

Kellogg's factsheet

Vitamins and Minerals

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Recent dietary surveys of children and adults in the UK have found many areas of nutritional inadequacy in people's diets. According to surveys, nutrients most likely to be under-consumed are the minerals iron, calcium and vitamin D and folic acid. Iron is a particular problem nutrient, with iron deficiency anemia the most common nutrient deficiency world-wide.

Teenagers are particularly vulnerable to nutritional deficiency as growth is rapid and eating habits are increasingly independent and erratic. For example almost half of all teenage girls aged between 11-18 years were iron deficient. A quarter of 11-14, and a fifth of 15-18 years old girls eat diets deficient in calcium. One in eight boys aged 11-14, and one in ten of those aged 15-18 years are also calcium deficient. As around 45% of the adult skeleton is laid during the teenage years these low calcium intakes are of serious concern.

Among adults, women are more likely than men to have inadequate intakes and older adults are also more at risk. More than 4 out of 5 women aged between 25-49 years fail to eat adequate amounts of folic acid. In the UK, 8 out of 10 women eat less than the recommend intake of iron and one quarter are deficient in iron and at risk of anemia. One in 5 men and 2 in five women failed to meet their recommended daily intake of calcium. It has been estimated that potentially 50% of adults in the UK have insufficient vitamin D status.

In recognition of the importance of essential nutrients to good health, Kellogg's has been providing breakfast cereals with added vitamins and minerals for decades. Vitamins, which are provided by Kellogg's cereals, include vitamin B1, vitamin B2, niacin, vitamin B6, vitamin B12, folic acid, vitamin D and vitamin C. Minerals include iron and calcium. Magnesium, zinc and phosphorous are naturally present in many cereals.

Nutrient Function

- **Vitamins B1, B2 & niacin** are essential B-group vitamins which help the body to release energy from carbohydrates
- **Folic acid**, another B-group vitamin is essential for growing cells and healthy blood. Also important in the early weeks of pregnancy and for a healthy heart
- Vitamin B12 is important for a healthy nervous system and to help blood cells grow and develop.
- Vitamin B6 is involved in protein digestion and also healthy nerves, blood and skin
- Vitamin D helps is important for the development for strong bones
- Vitamin C increases the absorption of iron and is important for healthy skin and immune function
- Iron is a mineral involved in the formation of healthy red blood cells which help carry oxygen around the body for daily activity. Especially important for young children, teenagers and women

- Calcium, a mineral needed for strong, healthy bones and teeth. Especially important during the teenage years when almost half the skeleton is laid down.

Breakfast cereals make a difference in healthy diets

Children eat just under one bowl of breakfast cereal each day, and yet this single bowl of cereal provides one fifth of daily intakes of thiamin, niacin, vitamin B6, folic acid and vitamin D, one quarter of iron and one third of riboflavin, demonstrating the valuable contribution that breakfast cereals make to the UK diet. Adults, again on average, eat just under one bowl of breakfast cereal and again this provides a significant contribution to overall nutrition, contributing between one tenth and one quarter of B-group vitamins and iron.

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In addition, dietary studies demonstrate that eating breakfast cereals containing vitamins and minerals makes a significant contribution to the intake of these vital micro-nutrients in children:

- Research has shown that children who eat a cereal breakfast are generally healthier, as they have higher vitamin and mineral intakes especially if they choose a fortified cereal breakfast. Breakfast skippers are unlikely to compensate for these missed nutrients during the rest of the day.
- Children who regularly skipped breakfast were found to have lower daily intakes of vitamins A and B6 and the minerals iron, calcium, magnesium, copper and zinc, compared with children who consumed breakfast cereals on a regular basis.
- Teenagers who regularly consume breakfast cereals are more likely to meet the recommended intakes of, B-group vitamins, iron, calcium and zinc

The vitamins and minerals in cereals are clearly indicated on the packaging labels. To find out more about the vitamins and minerals in Kellogg's cereals look at:

- The ingredients list – includes the types of vitamins and minerals that have been included in the cereal
- The nutritional information panel – states the amount of vitamins and minerals that are present, both in quantities and in terms of the percentage of Recommended Daily Allowance (RDA)

Cereals with added vitamins and minerals play an important role in achieving a healthy and balanced diet.

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