



## **Getting your daily dose – vitamins and minerals**

We hear a lot about vitamins and minerals (also often called micronutrients) and there's a huge industry built up around making sure that we get our recommended daily doses of them.

### **What's the difference between vitamins and minerals?**

A vitamin is an organic (carbon containing) compound that is essential to our survival. Usually only needed in tiny amounts, vitamins can't be created by the body, so we have to obtain them from our food, or in the form of food supplements.

A mineral is also a naturally occurring compound, but minerals are inorganic, which just means that they don't contain carbon. Minerals are always made up from just one element. They play a part in many of the biological functions of the body, and like vitamins, they can't be created by the body.

Some minerals are known as essential because we need them in larger amounts than others, which are called trace minerals. Essential minerals include iron, zinc and calcium.

### **Different types of vitamin**

Although all vitamins are essential, some can be stored by the body, and some can't. Vitamin C and the B vitamins have to be constantly replaced. They are water soluble, which means that if you take in more than your body needs, you'll just excrete them through your urine. If you take large doses of vitamin B, for example, you may be a bit disconcerted to notice that your urine turns bright yellow! This is nothing to worry about, it's just your body getting rid of anything it doesn't need.

The vitamins that can be stored by the body are vitamins A, D, E and K. These are called fat-soluble vitamins.

### **How can vitamins and minerals enhance our health?**

It's rare these days for anyone to actually be vitamin deficient to the point of illness, so when we look at the power of vitamins and minerals, we're really looking at how we can improve our overall wellbeing, rather than avoid scurvy (vitamin C deficiency) or rickets (deficiency in vitamin D.)

One very powerful group of vitamins and minerals is antioxidants (Vitamin A, C, E, Beta carotene, selenium, zinc, manganese and copper). These are used by the body to break down harmful substances called free radicals, which we produce more of when we are feeling under the weather, stressed or if we smoke/breathe polluted air.

Everyone has a certain amount of these free radicals in their body, and they are usually kept in check by a healthy immune system. Too many of them can lead to cell damage over time. Eating a diet rich in antioxidants could help to defend your body against too many free radicals.

### **Super Foods**

You might have heard about super foods – and associate them with exotic sounding delicacies like goji berries, or perhaps just expensive, if delicious, blueberries. But most super foods are actually just everyday foods that contain high levels of antioxidants. Apples, for example, are considered a super food because they contain vitamin C and are also high in pectin, a soluble fibre that can help to lower blood cholesterol.

The humble baked bean is another surprising super food, rich in the antioxidant lycopene which is said to help protect against heart disease and cancer. Other good sources of antioxidants that can be picked up with your daily shopping include:

Broccoli: contains vitamin C, folic acid and lutein – and has been shown to help slow down age-related macular degeneration, a condition that can affect our eyesight as we age.

Tea: It doesn't matter if you like your cuppa to be black or green, you can still benefit from your daily brew. Tea contains antioxidants called catechins which are said to help protect against heart disease.

### **Beauty From Within**

Vitamins and minerals are also great for enhancing our looks, as they are used in every part of the body, including skin, hair and nails. You can buy specialist supplements designed to include all the elements that you need for shiny hair, strong nails and gorgeous skin, but you can also enhance what nature gave you with some of nature's own foodie treats.

- Vitamin A is a must for your skin, and is excellent at helping reduce the signs of ageing that we all try to resist. Foods to eat to keep your skin supple include vitamin A rich spinach, carrots, butternut squash and broccoli.
- If your skin feels a little dry, add some vitamin E rich food to your daily diet. This vitamin restores moisture to parched skin and is also said to slow down the rate at which skin cells age. The best sources of this vitamin include green leafy vegetables and nuts.
- If you're after a lustrous head of healthy looking hair, make sure that your diet includes enough of the B vitamins to encourage hair growth. Whole grain foods, cereals and bread are all good sources of B vitamins, as are brewer's yeast, eggs, fish, turkey, and milk.
- Vitamin C also plays a part in keeping your hair gorgeous – it's essential for the formation of healthy tissue. It's unusual to be deficient in this vitamin, but

supplement your diet with lots of fresh fruit and vegetables to make sure your hair and skin don't lose their lustre.

- As for your nails, if they are looking less than great, it could be worth looking into your iron intake. Although it takes a serious iron deficiency to produce obvious signs in the nails (pale, brittle looking nails can be a sign of anaemia, which should always be investigated by a doctor) keeping your intake up is a way to keep nails looking healthy. Iron rich foods include lean red meat, green leafy vegetables, dried fruit and fortified breakfast cereals.

### **Times of Need**

Pregnancy is one of the times in a woman's life when we need a little extra support – and to make sure that we have enough vitamins and minerals to keep our bodies strong.

There are formulations designed specifically for pregnant women, and women who are trying to conceive, which are designed to keep you and your developing baby as healthy as possible. Diet wise, foods that contain folic acid are universally accepted to be essential in pre-pregnancy and also throughout your pregnancy. It's also recommended that women trying to conceive take a supplement of folic acid, because of the vitamin's importance in the development of the foetus. Eat plenty of pulses, oranges, dark leafy greens, avocados, broccoli, and asparagus and look for a supplement with 400 mcg folic acid.

### **Summary:**

- Vitamins and minerals are substances essential to our bodily functions
- Some vitamins can be stored and others can't
- Antioxidants protect against cell damage
- Some 'super foods' contain high levels of antioxidants
- There are some vitamins & minerals that can help with skin, hair and nails
- Pregnant women may need supplements

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A wide range of women's health resources are available at [www.healthywomen.org.uk](http://www.healthywomen.org.uk)

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