

THE BENEFITS OF BREAKFAST AND BREAKFAST CEREALS



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European Breakfast Cereal Association

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FOREWORD	1
THE IMPORTANCE OF BREAKFAST	2
Breakfast Cereals – They've Been Around Longer Than You Think	
Breakfast – A Nutritious Start to Your Day	
WHAT THE EXPERTS SAY ABOUT BREAKFAST	3
Health and Obesity	
Children and Breakfast	
THE HARD FACTS	4-5
Breakfast Cereals – A Healthy Choice to Start Your Day	
BREAKFAST TIPS	6-7
Common Myths and Misconceptions About Breakfast	
Skipping Breakfast – Some of the Facts	
FROM THE FIELD TO YOUR BREAKFAST BOWL	8-9
GLOSSARY OF TERMS	10
REFERENCES	11-12



FOREWORD



It's a well-known saying that breakfast is the most important meal of the day but, unlike many other sayings, this one is supported by scientific evidence. Time and again, studies show that breakfast consumers are leaner, have lower cholesterol levels, and higher intakes of fibre, vitamins and minerals compared with people who do not consume breakfast. The reason is simple: the types of foods eaten at breakfast time tend to be healthier and more nutrient-dense than foods eaten at other times of the day.

A great example of this is breakfast cereals. Breakfast cereals are high carbohydrate, low fat foods that are often fortified with essential vitamins and minerals. With diets in Europe still failing to meet targets for fibre and saturated fat, and certain groups of consumers, such as teenagers and young women, having inadequate intakes of some vitamins and minerals, breakfast cereals continue to play an important role in helping consumers of all ages move towards a healthy, balanced diet.



Carrie Ruxton

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**BREAKFAST CEREALS
REPRESENT A HEALTHY
BREAKFAST CHOICE**

THE IMPORTANCE OF BREAKFAST



Breakfast Cereals – They've Been Around Longer Than You Think

Could you tell the story of the first breakfast man ever ate? Do you know about John Harvey Kellogg's lucky accident that gave birth to the Corn Flake? Probably not. Yet the story of breakfast is a long and complex tale that spans continents and millennia. Here we show you a brief timeline of the history of breakfast and the early beginnings of what came to be one of the most popular breakfast foods – breakfast cereals. Today, breakfast cereals are still based on natural grains – wheat, maize, rice, barley, oats and rye. Made from either flour or whole grains, they contain all of the basic nutrients that we need to start the day: carbohydrates, protein, fat, minerals, vitamins and fibre.

A BRIEF TIMELINE



Around 7000 B.C

The first cereals (wheats & barley) are cultivated in the Middle East

Around 100 A.D.

Roman soldiers add porridge to their diets

1463

First use of the word "breakfast" in English

1500s

First shipments of coffee to Venice

1821

William Cobbett, an English writer, complains about the rise of tea as a breakfast drink

1894

John Harvey Kellogg invents the Corn Flake

Breakfast – A Nutritious Start to Your Day

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 a number of ways:

- People who eat breakfast consume more essential nutrients which are necessary for a healthy body and lifestyle^{1,2,3}
- People who eat breakfast tend to be slimmer than those who skip breakfast⁴
- Eating breakfast contributes to cognitive performance – it improves concentration and fuels physical activity^{5,6,7}

WHAT THE EXPERTS SAY ABOUT BREAKFAST



The European Union and Member State authorities spend an enormous amount of time and money addressing a range of fundamental health, social, and economic challenges such as obesity, cardiovascular disease, education, and workplace performance. Breakfast can make a huge contribution to addressing all of these issues. However, with figures showing that **over 61% of Europeans skip breakfast at least once a week**, the need to address this worrying trend makes it even more crucial that breakfast is treated as an **important public policy issue**. Karin Hådel, Honorary President of the European Federation of the Association of Dieticians, suggests that *"It is essential that we halt the worrying decline in the numbers of Europeans regularly eating breakfast."*

Health and Obesity

According to **Doctor Vincenzo Costigliola**, President of the European Medical Association: *"The benefits of breakfast are clear and scientifically proven. It plays a valuable role in reducing obesity, decreasing the risk of heart disease, increasing cognitive ability and concentration, and boosting energy levels and metabolism."* Indeed, various scientific studies have proven that **skipping breakfast can be directly linked to excess weight gain**.^{4,8,9,10,11} This is particularly worrying for Europe, where the problem of obesity is acute – **over 53% of the EU population is either overweight or obese**.¹²

