

Absolute
Sports
Nutrition

Nutrition for Training and Performance

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Eatwell Guide

Check the label on packaged foods
Each serving contains:

Energy	250	250	1.5g	0.5g	5%
Carbs	50g	10g	0.5g	0.5g	10%
Fat	10g	10g	0.5g	0.5g	10%
Salt	10g	10g	0.5g	0.5g	10%

 of an adult's reference intake
 Typical values (as sold) per 100g/100ml/100kcal

Use the Eatwell Guide to help you get a balance of healthier and more sustainable food. It shows how much of what you eat overall should come from each food group.

8-8 a day
Water, lower fat milk, sugar-free drinks including tea and coffee all count.
Limit fruit juice and/or smoothies to a total of 150ml a day.

Choose wholegrain or higher fibre cereals with less added fat, salt and sugar

Choose unsaturated oils and use in small amounts

Oil & spreads

Choose lower fat and lower sugar options

Dairy and alternatives

Beans, pulses, fish, eggs, meat and other proteins

Eat more beans and pulses, 2 portions of sustainably sourced fish per week, one of which is oily. Eat less red and processed meat

Eat less often and in small amounts

Per day 2000kcal 2500kcal = ALL FOOD + ALL DRINK

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Iron

Low levels of iron can cause iron-deficiency anaemia which can lead to tiredness, reduced ability to work and concentrate and an increased risk of infections.

- ❖ Red meat
- ❖ Fish
- ❖ Poultry
- ❖ Shellfish
- ❖ Dark green leafy vegetables
- ❖ Dried fruit




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Gender / stage of life	Recommended Intake mg / day
Females 11 - 18	14.8
Males 11 - 18	11.3
Females 19 - 50	14.8
Males 19 - 50	8.7
Males / Females 50+	8.7

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Calcium

- ❖ Vital for bone formation and metabolism.
- ❖ Ensures strong bones from young until old age.
- ❖ A lack of calcium can cause things from broken bones to rickets.

Table 1. Recommended intake of

Gender / stage of	mg / day
Females 11 - 18	800
Males 11 - 18	1000
Males / Females	700
Males / Females	700
Lactating women	1250

Table 2. Calcium sources

Source	Serving Size	Calcium Content (mg)
Cabbage	1 cup	158
Tofu (firm)	1/2 cup	861
Soy milk	1 cup	368
Cows milk	1 cup	306
Cheddar Cheese	30g	204
Mozzarella	30g	207
Sardines, canned	100g	382

Omega 3

Why are they important?

- ♦ Recovery - reduces inflammation.
- ♦ Assisting in immune function
- ♦ Increased insulin sensitivity
- ♦ Prevent hypoglycaemia
- ♦ Increased power in older populations.
- ♦ Improved brain function in certain populations.

Gender / stage of life	Recommended Intake g /day
Men 19+	1.6
Women 19 +	1.1
Pregnant Women 19+	1.4
Breastfeeding women 19+	1.3

Sources

Omega 3 is split into two groups; sources found in nuts and seeds - ALA, and sources found in marine sources - DHA or EPA.

- Anchovies
- Flaxseed
- Flaxseed Oil
- Mackerel
- Herring
- Salmon
- Walnut oil
- Soy beans
- Pumpkin Seeds

Vitamin D

♦ Primary source is sunshine

♦ UVB rays

Can be affected by

♦ Smog

♦ Smoke

♦ Window glass

♦ Sun screen

♦ Season

♦ Latitude

Vitamin D

Food Source	Serving	Content (IU)
Cod Liver oil	15g	1360
Egg Yolk	1	20 - 40
Soy milk	1 cup	100
Cereals (fortified)	30g	40 - 100
Salmon, wild	100g	980
Tuna, steak	100g	82
Shiitake mushrooms	100g	18
Portobello mushroom	100g	7



Recommended daily intake: 600IU or 15µg per day.

