Processed foods should be cut out of the diet as much as possible and exchanged for whole food options.

White rice ➔ Brown Rice
Chips ➔ Jacket potato
Chicken nuggets ➔ Chicken breast fillets

Some processed foods can be bad because….

1. Processed foods lose nutrients and these remaining nutrients are less available for absorption.

2. Artificial ingredients. Processed foods may contain preservatives, flavours, texturants and colourants.

3. Processed foods often contain lots of added sugar and refined carbohydrates which cause blood sugar and insulin spikes which interferes with fat metabolism and increases fat storage.

4. Processed foods can be high in calories and high in trans fats, which significantly increases the risk of heart disease. These fats increase stress upon the body, which promotes inflammation which delays recovery.

5. Processed foods are often low in fibre. Fibre has many health benefits, particularly for the gut.

6. Less energy and time is required from the body to digest processed foods. A study showed it takes approximately 50% less energy to digest processed foods over whole foods.

7. Can cause over consumption. Processed foods are ‘rewarding’ to the brain. (Food reward hypothesis)

8. Addiction. Following consumption of certain processed foods which are rewarding for the brain, dopamine can be released, if this occurs regularly over time a food addiction can occur.

Food processing affects the nutrient content and food quality.
Fizzy drinks should be limited or cut out of the diet altogether because:

- Most are high in calories with no nutritious benefits.
- Some are high in sugars.
- Carbonated drinks contain phosphoric acid which competes with calcium absorption leading to poor bone health.
- Contain caffeine which may affect sleep quality.
- Contain chemicals that impact negatively on the body.

Try to cut out as much highly processed/refined foods as possible. These foods are not needed in an athlete's diet.
Carbohydrates are an incredibly important aspect of the diet, however hold higher significance in the diet of an athlete. This is because carbohydrates are the fuel for exercise, the central nervous system, the brain and the immune system.

Carbohydrates in the general diet

The Glycemic index is a method for classifying carbohydrates. The quicker the rise in blood sugar levels following consumption, the higher the rating on the glycemic index table (out of 100). Therefore the general diet (every day carbohydrate selections) should be made up of mainly medium to low glycemic index carbohydrates.

Higher rising blood sugar is reflected by an increase in released insulin. Insulin is a hormone in the body and encourages fat storage.

These include: Butternut squash, quinoa, whole wheat couscous, porridge oats, muesli, granary bread, brown rice, whole grains, whole meal wraps, whole meal pitta breads, sweet potato, beans, lentils.

Food processing affects the nutrient content and food quality

Sources of Protein

Nuts & Seeds
Chicken
Pork
Fish
Beef
Turkey
Milk
Cheese
Quinoa
Lentils
Mussels
Prawns

EAT CLEAN: Only purchase non processed meat and cook/prepare the food yourself.

Food processing affects the nutrient content and food quality
Fats in the diet

Fats often have a bad reputation with weight loss diets often promoting the need to cut fats out of your diet. However fats play an integral role in the diet.

Fats make up part of the structure of all cell membranes, brain tissue, nerve sheaths, bone marrow and are essential for hormone production.

Fats are a great source of energy. Per gram, fats are the most energy dense nutrient:
Protein = 4 kcal per 1g  Carbohydrate = 4 kcal per 1g  Fat = 9 kcal per 1g

There are four main types of fats:
1. Monounsaturated Fats – Increase intake (good fat)
2. Polyunsaturated Fats – Increase intake (good fat)
3. Saturated fats – Limit intake (not so good fat)
4. Trans Fats – decrease if not completely cut out (bad fat)

Monounsaturated Fats
Canola Oil, Olive Oil, Olives, Monounsaturated Margarine, Spreads, Avocado, Most Nuts, Egg Yolk

Polyunsaturated Fats
Most Vegetable Oils (Sunflower, soybean, corn, cottonseed), Polyunsaturated Margarine, Spreads, Linseeds, Some Nuts, Wheatgerm, Oily fish and Fish oils

Saturated Fats
Fatty meats, Chicken skin, Butter, Cream, Full cream milk, Cheese, Lard, Coconut oil, Palm oil, Chocolate

Trans Fats
Biscuits, Cakes, Pastries, Doughnuts, Fast foods

Omega 3 fatty acids
Oily fish are rich in a group of fatty acids called omega 3s. The two main omega 3 fats include:
1. Eicosapentaenoic acid (EPA) - plays a major role in inflammation and inflammatory conditions
2. Docosahexanoic acid (DHA) - is essential for brain and central nervous system development and health, especially memory and learning of new skills

Omega 3 intake is also associated with having a positive effect on joint pain, asthma, gut health, bone health, cardiovascular health, muscle repair and immune function.
Fruit and vegetables contain vast amounts of vitamins and minerals which play major roles in virtually every metabolic process that occurs in the body.