Cardiovascular diseases, which account for 23% of the EU's total disease burden, are now also the main cause of illness and death in Europe. However, studies show that men and women who eat whole grain cereals between two and six times a week have a 22% lower chance of heart failure, and those who eat them up to once a week have a 14 percent lower chance.¹³

Children and Breakfast

Breakfast provides many nutritional and health benefits for children.^{14,15,16} As well as making you less prone to ill-health, **regularly eating breakfast affects cognition**. Research has established that children who consume breakfast have better memories and solve problems more efficiently than those who skip the meal.^{17,18,19} *"Without a proper breakfast in the morning, students' concentration levels and memory are undermined and their educational performance suffers,"* explains **Hugo Ramon**, Vice Secretary General, European Association of Teachers. Adult memory is also negatively affected amongst regular breakfast skippers.²⁰ There is a **strong link between regular breakfast consumption and cognitive performance as well as physical performance**, and recent studies have found that rates of overweight and obesity are significantly higher in children who skip breakfast or eat a smaller breakfast than their non-obese peers.^{5,21,22}

THE HARD FACTS



Breakfast Cereals – A Healthy Choice to Start Your Day

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

Scientific studies have established the importance of consuming the above mentioned 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.



FREQUENT BREAKFAST CEREAL EATERS HAVE HEALTHIER BODY WEIGHTS

Breakfast cereal	Body Mass Index	
	Men	Women
- heavy consumers	24.3	22.1
- regular consumers	24.6	22.7
- occasional consumers	24.7	23.0
- non-consumers	24.5	23.0

Source: Bertrais S. et al, Contribution of ready-to-eat cereals to nutrition intakes in French adults and relations with corpulence. Ann. Nutr. Metab. 2000; 44:249-255





To give consumers 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 the nutritional status of Europeans. 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.^{1,2,3,23,24,29}

Cereals are food that children and adults enjoy²⁵, and breakfast is an excellent occasion to eat together with the family.^{1,2,3} Children who eat with their parents in the morning tend to have more nutritious breakfasts, which helps to develop good nutrition habits that will last a lifetime. Indeed, in combination with appropriate nutritional information and educational programmes, breakfast cereals can play an important role in improving the diets and nutritional status of European children.

Breakfast cereals make a major contribution to people's diets. 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**.^{24,26} Breakfast cereals are also a great source of calcium when consumed with milk or yoghurt.

BREAKFAST CEREAL NUTRITION FACTS

ENERGY

Good source. Nutrient dense but not energy dense

PROTEIN

Taken with milk/yogurt, a good source of protein

CARBOHYDRATE

WHOLE GRAIN **TYPICALLY A GOOD SOURCE**

SUGARS **TYPICALLY LOWER**

Lower than in other breakfast alternatives.

Only 5% daily contribution

FAT **TYPICALLY LOW**

On average only 2% - 4% of daily intake

FIBRE **TYPICALLY HIGH**

Provide 10% in the diet of young people

SALT **TYPICALLY LOW**

On average less than 5% daily contribution

CALCIUM **TYPICALLY A GOOD SOURCE**

Taken with milk/yogurt, a good source of calcium

B VITAMINS **TYPICALLY A GOOD SOURCE**

Provide approximately 20% of daily intake

IRON **TYPICALLY A GOOD SOURCE**

Can provide approximately 15% of daily intake

**OVER 61% OF EUROPEANS
SKIP BREAKFAST
AT LEAST ONCE A WEEK**

BREAKFAST TIPS



Kick-starting your day with a healthy breakfast is easy. Dietician and public health nutritionist Dr Carrie Ruxton explains that breakfast cereals in particular represent a healthy choice for breakfast:

