Sports Nutrition for Football

By Drew Griffiths (BSc, MSc, MMA hero)
Introduction

Athletes are often concerned with dietary manipulations in the period around competition. However, the main role of nutrition may be to support consistent intensive training which will lead to improved performance. Meeting energy demand and maintaining body mass and body fat at optimal levels are key goals.

Often overlooked elements of Sports Nutrition however, included optimal dietary requirements for health, minimal systemic and muscular inflammation and enhanced immune function. A general feeling of wellbeing and energy are undervalued in Sports Nutrition but are fundamental for performance.

Nutritional Goals should include:

Maintaining energy supply to working muscles and other tissues

Promoting tissue adaptation, growth and repair

Promoting immune function

Reducing inflammation – a crucial marker in association with both recovery and general health.

Disclaimer – Consult your Doctor before adopting any dietary changes
General Eating Habits

Omega 3 to Omega 6 ratio
Western diets are full of Omega 6 fats, and highly processed, heated fats, that cause inflammation. Omega 6 causes inflammation, which is the enemy for recovery and general health. The easiest way to adjust this balance is to supplement with fish oil and cook with coconut oil, instead of vegetable oils. EPA is the anti-inflammatory element of omega 3. Look for fish oil (and krill oil) high in EPA.

Probiotic Foods
Back in the day, we had dairy from one cow, it was raw, untreated etc. and full of goodness. Nowadays the milk (and most other products) come from about 1,000 cows, mass milked, full of drugs to make them produce more milk and anti-biotics to stop them getting infections, the milk has to be heated to 97 degrees so it doesn’t kill us...what you end up with, is a product that is on a different level (a lower one) to what our great, great grandparents and their mates drank.
If the balance of bacteria in our gut isn’t right, we’ll feel slugish and generally less awesome. Look to get some of these in your diet: raw honey, miso soup, kefir, dark chocolate, sauerkraut, kombucha tea (might be a bit on the yeasty side for some people), pickles and olives.

High Quality Carbohydrates
Include sweet potatoes, buckwheat, quinoa and oats. Avoid sugar
except for post-training, as sugar is highly inflammatory.

**Nuts for extra calories**
If you are struggling to consume enough calories try snacking on nuts.

**Experiment with Dairy and Wheat Free**
It’s not for everyone, but try it for a week and see how your body and digestive system feels. Dairy is also known to cause inflammation in many people.

**Experiment with Alkaline Foods**
Some nutritionists claim that alkaline diets are superior for health and also endurance. Try adding wheatgrass and spirulina to your diet, and minimise the consumption of citrus fruits.

**Consume natural anti-inflammatories**
Eat more:
*Ginger, Tumeric, Garlic, Onions, Red cabbage*
*High magnesium foods such as spinach, squash and pumpkin seeds and fish such as Mackerel*
*Try Pineapple for its bromelain content (you can also buy bromelain as a supplement)*
Eat/Consume less:
*Alcohol, caffeine, deep fried foods, artificial sweeteners and additives, sugar, vegetable cooking oils, dairy& processed meats as these can cause high levels of inflammation. Nightshade fruits such as tomatoes are also linked to high levels of inflammation. Consider cutting down on these if suffering with knee, back or any joint inflammation.*

**Consume fresh, whole foods, in their original state if possible**
Take table salt for example – consume sea salt or Himalayan salt, not table salt that has been bleached.
Another example – eat organic, grass fed beef, not processed meat.
Eat organic food, that’s as fresh and ‘unprocessed’ as possible.
**Supplements**

**Protein Powder – Consume Daily & Post-Training**
One of the most aggressively contested topics in nutrition is related to protein consumption. How much people need, and whether or not it is bad for the kidneys. Research suggests that animal protein consumed in large quantities is *possibly* harmful.
Looking at further research, which is the only thing you can really do, it is recommended that football players consume between 0.6g and 1g of protein per pound of bodyweight. Whey, egg or hemp protein powder are usually recommended.
Research does also suggest that consuming protein after training increases [muscle mass](#) and when taken during rehab, can increase [recovery rate](#).

