



Vitamins, Minerals and Antioxidants

The small players that make a big difference

Micronutrients are the vitamins and minerals your body needs in tiny amounts to work properly. They provide no energy themselves, but they power nearly every process inside you, from releasing energy to bone strength and immunity. A varied, colourful diet is the best way to get them.

Vitamins

Vitamins are made by plants and animals and needed only in trace amounts. There are 13 in total, in two groups.

Fat-soluble (A, D, E, K)

- Need fat to be absorbed
- Stored in the liver and fatty tissue
- A steady supply builds up over time

Water-soluble (B group and C)

- Need water to be absorbed
- Not stored, lost in urine
- Top them up regularly from food

Vitamin D is the exception your body can make, using sunlight. The NHS advises a 10 mcg daily supplement in autumn and winter, when sunlight is too weak.

Minerals

Mineral	Role	Found in
Calcium	Bones, teeth and muscle contraction	Dairy, fortified alternatives, leafy greens
Iron	Carries oxygen, helps release energy	Red meat, beans, lentils, fortified cereals
Potassium	Fluid balance, nerve and muscle function	Fruit, vegetables, potatoes
Zinc	Growth, immunity and wound healing	Meat, shellfish, seeds, wholegrains
Sodium	Fluid balance (most of us get too much)	Salt and processed foods, so limit these

Antioxidants

Free radicals are reactive molecules made during normal metabolism, and from smoke, pollution and radiation. In excess they can damage cells and are linked with heart disease, diabetes and cancer. Antioxidants, including vitamins A, C and E, neutralise them. You will find them in brightly coloured fruit and leafy green vegetables.

Eat a rainbow. A wide variety of colourful fruit and vegetables is the simplest way to cover your micronutrient needs, with no supplements required for most people.

Get the most from your food

- Eat a wide variety: aim for 2 to 4 portions of fruit and 3 to 5 of vegetables daily.
- Frozen can beat fresh, since nutrients fade from the moment food is harvested.
- Store food cool and dark, away from heat and light.
- Steam or microwave rather than boil, and eat some vegetables raw, to keep more nutrients.

Where to learn more: the NHS, the British Nutrition Foundation, and the British Dietetic Association (BDA). Before taking any supplement, or if you think you may be deficient, please speak to your GP.

This leaflet is general nutritional guidance for education only. It is not medical advice, diagnosis or treatment, and it does not replace advice from your GP or a registered dietitian. Always check with a qualified professional before making significant changes, particularly if you have a health condition, are pregnant, or take medication.

Ready to take the next step? Book a free call or start your food diary analysis at performancenutritionlondon.co.uk