



National Performance Nutrition Newsletter

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Rugby Grub - Issue [6]

Finals Footy Food...

With finals in various rugby competitions upon us & the Rugby World Cup just about to start, it's only natural to look to all avenues to get the most out of your body during these critical games. You've trained hard throughout the season, won more games than you've lost, managed your recovery between games and worked through those niggling little injuries and you're ready to lift the trophy aloft. You recognize what you eat & drink also impacts on performance & you've been conscious of this each week but is there anything else you could do or take?



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Reality is your eating & drinking strategies for a final should be based on what's been so successful for you throughout the season. The last thing you'd want to do is introduce a new food, drink or supplement that you haven't used before & thus don't know if you tolerate it or how you'll respond to it. The analogy would be wearing a brand new pair of boots in a final when you've never used them before... hello blisters!

Rather than looking for that extra performance boost from something new, use the following tips to assist you in ensuring you are getting the most from your existing strategies...

- **Focus on your food & fluid strategies 1-2 days before kick-off.** If you have an early final, start 2 days out while a final late in the day will demand consideration of your diet the day before & game day.
- **Given the higher intensity of finals, energy reserves are more likely to be challenged.** Allocate more of your plate real estate to fuel foods like bread & other flour based foods (English muffins, crumpets), pasta, rice, couscous, noodles, fruit in all its forms, dairy snacks (yoghurt, custard, flavoured milk) and starchy veggies (potato & corn). By cutting back the size of your protein rich foods and following a low fat meal plan you'll be able to carb up without blowing your energy budget.

**Take Home Tip...**

Don't look to new or novel foods or supplements to get the most from your body in preparation for a final. Instead, ensure you are doing ALL of the basics right... adequate fuel before & during a game & remaining well hydrated throughout. If you have to back up again next week, make the most of the powerful recovery benefits of a post-game meal rich in carbs with a hit of high quality protein.

Finals Footy Food cont...

- **Finals footy can be played in warmer weather so it's critical you start the game well hydrated.** Boost your total fluid intake the day before the final, focusing much of your extra fluid intake at meals & snacks. The salt in your food helps ensure the fluid is retained in your body, boosting body fluid stores, rather than passing out in your urine. Following this strategy you should wake game day in a well hydrated state. This can be confirmed by looking at your waking urine sample... there should be plenty of it & light straw coloured. On game day, simply continue to drink with meals & snacks but don't be too aggressive in the 2-3 hrs before the game, the hard yards should already be done. Knocking back heaps of water before the game is a sure fire way to making you feel uncomfortable & it won't make you any better hydrated, you'll just be pissing more.
- **While energy reserves are a reflection of your diet over the previous 1-2 days, your pre-game meal is still important as the fuel it contains will help sustain your performance on the field.** Given this, focus your attention on a carb rich pre-game meal like a stir-fry with accompanying rice, pasta dish, sandwiches with an extra carb hot filling (try a banana, honey & peanut paste sandwich or roll) or the Wallabies favourite pancakes with maple syrup. Larger pre-game meals are best taken 3-4 hrs before kick-off while smaller meals & snacks can be taken 1-2 hrs beforehand. Given this, try to stick to the following meal times...
 - **2pm Game** – 7am breakfast, 11am pre-game meal
 - **4pm Game** – 7am breakfast, 10am snack, 1pm pre-game meal
 - **7pm Game** – 8am breakfast, 10am snack, 1pm lunch, 4pm pre-game meal
- **If nerves get the better of you before a final, choose energy packed drinks or snacks like creamed rice & sports or cereal bars.** Alternatively, liquid snacks (like home made smoothies with milk, yoghurt, fruit & honey, or carbohydrate rich powders like PowerBar Protein Plus, Sustagen Sport, Musashi Bulk or BSc Rapid Growth) may be particularly valuable as they leave the stomach quickly, ensuring you feel comfortable in time for kick-off.
- **If you're chasing a performance boost from caffeine, talk to your sports performance dietitian to see if it's right for you.** Getting the dose or timing wrong may actually impair your performance, not boost it. As with any other dietary strategy, the use of caffeine and other supplements needs to be trialed in training to develop a protocol that works best for you.
- **After your warm-up, down ½-1 bottle of sports drink.** This not only tops up energy reserves but also 'primes' your gut to maximize the rate of fluid uptake during the final, ensuring the fluid goes into your system quick.
- **Make sports drinks your drink of choice during the final; they get fuel to the muscles when you need it most.** If you can't knock down a sports drink, at least get through 1 gel at half-time to help get you through the back end of the final. The sheds should be littered with empty bottles of sports drink & gels after the final.
- **After the game, start the recovery process ASAP by getting some carbs, protein, fluid & electrolytes into the system.** This not only helps with restoring energy levels & muscle repair, but also helps to decrease muscle soreness. A 500 ml bottle of low fat flavoured milk is excellent in recovery as it's easy to knock back & provides heaps of carbs, protein & electrolytes. Complement this with a burger, sushi or similar in the sheds as your appetite returns & you're a long way towards getting yourself ready for the next session.

