

NETBALL

EATING FOR YOUR SPORT



Your sport:

Netball games are played in four quarters. At an elite level the quarters are 15 minutes with additional time for injury and breaks in play. In recreational play, the quarters are often shorter.

Netball teams have seven 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 skill 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 and anywhere up to 1-2 sessions per day for players during competition season or for professional players.

This Nutrition Advice Sheet is aimed for those who compete and train 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:

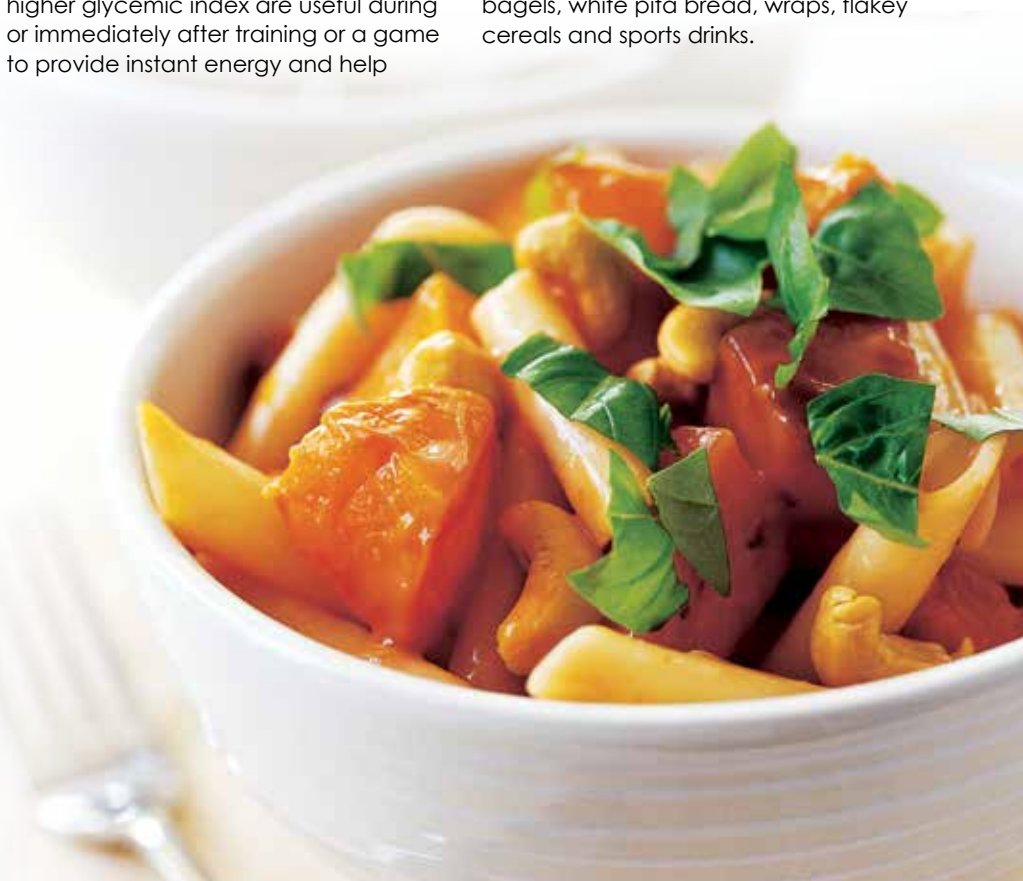
- **Fruits and vegetables** every day – aim for a variety of colours
- **Breads and cereals** – pasta, rice, bread, rolled oats, breakfast cereal, kumara, potatoes and low fat noodles
- **Low fat dairy products** – including milk, yoghurt and cheese
- **Lean protein** - meat, chicken, fish, eggs and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

Other carbohydrate rich foods with a higher glycemic index are useful during or immediately after training or a game to provide instant energy and help

refuel the body quickly. This may include bagels, white pita bread, wraps, flakey cereals and sports drinks.

CARBOHYDRATE

Carbohydrate is the main fuel needed for netball players. Having adequate carbohydrate is essential to ensure there is sufficient fuel available when training, as well as to help with quick recovery between training sessions and games. Basing meals and snacks on low glycemic index (low GI) and wholegrain carbohydrate foods is ideal. This includes oats, grainy breads, basmati rice, pasta and low fat noodles.



PROTEIN

Protein is essential for building muscle and assisting with recovery.* Including protein in all meals and most snacks can help meet your protein needs. This includes food such as lean meats, fish, chicken, eggs, pulses (e.g. chickpeas, kidney beans, lentils, and baked beans), nuts and 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 milk or yoghurt, or try adding shredded chicken, canned fish or egg to a filled roll, wrap or pita bread.

FAT

For all players it is important to include some healthy fats each day. Avocado, nuts, seeds, oily fish and vegetable oils are all suitable. The amount of these fats that are 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 your needs for vitamins, minerals and antioxidants. Adding vegetables into cooking or fruit to your meals is a great way to boost your fibre, vitamin and mineral intake. Try slicing a banana or berries onto 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 netball, it is important that athletes learn how to time their meals and snacks to maximise energy levels, and avoid getting a stitch during training. For most players, a healthy low GI meal approximately 1-4 hours before training or a game 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 will be better with 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 essential for good hydration. For training under 1 hour, water is the best, cheapest and 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 NETBALL PLAYER

BREAKFAST:

- Natural muesli with fresh fruit and low fat milk/yoghurt OR
 - Wholegrain toast with peanut butter and a glass of fruit juice OR
- If travelling, pack a combination of fresh fruit, milk drinks or fruit juice carton yoghurt, cereal bars or 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 and salad OR
- Pasta/rice with tuna/chicken and vegetables

Add a piece of fruit and/or yoghurt to each option

PRE AFTERNOON TRAINING:

- Sandwiches OR
- Fruit toast with peanut butter and jam OR
- Dairy snack or MILO made with low fat milk or smoothie OR
- Muesli bar and 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 low fat 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: ANNA HARRISON

Why do you think nutrition is important for your sport?

