

EAT YOUR WAY TO THE PODIUM

ENDURANCE SPORT NUTRITION GUIDE



Whitney Dagg
Nutrition Consultant

Table of Contents

Table of Contents 2

Introduction..... 3

Day to Day Nutrition 4

 Macronutrient Basics..... 4

 Regular High Quality Meals..... 5

 Snack Smart..... 5

Training Nutrition 6

 Pre-Training..... 6

 During Training..... 6

 After Training..... 7

 Recovery Foods..... 9

 General Snacks..... 9

Other considerations 10

 Alcohol..... 10

 Supplements 11

Race Nutrition..... 13

 How much to eat..... 13

 Hydration 14

GI Problems 15

Body Mass..... 17

 Maintaining Weight During Intense Training Periods 17

 Weight Loss 17

 Weight loss is slow..... 17

 Loosing Body Fat 18

Practical Meal Options 19

 Breakfast Meal Ideas..... 19

 Lunch Meal Ideas..... 21

 Dinner Meal Ideas 24

About the Author 27

Please note that the above page numbers relate to the full copy of this e-book.
Not this edited preview.

Introduction

There is a mindset among many endurance athletes of '***I can eat anything I want, because I will just burn it off in training***'. While this is true (you will likely burn it off), the reason you need to pay attention to your nutrition is not so you do not get fat, it is so you are providing your body with the right 'ingredients' that it needs to:

- 1) Function as a normal human being
- 2) Perform the required training
- 3) Repair and adapt to the training that you are doing
- 4) Maximise your performance on race day

Nutrition is such an important aspect for any athlete looking to maximise their performance gains from training. Large gains can be made through incorporating simple changes into your day to day eating. This guide is aimed at providing some baseline fundamentals that can easily be integrated into your current nutritional intake.

Sports nutrition can be broken down into three main components

- 1) Day to day nutrition
- 2) Training Nutrition
- 3) Racing Nutrition

These three components form the basis of this nutrition guide and how the chapters are constructed.

Day to Day Nutrition

Most people only think about nutrition leading into race day in the form of what sticky gels and sweet sports drinks they are going to use for the race. However, the day to day nutrition that someone training for an endurance event consumes is even more important. To train and race efficiently you need to take care of your day to day nutrition first. Your body needs the right nutrients at the right time, to perform daily tasks optimally and be primed for exercise. Adequate day to day nutrition provides the best 'environment' for your body to adapt to the stress you place on it through training and allows you to become fitter and stronger. Before we get into the details let have a look at some background information.

Macronutrient Basics

Macronutrients are defined as being the classes of chemical compounds that humans consume in the largest quantities and provide bulk energy. There are 4 macronutrients; Carbohydrate, Protein, Fat and Alcohol.

Carbohydrate

Carbohydrate containing foods provide us with everyday fuel. They not only fuel our muscles, but also our brain to keep us functioning at our best. They can be broken into two distinct groups; slow burning (also known as low Glycemic Index (GI)) and fast burning (high GI). For smart day to day nutrition, choose slow burning carbohydrate sources that will give you sustained energy in between meals. Examples of low GI carbohydrates are wholegrain breads, wholegrain cereals, brown rice, starchy vegetables (potato and kumara), and fruit. These carbohydrate foods are nutrient dense, providing fibre, vitamins and minerals.

Protein

Protein containing foods are required in our diet to build and repair many tissues and structures contained in our body. They are not only responsible for building muscle tissue, but they are essential for the optimal functioning of all bodily cells. Choose protein sources such as lean meat, fish, low fat dairy, eggs, beans and lentils. Excess protein cannot be stored in your body, but can be used as an energy source.

