



**National
Performance
Nutrition
Newsletter**

April 2011



Rugby Grub - Issue [2]

**Getting it right on the day...
Game Day Nutrition cont.**

Last month we focused on the importance of fuelling the body in the 1-2 days before a game, recognising that the body's fuel & fluid reserves at the start of a game are a reflection of exercise & diet over the last 24-48 hrs, not just the pre-game meal. As such, most of the hard yards should already be done game day, allowing you to focus more of your attention to intestinal comfort rather than playing catch-up on body fuelling.

Pre-game meals are usually taken 2-4 hrs beforehand but this will really depend on individual tolerance. As such, there's no reason why your food intake should back off game day. The following are examples, of suitable meal times depending on game starts...

11:00am kick-off

8:00am Breakfast

2:30pm kick-off

8:00 am Breakfast
11:00am Pre-game meal

7:30pm kick-off

9:00 am Breakfast (assumes a sleep-in)
12:00pm Lunch
3:00pm Pre-game meal

So what should be on your plate game day...



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gary.slater@rugby.com.au

*Peta, Kate, Christine,
Sophy & Gary*



Take Home Tip...

Avoid the temptation to drink large amounts of fluid in the few hours before the game, it does nothing except keep you on the squirter. Instead, include 1-2 glasses of fluid with each meal & snack game day. A 400-600 ml hit of sports drink just prior to your warm up can prime the stomach to maximise the rate of fluid uptake during the game, getting nutrients to the muscles when they need it most.

Game Day Nutrition cont.

So what should be on your plate game day...

There's no one perfect game day meal plan. Instead your meals can come from an array of different choices, taking into consideration food likes/dislikes as well as practical issues like the logistics of eating when travelling. The emphasis should remain with fuelling foods to boost energy reserves such as breads, cereals, fruit in all of its forms, pasta, rice, noodles, cous cous, starchy veggies (potato, corn) & dairy snacks. Keeping the fat content low helps reduce the potential for intestinal discomfort & moderating your intake of protein rich food frees up some of your plate real estate for the fuel foods. If game day nerves get the better of you, smaller more frequent meals/ snacks may suit you better, with liquid meals like smoothies & shakes often being better tolerated as they leave the stomach that little bit faster.

If you've been diligent with your fluid intake the day before the game your waking urine should be light straw coloured. If it isn't you'll need to be a little more aggressive with your fluid intake in the lead up to the game. Otherwise, it's a case of trying to maintain your enhanced hydration status. Avoid the temptation to drink large amounts of fluid in the few hours before the game, it does nothing except keep you on the squirter. Instead, include 1-2 glasses of fluid with each meal & snack game day. A 400-600 ml hit of sports drink just prior to your warm up can prime the stomach to maximise the rate of fluid uptake during the game, getting nutrients to the muscles when they need it most. This will also reduce the potential for intestinal discomfort during the game but as with any new strategy, trial it first to confirm it works for you.

For some athletes, their pre-game diet never changes, sticking with a tried & true formula that works for them & forms part of their overall game preparation. While you don't have to stick with the same formula all the time, focusing on foods you know work for you in similar amounts each time is worth considering. Chat with your team dietitian about developing a game plan that's specific to your needs. Once refined, it's something that can be rolled out every time you play. What you eat & drink in preparation for a game is just far too important to leave to chance.



Rugby Grub... Spaghetti Bolognese

Ingredients (serves 4-6)

- Spray of canola or olive oil
- 1 large onion, chopped
- 2 teaspoons minced garlic
- 500 g premium lean beef mince
- 200 g button mushrooms, thickly sliced
- 2 teaspoons dried Italian herbs
- 825 g can crushed tomatoes
- 2 tablespoons tomato paste
- 250 ml (1 cup) MAGGI beef stock
- Salt & freshly ground black pepper, to taste
- 500 g spaghetti



Method

1. Spray a large pan with oil & heat.
2. Add the onion & cook over medium heat for 3 minutes or until soft. Add the garlic & cook for 1 minute more.
3. Add the beef mince, & cook for about 5 minutes over high heat, or until browned, using a fork to break up the lumps.
4. Add the mushrooms, herbs, tomatoes, tomato paste & stock. Bring to the boil, reduce the heat to low & simmer, uncovered for 20 minutes, stirring regularly. Season to taste.
5. While the sauce is simmering, cook the pasta in a large saucepan of boiling water until al dente. Drain & serve topped with the sauce. Enjoy with a crispy salad.
6. Garnish with parmesan cheese.

