PURE
SPORTS NUTRITION

Nutrition Training Guide

Kepler Challenge and Luxmore Grunt

Running the Kepler or Luxmore is no simple feat. It takes hours of training and the right nutrition to ensure you even make it to the start line. Here we will talk about how to eat well to ensure you are optimising your training in preparation for the big day.

GET THE BASICS RIGHT FIRST

Eating enough of the right foods is vital for overall health and wellness. Reducing illness and injury are the 2 main focus's when it comes to nutrition for training.

Key points:

- Aim to have 5+ serves of vegetables (1/2 cup cooked or 1 cup of salad is one serve) and 2 serves of fruit per day. This will contribute to your fibre targets, which are 38g/day for men and 28g/day for ladies.
- Eat more Fibre – it is well researched that the NZ population don't eat enough fibre. This is vital for supporting a healthy gut. Not just to poop well, but more importantly feeding our microbiome (probiotics) which help look after our body.
- Optimise your protein. Frequent protein targets of 0.2-0.5g/kg 4-5x per day will support recovery – so making sure you are having protein in all of your meals and snacks is vital (and not just living off supplements either). Higher protein targets (1.6-2.2g/kg[1] of body weight) can also help with those trying to lose weight and retain muscle mass.
- Stay hydrated – morning is the best time to check to see if you have hydrated adequately the day before.
- Aim for at least 7-9 hours of sleep every night. There is no such thing as banking or catching up on sleep.

Sports nutrition recommendations generally focus on performance. This often involves food high in refined carbohydrates and low in fat, fibre and protein. This would compromise our body's ability to recover and adapt if we ate like this every day. During training, it is about finding the balance between having adequate calories and fuelling with nutrient dense foods. We are not just focusing on performance during training; it is about recovery, adaptation and overall health.

PLAN

To build your nutrition plan, start by determining you training load; including frequency, duration and intensity. Then use the tools below to start optimising your pre, during and post training nutrition. You can then fill the gaps with the key points above to support your recovery and well-being for the rest of the day. See the meal outline below to help with structure.

www.conradgoodhew.com© 2022 by Conrad Goodhew Nutrition / All rights reserved To Review August 2024

PRE-TRAINING – WHAT AND WHEN

Your pre-run nutrition is going to be dependent on what time of day you run and what your stomach can tolerate.

- Aim to have your last main meal ~2 hours before your run.
- Balance your meal with carbohydrates, protein, fruit and vegetables. Simple changes such as increasing carbohydrates may help give you the energy you need for you training.

If you struggle with GI discomfort* on your runs, make sure you stick with it. Start small; eat further away from training and build up your tolerance over time. This will train your gut to handle more during competition. If symptoms still persist, talk to one of the team members at CGN as this will require an individualised approach.

If you are feeling like you need a little bit more energy, get a carbohydrate rich snack in 30 minutes before your run. Some simple suggestions include:

- A banana
- Small bowl of cereal with fruit
- Toast with sliced banana and honey
- Small bowl of pasta with tomato-based sauce
- Banana and berry smoothie
- Fruit toast with jam

*In severe cases, from change in stools to vomiting, please reach out to a registered nutritionist or dietitian soon to ensure there is no clinical underlying issue.

NUTRITION ON THE RUN

It is essential you know how to fuel correctly during your run if you want to not only complete the run(s), but also enjoy the challenge. Practicing this in training and learning what works for you is vital. For trainings less than an hour, just focus on what you're eating before and after. Runs between 1 and 2 hours, aim for 30-60g of carbohydrates per hour. When out for over 2 hours, then 60-90g of carbohydrates is good practice[2,3].

There is an art to consuming food during training. Planning and practicing is crucial to get it right. It is not just about having energy for that training, it is about teaching your body to maximise carbohydrates as a fuel source during competition, i.e. training your gut. Trialling a combination of foods and supplements (gels and sport drinks) is key to figuring out what will work for you on race day. PURE is the on course hydration sponsor, so practicing using their products is encouraged.

Carbohydrate ideas (but not limited to - find more in our 'during carb sheet' guide here):

- PURE Energy or Fluid Gels ~23-26g
- Jam or honey Sandwiches ~35g
- PURE Energy Chews ~24g (4 chews)
- Banana ~20g
- X3 Jet Planes ~20g
- X14 Jelly Beans ~30g
- X4 Snakes ~40g
- Muesli Bar (e.g. OSM) ~20-30g
- Sports Drink (e.g PURE Hydration) ~12.5g
- Sports Bars ~40g
- 2 x pikelets with jam ~20g
- Marmite Sandwich ~17g
- Creamed Rice ~18-24g
- Pretzels ~22g
- Fruit Pouch ~10-28g

www.conradgoodhew.com© 2022 by Conrad Goodhew Nutrition / All rights reserved To Review August 2024

- Dried Fruit ~23-33g

For runs over 1 hour, hydration is something to consider. Trial different sport drinks/water combinations to see what works for you. We will discuss more about hydration strategies, and exercise induced gastrointestinal distress, in our next article on race day nutrition. For now, you can weigh yourself before and after your runs and see if you are drinking/eating enough to keep your weight loss to a minimum (<2% body weight change).

