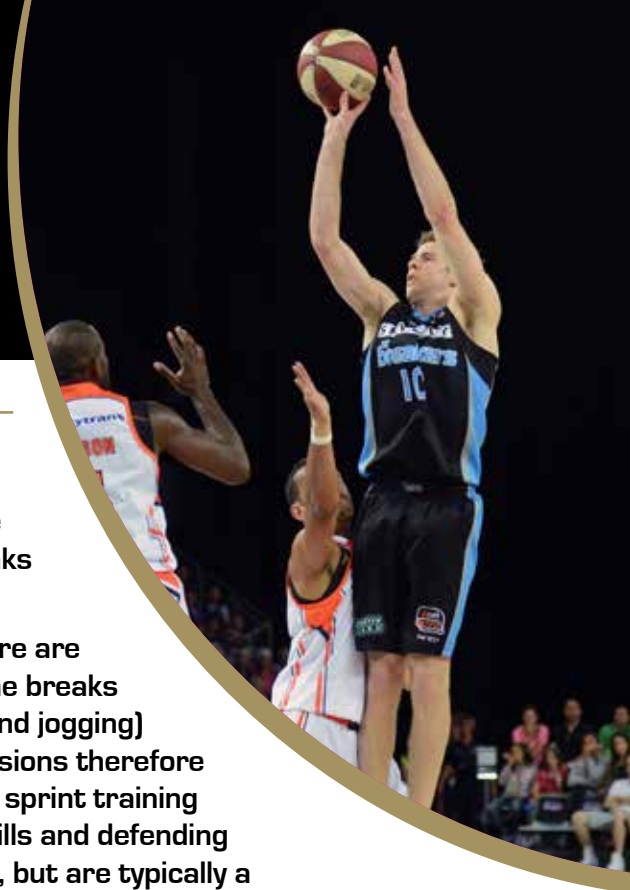


BASKETBALL

EATING FOR YOUR SPORT



Your sport:

Basketball is a game played in four quarters. At an elite level the quarters are 10 minutes with additional time for injury and breaks in play. In recreational play, the quarters are often shorter.

Basketball teams have five players on court at any one time, there are also reserve players on the sidelines who may be subbed in at the breaks in play. Players are required to work both the aerobic (running and jogging) and anaerobic (sprints and jumps) energy systems. Training sessions therefore involve a variety of activities such as distance running as well as sprint training and jumping and skills based sessions including shooting, ball skills and defending strategies. Training sessions vary depending on the time of year, but are typically a minimum of one training session a week, anywhere up to 1-2 sessions per day for players during competition season or professional players.

This Nutrition Advice Sheet is aimed for those who train and compete at a recreational level. Elite players require different nutrition pre and post training and/or competition strategies.

TRAINING DIET:

All athletes need to eat a balanced diet which includes:

- Fruits and vegetables every day – aim for a variety of colours
- Breads and cereals – pasta, rice, bread, rolled oats, breakfast cereal, kumara, potatoes and low fat noodles
- Reduced fat dairy products – including milk, yoghurt and cheese
- Lean protein - meat, chicken, fish, eggs and other protein rich foods like tofu and pulses
- Healthy fats like most vegetable oils, nuts, seeds and avocado

CARBOHYDRATE

Carbohydrate is the main fuel that you need as a basketball player. Having adequate carbohydrate is essential to ensure you have sufficient fuel available for training, as well as to help with quick recovery after training sessions and games. Basing your meals and snacks on low glycaemic index (low GI) and wholegrain carbohydrate foods is ideal. This includes rolled oats, grainy breads, basmati rice, pasta and low fat noodles.

PROTEIN

Protein is essential for building muscular strength and assisting with muscle recovery. Including protein in all meals

and most snacks can help meet a players protein needs. This includes food such as lean meats, fish, chicken, eggs, pulses (e.g. chickpeas, kidney beans,



lentils, and baked beans), nuts and low fat dairy products. It is especially important to include some protein in the meal or snack eaten after training as this will assist with muscle repair and recovery. Try a smoothie made with MILO and trim milk, low fat yoghurt and fruit, or cereal with low fat milk or yoghurt. A filled roll/wrap/pita bread with shredded chicken, canned fish or egg is another great idea.

Protein plays a vital role in building muscle and assisting with recovery after training*

FAT

For all players it is important to include some healthy fats each day. Avocado, nuts, seeds, oily fish and most vegetable oils are all suitable. The amount of these fats that is needed will depend on an individual's weight goals and energy requirements (how many calories/kJs you need each day). However, unhealthy fats should be avoided as much as possible. This includes the skin on chicken, white fat on meat, butter and fat often used in cakes, biscuits and many takeaways.