The importance of vitamins and minerals cannot be overstated. Achieving recommended intakes will promote vast health and performance benefits including:

- Immune function
- Muscle repair
- Energy production
- Bone formation

To name but a few!

Not all vitamins and minerals are present in good volumes in every kind of fruit and veg. You need to eat a variety of different fruits and vegetables of varying colours in order to achieve good intakes of a diverse range of vitamins and minerals.

**Consume 2 veg portions with each meal**

**Consume at least 2 portions from each colour set throughout the day**

**Consume 2/3 portions of fruit a day**
Recipe ideas: breakfast

Honey muesli with raspberries & hazelnuts

**Ingredients**
- 225g porridge oats
- 125ml freshly squeezed orange juice
- 225ml natural yogurt
- 3 tbsp clear honey
- Finely grated zest of 1 lemon
- 2 red or pink dessert apples
- 2x 125g punnets raspberries
- 50g hazelnuts, coarsely chopped

**Method**
Mix oats, orange juice and 300ml/½ pint cold water in a bowl. Cover with cling film and leave in the fridge overnight. The next morning, stir in the yogurt, honey and lemon zest. Quarter and core the apples, grate them in and stir well. Spoon into bowls and top with raspberries and hazelnuts.

Breakfast muffins

**Ingredients**
- 2 large eggs
- 150ml pot natural low-fat yogurt
- 50ml rapeseed oil
- 100g apple sauce or puréed apple
- 1 ripe banana, mashed
- 4 tbsp honey
- 1 tsp vanilla extract
- 200g wholemeal flour
- 50g rolled oats, plus extra for sprinkling
- 1½ tsp baking powder
- 1½ tsp bicarbonate of soda
- 1½ tsp cinnamon
- 100g blueberries
- 2 tbsp mixed seeds

**Method**
Heat oven to 180C/160C fan. Line a 12-hole muffin tray with large muffin cases. In a jug, mix the eggs, yogurt, oil, apple sauce, banana, honey and vanilla. Tip the remaining ingredients, except seeds, into a large bowl, add a pinch of salt and mix to combine. Pour the wet ingredients into the dry, mix briefly until you have a smooth batter, don’t over mix as this will make the muffins heavy. Spoon the batter between the cases. Sprinkle the muffins with the extra oats and the seeds. Bake for 25-30 mins until golden and well risen, and a skewer inserted to the centre of a muffin comes out clean. Remove from the oven, transfer to a wire rack and leave to cool. Store in a sealed container for up to 3 days.
Recipe ideas: snacks

Dried fruit energy nuggets

**Ingredients**
- 50g soft dried apricot
- 100g soft dried date
- 50g dried cherry
- 2 tsp coconut oil
- 1 tbsp toasted sesame seed

**Method**
Whizz apricots with dates and cherries in a food processor until very finely chopped. Tip into a bowl and use your hands to work in coconut oil. Shape the mix into walnut-sized balls, then roll in sesame seeds. Store in an airtight container until you need a quick energy fix.

Dark chocolate, banana & rye loaf

**Ingredients**
- 50ml extra virgin olive oil
- 150g rye flour
- 100g spelt flour
- 2 tsp baking powder
- 50g cocoa powder
- 2 large eggs, beaten
- 200ml coconut milk
- 80ml maple syrup
- 3 ripe bananas, mashed
- 50g dark chocolate, roughly chopped

**Method**
Heat oven to 180C/160C fan. Grease and line a 900g loaf tin. In a large bowl, combine all the dry ingredients except the chocolate. In a separate bowl, whisk together the oil, eggs, coconut milk and maple syrup, then stir in the bananas. Pour the wet ingredients onto the dry and stir to combine. Add the chocolate, then spoon into the prepared tin. Bake in the centre of the oven for 50-55 mins until a skewer inserted into the middle of the loaf comes out clean. Leave to cool in the tin, then remove and cut into slices to serve. Will keep in an airtight container for 3-4 days, or freeze for up to 3 months – warm in the oven before serving.
Recipe ideas: light meals