Fat

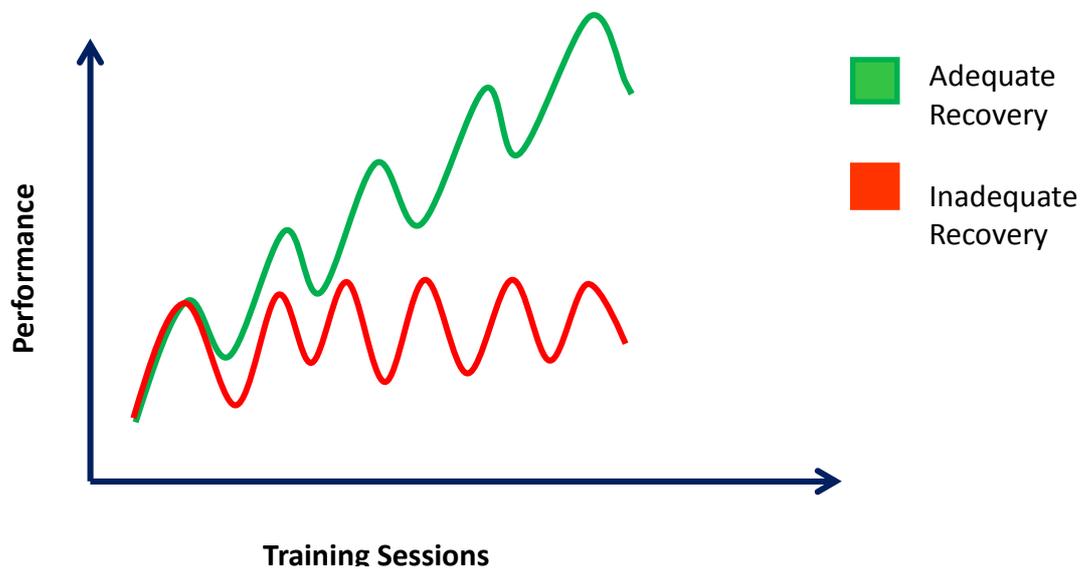
Not all fat is bad. Fat is very high in energy, but is required daily in small amounts to assist in the absorption of several nutrients and optimal health. Actively choose 'oily' fish, nuts, seeds, olive oil, avocados and coconut oil as your fat sources.

Alcohol

Most people are surprised when they hear that alcohol is a macronutrient. Alcohol is formed when yeast ferments without oxygen. Different sugars in foods form different forms of alcoholic drinks. For example beer is made from the sugar of malted barley. More information about alcohol can be found below.

EAT YOUR WAY TO THE PODIUM

Figure 1: This graphic depicts the importance of adequate recovery nutrition post training and the effect that it has on performance improvement. The performance equation is a fundamental principle that requires both training stress and recovery for performance to be improved.



Training stress + Recovery = Improved Performance

Refuel:

Get some fast acting (high GI) carbohydrate on board as soon as possible to refuel your depleted energy tank. This will provide your muscles and liver with energy to carry out the repair process and prepare for the next session. A general guide is that you should have 1 g/kg body weight of carbohydrate. For example a 75 kg athlete will need 75 g of carbohydrate to refuel.

Rehydrate:

A good idea is to monitor your body weight before and after a session to get an idea of how much you sweat. To rehydrate you need to drink 1.5 X body weight loss in litres. For example if you lost 1 L of sweat during your training session you need to drink 1.5 L to replace this.

Rather than drinking large amounts of fluid at once, which can make you feel bloated, drink small amounts over 2-3 hours. You can monitor your urine colour to determine hydration status. When you are hydrated your urine will be a pale yellow or clear colour. Sports drink

EAT YOUR WAY TO THE PODIUM

Fish Oil

Fish oil tablets contain essential omega fatty acids called EPA and DHA. Our body cannot produce these molecules on its own, therefore they must be provided from our diet. Fish oil can be obtained by eating fish or taking a daily fish oil supplement. It is recommended that we consume fish twice a week as part of a balanced diet. While foods are your best bet for getting omega-3s in your diet, fish oil supplements are also available for those who do not like fish. EPA and DHA contained in fish oil have the following benefits for our overall health.