Good luck!



World Cup Wonders...

Running short on time at home or out & about with friends watching the Rugby World Cup? While snacks like fruit & yoghurt are always a great choice, its inevitable that you'll be faced with the challenge of making a smart choice out when the 'worms start biting'. Use the guide below to help you make the best choices among snacks & meals on the run.

Fantastic Freezer Feeds

Straight out of the freezer & into the microwave, look to one of the following when you're short on time at home & the rugby is just about to start...

- McCain Healthy Choice beef lasagne with a side salad & accompanying low fat dressing (1910 kJ/ 22 g protein/ 10 g fat/ 65 g carbs)
- McCain Healthy Choice oven baked chips (2 cups), 2 pieces frozen fish with a side salad (2600 kJ/ 22 g protein/ 20 g fat/ 82 g carbs)
- Two 'health focus' frozen meals e.g. McCain Healthy Choice, Weight Watchers, Lean Cuisine (approximately 2400 kJ/ 30 g protein/ 12 g fat/ 80 g carbs)

Top Take-Aways

Out with friends & need a feed on the run. Check out the best choices from a range of common take-away outlets...

- Crust Gourmet Pizza - go halves with a friend from one of the 6 'heart foundation approved' pizzas, including beef fajita, paprika chicken, chicken avocado or Mediterranean vegetable or seafood pizzas. Order a side salad to top up on veg
- McDonalds - seared tandoori or sweet chilli chicken wrap
- Hungry Jacks - grilled chicken burger (minus ranch sauce)
- Subway - select from the 6g fat or less subs (roast chicken, ham, roast beef, turkey, turkey & ham, veggie delite & Subway club) with plenty of salad veg. Go light on the high fat sauces like mayonnaise, thousand island, caesar & ranch
- Nando's - fresh garden or Mediterranean salad with grilled chicken or one of their burgers, wraps or pitas (classic, supremo or BBQ)
- Sumo Salad - Thai beef salad or any of their array of rice paper rolls
- Sushi - California, salmon, prawn or teriyaki chicken rolls

Priority Pub Grub

No need to shy away from a feed at the pub if you're watching the footy. In fact it's hard to beat the grill at the pub. Best to steer clear of the chicken parmy though, upwards of 10 tsp of fat per serve, even more if you're after a side of chips

- Char grilled lean beef steak (with the mandatory mushroom or pepper sauce), skinless chicken breast or fish with baked potato/s & salad or veg
- Grilled chicken or steak burger

Snack in a Pack

Got the munchies at home or around a friends place during the footy? While *not* every day snack ideas, the choices below should hold you in good stead...

- Rice crackers, pretzels or low fat chips with tomato salsa & slices of low fat cheese
- Billabong, Frosty Fruits, Paddle Pop or similar ice block

Check out the Taste website for a huge range of footy finals recipes, including chicken & chorizo skewers, beef sausage rolls & an Aussie favourite, beef & beer pies. See the link below for more footy food ideas...

<http://www.taste.com.au/recipes/collections/football+finals>

Got a kick butt recipe you want to share? Submit your recipe to Gary at gary.slater@rugby.com.au



Supplement Low Down... Multi-Vitamins & Minerals

Vitamins & minerals play many essential roles in the body ranging from energy metabolism, cell growth & repair to protection from free radicals generated during exercise. As a consequence, you should be conscious of selecting a wide range of foods from each of the food groups throughout the week to assist in achieving your vitamin & mineral needs. Despite this, many athletes choose to also take a broad spectrum multi-vitamin & mineral (MVM) supplement. In fact, multivitamin & mineral supplements are among the most popular supplements for both athletes and the general population. For some, it's an insurance policy because their diet is less than optimal or a belief that the nutrients in food have been leached out because of poor quality soil or food processing. For others, it's about trying to stay healthy & avoid the winter flu or meet unusual nutrient needs during periods of heavy training.

To supplement or not?

Given the critical role played by vitamins & minerals in the body, it's easy to understand why a MVM supplement might benefit a hard training athlete. However, there just isn't any scientific support for the use of MVM supplements amongst athletes, even during extended periods of heavy training. In fact, there's still debate whether or not vitamin-mineral needs are increased with heavy training. Even if needs are elevated among hard training athletes, it's understood the wide margin for safety incorporated into daily recommended intakes would adequately cover any increases. What's more, athletes have higher total energy needs, increasing food & thus total nutrient intake, assuming they are making use of nutritious foods.

