

READY RECKONER OF PROTEIN FOODS

Food portions containing approximately 20 grams of animal protein

Animal Source	Approximate Weight		Handy Measure
Beef, lamb, pork	75g	3oz	2 medium slices
Turkey, chicken	75g	3oz	1 small breast
Liver	100g	4oz	2 tablespoons
Grilled fish	100g	4oz	1 small fillet
Fishfingers	100g	4oz	6 fishfingers
Salmon/tuna	100g	4oz	1 small tin
Sardines	100g	4oz	1 small tin
Shrimps/prawns	100g	4oz	2 tablespoons
Cockles	200g	8oz	4 tablespoons
Eggs			3 medium
Cheddar cheese	75g	3oz	2 matchbox size pieces
Edam cheese	150g	6oz	2 matchbox size pieces
Cottage cheese	150g	6oz	4 tablespoons
Milk skimmed/semi skimmed	600ml	24 fl oz	1 pint
Yoghurt- low fat	400ml	16 fl oz	3 cartons

Food portions containing approximately 10 grams of vegetable protein

Vegetable Source	Approximate Weight		Handy Measure
Nuts (eg, peanuts, cashews)	50g	2oz	1 medium packet
Seeds (eg, sunflower, sesame)	50g	2oz	4 tablespoons
Baked beans	200g	8oz	4 tablespoons ½ large tin
Kidney beans/split peas	150g	6oz	5 tablespoons cooked
Lentils	150g	6oz	5 tablespoons-cooked
Tofu (soya bean curd)	125g	5oz	1/2 packet
Soya milk	350ml	14 fl oz	approx 2/3 pint
Hummous	125g	5oz	3 tablespoons
Peanut butter	50g	2oz	Thickly spread on 2 slices of bread
Bread	125g	5oz	4 large slices
Pasta/noodles	250g	10oz	8 tablespoons cooked
Rice	450g	18oz	12 tablespoons cooked
Cornflakes	100g	4oz	2 large bowls
Rice Krispies	150g	6oz	3 large bowls
Weetabix	100g	4oz	5 Weetabix
Digestive biscuits	100g	4oz	7 biscuits
Semi-sweet biscuits	150g	6oz	6-8 biscuits

Protein Calculator

Athletes need to eat between 1.2-2.0 grams protein/kg body weight/day.

The quantity of protein you require depends on your body weight and the type of training you are doing.

CALCULATING YOUR PROTEIN REQUIREMENT

Record your body weight in kilograms

For example

Protein required for a 60kg endurance athlete is:

Weight in kg	60
Protein requirement/kg	1.2-1.5 g (grams)
Protein requirement/day	72-90 grams protein per day

Your protein requirement is:

Weight (kg) x Protein requirement grams (g) = Protein requirement per day grams (g).

The Ready Reckoner of protein foods will help you to work out which types of foods you will need.

Protein quality is important. Try to ensure that about 2/3 of your protein intake is from the animal sources. These foods are considered as high biological value. This means that the build up of protein is similar to humans.

Carbohydrate Exchange List

Ready Reckoner

Food portions containing approximately 50 grams of carbohydrate			
	Approximate Weigh		Handy Measures
	Grams	Oz	
Breakfast Cereals			
Porridge (made with water and milk)	500	20	2 large bowls
Weetabix	75	3	3-4
Shredded Wheat	75	3	3
Shreddies	75	3	1 large bowl
Branflakes	75	3	1 large bowl
Cornflakes	50	2	1 large bowl
Muesli (unsweetened)	75	3	1 medium bowl
Cereal & Grains			
Pasta - white or wholewheat (cooked)	225	9	8 tablespoons
Rice (cooked)	175	7	4 tablespoons
Tinned spaghetti in tomato sauce	400	16	1 large can
Tinned spaghetti in tomato sauce	75	3	1 layer
Tinned ravioli	500	20	1 large can
Pulses			
Baked beans	325	13	7 tablespoons
Sweetcorn	300	12	10 tablespoons
Red kidney beans	300	12	10 tablespoons
Chickpeas	275	11	10 tablespoons
Potatoes			
Boiled	300	12	5 egg size
Jacket skin	175	7	1 medium
Mashed	325	13	5 scoops
Chipped	175	7	¾ chip shop portion
Roast	200	8	4 small
Crisps	100	4	4 packets
Low fat crisps	75	3	3 packets
Bakery Products			
White bread	100	4	3-4 slices
Wholemeal bread	125	5	3-4 slices
Rolls	100	4	2 soft/crusty
Pitta bread	100	4	1 large
Naan bread	100	4	2 mini
Crumpets	125	5	3
Currant Buns/Teacakes	100	4	1-2
Fruit scones	100	4	2
Malt loaf	100	4	2-3 slices
Welsh Cakes	75	3	3
Bagels	75	3	1
Jam tarts	75	3	3
Swiss roll	100	4	3slices
Cereal Bars & Desserts			
Jordans Fruesli (Fruit & Nut)	80	3	2 ½ bars
Jordans Original Crunchy	80	3	2 ½ bars
Tracker (Nut)	80	3	3bars
Jelly	70	3	½ packet