POST RUN RECOVERY

Optimising your post run nutrition will aid training adaptation, maintain training quality and facilitate a healthy immune system. The three key goals after a run are refuel, repair and rehydrate.

Refuel with carbohydrates – the glucose stored in our muscles is what we use to provide energy needed to run, but also function as a human. After exercise, we need to replenish these stores by eating good quality carbohydrates. The goal is 0.8-1.2g/kg of carbohydrates in that meal[4]. Aim for the higher end of that range if you have another training that day. Carbohydrates also support protein (amino acid) absorption into the muscle – which further helps recovery.

Repair with protein – this is essential for promoting muscle repair (both muscle fibres and mitochondria). Aim to get a meal or a snack in 30 minutes to 1 hour post exercise. Regardless if you are opting for a meal or snack, make sure you get ~20g of protein[4]. See PURE Sport Nutrition's recovery range for supplement options.

Rehydration is critical to support the body in moving nutrients around. If you are a heavy sweater, electrolytes may be warranted. Simple recommendations encourage us to consume (through fluid or food) ~150% of body weight loss over 2 hours[5] post-run. For example, if you lost 1kg then you need to get in 1.5kg of food and fluid. More detail around this in the next article when we discuss sweat rates.

ARE YOUR EATING ENOUGH?

You can't take a car on a road trip without fuel, well the same applies for you. Most new athletes we see at CGN are simply not eating enough. Under eating can be detrimental, resulting in reduction in performance, loss of period, fatigue, muscle loss, sleep disturbances, illness as well as injury – which include stress fractures. These all fall under a syndrome called Relative Energy Deficiency in Sport (RED-S) and is something we as sport nutritionists/dietitians take very seriously.

HOW IS YOUR STRESS AND SLEEP?

Stress significantly influences the way we feel both mentally and physically. Responses to stress vary from person to person and often associated with a change in appetite (among other things). This could compromise our ability to recover, which will lead to illness and/or injury. In addition to stress, sleep should be a priority to support good body function. Not only should you be aiming for 7-9h sleep per night, we also need to make sure those hours are of quality. Sleep hygiene (ie what you do before bed) is something you need to consider. This includes a regular sleep and wake time – yes that includes all 7 days of the week (not just the week days).

www.conradgoodhew.com© 2022 by Conrad Goodhew Nutrition / All rights reserved To Review August 2024

Takeaway messages

1. Get the quality of your diet right first. Aim for wholegrain carbohydrates, plenty of fruit and vegetables and a serve of protein at each meal and snack.
2. Structure your days to eat 'fuelling food' pre training, and 'recovery food' post training.
3. During runs longer than 1 hour, practice consuming carbs during.
4. Prioritise sleep and stress management.

Most of us know what we can do to improve our nutrition. A simple approach, such as recording what you eat and how you are feeling, can help you become more self-aware. Click here to download our diet history worksheet.

If you are still feeling a bit lost, get in touch with the team at Conrad Goodhew Nutrition. We can support you in habit changing for day-to-day training, as well as optimising your nutrition for your upcoming race.

Click here for a video with more context about how to optimise nutrition for training.

Disclaimer

This information sheet was written by an independent provider and there was no financial gain for recommending any products or brands within this document.

References

1. Hector, A. J., & Philips, S. M. (2018) Protein recommendations for weight loss in elite athletes: A focus on body composition and performance. International journal of sport nutrition and exercise metabolism, 28(2), 170-177. https://doi.org/10.1123/ijsnem.2017-0273

2. Jeukendrup, A. (2014), A step toward personalized sports nutrition: carbohydrate intake during exercise. Sports Medicine, 44(1), 25-33. https://doi.org/10.1007/s40279-014-0148-z

3. Burke, L. M., Hawley, J. A., Wong, S. H., & Jeukendrup, A. E. (2011) Carbohydrates for training and competition. Journal of sports sciences. 29(sup1). S17-S27. https://doi.org/10.1080/02640414.2011.585473

4. Beck, K. L., Thomson, J. S., Swift, R. J., & Von Hurst, P. R. (2015). Role of nutrition in performance enhancement and postexercise recovery. Open access journal of sports medicine, 6, 259. https://doi.org/10.2147/OAJSM.S33605