**Creatine – Consume Daily – Ideally Post-Training**
Creatine monohydrate, consumed with simple carbohydrates such as dextrose have been shown in dozens of studies to enhance intermittent high intensity exercise performance. Research suggests ‘loading’ (taking 20g of creatine a day for 5 days) is not necessary. Instead consume 3g a day with 20-30g of dextrose or another simple carbohydrate such as maltodextrin. Post-training is the ideal time to consume a drink containing creatine and carbohydrate.
Research also suggests that consuming 1000mg of alpha lipoic acid immediately before consuming a creatine/carbohydrate drink, enhancing skeletal muscle uptake.
**Acetyl-L-Carnitine – Consume pre-training / game**
Great caffeine free supplement for enhancing mental power and physical energy. Try a small amount to begin with, as it can cause stomach upset if you are not used to it. I use 200mg for an endurance boost, but others advocate 2-3g.

**Beta Alanine – Consume pre-training / game**
This amino acid raises carnosine levels, which helps to buffer the influence of H+ ions which cause acidity and fatigue. Watch out for the tingling!

**Caffeine – Consume pre-training / game**
Some experts state that caffeine, taken for prolonged periods at high dosages can lead to adrenal fatigue. Either way, it does dramatically enhance endurance significantly.
Caffeine can be consumed with beta alanine or acetyl l carnitine.
Caffeine is relatively safe; however I was unable to find any research on the safety of long term use of beta alanine or acetyl l carnitine.

**Carbohydrate & Electrolyte Drinks**
Important to consume during and after training and games. You can make your own using maltodextrin powder and adding a pinch of salt.

**Fish Oil**
Look for fish oil with a high EPA content. This is the element of omega 3 that has anti-inflammatory properties. Supplement with 1 to 15g per day depending on the EPA content and your own muscle and joint soreness.

**Gingko Biloba**
A great anti-inflammatory supplement that also enhances mental performance. If you are looking to increase energy levels, mental focus and/or enhance recovery rate, consider supplementing with Ginkgo Biloba.

**Greens Powders**
If you struggle eating enough organic fruit & vegetables, consider supplementing with ‘greens’ powders such as wheatgrass and spirulina.
Adaptogens

Adaptogens are a group of herbs and foods that are able to offset some of the effects of physical and mental stress on the body.

If you are struggling to recover in between matches and training sessions, then they are worth considering as part of your nutritional regime.

Korean Ginseng
The most famous adaptogen there is. Stacks of research to show that this herb increases immune functioning and reduces fatigue. Study

Rhodiola Rosea
Rhodiola rosea is a flowering plant, which resides in all the ridiculously cold regions of the world. Including Iceland, North America, the Artic and the UK. It has been showed to reduce fatigue and enhance mental clarity. Study

Ashwagandha
Also known as ‘Indian Ginseng’, this herb is a powerful antioxidant. Studies suggest that this herb not only reduced stress and cortisol levels, it also ‘fights’ cancer. It is also a strong anti-inflammatory, suggesting that it will help enhance recovery. Study

Note – as far as I am aware none of the adaptogens listed above are banned by the FA, IOC or FIFA, but please check with your manager or governing body.
The Glycemic Index (GI) is basically an update to the concept of simple and complex carbohydrates. It is a measure of how quickly carbohydrates raise blood sugar level following consumption. It is relative to pure glucose. For example, if a piece of white bread has a GI of 70 – it would indicate that white bread raises blood sugar at a rate 70% as much as pure glucose; over a 2 hour period.

Generally an athlete should look to consume foods with a GI of 60 or below. It is important to note however, that as low GI foods take longer to digest, than can cause GI distress in some individuals. It is also less practical to get all of an athletes carbohydrate requirements purely from low GI carbohydrates. A mixture of GI types/scores is therefore often recommended. GI has little impact on carbohydrate loading.

The Glycemic Load (GL) is a number that estimates how much a food will raise a person’s blood sugar level by. High GL foods, like high GI foods cause blood sugar to rise rapidly. Very high GL foods should ideally only be consumed within 2 hours after a training session or match.
GI aside, appropriate timing of carbohydrate intake is also vital. Research has shown that carbohydrate supplementation during soccer matches has been found to result in muscle glycogen sparing (39%), greater second-half running distances, and more goals being scored with less conceded, when compared to consumption of water. Carbohydrate supplementation has been recommended prior to, during, and after matches.

