries Snack: Rice cakes, peanut butter & apple Lunch: Medium jacket potato with tuna, cheese & salad Post training dinner: Glass of milk & Chicken Pasta Bake