Spicy butternut squash soup

Ingredients
- 1 large butternut squash, peeled and deseeded
- 2 tbsp olive oil
- 1 tbsp butter
- 2 onions, diced
- 1 garlic clove, thinly sliced
- 2 mild red chilli, deseeded and finely chopped
- 850ml hot vegetable stock
- 4 tbsp crème fraîche, plus more to serve

Method
Heat oven to 200C/180C fan. Cut the squash into large cubes, about 4cm/1½in across, then toss in a large roasting tin with half the olive oil. Roast for 30 mins, turning once during cooking, until golden and soft. While the squash cooks, melt the butter with the remaining oil in a large saucepan, then add the onions, garlic and ¾ of the chilli. Cover and cook on a very low heat for 15-20 mins until the onions are completely soft. Tip the squash into the pan, add the stock and the crème fraîche, then whizz with a stick blender until smooth. For a really silky soup, put the soup into a liquidiser and blitz it in batches. Return to the pan, gently reheat, then season to taste. Serve the soup in bowls with swirls of crème fraîche and a scattering of the remaining chopped chilli.

Tuna, avocado & quinoa salad

Ingredients
- 100g quinoa
- 3 tbsp extra virgin olive oil
- Juice 1 lemon
- ½ tbsp white wine vinegar
- 120g can tuna, drained
- 1 avocado, stoned, peeled and cut into chunks
- 200g cherry tomatoes on the vine, halved
- 50g feta, crumbled
- 50g baby spinach
- 2 tbsp mixed seeds, toasted

Method
Rinse the quinoa under cold water. Tip into a saucepan, cover with water and bring to the boil. Reduce the heat and simmer for 15 mins until grains have swollen but still have some bite. Drain, then transfer to a bowl to cool slightly. In a jug, combine the oil, lemon juice and vinegar with some seasoning. Once the quinoa has cooled, mix with the dressing and all the remaining ingredients and season. Divide between plates or lunchboxes.
Recipe ideas: main meals

**Lamb tagine with dates & sweet potatoes**

**Ingredients**
- 6 tbsp olive oil
- 4 onion, thinly sliced
- 2 tbsp finely chopped fresh root ginger
- 2kg boneless lamb shoulder, cut into 5cm chunks
- 4 tsp ground cumin
- 2 tsp each paprika and ground coriander
- 2 cinnamon stick
- 850ml passata
- 700g sweet potato, cut into chunks
- 350g pitted date
- 100g blanched almond, toasted
- Handful coriander, roughly chopped

**Method**
Heat oil in a large, deep pan. Add onions, then gently fry until softened, about 5 mins. Stir in ginger, add lamb in batches, then fry on all sides until lightly coloured. Return all the lamb to the pan, stir in spices and cinnamon sticks, then cook for 1 min. Add the passata and 800ml water, then bring to the boil, stirring. Season well, then cover and simmer for 1½ hrs, until the lamb is tender. Add sweet potatoes, stir well, cover then cook for 20 mins or until the potatoes are just tender. Stir in the dates and heat through for 5 mins. Taste and add more seasoning if necessary. Scatter with the almonds and coriander to serve.

**Chilli beef with black beans**

**Ingredients**
- 1 tbsp both cumin seed & ground coriander
- 2 tbsp both hot chilli powder and sweet paprika
- 500g pack extra lean steak mince
- 4 garlic clove, sliced
- 400g can chopped tomato
- 1 reduced-salt beef stock cube
- 2 tbsp tomato purée
- 3 peppers, deseeded and diced
- 2 x 400g cans black beans
- Wholegrain brown rice
- Large pack coriander, stalks and leaves separated and roughly chopped

**Method**
Tip spices into a large pan and warm for a few seconds. Add mince and garlic, and stir, breaking down the beef as it browns. Pour in the tomatoes and a can of water, crumble in the stock cube, then stir in the tomato purée, peppers and coriander stalks. Cover the pan and cook for 15 mins. Stir in the black beans and their juice, and cook for 10 mins more until everything is tender. Meanwhile, cook the rice following pack instructions. Stir the coriander leaves into the chilli and serve.