

breakfast cereals
a nutritious
start
to your day!



**kick-start
your day!**





breakfast cereals – an important source of nutrition

Breakfast cereals represent a healthy choice for breakfast. They are made from grain, they are typically **low in fat, high in carbohydrates**, and often a **good source of fibre**.

To give the consumer the full freedom of choice, the breakfast cereal and oat milling industry provide a wide variety of breakfast cereals, ranging from conventional breakfast cereals to oat flakes and varieties of mueslis. In combination with appropriate nutritional information and educational programmes, breakfast cereals can play an important role in improving the diets and nutritional status of Europeans.

Cereals are a food that children and adults enjoy which serve to encourage them to eat breakfast (1a-c). Research confirms that breakfast cereal consumers have a more substantial and varied breakfast, and are more likely to meet nutritional requirements from nutrients such as vitamins, minerals and fibre than non-consumers (1a-c, 3, 5, 8).

Breakfast cereals make a major contribution to peoples' diet. Data results show, for example, that they are the leading source of iron, a **major source of B vitamins (about 20%)** and provide **10% of young people's fibre intake** (5, 6, 8).

nutrients – the facts

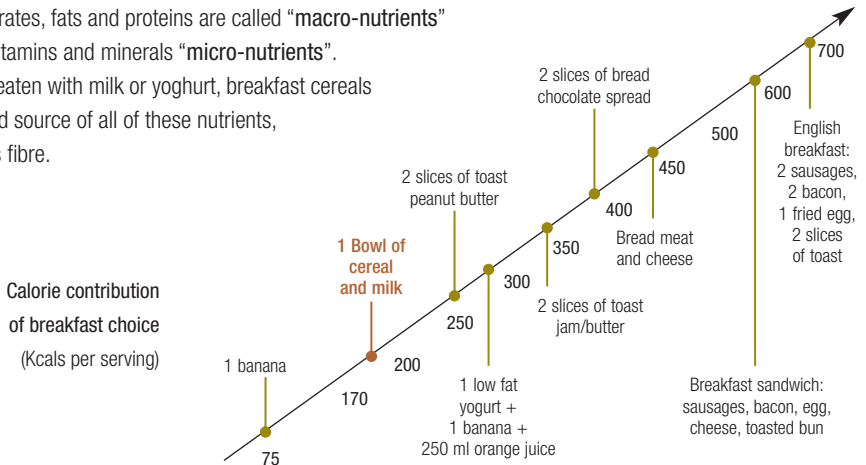
What are nutrients?

Breakfast cereals are a “**nutrient dense**” food i.e. while supplying only a modest amount of energy (calories) they make a significant contribution to intakes of essential nutrients. These nutrients are usually divided into five groups: **carbohydrates, proteins, fats, vitamins and minerals.**



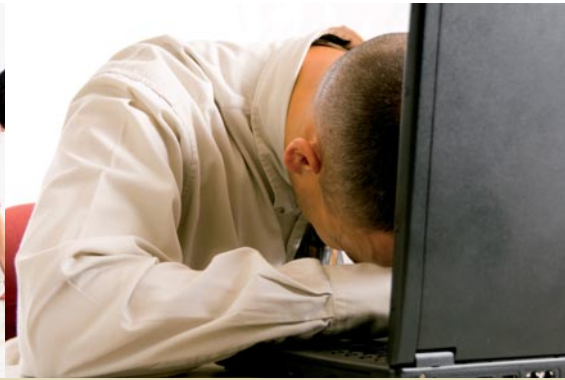
Carbohydrates, fats and proteins are called “**macro-nutrients**” and the vitamins and minerals “**micro-nutrients**”.

Whether eaten with milk or yoghurt, breakfast cereals are a good source of all of these nutrients, as well as fibre.



why are breakfast nutrients so good for me?