### GI and GL for Common Foods

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<tr>
<th>Food</th>
<th>Gl</th>
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<th>Net Carbs</th>
<th>GL</th>
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<td>Bean sprouts</td>
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In a separate study, movement analysis of a 4-a-side indoor soccer game lasting 90 min was undertaken following 48 h of high (approx. 8 g/kg/day) or moderate (approx. 3 g/kg/day) carbohydrate intake. The high-carbohydrate diet increased muscle glycogen by 38% and allowed soccer players to complete approximately 33% more high-intensity work during the game.

If you weigh 80 kg, 8 g per kg per day is 640 g of carbohydrate and 2560 calories just from carbohydrate. This is a lot of carbohydrate to eat daily! This is especially true if you rely on whole foods, with low GI properties to be the primary source of carbohydrate in your diet. Smoothies and drinks are a great way to get more carbohydrate in an athlete’s diet, whilst minimizing GI discomfort and bloating.

To ensure that the ideal amount of calories are being consumed, a coach should monitor the team’s body fat percentage, and waist circumference. An athlete can work out their approximate calorie requirements by doing the following:

– First start by working out Basal Metabolic Rate (BMR) using the below equation (or just use an online ‘BMR calculator’):

**For men:** BMR = 10 x weight (kg) + 6.25 x height (cm) – 5 x age (years) + 5
**For women:** BMR = 10 x weight (kg) + 6.25 x height (cm) – 5 x age (years) – 161

– Then use the Harris Benedict Formula, to work out your calorie requirements, based on your physical activity levels:
– If you exercise 1-3 days a week, x your BMR by 1.375
– 3-5 days a week BMR x 1.55
– 6-7 days a week BMR x 1.725
– if you have a physical job and train most days, BMR x 1.9

I’m 5 ft 10, 200 lbs and train about 4 times a week. So my calorie requirement would be 3060 calories.

Author’s note – Although research suggests a high carbohydrate diet is the mainstay of any athlete’s diet and results in an enhanced soccer performance; consuming a vast amount of carbohydrate every day, may not be the best for long term health. To offset any negative health effects of ‘sugary’ carbohydrates; consume high GI carbohydrates within 2 hours of training and the day before a match.
Some nutritionists and recent research suggests that eating fats from nuts, fish and hemp for example, may be a more healthy way to reach calorific needs day to day. Then 2 days before a match or competition increase carbohydrate intake and decrease fat intake to load the muscles and liver with glycogen (carbohydrate).

**Example Meal Plan**

**8am** – High protein porridge (oats, ground almonds, banana, coconut milk, raw honey) - 350 calories

**10am-12pm** training – Consume maltodextrin drink during training (150 calories)

**12pm** – Protein & carbohydrate drink (30g whey/hemp protein, 50g maltodextrin) + banana – 350 calories

**1pm** – Jacket potato / sweet potato, tuna, salad with olive oil or hemp oil & handful of almonds. Raw Cacao chocolate bar. – 750 calories

**3pm** – Super Lazy Smoothie*
Handful of mixed nuts – 500 calories

**6pm** – Main meal – Noodle stir fry* - 500 calories

**8pm** – Handful of mixed nuts & glass of coconut milk (unsweetened & no additives) – 250 calories

**9pm** – Rice cake with peanut butter – 200 calories

Consume at least 2 litres of water (preferably filtered and with a pinch of Himalayan salt OR coconut water)

*See recipes

The 2 days leading up to a match, the nuts should be replaced with a high carbohydrate snack.

Experiment with meals and carbohydrate content of day to day meals
during the off season, and monitor the effect on performance and energy levels.

The quality of the meal plan and the nutritional content depends largely on how the food is sourced. For example, if the 1pm salad contains homegrown organic watercress, spinach, carrots and tomatoes, it will have many more micronutrients than a pre-packaged salad bought from a high street store.

This applies to all the food in the meal plan. Peanut butter for example should be organic, and contain no added sugar or preservatives, just peanuts and a small amount of added oil. Honey should be raw and not a ‘blend’ of filtered honey. Manuka honey is regarded as the most nutritious, but is also very expensive.
Any change in diet should be piloted during a training match as changes in food types etc. can cause stomach upset.