FRUIT & VEGETABLES

Fruit and vegetables are essential for good health and performance and should be included at every main meal. Including a range of fresh, frozen, dried and canned varieties will help meet requirements for vitamins, minerals and

antioxidants. Adding vegetables into cooking or fruit to meals is a great way to boost your fibre, vitamin and mineral intake. Try slicing a banana or adding berries to breakfast cereal; add sliced apple or pear to salads or incorporate grated carrot and courgette into mince.

EATING AND TIMING

Given the high physical demands of basketball, it is important that you learn how to time your meals and snacks to maximise your energy levels, and avoid getting a stitch during training. For most players, including a meal or larger snack 3-4 hours before training or game may be helpful so you have enough energy on board is ideal. Pasta with chicken or tuna with basmati rice are good examples. A small snack during the hour before exercising may also be helpful, but what works best will vary from player to player. Some will be able to tolerate a substantial snack like a sandwich or bowl of cereal, whereas others may choose a lighter snack like fruit, yoghurt or a smoothie. The most important thing is to practice eating strategies during training and not try any new foods on the day of competition, in case they don't agree with you.

HYDRATION

Drinking fluid regularly before, during and after training is recommended. For training under 1 hour, water is the best,



cheapest and the most convenient option. For longer sessions or when training is extremely demanding on the body, using sports drinks is a good option, as they not only assist with hydration but also provide extra carbohydrate for the working muscles. Athletes should be aiming to have very pale urine most of the day indicating a healthy level of hydration.

Teams may want to initiate the practice of recording their pre and post training weights to determine hydration strategies or pinpoint which players need to work on hydration. Even a mere 2% reduction in an athlete's bodyweight can negatively affect performance**.



A SAMPLE ONE DAY MEAL PLAN FOR A BASKETBALL PLAYER

BREAKFAST:

- Natural muesli with fresh fruit and low fat yoghurt/low fat milk OR
 - Wholegrain toast with peanut butter and a glass of fruit juice OR
- If travelling, pack a combination of fresh fruit, milk drinks, fruit juice cartons, low fat yoghurt, cereal bars and sandwiches

MORNING TEA:

- Dried fruit and nuts OR
- Wholegrain crackers with hummus, avocado and tomato OR
- Low fat yoghurt and fresh fruit

LUNCH:

- Wholegrain bread rolls or wrap filled with hummus, lean meat/canned fish/egg and salad OR
 - Pasta/rice with tuna/chicken and vegetables
- Add a piece of fruit and/or low fat yoghurt to each option

PRE AFTERNOON TRAINING:

- Sandwiches OR
- Fruit toast with peanut butter and jam OR
- Low fat dairy snack or MILO made with low fat milk or smoothie OR
- Muesli bar and fresh fruit

DURING AFTERNOON TRAINING

Drink a bottle of water. May need sports drink if over 60 - 90 minutes of training

DINNER:

- Lean meat and vegetable stir-fry with rice or noodles OR
- Spaghetti Bolognese with a side salad OR
- Fish and oven baked chips with salad

SUPPER:

- Hot MILO made with low fat milk

NUTRITIONIST'S NOTE

This meal plan is an example only and not intended for individual purposes. This should be altered to suit individual energy requirements depending on age, gender and training load. For those who train at an elite level and/or twice or more a day additional pre training snacks and post training recovery food/drinks will be required. Contact a Sports Dietitian for guidance.

NUTRITION PROFILE: TOM ABERCROMBIE

Why do you think nutrition is important for your sport?

Basketball is a high intensity sport so it's important that I am putting the right fuel into my body to sustain my energy and focus during training and games.

What are some healthy and tasty foods you recommend?

I love quick healthy snacks to eat on the run. Tuna and rice, cereal bars or fresh fruit are my favourites.

Do you have specific healthy food routines before a game?

I have a big lunch with pasta and chicken. 3 hours before tip-off I have a snack of fruit, a jam sandwich and a liquid breakfast drink. cereal bars or fresh fruit are my favourites.