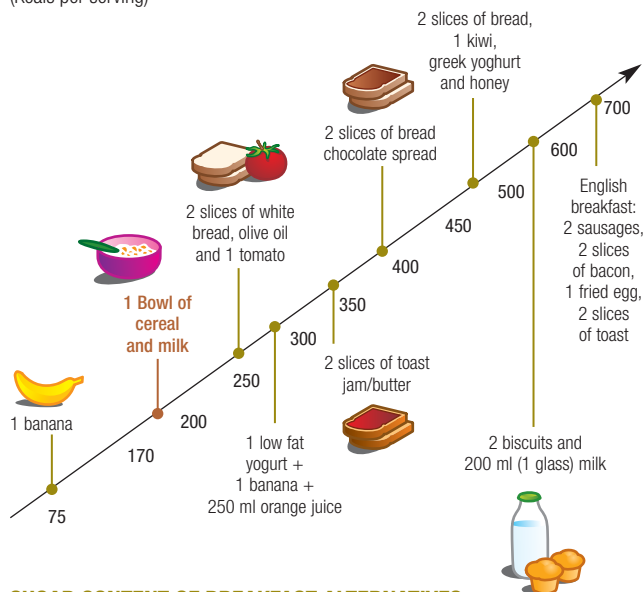
- A bowl of fortified cereal, such as toasted flakes, provides iron and B vitamins.
- By adding low fat milk to your cereal and coffee, you will achieve over half of your daily recommended calcium intake in just one meal.
- Breakfast cereals and bread provide slow release carbohydrate which helps to maintain energy levels and concentration throughout the day.
- Eating a bowl of muesli, oats or granola will provide you with at least 25% of the fibre you need each day. Oats are a good source of protein, vitamins, minerals and fibre, and may support heart health.
- Breakfast cereals fare well compared to other breakfast alternatives. 1 bowl of cereal with milk contains fewer calories than toast and peanut butter or jam; or a breakfast of meat and cheese with bread.
- 1 bowl of breakfast cereal with milk also contains less sugar than many other breakfast alternatives.

Common Myths and Misconceptions About Breakfast

- **“I don’t have time to eat breakfast.”**
False! Preparing and eating a bowl of cereal takes less than 5 minutes in the morning and will provide you with great benefits. Can you afford to find 5 minutes to benefit from eating breakfast?
- **“I don’t need breakfast.”**
False! You wouldn’t expect a car to run without fuel and equally you cannot expect your body to run without energy. Your body and mind will both work better during the morning after eating breakfast.
- **“Skipping breakfast does not matter – I can make up the missing nutrients later in the day.”**
False! The nutrients, vitamins and minerals missed at breakfast are not made up later in the day. People who skip breakfast have a less nutritious diet than those who eat this important meal.²⁷
- **“Skipping breakfast means losing weight.”**
False! Breakfast helps to kick-start daily metabolism, helping to process calories consumed later in the day. Also, people who skip breakfast tend to consume other and often healthier snacks later in the morning. Hence, skipping breakfast is often found to be one of the most important risk factors for obesity.²⁸

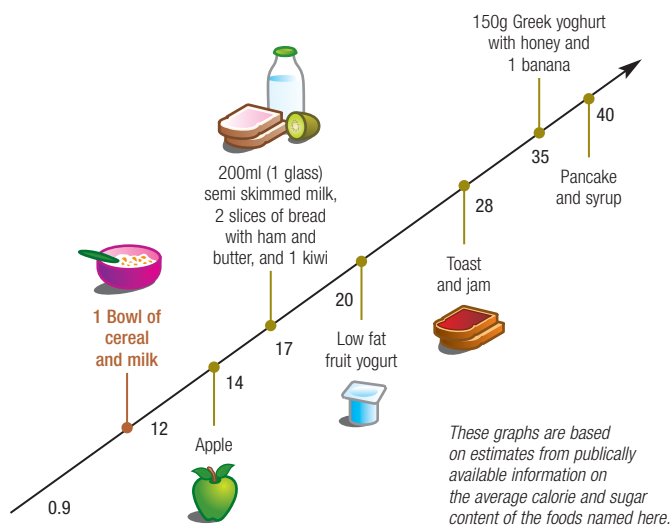
CALORIE CONTRIBUTION OF BREAKFAST CHOICE

(Kcals per serving)



SUGAR CONTENT OF BREAKFAST ALTERNATIVES

(grams sugar per serving)



kick-start
your day!