Goals of Match Day Nutrition:
- Provide carbohydrate for energy during a match
- Provide electrolytes to prevent cramps and fatigue
- Hyper-hydration

If a match starts at 3pm in the afternoon:

A football player should eat a high carbohydrate, moderate protein meal in the morning. The meal should mainly contain low GI carbohydrates that provide a slow release of energy. Porridge with ground almonds and a banana would be ideal. For those people who are fine to eat gluten, whole-wheat bread with jam or even peanut butter would be a good choice also. Some sugary carbs are fine, as long as the main source of carbohydrate is low GI and therefore slower releasing. In order to maximise hydration, a drink of between 300 and 600ml of water can be consumed with every meal on match day.

If competing in a hot or humid environment, a player can super-hydrate by consuming fluid with meals, and an extra 200ml every 15 minutes; until 60 minutes before the match. The fluid should contain electrolytes and should be 5-8% carbohydrate. Maltodextrin is the best form.
7-8am
Large bowl of porridge oats, with coconut milk, ground almonds and a banana
Separate drink - 300ml water with 20g maltodextrin and a pinch of Himalayan salt

9-10am
2 poached eggs on rye bread
300ml water with 20g maltodextrin and a pinch of Himalayan salt

12pm
Sweet potato chips
Broccoli
Haddock or chicken breast
300ml water with 15g maltodextrin and a pinch of salt

It is important to pilot this meal before a practice match in order to ascertain how easily your body digests and assimilates certain carbohydrate sources.
Eat a pre-match meal around 3 hours before the match to allow sufficient time for the food to be digested.
Again large carbohydrate meal, with a base of low GI carbohydrates and some protein. Avoid high fat foods as these take longer to digest. Carbohydrate consumed within 4 hours of a match, may decrease lipolysis. The carbohydrate amount consumed should therefore be large enough to offset any negative effects caused by this reduction in fat oxidation.

Traditionally pasta or rice have been recommended as the pre-match meal. White rice is digested and assimilated very quickly, and being a high GI carbohydrate it will not provide a sustained release of carbohydrate.
This is not a major problem, as the rice will still serve as a source of carbohydrate to top up the liver and muscle carbohydrate (glycogen) stores; which is the main objective. Ideally however, brown rice or a lower GI form of carbohydrate should be consumed.

Avoid eating solid food 90 minutes before the match
Between 2 hours & 90 minutes before the match is a great time to eat a banana. Some studies have proven that consuming foods with a high GI within an hour of a match can actually lower blood glucose, thus damaging performance levels. Consuming low GI foods an hour before a match however, can affect blood flow to working muscles, as food is still being digested in the gut.

The only recommended carbohydrate to consume an hour before a match, would be to sip on a sports drink. The sports drink should only contain maltodextrin as this has minimal effect on gastric emptying which in turn influences hydration. 2 hours before the match, a player should sip on a carbohydrate and electrolyte drink. Ideally the carbohydrate should be maltodextrin to ensure gastric emptying is optimised.

**30 minutes before the match**
Consume any pre-match supplements such as caffeine, BCAAs and/or beta alanine
Half Time Nutrition

The goals of any nutritional strategies during the half time break can be broken down:

- Replace carbohydrates
- Replace electrolytes
  - Replace fluid

A sports drink containing maltodextrin as well as electrolytes would be able to accomplish all 3 of the above goals.

You can make your own sports drink with 500ml of water, 30-50g of maltodextrin and a pinch of salt (ideally Himalayan salt).

Adding carbohydrate and electrolytes will help replace losses during the first half of the game, and also enhance rehydration.

Try out your own sports drink in a training game, before using in a competitive match. High amounts of electrolytes have been known to upset some people’s stomachs.

For additional carbohydrates, some players choose to eat high sugar, low fat and protein snacks. It is possible that this could cause a large spike of blood sugar and a large drop around 10 to 15 minutes later.

It could also slow down ‘gastric emptying’ which would reduce the
hydration effect of a sports drink. This appears to differ per individual however, so this may be something to try in a training game. Bear in mind however that some studies report that loss of fluid through sweat during a soccer match ranges from 1 to 3.5 litres, making hydration and therefore gastric emptying a primary concern of half time nutritional strategies.