If you're not eating the right foods, you will fade during the game and this can be seen in your ability to sustain your physical and your mental performance.

What are some healthy and tasty foods you recommend?

I really enjoy oats, raisins and yoghurt mixed together. Another is toast, peanut butter, sliced tomato and cracked pepper!! "Don't knock it until you've tried it!"

Do you have specific healthy food routines before a game?

Before a game we always have our 'pre-game meal' about 4 hours before the game starts. This is pretty much a full meal and a typical one for me would be multigrain toast, with peanut butter and banana, glass of fruit juice or flavoured milk and a small bowl of cereal with milk. An hour before the game starts I would have a muesli bar to top up the tank. Carbohydrate rich foods are the most important to eat before a game so that you have the energy and stamina to last the entire game.



KEY FOODS FOR A NETBALL PLAYER'S PANTRY

- ✓ Wholegrain bread, English muffins, crumpets, rolls, wraps
- ✓ Wholegrain breakfast cereal
- ✓ UNCLE TOBYS Rolled Oats
- ✓ Rice, pasta, low fat noodles, couscous, lentils
- ✓ Low fat pasta sauce
- ✓ Canned spaghetti, baked beans, chickpeas, bean mix
- ✓ Creamed rice
- ✓ CARNATION Light & Creamy Evaporated Milk
- ✓ Canned tuna, salmon
- ✓ Crackers and pretzels/corn thins/rice crackers
- ✓ Cereal bars
- ✓ Dried fruit, nuts
- ✓ Vegetable oil/spray
- ✓ Low fat salad dressing
- ✓ Liquid meal supplements
- ✓ MILO Energy Food Drink
- ✓ Herbs and spices
- ✓ Spreads e.g. honey, jam, peanut butter (low salt and sugar)
- ✓ Sauces and condiments e.g. sweet chilli, BBQ, mustard, relish

KEY FOODS FOR A NETBALL PLAYER'S FRIDGE/FREEZER

- ✓ Trim milk, flavoured milk
- ✓ Low fat yoghurt
- ✓ Eggs
- ✓ Reduce fat spread (e.g. canola, olive or rice bran)
- ✓ Edam cheese, cottage cheese
- ✓ Frozen fruit and vegetables
- ✓ Fresh fruit and vegetables
- ✓ Lean meat, fish, chicken

KEY COMPETITION FOODS

- ✓ Low fat yoghurt and dairy snacks
- ✓ Flavoured milk and MILO
- ✓ Fresh or dried fruit
- ✓ Low fat muesli bars and cereal bars
- ✓ Sandwiches/rolls or wraps with low fat fillings such as tuna, salmon, ham, smoked chicken, eggs or peanut butter
- ✓ Muffins/crumpets/fruit bread
- ✓ Rice cakes/corn thins/low fat crackers/plain biscuits
- ✓ Cordial/sports drinks
- ✓ Water-based ice-blocks
- ✓ Liquid breakfast drinks
- ✓ Rice, pasta or noodles

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.

Usually meals should be consumed at least two hours prior (and snacks up to one hour prior) to games as in training. 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 NETBALL:

- 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.
- Netball players, particularly young females may be at risk of having low iron levels. For most people, there is no need to purchase iron supplements,

just ensure that your diet contains enough iron rich foods. Red meat is the best source of iron and most readily absorbed. Other sources include 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. See the nutrition advice sheet on 'Iron and Sport' for more information.

* Stuart M Phillips et al. (2011). Dietary protein for athletes: From requirements to optimum adaptation. *Journal of Sport Sciences*, 29(s1): S29-S38

** Louise Burke et al, 2011. Carbohydrates for training and competition, *Journal of Sports Sciences*

*** Louise Burke et al 2006. *Clinical Sports Nutrition*, 3rd Edition, Fluid and CHO intake during exercise. pg 394

GARLIC AND CORIANDER CHICKEN BREASTS

Serves 4

- 1 bunch coriander leaves
- 4 cloves garlic, peeled and crushed
- 1 tbsp lemon juice
- 1 tbsp olive oil
- 2 tsp MAGGI Chicken Stock Powder
- 400g boneless, skinless chicken breast, quartered

- Mince coriander and garlic in a food processor or using a pestle and mortar. Add lemon juice, olive oil and MAGGI Chicken Stock Powder.
- Place in a covered dish or resealable bag with chicken to marinate. Chill for 20 minutes or overnight.
- Grill on barbecue or pan-fry for 7 minutes on each side or steam for 10 minutes until cooked through.

Serving Suggestion:

Serve with *pasta, rice, couscous* or *grainy bread* with lots of *veggies* or *salad* too.



ANALYSIS	per serve
Energy (kJ)	632
Carbohydrate (g)	2
Protein (g)	23
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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