ANALYSIS per serve	4	6
Energy kJ (Cal)	2867 (684)	1911 (457)
Carbohydrate (g)	97	65
Protein (g)	45	30
Fat (g)	11	7

This is a great version of a traditional pre-game meal popular among many rugby athletes. It's really easy to prepare, packed with fuel & tastes great too.

Source: Survival for the Fittest, Page 58.

Want some inspiration? Check out the Taste website for a huge range (>21000) of recipes... Taste.com.au

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



Magic of Milk in Recovery

What you consume after exercise can be one of the most powerful tools in your recovery arsenal, helping to promote rehydration & refuelling, plus muscle repair & adaptation. Nutrients key to achieving these recovery goals include fluid & electrolytes (for rehydration), carbs (for refuelling) & protein (for repair & adaptation). To meet these needs in a recovery snack generally requires a combination of different foods, for example...

- Lean meat & salad sandwich with water or juice
- Lean meat & vegetable stir fry with rice or noodles
- 1-2 Tubs of yoghurt & fruit

Milk is one of the few foods which ticks all of the recovery nutrition goals by itself. Here's the 'milk' story... The nutrient profile & practical characteristics of dairy foods can make a significant contribution towards the nutritional goals of recovery. These goals include...

- **Rehydration**
 - Milk & drinks based on milk provide a source of fluid & electrolytes (sodium, potassium), key to promoting rehydration
 - Milk is a good source of sodium or salt, higher even than sports drinks. This, combined with the potassium & protein content promotes better fluid retention ensuring the ingested fluid stays in the blood rather than your bladder
- **Refuelling**
 - Sweetened dairy drinks (flavoured milk, smoothies), dairy desserts (yoghurt, custard, rice cream) are good sources of carbohydrate & have other advantages as well, including...
 - Easy to consume, even when your appetite backs off after a hard session
 - Variations in fat/sugar content mean individual athlete needs can be met by different products (see milk guide below)
 - The additional protein in milk enhances recovery of muscle energy reserves, especially when fuel food intake is less than ideal
- **Repair & Adaptation**
 - Dairy foods contribute significant amounts of high biological value protein
 - Dairy proteins, particularly the whey sub-fraction (that's where whey protein comes from...yes milk), have been shown to be superior to other protein sources in maximising the protein building response to resistance exercise & other forms of exercise
 - Blood amino acid profile following consumption of quickly digested proteins appears to promote superior protein building in response to exercise

Finally, dairy foods contain an array of other nutrients (including calcium, vitamin D) that support the function of the body & may be consumed to support the acute energy & macronutrient needs associated with a bout of hard training exercise.

What milk is best for me...

- Low fat milk:** The unleaded version, best for those trying to maintain or reduce body fat levels
- Reduced fat milk:** The great all rounder, reduced in fat but still maintains that great milky taste
- Full cream milk:** A great energy booster when trying to gain weight or prevent unwanted weight loss
- Flavoured milk:** Packed with extra carbs, an excellent post session refueller.



WARNING - OVER THE COUNTER SUPPLEMENTS FOUND TO CONTAIN BANNED SUBSTANCES

All athletes should be aware that supplements containing the BANNED substance **methylhexanamide** ARE available in supplement stores throughout Australia. Imported supplements especially those from the USA where supplement regulation is much looser are more available due to the strengthening Australian dollar.

In late 2010 two of the Springboks athletes (Chiliboy Ralepele & Bjorn Basson) tested positive to **methylhexanamide** & recently 2 English Rugby players have also tested positive to this substance. Anti doping bans have been imposed on these athletes.

These incidents serve as a timely reminder to ALL rugby athletes that supplement use carries with it a risk of doping. **ALL OVER THE COUNTER SUPPLEMENTS ARE A RISK.**

Products most like to contain **methylhexanamide** are the pre-training 'potentiators', promoted to 'give you the mad aggressive desire & ability to lift more weight, pump out more reps & have crazy lasting energy, along with sick muscle-engorging pumps'. Examples of these products are **Jacked 3D & Mesomorph**.



Care should be taken with ALL supplements & any product containing any of the following ingredients should be avoided.

Methylhexanamine	Forthan	2-hexanamine, 4-methyl-
Methylhexanamide	Floradrene	2-hexanamine, 4-methyl- (9CI)
DMAA	4-methyl-2-hexanamine	1,3-dimethylamylamine
Geranamine	4-Methylhexan-2-amine	1,3-dimethylpentylamine
Forthane	2-amino-4-methylhexane	Pentylamine, 1, 3-dimethyl-

Labelling on supplements especially from overseas is notoriously POOR. Do not take a risk; always check with your team doctor or team dietitian before using any over the counter supplement.

Check out the ASADA website for more information on **Methylhexanamide**
<http://www.asada.gov.au/substances/supplements.html>

