













Rugby Nutrition:

Bringing It All Together: Eating Plans

These eating plans have integrated ALL the best practice nutritional recommendations to meet your specific goals for rugby. The eating plans for **training** and **recovery** provide a guide on portion sizes with added tips and advice depending on your specific body composition goal:

- PLAN 1: If you want to lose weight and/or, reduce your body fat levels while maintaining your muscle mass.
- PLAN 2: If you want to maintain or increase your lean muscle mass.
- A match-day eating plan has also been provided.

TRAINING and RECOVERY MEAL PLANS

PLAN 1

The meal plan is recommended for a 90 kg player who wants to **optimise their** nutrition.

For **weight loss**, see tips on the left and for decreasing fat mass and maintaining muscle mass, see tips on the right.

PLAN 2

The meal plan is recommended for a 90 kg player who wants to either **maintain** muscle mass (without fat loss) or **increase** muscle mass (see tips on the right).

Note bigger or smaller rugby players can apply the meal structure, but need to adjust the portion sizes accordingly.







PLAN 1

Goal: Weight loss

Cut your breakfast cereal/ porridge by half and choose high-fibre options for bulk

Cut the fruit and add plenty of salad to your sandwich/roll

Reduce your portion sizes – eat less carbohydrate and always choose lean protein choices with minimal fat.

Plan and pack with suitable snacks for mid-afternoon (recovery) to avoid making bad choices when hungry

Reduce your portion sizes

Choosing fat-free dairy products helps to reduce your fat intake further

Limit choices concentrated in sugar – e.g. sports drinks and sweets

Goal: Optimise Nutrition

Breakfast:

1 banana OR 1 tbsp raisins OR 1 apple 1½ cups Cornflakes OR 1½ cups All-Bran OR 1½ cups cooked oats OR ¾ cup muesli Plus 250 ml low fat milk OR 150 ml low fat yoghurt/maas

Mid-morning:

1 apple OR 1 pear OR 2 naartjies 2 slices low GI bread OR 1 roll OR 6 Provita

Plus 1 tsp butter/soft margarine OR 2 tsp peanut butter OR ¼ avocado OR 1 tbsp low fat mayonnaise

Plus~1 egg, boiled OR 30 g lean meat OR 30 g cheese OR ½ tin tuna OR ½ cup baked beans

Plus salad (lettuce, tomato, cucumber)

Lunch:

2 cups cooked rice OR pasta OR 2 rolls OR 4 slices bread

Plus 90 - 120 g lean meat OR 90 - 120 g chicken OR 1 tin tuna OR 120 – 160 g fish Plus 1-2 tsp oil OR 1-2 tsp butter/soft margarine OR ¼ - ½ avocado Plus vegetables/salad

Mid-afternoon:

6 Provita OR 4 rice cakes OR 1 raisin bun 30 g cheese OR 20 g lean biltong 1 cup melon or 1 pear 150 ml low fat yoghurt/maas

Dinner:

180 g lean meat OR 180 g chicken OR 240 g fish

Plus 1 tsp oil for food preparation
Plus 1 cup cooked rice OR 1 cup cooked
pasta OR 1 cup samp OR 2 medium
potatoes OR 1 sweet potato
Plus 1 cup cooked butternut / pumpkin
/peas / carrots/ corn OR 1 cup thick soup
Plus salad / other vegetables

Snack:

% cup fruit salad 150 ml low fat yoghurt/250 ml low fat milk

Extra:

1-2 X 50g carbohydrate ± 10 g protein servings to have after training Examples:

- 250 ml low fat fruit yoghurt OR350 ml drinking yoghurt
- 500 ml low fat milk plus 2 bananas

Goal : Maintain muscle mass ↓ Fat mass

Double up on your protein filling

Beef up your protein intake at lunch and supper – i.e. bigger portions of meat, chicken, fish or beans

Never miss a snack – this is a missed opportunity making it difficult to achieve your daily nutrient intake goals

Add an extra fruit and make a smoothie

Practice good recovery strategies to get the most out of your training program







PLAN 2

Goal: Maintain muscle mass

Breakfast:

1 banana OR 1 tbsp raisins OR 1 apple 2 cups Cornflakes OR 2 cups All-Bran OR 2 cups cooked oats OR 1 cup muesli Plus 250 ml low fat milk OR 150 ml low fat yoghurt

Mid-morning:

1 apple OR 1 pear OR 2 naartjies 2-4 slices low GI bread OR 1-2 rolls OR 6-12 Provita Plus 1 tsp butter/soft margarine OR 2 tsp peanut butter OR ¼ avocado OR 1 tbsp low fat mayonnaise Plus 2 eggs, boiled OR 60 g lean meat OR 60 g cheese OR ½ tin

tuna

Plus salad (lettuce, tomato, cucumber) 250ml low fat milk

Lunch:

2 cups cooked rice OR pasta OR 2 rolls OR 4 slices bread Plus 180 - 240 g lean meat OR 180 – 240 g chicken OR 1% - 2 tins tuna

Plus 1-2 tsp oil OR 1-2 tsp butter OR $\frac{1}{4}$ - $\frac{1}{2}$ avocado Plus vegetables/salad