The only time when a MVM supplement might offer some value is during extended periods in which food intake is compromised. For example, when on tour to another country in which the food quality is compromised or following a facial injury where the jaw has to be wired. It's a fact even the supplement companies recognize, with labels stating 'vitamin & mineral supplementation may only be of benefit to health & performance if dietary intake is inadequate'. For hard training rugby athletes who follow a meal plan that includes a wide range of foods from each of the food groups, the need for a MVM supplement just isn't warranted.

If you think your diet could do with some work, it's likely you'll benefit more from focusing on improving the quality of your food intake than taking a MVM supplement. That's because food contains a wide range of nutrients essential to the body, including some we probably don't even know about yet (and thus won't be in MVM supplements). What's more, the availability of nutrients to the body is often so much greater from food than supplements. You're better off investing your hard earned cash elsewhere.

Safety

While MVM supplements (plus specific vitamin & mineral supplements) are generally considered safe, they may not be without risk...

- An International Olympic Committee study undertaken in Europe confirmed the contamination of MVM supplements with anabolic steroids
- A 1000 mg dose of Vit C daily throughout an 8 wk training block was shown to impair training adaptations, rather than enhance them
- Antioxidant supplements have on occasion been shown to stimulate oxidative damage, rather than prevent it

Take home message

There is little evidence to support the sustained use of multi-vitamin & mineral supplements amongst the majority of rugby athletes who follow a meal plan that includes a wide range of foods from each of the food groups. If on occasion a MVM supplement is advocated, choose a broad spectrum, lower dose supplement. While all supplements carry with them a risk of doping, selecting MVM supplements produced by major pharmaceutical companies are likely to be low risk, recognising the quality control procedures that are in place. As with all supplements, a cost versus benefit assessment should be considered prior to making a decision to use a MVM supplement.



Guru Goss... Answering Your Nutrition Concerns

“A few of my mates that I lift with at a local gym have been using a supplement before training called Jacked 3D. They reckon it really helps them out during training. Is it OK for me to take it?”

Pre-training supplements have become increasingly popular in recent years among athletes attempting to increase work capacity during a session. These pre-training supplements often contain a blend of caffeine, creatine, beta-alanine and perhaps a nitrate precursor to further stimulate blood flow to exercising muscles. While Jacked 3D contains a similar mix of ingredients, it also contains a substance called methylhexanamide which is on the World Anti-Doping Association banned list. Given this, it's essential that you DO NOT take this supplement. See your sports performance dietitian for more advice.

“I find it so much more convenient using frozen vegetables with meals at night. Do they still have some nutritional value?”

Vegetables lose goodness the longer they are out of the ground. Given that frozen vegetables are often picked, blanched & frozen in a short time, they remain a very nutritious choice. In fact, nutrients like Vit C can actually be higher in frozen veggies than their wilted cousin who has been sitting on the supermarket shelf for several days. To maximise the nutritional value of your veggies, buy fresh as your time permits & prepare your food in a way that doesn't leach out the nutrients. Some of the best cooking methods to preserve the nutrients of veggies - fresh or frozen - are steaming, microwaving, stir frying or baking. A lot of nutrients like Vitamin C are water soluble and will leach away in a process like boiling.

“Our team missed out on the finals so my season is over. Will the muscle I put on during the season turn to fat if I stop training?”

This is a common belief among individuals. However you'll be glad to know that muscle & fat are two completely different tissues that can't be interchanged. That said, stop pumping up those guns during the off-season & your muscle size & strength will back off. Similarly, if you continue to eat the same during the off-season when energy needs aren't as great, you'll also put on body fat. The solution is to adjust your diet according to your training loads. For athletes chasing further size & strength gains, the off-season becomes a real opportunity to focus more on weights, which when combined with a muscle building meal plan, sets them up for the season ahead. Stay focused on the task at hand.

Research Ramblings

The Science...

Preloads of salads, fresh fruit & vegetable based soups help to reduce subsequent food intake & thus lower total energy intake. What's more, the larger the preload of vegetables, the more effective the strategy in lowering total energy intake.

Take Home Message...

When energy levels are reduced (for example, during training free days or during the off-season), starting a meal with a salad or soup can help take the edge off your appetite & reduce total energy intake. Filling your sandwiches out with as many veggies as possible at lunch time or allocating more of your plate real estate to veggies at dinner will have the same effect. Veggies are also an excellent source of vitamins, minerals and antioxidants so make them part of your daily habit.

Rolls et al. Salad & satiety. J Am Diet Assoc. 100:232-232, 2000.

