



Food for Fitness

A training and competition guide for Rugby players

Developed by: Rachel Scrivin - March 2010

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Rachel Scrivin
BOP Rugby Nutritionist
NZ Registered Dietitian
Accredited Sports Dietitian (Academy of Sport)
Phone: 07 574 7126
Mobile: 021 336262
Email: info@foodfx.co.nz
Web: www.info@foodfx.co.nz

Introduction

Putting time and effort into your eating is just as important as your physical training. Good nutrition helps your body to perform to its best and can improve training, competition play and recovery. Start implementing good nutritional practices into your lifestyle so that it is something that becomes a habit.

Building Blocks

You need to get the basic nutritional practices in place before you can start fine tuning your individual needs. Rugby players need to focus on nutrient dense food sources of carbohydrate (mostly wholegrains if possible), moderate amounts of lean protein and smaller amounts of fats, sugar and salt.

Eat Most	Eat Moderate	Eat Least	Eat Least	Eat Least
Nutrient dense carbohydrate	Lean Protein	Fat	Sugar	Salt
Bread Cereals Fruit – fresh, frozen, dried, tinned Pasta Rice Couscous Vegetables	Low fat dairy products (yoghurts/milk) Lean meat Trim Pork Lean Lamb Fish Eggs Beans Lentils Dried peas	Butter Margarine Oils *moderate amounts of good fats ok such as avocado, olive oil, rice bran oils, canola oil, fish oils and plain nuts	Cakes Biscuits Pastries Chocolate Sugar Sweets Soft drinks Jam Honey Sports drink (unless training justifies this) Alcohol	Potato chips Added salt Takeaways

Rugby may not be as aerobically demanding as other sports; however the intake of nutrient dense carbohydrate still needs to be high in order to adequately train and recover between training sessions and prepare for weekly matches.

A single rugby match is unlikely to deplete fuel supply by the end of a match, however if you have eaten poorly through the week with training sessions, then you are unlikely to perform well during a whole match.

To expand on the above food choices, serving sizes can be incorporated to give a better understanding on how much to eat. There are four main food groups that we need to eat from each day:

- Breads and cereals
- Milk and dairy products (or alternatives)
- Fruits and vegetables
- Meats (or alternatives)



Servings Sizes for active people

Breads/cereals

Aim to eat at least 6-10 servings/day

Provides essential energy (B vitamins) and fibre

Choose wholegrain varieties if possible

Serving size examples

½ -3/4 cup cooked pasta

1/3-1/2 cup cooked rice or couscous

1 medium slice of bread

½ cup wholegrain cereal

1 small roll

½-3/4 cup breakfast cereal

1 Weet-Bix

Milk Dairy products or alternatives

At least 2-3 servings/day

Provides calcium and protein

Choose lower fat options

If choosing alternatives ensure they are fortified with calcium

Serving size examples

200mls glass of milk

150g carton of yoghurt

30g of cheese

2 Tablespoons of cottage cheese

Fruits and Vegetables

At least 5 servings/day (3 servings of vegetables/day and 2 servings of fruit/day) more if possible!

Provides essential vitamins, minerals and fibre

Serving size examples

1/2 cup potato

½ cup cooked vegetables

Medium piece of most fresh fruit or basically what fits into your hand (except dried fruit as it is concentrated energy)

2 tablespoons of dried fruit

Meat, Fish, Chicken and alternatives

At least 2 servings/day

Provides iron, protein and other nutrients (Zn, Mg)

Choose lower fat options and try to reduce added fat when cooking

Serving size examples

2 'palm' sized thin slices meat

1 medium sized chicken breast

1 egg

1 medium-large fish fillet

½-3/4 cup beans, lentils, chickpeas

150g tofu or other vegetarian alternative



Suggested meal plan using serving sizes

Based on typical training day

6 am	Pre-training snack	1 x Banana + 200mls low fat milk
6:30am	Cardio + weights	Water*
7:30am	Recovery snack	Nutty muesli bar or protein shake**
8 am	Breakfast	4 x Weetbix, 200mls low fat milk, ¼ tin fruit
10am	Morning tea	150g of low fat yoghurt
Noon	Lunch	4 slices wholegrain bread, 2 slices of ham, handful of lettuce, 1 x sliced tomato + 200ml fruit juice
3pm	Afternoon tea	6 x Dried apricots + 1 Tablespoon unsalted nuts
4pm	Pre-training snack	2 x wholemeal toast + 2 tsps honey
4:30	Skills, cardio session	Water + 500mls sports drink
6pm	Recovery snack	250mls Sports drink + 1 x banana
7:30pm	Dinner	150g Steak (raw weight), 1 x large baked potato, 1.5 cups green salad
8pm	Snack	Milky milo (200mls low fat milk, 2 tsp. milo)

*Throughout the day additional 2-3L water depending on hydration status.

**Protein shakes are not recommended for <18years unless directed by team nutritionist. Homemade protein shakes can be made with milk, skimmed milk powder and fruit.