Mid-afternoon:

6-9 Provita OR 4-6 rice cakes OR 1-2 raisin buns 60 g cheese OR 40 g lean biltong 1 cup melon or 1 pear or 125 ml fruit juice 150 ml low fat yoghurt/maas

Dinner:

240- 300 g lean meat OR 240 – 300 g chicken OR 320 - 400 g fish Plus 1 tsp oil for food preparation

Plus 1½ cups cooked rice OR pasta OR 3 medium potatoes OR 1 large sweet potato

Plus 1 cup cooked butternut / pumpkin /peas / carrots/ corn Plus salad / other vegetables

Snack:

% cup fruit salad 150 ml low fat yoghurt/250 ml low fat milk

Extra:

1-2 X 50g carbohydrate \pm 10 g protein servings to have after training.

Examples:

- 250 ml low fat fruit yoghurt OR 350 ml drinking voghurt
- 500 ml low fat milk plus 2 bananas

Goal: Increase muscle mass

Add 2 slices bread/toast with a protein (egg, cheese, lean meat or fish) topping for extra carbohydrate and protein

This also serves as a recovery option especially when training twice a day.

Choose the larger protein portions (upper end of range) to meet your additional protein requirements

For gut comfort, go for less bulky options such as rice cakes and fruit juice

Add extra fruit, juice and peanut butter for a delicious smoothie







MATCH-DAY EATING PLAN (before, during and after the match)

To get it right on the day of the match you need to fine-tune your training and recovery nutrition strategies. Part of this fine-tuning is to maximise your glycogen stores in the last 2-3 days before the match and to stay adequately hydrated. Never try anything new, stick to familiar foods and well-rehearsed strategies [1].

Two to Three DAYS Before the Match

- Eat carbohydrate-rich, low fat meals and snacks throughout the day
- Stay adequately hydrated by drinking small amounts regularly



2 - 4 HOURS Before the Match

- Eat a high-carbohydrate low fat **meal** 2-4 hours before the match, with some lean protein. If not possible, eat a carbohydrate-rich snack 2 hours before the match.
- Choose low fibre, easy to digest carbohydrates to prevent abdominal discomfort cereals, rice, potatoes, sweet potato, brown bread etc.
- To avoid abdominal cramps it may also be useful to avoid lactose-containing foods and drinks before exercise. Establish a routine of emptying the bowel before a match.
- Practice different meal combinations in training and if a meal is not tolerated, try a liquid meal replacement or a fruit smoothie instead.
- Hydration is important. Drink 250 500 ml fluid with every meal milk, water, fruit juice, cold drink, sports drink.





CHOICES for PRE-EVENT meals	
A pre-event BREAKFAST	A pre-event LUNCH or DINNER
Fresh or pureed fruit or fruit salad, fruit juice	Rice or pasta OR potatoes, sweet potato OR
+ Cereal or porridge with low fat milk/yoghurt	pap (maize porridge)
+ Bread, rolls, muffins, crumpets, pancakes or	+ Grilled chicken OR fish/tuna OR lean mince
toast with jam or honey	with vegetables and/or salad
+ Eggs, boiled or poached, lean ham or	+ Extra bread, rolls with jam or honey, peanut
reduced-fat cheese	butter, reduced-fat cheese
+ Water	+ Fresh or pureed fruit, low fat yoghurt
	Milk, flavoured milk, fruit juice, sports drinks
	and water



1-2 HOURS Before the Match

• Eat a high carbohydrate, low fat, low fibre snack, including drinking fluid.

Sandwich/roll with lean protein filling (egg, tuna, chicken, lean ham, reduced fat cheese)

Cereal with low fat milk and fruit

Low fat muffin, crumpets or pancakes + fruit / juice

Cereal bar + fruit

Fruit smoothie OR low fat drinking yoghurt + fruit

Energy bar + sports drink









Less than 1 HOUR Before the Match

- Before kick-off, top up fuel stores with a small snack/drink with at least 50 g
 carbohydrate: sports drink, carbohydrate gel, sports bar, cordial, fruit lollies.
- Immediately before the game, drink 250 500 ml fluid, as this primes the stomach and assists with emptying.



DURING the Match

- Fluid is important to prevent any dehydration.
- Know your fluid requirements in different environmental conditions.
- Drink at the following times to maintain fluid requirements stoppages, injury- and halftime.
- Include 30 60 g carbohydrate every hour to delay fatigue and maintain skills and concentration. Sports drinks provide fluid and carbohydrate. Fluid should not be forgotten if consuming gels, bars, sweets (jelly sweets) or solid food.



RECOVERY within 1 HOUR After the Match (see additional documents on the BokSmart website)

REFERENCES

1. Burke LM. Competition Nutrition. In: *Sport and Exercise Nutrition*. First Edition. 2011. The Nutrition Society. Blackwell Publishing Ltd.

For more information on *Rugby Nutrition*, go to the BokSmart website www.BokSmart.com or go to the following link: http://boksmart.sarugby.co.za/content/eating-and-drinking-right

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