

## **Summer Vitamins and minerals essentials**

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Lack of vitamins and minerals is something that people often associate mainly with winter. Grey skies, colds and flu, comfort eating on stodgy puddings instead of salads and fruit – it's easy to assume that once summer arrives, a combination of better weather and a variety of seasonal fruits and vegetables will mean that people get all the vitamins they need.

However, summer brings its own challenges in relation to vitamin and mineral intakes. When the sun starts to shine people want to pack as much into life as possible – walking, cycling, horse riding, sailing, swimming, sunbathing, summer concerts and country shows. Meals may be rushed and appetites reduced.

#### **Heat and sleep....**

Hot weather can lead to lack of sleep and leave us feeling drained and out of sorts. Immune systems can suffer in the summer as they do in the winter. Skin is particularly vulnerable – to insect bites, allergic rashes, dryness, cold sores and sunburn. Holidays are something we all look forward to, but away from our daily routine, we eat and drink differently and the risk of gastrointestinal problems increases. All these factors can lead to poor diet and hence to poor intakes of vitamins and minerals.

#### **Nutrient must have's....**

To stay healthy throughout the summer, it is important to eat a healthy diet with plenty of fruit and vegetables. However, the most recent data from the National Diet and Nutrition Survey (NDNS) showed that almost two thirds of men and women are still not consuming the recommended 5-a-day of fruit and vegetables. Only 33% of women and 37% of men are meeting the 5-a-day guideline.<sup>1</sup>

Intakes of vitamins, with the exception of vitamins A and C, have not improved since the last national survey. Mineral intakes continue to be a cause for concern particularly in young women. But only 24% of adults in this survey were found to be taking a vitamin supplement. Given the poor diets of significant numbers of the UK population, a risk that does not go away in the summer, a vitamin and mineral supplement can help to bridge this dietary gap.

Moreover, people should not forget to take their vitamins away on holiday as this is a time when diets can change. Stomach upsets and drinking more alcohol than usual, which is what, can happen on holiday, can also influence eating patterns and increase the risk of reduced vitamin and mineral intake.

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<sup>1</sup> Bates B, Lennox A, Swan G. National Diet and Nutrition Survey. Headline results from year 1 of the Rolling Programme (2008/2009). A survey carried out on behalf of the Food Standards Agency and the Department of Health. Available:

<http://www.food.gov.uk/science/dietarysurveys/ndnsdocuments/ndns0809year1>

All nutrients are important all year round, but some specifics to consider during the summer are vitamin B, vitamin C, vitamin D, vitamin E, zinc and selenium

### **Vitamin B**

B vitamins are essential for tissue maintenance and repair and help to ensure a steady supply of energy from the food we eat. They are all important for a healthy nervous system and skin. Vitamin B2 (riboflavin) is important for the health of the eyes and vitamins B6 and B12 help to maintain healthy blood cells. B vitamins work together in the body and people are unlikely to lack just one of them. Good food sources include grains, fortified breakfast cereals, beans and legumes, though animal foods are the primary source of vitamin B12. B vitamins are also available in combination supplements and as part of multivitamin supplements.

### **Vitamin C**

Vitamin C helps to maintain the integrity of the body's connective tissue, including the blood vessels, gums, ligaments and skin. As an antioxidant, vitamin C helps to protect the body's cells. Like vitamins A, E, zinc and selenium, it also helps to maintain the immune system, which is important during the summer when people want to feel at their best as holidays approach. Good sources of vitamin C include citrus fruits, dark green vegetables, tomatoes and kiwi fruit. A multivitamin also provides recommended amounts of vitamin C.

### **Vitamin D**

Vitamin D is obtained mainly through the action of sunlight on the skin. Not surprisingly, by the end of the winter, blood levels of vitamin D have been found to be below the recommended threshold in a quarter of British people.<sup>2</sup> However, care needs to be taken to follow guidelines for appropriate sun exposure, which together with time spent indoors in offices may not optimise blood levels of vitamin D even by the end of summer. For people who don't get out of doors much between 8am and 3pm, which applies to many of the working population and older people, a supplement containing vitamin D could be considered all year round.

### **Vitamin E**

Vitamin E is a key antioxidant which helps to protect cell membranes and maintain the health of the skin and the immune system. It is found in foods such as vegetable oils, wheatgerm, nuts and seeds, green leafy vegetables and wholegrains. Like all vitamins, vitamin E is just as important in the summer as in the winter.

### **Zinc**

Zinc is critical for hundreds of processes that take place in the body from cell growth and development to immunity. It is also essential for the body's

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<sup>2</sup> Mason. Towards a healthier Britain. London: Proprietary Association of Great Britain, 2008. This document provides details of vitamin and mineral intakes from previous NDNS in adults and children.

metabolic processes and as it is involved in so many systems of the body, it helps to maintain the health of the skin. Skin health is important at all times of year, including the summer when sun, sea, wind and dry atmospheres – both inside and outside – can be a challenge to the skin's ability to look and feel good.

### **Selenium**

Like vitamin C and E, selenium is an antioxidant. Indeed, it works with vitamins C and E to protect the body cells. Selenium is also essential for immune function and for the function of the thyroid gland, with thyroid hormones influencing the function of cells throughout the body. Intakes of selenium, which have not been reported in the NDNS before, fell below reference intakes in both older children and adults. Adult women overall achieved 72% of the Reference Nutrient Intake (RNI) while adult men achieved 74% of the RNI. Around half of adult women and older girls and a fifth of men and older boys had intakes below the Lower Reference Intake (LRNI), an intake below which deficiency is likely. The most abundant food sources of selenium include Brazil nuts, seafood and meat. Grains may also have useful amounts, but this depends on the selenium content of the soil, which in several areas of Britain can be low. This essential mineral is also found in multivitamin supplements.

### **In summary...**

Summer is a time when people want to feel and look their very best, ready to enjoy holidays and all the outdoor activities. Ensuring adequate nutrient intake is important for good health and though we tend to think of winter as the key time when our diets are not as healthy as they should be, getting the most out of the summer may mean that we still don't make the time to eat properly. It is important to enjoy all those seasonal fruits, salads and vegetables as part of a healthy summer diet. However, UK national dietary surveys show that significant proportions of the population do not achieve recommended intakes throughout the year and a multivitamin and mineral supplement can help to bridge this dietary gap.

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