Some studies also suggest that protein should be consumed at half time. Players and coaches may therefore want to experiment with adding either Branch Chain Amino Acids or whey protein to the half time drink.
Post-Match Nutrition

Rather ironically, chocolate milk has been proven in one study to enhance recovery from exercise more effectively than a commercial sports drink.

Immediately following a match, a player should consume a drink containing high GI carbohydrate, some electrolytes, and some protein. For optimal recovery, creatine and alpha lipoic acid can be taken to with the drink. Insulin levels are highest immediately after the match, and remain elevated for approximately 2 hours.

Chocolate milk contains protein, some sodium and some high GI carbohydrates and therefore is a good option for a ‘recovery drink’. Ideally however, a whey protein, maltodextrin and electrolyte drink should be consumed.

The drink should contain:
25-30g whey protein
50-100g maltodextrin
2 pinches of salt (ideally Himalayan salt, or use coconut water)
5-10g creatine
1000mg alpha lipoic acid (antioxidant that enhances creatine uptake)
Optional:
consider adding an anti-inflammatory food source such as turmeric or ginger to enhance recovery.

Consume drink then eat a banana.

Consume the drink within 30 minutes of the final whistle. Eat a high carbohydrate meal within 2 hours of the match ending. Ideally within 1 hour, as insulin levels will be higher, meaning that more carbohydrate will be utilised to replenish muscle glycogen.

Ideally, 1-1.2 g per kg Body Mass of carbohydrate should be consumed every hour for first 4 hrs in order to optimise glycogen refuelling.
General Recovery and Injury Prevention Tips

It is highly recommended that any change in routine is piloted in training or training games before a competitive match, as individual preferences and tolerances impact the effectiveness of each strategy. Extensive warm up

In cold environments, muscle temperature should be increased as much as practically possible. This reduces the chance of injury and increases maximum power-output.

The increased power output of course, consumes more calories (as more physical work is done). The extent of the warm up may need to be tailored to offset any risk of dehydration and fatigue; in warm and human environments for example. Sip on a carbohydrate/electrolyte drink during the warm up to offset any dehydration.

Dynamic stretching is recommended as part of a warm up as opposed to static stretching - the warm up should built up in intensity and replicate as closely as possible, the actual movements and actions of the game to come.

Interestingly, there is also evidence that a Half Time ‘ReWarm up’ increases performance in the second half.

Cool down Light dynamic stretching, 20 min cycle/low impact low intensity exercise. Foam roller. Will enhance recovery. Consume foods with anti-inflammatory properties within 5 hours of a match; including turmeric, ginger, pineapple and/or oily fish.
Easy Recipes

Ideally we would all be living in caves, drinking milk from our goat and foraging for berries, then cooking meals from scratch. In practical terms however, when faced with the goal of eating 2,500 calories of carbohydrate a day, one will need to fall back on a few ‘lazy’ tactics to get enough consumed per day.

Eat fresh, organic foods whenever possible, and cook from scratch whenever possible. If it’s not possible, try blending stuff.

**Pouting Fish Fingers, sweet potato Chips with Basil Mayo**

**Ingredients**
- 2 x 130 g pouting or whiting fillets
- sea salt
- freshly ground black pepper
- 2 heaped tablespoons plain flour
- 1 free-range egg, beaten
- 50 g fresh breadcrumbs
- 1 clove garlic, crushed
- 2 sprigs fresh rosemary
- ½ lemon, cut into wedges

For the sweet potato chips
- 2 medium sweet potatoes, scrubbed clean and cut lengthways into 8 wedges
- ½ teaspoon sweet smoked paprika
- olive oil

For the basil mayo
- 4 sprigs fresh basil
- 1 heaped tablespoon low-fat mayonnaise, made with free-range eggs
- juice of ½ lemon
- 1 tablespoon fat-free natural yoghurt

**Instructions**
Preheat the oven to 200ºC/400ºF/gas 6. Toss the sweet potato wedges in a roasting tray with a pinch of salt and pepper, the paprika and a lug of olive oil. Cook in the hot oven for 35 to 40 minutes, or until golden and cooked through.