Time after time, scientific studies have established the importance of consuming these 5 essential groups of nutrients in order to maintain a healthy balanced diet. Furthermore, research shows that essential nutrients missed at breakfast are not compensated for during the other meals of the day, making our choice of what we eat in the morning ever more important. With the support of an independent nutritionist Dr Clare Leonard*, we attempt to explain through this brochure the purpose and nutritional importance of these nutrients found in breakfast cereals as part of a complete breakfast.



Carbohydrates

Carbohydrates are our main and most important source of energy, and most of it is provided by plant foods such as cereals. Carbohydrates can come from simple sugars or starches, both of which can be found in breakfast cereals. Approximately 50% of our body's energy should come from carbohydrates and a healthy diet should contain plenty of starches. Regularly eating breakfast cereals is an excellent way of providing your body with carbohydrate energy (1a-c).

Protein

Proteins consist of smaller units called amino acids which when combined can form different types of proteins. Proteins are the main functional and structural component of human cells. They are needed to replace organ tissues and are the constituents of muscles, hair, nails and skin. Eating a breakfast cereal with milk is a good way to provide your body with enough protein to start your day.

* Dr. Clare Leonard is a Registered Public Health Nutritionist who has over 10 years of experience working in the food industry, including both Unilever and Nestle. She is now an independent consultant working with food companies worldwide.

Fat

Breakfast cereals are typically low in fat which is most often found as a natural component in the grain. Some fat is essential as fatty acids and fat-soluble vitamins are important for human health, but these needs are easily met with today's food. The majority of **breakfast cereals are low in fat and on average contain between 2 to 4% fat**. Those that contain nuts and oilseeds (e.g. muesli and Granola) usually have a higher fat content, but the fat is mostly of the healthier unsaturated type which helps keep cholesterol levels low. In addition, by regularly eating breakfast cereals, fat intake is usually reduced as it lessens the need for higher fat contained in mid-morning snacks (1c, 3).

Fibre

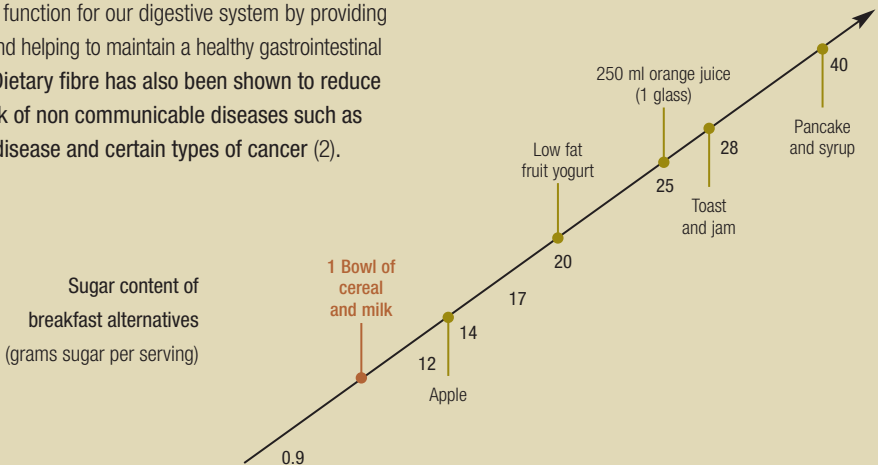
The first thing you need to know is that there are two types of fibre: "**soluble**" and "**insoluble**". **Soluble fibre** – present in larger amounts in oat-based cereals – perform an important function, as they actively help to reduce cholesterol levels. **Insoluble fibres** are not digested, but perform a crucial function for our digestive system by providing bulk, and helping to maintain a healthy gastrointestinal tract. **Dietary fibre has also been shown to reduce the risk of non communicable diseases such as heart disease and certain types of cancer (2).**