5. Meyer, N. L., Manore, M. M., & Berning, J. (2012). Fueling for fitness: Food and fluid recommendations for before, during, and after exercise. ACSM's Health & Fitness Journal. 16(3). 7-12. https://doi.org/10.1249/01.FIT.0000414750.69007.fc

www.conradgoodhew.com© 2022 by Conrad Goodhew Nutrition / All rights reserved To Review August 2024

www.conradgoodhew.com© 2022 by Conrad Goodhew Nutrition / All rights reserved To Review August 2024

Early Morning	Mid-Morning	Midday	Afternoon	Double	Morning (Long)	Midday (Long)
PRE-TRAINING				PRE-TRAINING	BREAKFAST	
Light carb rich snack (optional but encouraged)				Light carb rich snack (optional but encouraged)	Carb rich with small source of protein, veggies and/or fruit	
TRAINING	BREAKFAST	BREAKFAST	BREAKFAST	TRAINING	TRAINING >1.5h	BREAKFAST
Light snack prior Breakfast ASAP post	Carb rich with source of protein, veggies and/or fruit	Balance of protein, carbs and fruit and or vegetables	Balance of carbs, protein, veggies/fruit	Light snack prior Breakfast ASAP post	Meal ~2h pre training Snacks + hydration Lunch straight after	Carb rich with small source of protein, veggies and/or fruit
POST TRAINING	TRAINING	MID MORNING	MID MORNING	POST TRAINING		MID MORNING
Decent Breakfast: Balance of carbs, protein, veggies/fruit	Pre training: Have breakfast ~2h prior	Mini Meal: Carb rich with source of protein	If needed: High protein snack	Decent Breakfast: Balance of carbs, protein, veggies/fruit		Carb rich with small source of protein, veggies and/or fruit
MID MORNING	POST TRAINING	TRAINING	LUNCH	MID MORNING	LUNCH	TRAINING >1.5h
High protein snack	Mini Meal: Balance of protein, carbs and fruit and or vegetables	Mini Meal ~2h pre training Lunch straight away after	¼ plate protein ¼ plate carbs ½ plate veggies	High protein snack	¼ plate protein Split rest carbs/vegetables	Meal ~2h pre training Snacks + hydration Lunch straight after
LUNCH	LATE LUNCH	LUNCH	PRE-TRAINING	LUNCH	AFTERNOON TEA	
¼ plate protein ¼ plate carbs ½ plate veggies	¼ plate protein ¼ plate carbs ½ plate veggies	¼ plate protein Split rest carbs/vegetables	Mini Meal: Carb rich with source of protein	¼ plate protein ¼ plate carbs ½ plate veggies	High protein snack	
AFTERNOON TEA	AFTERNOON TEA	AFTERNOON TEA	TRAINING	PRE-TRAINING		POST MEAL
If needed: High protein snack	If needed: High protein snack	If needed: High protein snack	Mini Meal ~2h pre training Dinner straight away after	Mini Meal: Carb rich with source of protein		¼ plate protein Split rest carbs/vegetables
DINNER	DINNER	DINNER	DINNER	TRAINING	DINNER	DINNER
¼ plate protein ¼ plate carbs ½ plate veggies	¼ plate protein ¼ plate carbs ½ plate veggies	¼ plate protein ¼ plate carbs ½ plate veggies	¼ plate protein ¼ plate carbs ½ plate veggies	Mini Meal ~2h pre training Dinner straight away after	¼ plate protein ¼ plate carbs ½ plate veggies	¼ plate protein ¼ plate carbs ½ plate veggies
SUPPER	SUPPER	SUPPER	SUPPER	DINNER	SUPPER	SUPPER
If needed: Protein Source + fruit	If needed: Protein Source + fruit	If needed: Protein Source + fruit	If needed: Protein Source + fruit	¼ plate protein ¼ plate carbs ½ plate veggies	If needed: Protein Source + fruit	If needed: Protein Source + fruit
Focus	Focus	Focus	Focus	Focus	Focus	Focus

www.conradgoodhew.com© 2022 by Conrad Goodhew Nutrition / All rights reserved To Review August 2024

Front loading protein to assist in recovery and minimise hunger in the afternoon/ night	Practice pre fuelling before runs, then optimise recovery around midday	Practice pre fuelling before runs, then optimise recovery after midday run	Lighter in the morning if needed, but lunch and afternoon snack need to be a focus to prevent hunger at dinner.	Really need to nail all of your meals today to ensure you get the most out of both of your sessions	This is a great opportunity to practice race day as starting will be similar to your morning run. Remember that afternoon snack too!	Morning is a great opportunity to prep for this run. Make sure you have both of these meals.

www.conradgoodhew.com© 2022 by Conrad Goodhew Nutrition / All rights reserved To Review August 2024