Meanwhile, put the pouting fillets on a board and sprinkle over a pinch of salt and pepper and the flour, making sure they’re well coated on both sides. Dunk the floured fillets in the beaten egg then transfer them to the breadcrumbs and push and turn them until well
coated on all sides.

Put a large frying pan on a medium heat. Add a good lug of olive oil along with the garlic and rosemary to flavour the oil. When the garlic starts to sizzle, it's time to add the fish. Shake the fillets so any excess breadcrumbs fall off then add to the pan, skin-side down. If you're cooking fish fingers, they'll need 5 to 6 minutes; a whole fillet will take 7 to 8 minutes. Don't be tempted to touch the fish, use your instincts and let it cook until golden on the underside before flipping it over and reducing to a low heat while it finishes cooking.

Meanwhile, chop off the tough ends of the basil stalks then pound the rest of it with a pinch of salt in a pestle and mortar until you've got a paste. Add the mayonnaise, yoghurt and lemon juice and muddle it all together.

Serve the pouting with a portion of sweet potato chips, a good dollop of basil mayo and a wedge of lemon for squeezing over. Delicious with a crisp green salad or hot buttered peas.

Source

Lazy Alternative
Defrost some frozen fish of your choice (preferably wild, dolphin friendly fish (farmed fish is full of carcinogens and synthetic chemicals))
Preheat oven to 200ºC
Slice sweet potato into wedges, cover in black pepper, Himalayan salt and olive oil
Cook for 35 to 40 minutes

Fry fish in frying pan with olive oil or coconut oil or poach salmon in a pan full of hot water and butter for 15-20 minutes

Serve fish with sweet potato chips and a large handful of spinach
Blueberry Buckwheat Pancakes

Ingredients
90g buckwheat flour
105g wholemeal pastry flour
1 1/2 tsp baking powder
1/2 tsp bicarbonate of soda
1/4 tsp salt
240ml buttermilk
180ml nonfat milk
20g honey
2 large eggs
2 tbsp canola oil
300g blueberries, divided
160g real maple syrup

Instructions
In a large bowl whisk together the flours, baking powder, bicarbonate of soda and salt. In another bowl, beat together the buttermilk, non-fat milk, honey, eggs, and oil. Stir the wet ingredients into the dry ingredients, mixing only enough to combine them. Stir in 150g of berries.

Preheat a large nonstick flat-top or frying pan over a medium flame.

Ladle the batter into the pan with a 60ml measure. Flip the pancake when it is golden brown on the bottom and bubbles are forming on top, about 1 1/2 mins. Cook the other side until golden brown, about 1 1/2 mins.

Serve topped with more blueberries and the maple syrup.

Source
Super-Lazy Smoothie

Ingredients
40g hemp or whey protein (unflavoured ideally)
1 banana
30g porridge oats
5ml hemp oil/olive oil
1 pinch of Himalayan salt
30g maltodextrin (add only if require high carbohydrate intake that day; this is a very high GI carb that will increase muscle glycogen stores but also cause a dip in blood sugar)
10g Flax-seed powder
50-100ml of coconut milk
200-300ml water

Instructions
Blend all the ingredients for 30-60 seconds
Super Lazy High Protein Porridge

**Ingredients**
- 20-30g ground almonds
- 50-100g of porridge oats
- 1 banana
- Handful of raisons
- 100-200ml of coconut milk
- Optional – 20g whey protein

**Instructions**
Mix all ingredients except banana in a bowl and place in microwave for 2 minutes / mix in a pan on the hob for 2/3 minutes.
Serve with sliced banana

Super-Lazy Pasta

**Ingredients**
Ideally you would make your own pasta sauce using fresh tomatoes, onions, garlic, black pepper and vinegar. Freeze the sauce and reuse with each pasta meal.
Alternatively (and less healthily) use a commercial sauce
- 100g of pasta

**Instructions**
Bring a pan of water to the boil
Add pasta
Stir pasta and leave to simmer in the water for 5-10 minutes
Drain pasta in a sieve and then place back in the pan.
Mix in commercial or home-made tomato sauce.
Serve with a handful of spinach.