KEY FOODS FOR A BASKETBALL PLAYER'S FRIDGE/FREEZER

- ✓ Green or yellow top milk, flavoured milk
- ✓ Low fat yoghurt
- ✓ Eggs
- ✓ Low fat spread
- ✓ Edam cheese, cottage cheese
- ✓ Fresh and frozen vegetables
- ✓ Fresh fruit
- ✓ Lean meat, fish, chicken

KEY COMPETITION FOODS

- ✓ Rice, pasta or noodles
- ✓ Sandwiches/rolls or baps with low fat fillings such as tuna, salmon, ham, smoked chicken, eggs or peanut butter
- ✓ Muffins/crumpets/fruit bread
- ✓ Low fat yoghurt and dairy snacks
- ✓ Low fat flavoured milk and MILO
- ✓ Fresh or dried fruit
- ✓ Low fat muesli bars and cereal bars
- ✓ Corn thins/low fat crackers
- ✓ Sports drinks
- ✓ Water-based ice-blocks
- ✓ Liquid meal supplements

KEY FOODS FOR A BASKETBALL PLAYER'S PANTRY

- ✓ Wholegrain bread, English muffins, crumpets, rolls, buns
- ✓ Grain-based cereal
- ✓ UNCLE TOBYS Rolled Oats, natural muesli, wholegrain breakfast cereals
- ✓ Rice, pasta, noodles, couscous
- ✓ Low fat pasta sauce
- ✓ Canned spaghetti, baked beans, chickpeas, bean mix, lentils
- ✓ Creamed rice
- ✓ CARNATION Light & Creamy Evaporated Milk
- ✓ Canned tuna, salmon
- ✓ Crackers and pretzels/corn thins/rice crackers
- ✓ Dried fruit, nuts, seeds
- ✓ Vegetable oil/spray
- ✓ Low fat salad dressing
- ✓ Liquid meal supplements
- ✓ MILO Energy Food Drink

COMPETITION DAY EATING

During competitions it is important that the team management, caregivers and athletes all work together to plan what food to take both individually and as a group. Often competition venues do not have appropriate foods available and will not provide the foods usually eaten or in the amounts required to adequately fuel athletes. Packed lunches, snack boxes and drinks are therefore an important part of competition day.

Once the timing of games is established, players should plan what time to have their meals and snacks so as to maximise energy levels and optimise digestion. Having a meal or larger snack 3-4 hours

prior to a game can work well with a smaller top up snack in the hour or so before the competition starts. A high intake of fluids should be encouraged throughout the day to prevent dehydration. During games players should have individual drink bottles available which should be consumed at every available opportunity.

SPECIAL ISSUES AND REQUIREMENTS FOR BASKETBALL:

- Often players struggle to meet their energy (calorie/kJ) needs for training and competition. Therefore, planning regular nutrient rich meals and snacks is vital to maximise performance and recovery.
- Basketball players, particularly young females may be at risk of having low iron levels. For most people, there is no

need to purchase iron supplements, but ensure that your diet contains enough iron rich foods. Red meat is the best source of iron and most readily absorbed. Other sources include chicken, dried fruit, green vegetables and foods with added iron, such as some breakfast cereals and MILO.

- To enhance the absorption of iron from these non-meat sources, eat them at the same time as Vitamin C rich foods. If you are vegetarian, it is a good idea to discuss how best to meet your iron requirements with your doctor, sports nutritionist or dietitian.

*a: Lemon, P.W.R. 2000 Effects of exercise on protein metabolism. In Nutrition in sport (edited by R.J. Maughan), pp. 133-152 Oxford, UK

*b: Nutrition for Athletes, A practical guide for health and performance, 2012, International Olympic Committee

**Walsh, R.M., T.D. Moakes, J.A Hawley, and S.C Dennis. 1994. Impaired high-intensity cycling performance time at low levels of dehydration. International Journal of Sports Medicine 15: 392-398.

RED FISH CURRY

Serves 4

- 1½ cups jasmine rice
- 1-2 tbsp Thai red curry paste
- 1 cup sliced green beans
- 1 cup broccoli florets
- 1 cup CARNATION Light & Creamy Evaporated Milk
- 400g firm white fish, cut into large chunks

- Combine rice with ample water in a large saucepan. Bring to the boil, then simmer for 10-12 minutes until cooked. Drain.
- Heat a frying pan or wok and stir-fry curry paste for 1-2 minutes.
- Add vegetables and stir-fry for another 1-2 minutes before adding CARNATION Light & Creamy Evaporated Milk and fish.

- Simmer until fish is cooked. Serve with rice and fresh coriander if desired.

ANALYSIS	per serve
Energy (kJ)	1931
Carbohydrate (g)	71
Protein (g)	32
Fat (g)	6



This recipe is from the *Fit Food Fast* cookbook. For more recipes visit www.tastyrecipes.co.nz.

By Nutritionist Claire Turnbull - www.claireturnbull.co.nz

For more information and to obtain further copies of any of the Eating for Your Sport Nutrition Advice sheets, visit www.nutrition.nestle.co.nz or www.autmillennium.org.nz/nutrition

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