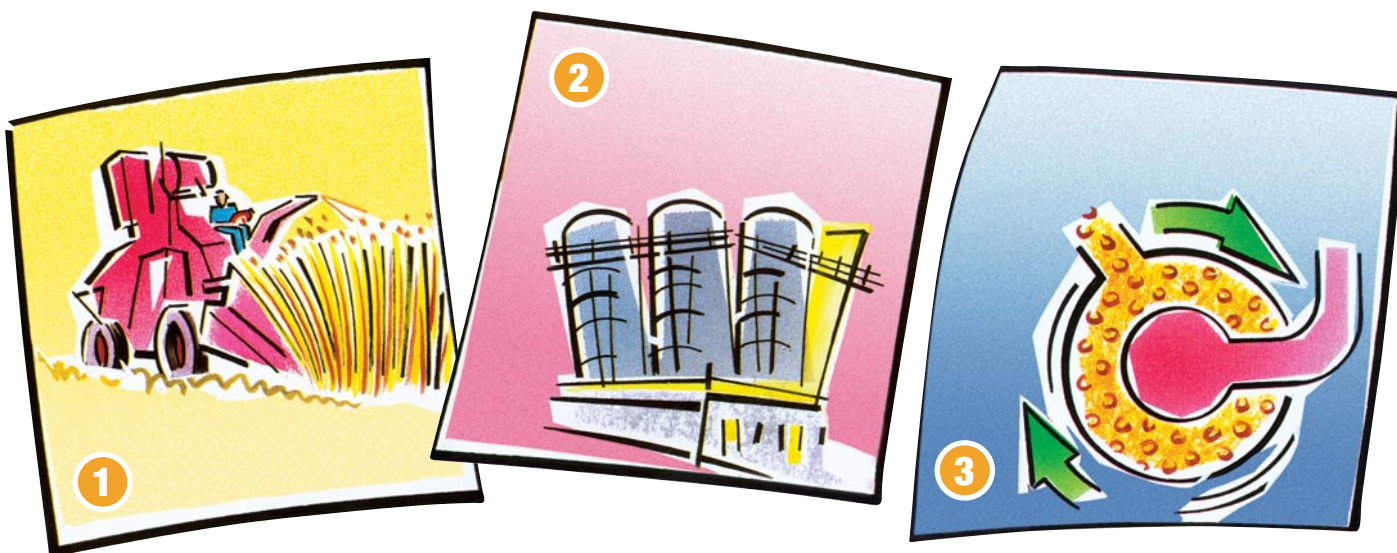
SKIPPING BREAKFAST – SOME OF THE FACTS

- Europeans on average skip breakfast 20% of the time and over 61% of Europeans miss breakfast more than once a week.³⁰
- In France alone, 38% of children aged 12-17 and more than 42% of young adults aged 18-24 skip breakfast at least once a week.³¹
- 12% of Dutch children aged 10-18 also skip breakfast.³²
- A recent German study finds that 1 out of 3 children miss breakfast completely, or rarely ever enjoy the meal before leaving the house on school days.³³

FROM THE FIELD TO YOUR BREAKFAST BOWL



Cereal has always been part of a healthy breakfast and viewed as a nutritious morning food. After milling, cereal grains, along with malt, a limited amount of salt, sugar and water are mixed together before being cooked. The cooked mixture is then dried and cooled before being toasted, packed and shipped, to bring choice and variety to consumers worldwide.



1 Harvesting

Ripened by sunshine, the cereal, which is to become breakfast cereal, is gathered by a giant combine harvester.

2 Storage

The grain arrives and is transferred by suction pipes to large storage silos.

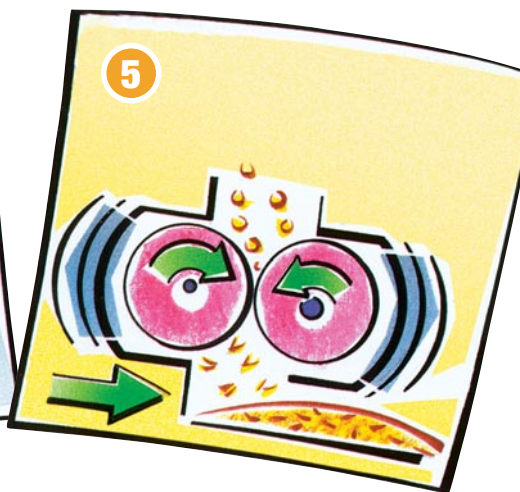
3 Blending and Cooking

The mixture is funneled into giant cookers where it is sealed and rotated under steam pressure.