**Basic Stir Fry**

![Basic Stir Fry Image](image)

**Ingredients**

- 2 tbsp soy sauce
- 1 tbsp olive oil
- 1 tsp sesame oil
- Thumb-sized piece of fresh root ginger, peeled and grated
- Pack stir-fry vegetables
- Pack straight-to-wok noodles
- Meat: beef/chicken etc, roughly cubed.

**Instructions**

Put the noodles in a bowl and pour boiling water over them. Stir gently to separate, then drain thoroughly.
Put oil in pan, stir fry meat until cooked. Set aside
Stir fry ginger and harder pieces of veg for 2 mins
Add noodles and rest of veg, stir fry over high heat until just cooked
Add back meat with soy and sesame oil. Cook couple minutes, serve.

**Source**
**Christmas Couscous**

100g green or brown lentils
100g wholegrain couscous
100g vegetable stock (in the example I used hot water with vegan vegetable bouillon)
1 carrot, grated
15g pistachio nuts (shelled)
15g dried cranberries
Juice from half an orange or 1 satsuma
1 tbsp olive oil
Spices – ginger, cinnamon, cumin, coriander to taste.

*Skip cooking lentils if you are using tinned ones.*

Turn the hob onto a medium heat.
Add lentils to a pan with just enough water to cover them.
Bring to a rapid simmer so that you only see a few bubbles.
Add more water if needed and cook for 20 minutes.
Drain lentils and put to one side.
Take a bowl and mix together couscous, cranberries and spices.
Pour over hot vegetable stock and leave for 5 minutes to allow the couscous to absorb it.
Grate the carrot into a bowl.
Juice the orange into a cup and chop the parsley.
Fluff up the couscous with a fork and after the 5 minutes is up, add the juice, carrot, parsley and nuts.
Serve on top of some green salad leaves, such as cavolo nero kale, and drizzle with lemon juice.

**Source - Wholeheartedlyhealthy.com**
### Healthy Shopping List

#### Fruit & Veg – Organic if possible
- Bananas
- Tomatoes
- Broccoli
- Spinach
- Red grapes
- Pineapple
- Lettuce
- Peppers
- Grains/Carbohydrates
  - Oats
  - Buckwheat
  - Couscous
  - Quinoa
- Sweet potato

#### Grains/Carbohydrates
- Pasta*
- Wholegrain bread*
- Noodles*
- *Contain gluten
- Potatoes

#### Nuts
- Peanut butter
- Almonds
- Mixed nuts and seeds

#### Oils
- Olive oil
- Coconut oil
- Hemp oil

#### Meat & Fish
- Wild Salmon
- Grass fed Beef
- Organic Chicken

#### Spices
- Tumeric
- Ginger

#### Other
- Fish oil
- Coconut milk – 100% check ingredients
- Wheatgrass
- Raw honey (not a mix of filtered honey)
- Himalayan salt
- Flax seed powder
Supplements

I would recommend if buying from in the UK – a website such as bulkpowders.com or the proteinworks.com and if possible, buying unflavoured versions of supplements.

Protein Powder such as - Hemp Protein, egg protein, whey protein

Creatine – Creapure creatine

Alpha Lipoic Acid – To take with creatine

Maltodextrin Powder – To make own sports drinks

Optional:
Beta alanine
Caffeine
Acetyl L Carnitine
Greens powders
Caffeine tablets
References

- Nutritional guidance to soccer players for training and competition
- Caffeine enhances cognitive function and skill performance during simulated soccer activity.
- Sport-specific nutrition: Practical strategies for team sports
- Monster Supplements Kickstart 2015 ebook
- Effect of Alpha Lipoic Acid Combined with Creatine Monohydrate on Human Skeletal Muscle Creatine and Phosphagen Uptake
About the Author

I have 1st Class Degree in Sport Science from Loughborough University; an MSc in Exercise & Nutrition from the University of Liverpool (studied in Chester, awarded by Liverpool) and quite randomly, a Chartered Institute of Marketing (CIM/CAM) Diploma in Digital Marketing from the Oxford College of Marketing.

I used to be personal trainer, I’ve had 8 amateur MMA fights and 1 full contact kickboxing fight.

I write for the GoodMenProject, Business2Community, CureJoy.com, CareerFuel.net and have contributed to several martial arts publications.

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