Food portions containing approximately 50 grams of carbohydrate

	Approximate Weigh		Handy Measures
	Grams	Oz.	
Fruits			
Apples	425	17	4 medium
Oranges (peeled)	625	25	4 medium
Pears	525	21	3 medium
Bananas	225	9	2 large
Dried apricots	150	6	20
Dates (dried)	100	4	7
Figs (dried)	100	4	5
Raisins	75	3	3 tablespoons
Grapes	325	13	60
Peaches in juice	500	20	1 large can
Pineapple in juice	400	16	1 large can
Apricots in juice	400	16	1 ½ large cans
Biscuits			
Plain Digestive	75	3	5
Ginger Nuts	75	3	7
Fig Rolls	125	5	4-5
Jaffa Cakes	75	3	6
Oatcakes	75	3	6
Ryvita	75	3	9
Crackers	75	3	10
Rice cakes	75	3	10
Dairy Foods			
Rice pudding (low fat)	325	13	1 can
Ice cream	225	9	4 scoops
Custard (low fat)	425	17	1 can
Milk - whole, semi or skimmed	1000ml	40gl.oz	2 pints
Confectionery			
Milk or plain chocolate bar	75	3	1 ½ 50g bars
Kit Kat	75	3	8 fingers
Milky Way bars	75	3	1 ½ bars
Mars Bar	75	3	1 std bar
Bounty	100	4	1 ½ std bars
Snickers	100	4	1 ½ std bars
Jelly Babies	75	3	1 med packet
Liquorice Allsorts	75	3	1 med bag
Fruit Pastilles	75	3	2 tubes
Sugar/Preserves			
Table sugar - white or brown	50	2	12 level teaspoons
Jam	75	3	9 level teaspoons
Honey	75	3	9 level teaspoons
Drinks			
Fruit juice	550	22	1 pint
Ribena (diluted)	400	16	2 glasses
Lemonade (not diet)	800	32	2 ½ cans
Cola (not diet)	500	20	1 ½ cans
Lucozade (Original)	250	10	1 glass
Isotonic sports drink	600	24	2 cans

Reference:

McCance R.A., Widdowson, E.M. (1991). The Composition of Foods, RSC. 25g=1oz
 Crawley, H. (1988). Food Portion Sizes. H.M.S.O. 25ml=1fl oz

KEY

Which foods provide Iron?

Food	Handy Measures	Weight		Iron Points	Iron Content (Mg)
		G	Oze		
Meat, Fish & Alternatives					
Almonds/Brazil nuts/Cashew nuts	Average portion	15	½	1	0.5
Baked beans in tomato sauce	1 small tin	225	9	6	3.2
Beef mince, stewed	Small portion	150	6	9	4.7
Bolognese sauce	Average portion	200	8	6	2.8
Butter beans, boiled	Average portion	75	3	2	1.1
Chilli con Carne	Average portion	200	8	9	4.4
Corned beef	2 thin slices	50	2	3	1.4
Egg, boiled	1 egg (medium)			2	1.1
Fish paste	Average spread on bread	15	½	2	0.9
Lean roast lamb	Small portion	100	4	3	1.7
Liver	Small portion	50	2	13	6.4
Liver pate low fat	Average on slice of bread	50	2	6	3.1
Moussaka	Average portion	300	12	7	3.3
Pilchards in tomato sauce	1/2 small can	100	4	5	2.7
Red kidney beans/lentils, boiled	1 tablespoon	25	1	1	0.5
Red Salmon, canned	Large portion	100	4	3	1.4
Sardines in tomato sauce	Large portion in sandwich	50	2	5	2.3
Shepherd's Pie	Average portion	300	12	7	3.6
White fish (eg: Cod/Haddock)	Average portion	100	4	1	0.5
Fruit & Vegetables					
Apricots (ready soaked)	10 (snack pack size)	50	2	7	3.4
Figs, dried	4 figs	75	3	6	3.2
Hummous (Chick peas)	Small serving	50	2	2	0.9
Raisins/Sultanas, dried	1 tablespoon	25	1	1	0.6
Spinach, boiled	Average serving	100	4	3	1.7
Bread, other Cereals & Potatoes					
All-Bran/Bran Buds	Medium portion	50	2	12	6.0
Branflakes	Medium portion	50	2	34	16.8
Bread, wholemeal	3 medium slices	100	4	5	2.6
Jacket potato	Large	200	8	3	1.4
Muesli, not crunchy	Small portion	50	2	6	2.8
Potatoes, boiled	3 egg sized potatoes	150	6	1	0.6
Shredded Wheat	2 pieces	50	2	4	2.0
Weetabix	2 biscuits	50	2	8	3.8
Weetaflakes	Small portion	25	1	6	2.9
Wholemeal pitta bread	1 small	75	3	4	2.0
Wholemeal roll	1 roll	50	2	3	1.7
Miscellaneous					
Peanut butter	Thick spread on bread	25	1	1	0.5
Rich fruit cake	Average portion	75	3	3	1.4
Sesame/Sunflower seeds	1 tablespoon	15	½	2	1.0
Tahini (Sesame seed paste)	1 heaped teaspoon	25	1	5	2.6
Toasted Teacake/Currant bun	1 teacake/1 bun	50	2	2	1.2
Plain Digestive biscuit	3 biscuits	50	2	3	1.6

REMEMBER that 1mg Iron = 2 IRON POINTS

McKance, R.A., Widdowson, E.M. (1991). The composition of Foods, RSC Crawley, H. (1998). Food portion sizes. H.M.S.O

KEY 25g = 1 Oz and 25 ml = 1 fl Oz