Salt

Salt is a natural product traditionally used mainly to improve taste and enhance conservation. Nevertheless, small amounts of **salt are essential for good health**: it plays a major role in the repartition and regulation of water in the body and inside cells, as well as generating electrical impulses in nerve and muscle tissue. Small amounts of salt are sufficient to perform these vital functions. **Most breakfast cereals today contain small amounts of salt per portion and contribute less than 5% of the average daily intake of salt (3, 4, 5, 8).**

Sugar

Sugar adds taste and texture to foods which provides for a wide variety of breakfast cereals. As a source of carbohydrate, nutritionally sugar in breakfast cereal provides a quick and essential source of energy to the body. Breakfast cereals on average contribute only to a small proportion of sugar in the diet – about 5-10% of the average adult daily intake of added sugars (3, 4).



Vitamins & Minerals

An easy and healthy option to improve one's daily intake of micronutrients is to eat breakfast cereals, which contain a variety of vitamins and minerals. Many manufacturers also include fruit and nuts in the mix which further increases the micronutrient content of breakfast cereals. Many nutritionists recommend that breakfast should contribute 20-25% of daily nutritional requirements; most breakfast cereals are fortified on this basis. Members of CEEREAL, who fortify their cereals take this recommendation into account. Breakfast cereals are most commonly fortified with B vitamins and Iron, sometimes calcium and vitamin D. Adults and children who frequently eat breakfast cereals are more likely to meet their daily requirements for essential nutrients such as vitamins B6, thiamine, riboflavin, niacin, folic acid, calcium, iron and zinc (1a-c, 5, 6).

Vitamins are essential nutrients that our body needs everyday in small amounts in order to work properly. Different vitamins have different functions; there are two types: **water-soluble** and **fat-soluble**.

Water-soluble vitamins (such as B2, B6, B12, C, biotin, folic acid), which are absorbed by the intestine and carried through the bloodstream, need to be replenished regularly in your diet, as they cannot be stored by the body. They are mainly found in fruit, vegetables and grains which are best eaten raw, steamed or grilled rather than boiled as fewer nutrients leak into the water, which is usually discarded.

Vitamin B6 allows the body to use and store energy from protein and carbohydrates and helps haemoglobin to form – vital for carrying oxygen around the body.



Vitamin B12 helps to produce red blood cells and keeps the nervous system healthy. It also releases energy from the food we eat, and is needed to process folic acid. **Folic Acid** works together with **Vitamin B12** to form healthy red blood cells and helps reduce the risk of neural tube defects such as spina bifida in unborn babies.

Vitamin C is needed to protect and maintain cells and tissues as well as help the body absorb iron from food.

Fat-soluble vitamins (such as A, D, E, K) are found mainly in fatty foods such as animal fats (including butter and lard), vegetable oils, dairy foods, liver and oily fish. Unlike water-soluble vitamins these are stored in your body, and although you don't need to eat foods containing them every day, they should still be included as part of a healthy diet to help your body work properly. If your body doesn't need these vitamins immediately, it stores them in your liver and fatty tissues for future use. This means the stores can build up so they are there when you need them.

Minerals

Minerals (such as calcium, iron, magnesium, phosphorus, potassium) are essential nutrients that your body needs in small amounts in order to keep it fit and healthy. They are as essential as vitamins and serve 3 core functions: **building strong bones and teeth** (particularly important in childhood); **controlling body fluids inside and outside cells**; and, most importantly, **turning the food we eat into energy**. Minerals are found in varying quantities in a variety of everyday foods such as cereals, meat, fish, milk and dairy foods, vegetables, fruit (especially dried fruit) and nuts.

Iron is an essential nutrient as we need it to grow properly as well as to help cognitive development. A lack of iron in the diet can have serious negative impact on your health.

Children who lack iron have been proven to do less well at school. **Iron is found in breakfast cereals, which can provide approximately 15% of daily intake**, helping to reach the recommended daily allowance of this essential mineral (6).