- Supports a healthy cardiovascular system
- Supports central nervous system activity
- Supports healthy cognitive function
- Helps support and manage a healthy mood by regulating hormones
- Helps maintain healthy triglyceride and cholesterol levels
- Supports exercise induced inflammation, promoting healthy joints and reducing the risk of injury

As with vitamins and minerals, fish oil is something that we can get from whole foods, however they can be beneficial.

EAT YOUR WAY TO THE PODIUM

Rocket and Chickpea Penne (Vegetarian Option)		
	Ingredients	Cooking Guidelines
	<p>Serves 3</p> <ul style="list-style-type: none"> ▪ 400g can chickpeas ▪ 500g jar of tomato pasta sauce ▪ 350g Penne pasta ▪ 100g rocket ▪ 50g shaved parmesan ▪ 3 tbsp walnut pieces ▪ 3 tbsp fresh basil (optional) ▪ Add vegetables of your choice 	<p>Serves 3</p> <ul style="list-style-type: none"> ▪ Place chickpeas in pan with pasta sauce and cook over a gentle heat ▪ Add veges as desired ▪ Cook pasta in saucepan ▪ Combine pasta with chickpeas, sauce and veges ▪ Toss through rocket ▪ Top with parmesan, walnuts and fresh basil
Pork and Noodle Stir fry		
	Ingredients	Cooking Guidelines
	<ul style="list-style-type: none"> ▪ 100g rice noodles ▪ 1 tbsp olive oil ▪ 200g lean pork mince ▪ 2 spring onions ▪ ½ cup of carrots, cut into sticks ▪ ½ cup of broccoli florets ▪ 2 Tbsp Soy sauce (salt reduced) ▪ 1 Tbsp Sweet chilli sauce 	<ul style="list-style-type: none"> ▪ Place rice noodles in a bowl and pour over boiling water to cover. Leave to soak for 8-10 mins ▪ Heat oil in pan and add mince to brown ▪ Add vegetables and cook as desired ▪ Add soy and sweet chilli sauce and mix until heated ▪ Add drained noodles
Cottage Pie (1/4 of recipe) + 1 wholemeal pita bread		
	Ingredients	Cooking Guidelines
	<ul style="list-style-type: none"> ▪ 2 tsp olive or canola oil ▪ 1 onion chopped ▪ 2 tsp crushed garlic ▪ 4 cups diced veges (carrot, beans, broccoli) ▪ 800g stewing beef ▪ 1 L beef stock ▪ 1 tbsp tomato paste ▪ ¼ cup red wine ▪ Mixed herbs (your choice) <p>Topping</p> <ul style="list-style-type: none"> ▪ 3 parsnips ▪ 3 carrots ▪ ½ cup grated edam cheese <p>Serves 4</p>	<ul style="list-style-type: none"> ▪ Cook onion and garlic with oil ▪ Add meat and brown ▪ Add stock, tomato paste, wine, herbs and vegetables ▪ Bring to boil then cover and simmer for 2 hours <p>Option: can cook beef mixture in the slow cooker throughout the day if short on time</p> <ul style="list-style-type: none"> ▪ Cook parsnip and carrot and mash together ▪ Pour stew mixture into a oven dish and top with mash and grated cheese ▪ Bake until golden

About the Author

Whitney Dagg has a passion for fitness and nutrition for sports performance. She believes that nutrition is a highly important aspect for all athletes and is the key to optimal performance.

Whitney is an elite long distance off-road runner. She has broken the woman's course record in the Routeburn Classic adventure run, won the Surf Coast Century 100 km race as well as placing highly in the North Face 100, Kepler Challenge and other ultra endurance events. Along with this Whitney has also 'dabbled' competitive mountain biking and adventure racing.

Whitney combines this personal experience with the theoretical background of a Bachelor of Applied Science in Sport and Exercise Nutrition from Otago University. This combination of practical experience and academic education has allowed Whitney to help many athletes in a variety of sports to maximise their personal performance.

Feel free to contact Whitney at whitney.epc@gmail.com if you have any questions or would like to get more personalised nutrition advice.

