

# Nutrition Bites

## Nutrition Bite Week 6

### Vitamins & Minerals – The Sparkplugs of Life

Vitamins and Minerals are substances that are only needed in tiny amounts, but without them, we wouldn't be able to function, not to mind walk or run A 10 mile race! Most vitamins cannot be made by the body so we need to get them from the foods we eat.

Getting the right balance of vitamins and minerals is important to help prevent you from getting ill and to ensure your body is in good working order. Vitamins and minerals can also help your performance in sports, so it's important to include a wide variety of foods in your diet to ensure you are not deficient in any.

Antioxidants in particular are very important when exercising. Intense exercise can produce high levels of harmful free radicals and leave your muscles sore and tired. The antioxidants will help to mop up these free radicals and help you recover from your training quickly.

Here are some of the important antioxidants that you need, and where you'll find them:

<b>Vitamin C</b> , antioxidant vitamin	Red peppers, strawberries, papaya, kiwi, oranges, blackcurrants, curly kale, Brussels sprouts, broccoli.
<b>Vitamin A</b> , antioxidant vitamin	Oily fish, liver, carrots, sweet potato, red peppers, spinach, butternut squash, watercress, apricots and mangoes.
<b>Vitamin E</b> , antioxidant vitamin	Rapeseed oil, olive oil, hazelnuts, almonds, other nuts, seeds and tomatoes.
<b>Selenium</b> , antioxidant trace mineral	Brazil nuts, lobster, tuna, lemon sole, squid, scallops, sardines, sunflower seeds, cashew nuts, mixed nuts & raisins, and walnuts.
<b>Betacarotene</b> (orange), <b>lycopene</b> (red) and <b>lutein</b> (yellow), all antioxidant pigments	Carrots, fresh apricots, tomatoes, pink grapefruit and spinach

Here are some more important vitamins and minerals to be aware of:

<b>Nutrient</b>	<b>Functions</b>	<b>Sources</b>
B vitamins	Help release energy from carbohydrates, fats & proteins	Wholegrains, dairy products, eggs, lean meat, pulses
Calcium	Builds bone & teeth, nerve & muscle function	Dairy products, pulses, beans, nuts, seeds, dark green leafy veg
Iron	Red blood cell formation, transport of oxygen	Red meat, wholegrains, green leafy vegetables, fortified breakfast cereals
Zinc	Healthy immune system, wound healing, cell growth	Eggs, wholegrain cereals, shellfish
Potassium	Fluid balance, muscle & nerve function	Fruit especially bananas, vegetables

### **Vitamins facts!**

Vitamins are not a source of energy or calories, but they are essential 'sparkplugs' that help release energy from cells. Eating a minimum of 5 servings of fruit and vegetables a day, will supply adequate vitamins and minerals, and if you take a multivitamin as a safety net, take one that provides just 100% of the RDA. If you want to take more, seek medical or dietetic advice.

### **Minerals facts!**

Minerals help form many structures of the body e.g. calcium in bones, iron in red blood cells. Minerals, like vitamins do not provide energy, but are essential for general health.

#### **Maximise your Vitamin and Mineral Intake**

- Buy seasonal local grown produce if you can. They are fresher and retain their nutritional value. Check out [www.bestinseason.ie](http://www.bestinseason.ie) or [www.topfruit.com](http://www.topfruit.com) for hints, simple recipes and nutritional advice.
- Prepare fruit and vegetables as close to eating or cooking them as possible as they can lose nutrients as soon as they are chopped.
- Don't peel fruit and vegetables where possible – wash them well instead.
- Frozen food can be just as good as fresh so keep frozen veg and berries on standby in the freezer.
- Steam vegetables or boil them using a tiny amount of water, as nutrients can be lost through heat and water.
- Save the cooking water from vegetables for using in soups, gravies and sauces.

If you need additional advice about your intake of vitamin and minerals, or are concerned about vitamin and mineral deficiencies e.g calcium or iron, you may need to contact a qualified dietitian. Check out [www.indi.ie](http://www.indi.ie).

Next week, we have some tips on losing weight. Good luck with your training until then!