The above meal plan adds up to:

- 4 servings of fruit
- 3 servings of vegetables
- 3 servings of dairy
- 10 servings of breads/cereals and
- 2 servings of meat or alternatives

Notes:

If the above was to be a match day then the times maybe slightly different and the morning pre-training and recovery snack would be deleted, otherwise the plan could be similar.

For individualised meal plans and further detailed nutritional advice see a Registered Dietitian or Accredited Sports nutritionist.

Preparing for Training and Matches

Ideally an easily digested high carbohydrate meal should be eaten at least 2 hours before a match or training. It is a good idea to try different foods during training so that you know exactly how much food and what type of food is best for you. It is best to avoid trying new foods prior to a match in case it is poorly tolerated which may lead to cramps, diarrhoea, flatulence or feeling generally unwell.

If you are training early in the morning a lighter snack or a glass of milk or juice maybe sufficient to help wake up your body and prepare for the exercise session. At the very least drink some water to ensure you are adequately hydrated before early sessions.

Food ideas for before an early morning training session (30-60 minutes before training)	Food ideas before an afternoon training session (60 minutes before training)	Match Day
<p>Early morning Strength training <i>Try to consume a small amount of easily digested carbohydrate and protein. Liquids are usually tolerated best for early sessions.</i></p> <ul style="list-style-type: none"> • Glass of milk • ½ strength protein shake made with milk • Ready made supplement such as; Sustagen Sport or Up and Go • Homemade smoothie 	<p>Strength training or skills <i>Moderate amount of carbohydrate and protein</i></p> <ul style="list-style-type: none"> • Small banana + low fat yoghurt • Lean protein filled sandwich • Protein shake with fruit • Nutty muesli bar • Sandwich made with honey/jam 	<p><i>Aim to eat at usual meal-times throughout the day. Try to eat a lighter meal 2 hours before a game and a small snack (bananas, muesli bars, sports drinks) an hour before a game. Keep well hydrated all day right up until the match.</i></p> <p>Morning game Breakfast (possibly earlier)</p> <ul style="list-style-type: none"> • Low fat breakfast cereals + low fat milk + fruit • Breads + spreads • Homemade smoothies with fruit • Ready made drinks such as: Up and Go or Sustagen Sport

<p>Early morning Cardio Training <i>Try to consume mostly carbohydrate which is easily digested.</i></p> <ul style="list-style-type: none"> • Glass of juice • Sports drink • Fruit smoothie • Small banana, low fat muesli bar or cereals (if have more time to eat and digest adequately) 	<p>Cardio Training (mostly carbohydrate)</p> <ul style="list-style-type: none"> • Fruit smoothie • Up and Go • Low fat yoghurt • Sports drink • Fruit • Low fat muesli bars • Milk • Juice • Ready made supplements such as: Up and Go or Sustagen Sport 	<p>Afternoon game <i>Allow about two hours to digest a small meal and at least one hour for a small snack.</i></p> <p>Match day meals ideas</p> <ul style="list-style-type: none"> • Breakfast cereals + low fat milk • Bread + spreads • Sandwiches with lean protein fillings • Pasta with tomato based sauces • Cold left-over rice or creamed rice • Cold potatoes or Baked potatoes with lean protein fillings (baked beans, cottage cheese, tuna) <p>Snacks Low fat yoghurts</p> <ul style="list-style-type: none"> • Fresh fruit • Low fat Muesli bars • Low fat muffins or homemade fruit • muffins • Ready made sports drinks
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Energy and fluid requirements during exercise

Due to the nature of rugby if you are eating well during the week you are more likely to have enough energy stores to last throughout the game. If you commence the game with insufficient energy stores then you may require extra energy, in the form of carbohydrate gels or sports drinks to ensure you perform at your optimum for the whole game.