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Performance impact of hydration

- ♦ 2% dehydration = 10% drop in performance
 - ♦ Training target = 60.0 seconds
 - ♦ Dehydrated = 66.0 seconds
 - ♦ How disappointed would you be with this session?
 - ♦ In a race 10% can be the difference between Gold vs Silver or even 1st vs last
- For athletes / sports or times when training is not based on time:
- ♦ Lowered mood state
 - ♦ Reduced concentration
 - ♦ Lowered immune function

Staying Hydrated

Pre	During	Post
Water / Flavoured water	Sports Drinks (>1.5 hrs)	Water / Flavoured water
Fruit Juice (1-2hrs before)	Squash	Fruit Juice (1-2hrs before)
Squash	Water	Squash
Milk		Milk

- ❖ Drink 2 - 5 litres per day (including water, cordial, tea, coffee etc.)
- ❖ Drink 750ml per hour when training (may change due to adaptations in athletes to regulate body heat - e.g. swimmers)
- ❖ Sip throughout the day, don't drink large quantities in one go.

Recovery

Adequate recovery is one of the most important parts of an athlete's training regime.

It is essential after every training session and race.

Recovery is aimed at:

- ❖ Re-fuelling
- ❖ Repair
- ❖ Adaptation

It will also contribute to:

- ❖ Reduced immunity risk
- ❖ Reduced injury risk

Post-Training

- ❖ 30 minute window
- ❖ Include:
 - ❖ fast absorbed carbohydrate
 - ❖ high quality protein.

Recommendations:

- ❖ Carbohydrates: Approx. 50-70g.
- ❖ Protein: Approx. 20-30g.
- ❖ Avoid high fat foods

Example Recovery Snack Combinations

Banana & Tuna

Or

4 x Muller Yoghurt

Or

2 x Apple & 1 Pint of milk

Or

Homemade flapjack & Pint of milk

Or

200g cottage cheese & 2 x orange & 2 Apples

So what does a day look like

Pre am training breakfast	Lizis Original Granola with whole milk
Post Training snack	2 x Apple with 1 pint of milk
Second breakfast	2 x Oats So Simple original
Snack (am)	2 slices (1cm) Soreen with 10 cashew nuts
Lunch	Chicken Pasta Salad (Homemade)
Pre Training Snack (pm)	52g Flapjack (Basic) with 125g whole milk yoghurt
During training	Cordial / Water
Post Training (pm)	3 x medium Bananas with 1 pint milk
Dinner (pm)	1 fillet: Balsamic-glazed Salmon Fillets with 2 or 3 vegetable portions, 160g basmati rice
Pre-bed snack	Pudding rice canned (375g)

Competition days

- ❖ Keep it simple
- ❖ Follow the same patterns and rules as training days
- ❖ Include carbohydrates, protein and fats along with lots of vitamins and minerals.
- ❖ Avoid “treat” choices
- ❖ Most important - plan what athletes will do.



Competition day snacks

Carbohydrate foods	Protein Snacks	Others
Ryveta	Nut butters	Ground flaxseeds / chia seeds
9 bars	Nuts / Trail mix	Cinnamon
Rice cakes	Beef Jerky	Honey (individual sachets)
Flapjacks	Tinned tuna (no drain)	Marmite
Instant oats / Porridge pots*	Tinned mackerel / sardines	Individual jam sachet
Dried Fruit	Powdered Milk / Skimmed milk	Cordial / Robinsons Squash'd
John West Steam Pot (http://tinyurl.com/jcen88h) *	Portion sized nut and seed tubes (https://wylldsson.com/products)	Flask for boiled water
Couscous pot* (http://tinyurl.com/hk8ctbk)		Zip lock bags
Soup Pots* (http://tinyurl.com/gvt4le2)		Tupperware tub http://tinyurl.com/ggd1vjf http://tinyurl.com/ha65g9e
Merchant Gourmet Ready to Eat grains (http://tinyurl.com/hpmt772)		Plastic knife and fork
Merchant Gourmet Ready to Eat snack pots (http://tinyurl.com/zkvjvh5)		Washing up wand http://tinyurl.com/gms8lac

Useful resources

- ❖ British Dietetic Association: www.bda.uk.com
- ❖ Sport and Exercise Nutrition Register: www.senr.org.uk
- ❖ Association for nutrition: www.associationfor nutrition.org
- ❖ Precision Nutrition: www.precisionnutrition.com
- ❖ AIS: www.ausport.gov.au/ais/nutrition



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