Breakfast cereals also encourage the consumption of milk which makes eating **breakfast cereals** one of the easiest and best ways to **ensure an adequate calcium intake in both children and adults** (8). In Europe, many children do not have an adequate calcium intake, which is essential for their development and growth. If someone's calcium intake is low during their formative years, there is a serious chance of developing bone-related problems later in life.

A close-up photograph of a hand holding a silver spoon over a white bowl filled with cereal and raspberries. The spoon is lifting a portion of the cereal and a single raspberry. In the background, a glass of milk and a bowl of fresh raspberries are visible, though slightly out of focus.

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your day!**

the importance of breakfast

In a nutshell, the first meal of the day is the most important because it supplies the body and brain with the necessary nutrients after a night's sleep.

Eating **breakfast is beneficial** for both the body and the mind in several ways:

- People who eat breakfast consume more essential nutrients which are necessary for a healthy body and lifestyle (1a-c)
- People who eat breakfast tend to be slimmer than those who skip breakfast (7)
- Eating breakfast contributes to cognitive performance – it improves concentration and physical activity (8)

Breakfast is also an excellent occasion to eat together with the family; indeed, children who eat with their parents in the morning tend to have more nutritious breakfasts (1c, 8). Eating a nutritious breakfast helps to develop good habits that will last a lifetime (8).

about CEEREAL's commitment to health and nutrition

- The breakfast cereal industry has had a long-standing commitment to nutrition and health, while ensuring that our products appeal to our consumers' taste.
- CEEREAL is committed to working together with all stakeholders, including public health authorities, healthcare, educational, governmental and other organizations to develop solutions to the rising public health problem of obesity and to contribute to healthier lifestyles.
- CEEREAL believes that both diet and physical activity have important roles in the treatment and prevention of obesity.
- CEEREAL's members continue to provide information to our consumers and comprehensive nutritional labelling.
- CEEREAL fully supports the work of the EU Platform for Action on Diet, Physical Activity and Health and similar initiatives taking place in various EU countries.
- CEEREAL's members invest in a number of voluntary and educational initiatives to support both consumer education about healthy diets and the increased uptake of physical activity.
- This is the 5th year running that CEEREAL is staging its 'Annual Breakfast Week' in Brussels with the objective of informing all European stakeholders and reaching out to EU citizens, about the importance of healthy breakfast habits.

- (1a) Gibson & O'Sullivan (1995). Breakfast cereal consumption patterns and nutrient intakes in British schoolchildren. *Journal of Royal Society of Health* 115 (6): 366-370.
- (1b) Preziosi P, Galan P, Deheeger M, Yacoub N, Drewnowski A & Hereberg S. (1999). Breakfast type, daily nutrient intakes and vitamin and mineral status of French children, adolescents and adults. *J Am Coll Nutr*, 18(2):171-178.
- (1c) Cho S et al (2003). The Effect of Breakfast Type on Macronutrient Intakes and Body Mass Index (BMI) of Americans. *J Am Coll Nutr*. 22:296-302.
- (2) Summary of Narrative Synthesis of the Health Effects of Potential Dietary Fibre Components: Scientific Advisory Committee on Nutrition
- (3) Gregory, J. et al. (2000). *The National Diet and Nutrition Survey: young people aged 4-18 years*. HMSO, London.
- (4) Henderson, L. et al. (2002) *The national diet & nutrition survey adults aged 19 to 64 years*. HMSO, London.
- (5) Gibson S. (2003). Micronutrient intakes, micronutrient status and lipid profiles among young people consuming different amounts of breakfast cereals. *Public Health Nutr*. 6(8):815-20.
- (6) Gibson SA. 1999a. Iron intake and iron status of preschool children: Associations with breakfast cereals, vitamin C and meat. *Pub Health Nutr*, 2(4):521-528.
- (7) Taylor Nelson, *Sofres Out of Home Survey*, UK. 2003.
- (8) Please visit our website at www.ceereal.eu to substantiate all information in this document.