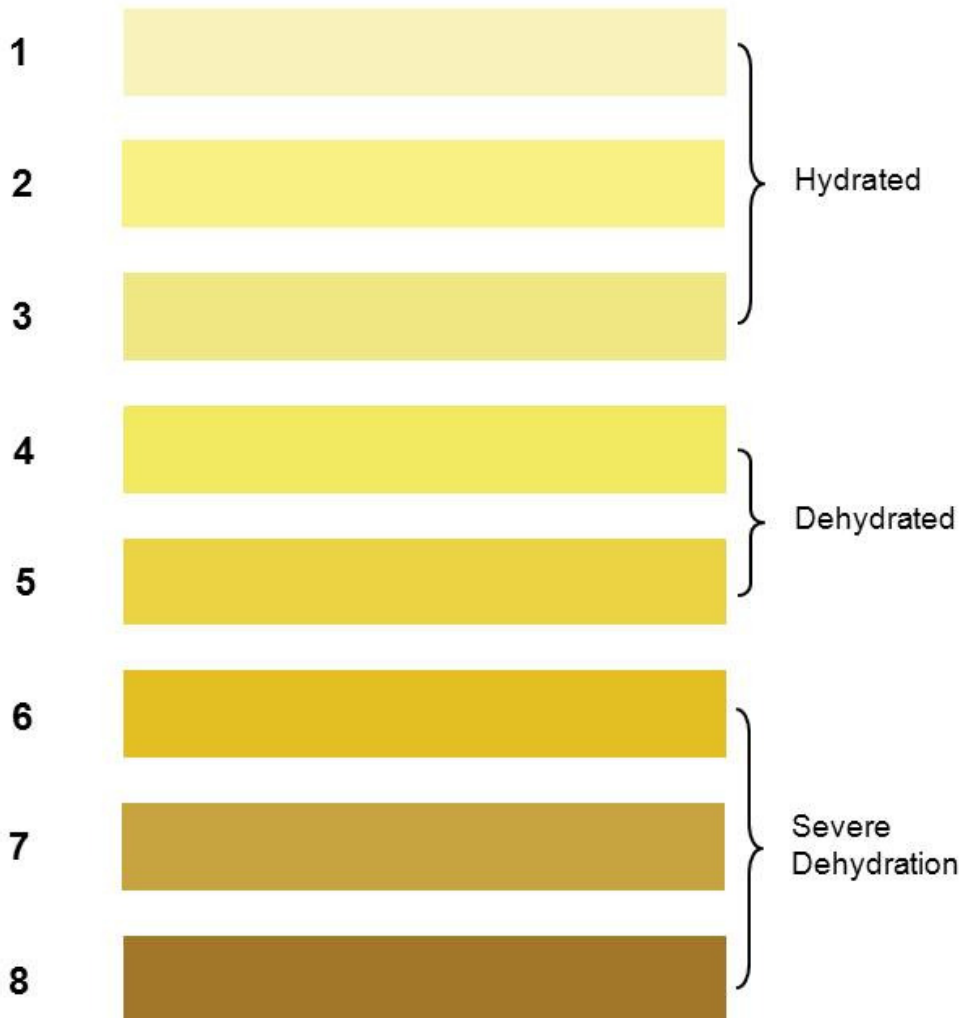
Fluid intake is important during matches as dehydration impairs skill and judgement in addition to you experiencing fatigue or tiredness much quicker. A mere 2% reduction in body weight over the duration of a game can reduce athletic performance by as much as 20%, which means players can only perform well for 60 minutes not 80 minutes. Players need to start the game well hydrated and try to drink whenever possible during the game.

Fluid requirement guidelines

Before the game	During the game	After the game
<ul style="list-style-type: none"> • Drink at least 600ml water 2-3 hours before the match • Drink 300mls of water immediately before the game • Aim to have a pale yellow pee just before the game • Sports drinks maybe consumed if water is difficult to drink or food intake has been poor during the week • Keep drinks cool as they are easier to drink 	<ul style="list-style-type: none"> • Drink whenever possible during the game, about 100-250mls every 15 minutes • Take a sports drink if energy levels are low or rapid hydration is required (very hot weather or sweating a lot) 	<ul style="list-style-type: none"> • Drink about 600mls water or sports drink within the next hour after exercise • Drink either a sports drink or water until urine is passed – aim for pale yellow urine, if it is dark continue drinking until urine colour lightens up (see Pee Chart below)

Pee Chart

- Your target urine colours are the numbers 1-3
- Colours 4-5 suggest dehydration and 6-8 severe dehydration
- For optimal athletic performance, keep well hydrated at all times
- Drink before, during and after exercise



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Recovery

A good 'team approach' is the best way to ensure all athletes recovery optimally after training and matches. Foods should be mostly carbohydrate based with smaller amounts of protein and fat. Good options include low fat yoghurts, muesli bars, fruit, low fat fruit muffins and sandwiches with lean protein fillings. Additional water, sports drinks, diluted fruit juices, milk drinks and protein shakes made with fruit should be available to encourage a good fluid intake. Fluids should be kept cool so that they are more enjoyable and are easier to consume more of.

Coaches and staff need to organise suitable drinks and snacks after training and matches to ensure all athletes enjoy the benefits. If food and drink is not usually provided, then ensure athletes are made aware of the importance of organising food and drink packs for after games.

Travelling away

For matches that involve travelling, the above food and fluid strategies need to be continued. Athletes need to continue eating food at regular intervals which is high in carbohydrate, moderate protein and low fat.

It is easy to buy food and drinks when away from home, but the food choices may not be the best fuel for exercising at peak performance. Often eating out results in poor food and fluid choices which will not be adequately fuel your body for training and recovery.

When travelling away ensure you take from home, plenty of food that you enjoy and usually eat in addition to plenty of drinks. Find out what catering facilities are going to be available and take as much food with you so that you can prepare your own healthy nutritious meals.

It is very easy to treat away matches as an opportunity to eat out more, which maybe fine if appropriate choices are made. However, rather than spending a lot of money on takeaways, café and restaurant meals try to cook as much as you can where you are staying or buy foods from supermarkets that you know and trust such as; fresh fruit, muesli bars, fresh bread and spreads, breakfast cereals, low fat yoghurts, tinned spaghetti/ beans/ creamed corn etc.

For further nutritional advice please contact me:

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