4 Quality Assurance

Every stage of processing is carefully checked and controlled.



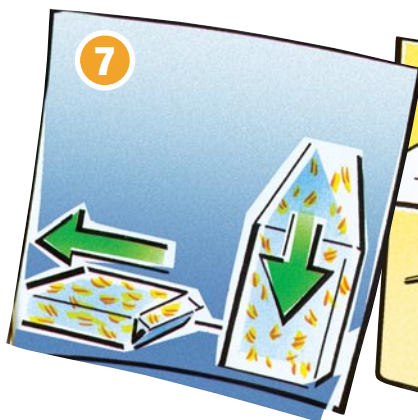
5 Shaping

Shaping of cooked dough to define shape and appearance, e.g. flake mill rollers press flakes under 40 tons of pressure.



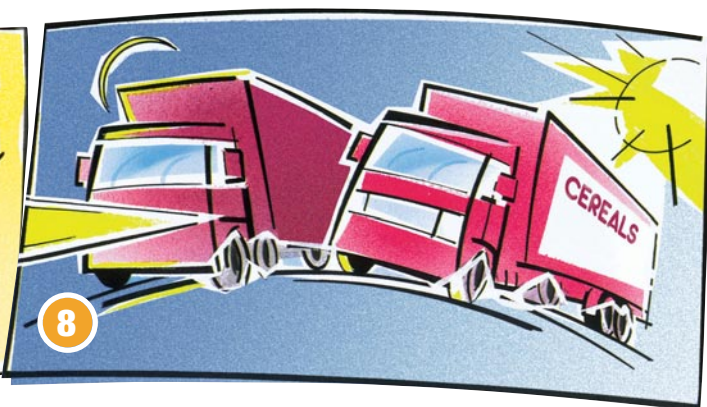
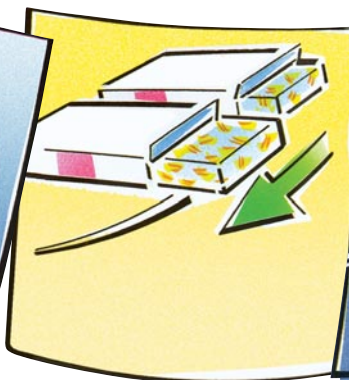
6 Toasting

The cereals are tumble toasted in giant rotary ovens at high temperature.



7 Filling and packing

The cereals flow by gravity in enclosed tubes from the ovens to filling machines where they are automatically dispensed by weight into the inner liners. Filled liners of cereal are passed along converters and then packed into the cereal cartons. After filling, the cartons are packed in cases which then travel by conveyor belt systems to the warehouse.



8 Distribution and consumption

Cereals are distributed across the continent and ultimately make it to your breakfast table.

Glossary of Terms

- **Blood sugar levels:** Blood sugar is a term used to refer to levels of glucose in the blood. Blood sugar concentration, or serum glucose level, is tightly regulated in the human body. Glucose, transported via the bloodstream, is the primary source of energy for the body's cells.
- **Body Mass Index:** BMI is a number calculated from a person's weight and height. BMI provides a reliable indicator of body fat for most people and is used to screen for weight categories that may lead to health problems.
- **Bran:** Bran is the outermost layer of the cereal grain. The bran, which contains the most fibre, is removed when the grain is milled to produce white flour.
- **Carbohydrates:** Carbohydrates can come from three different areas: simple sugars, complex carbohydrates or starches and dietary fibre. Approximately 50% of our body's energy should come from carbohydrates. Carbohydrate foods include rice, bread, cereals, fruit and vegetables.
- **Fortified foods:** Fortified foods have one or more essential vitamins and minerals added (whether or not the nutrient is naturally contained in the food) at levels higher than either that of the natural content or after restoration. Nutrients are added for the purpose of enhancing a food's contribution to nutrition and health.
- **Health claims:** Health claims are generally understood to be statements, symbols or other representation describing the relationship between diet and health, including the reduction of disease risk associated with the consumption of certain foodstuffs.
- **Protein:** Proteins consist of smaller units called amino acids which when combined can form different types of proteins. We use amino acids to help replace organ tissue as well as to grow muscles, hair, nail and skin. Amino acids are also used to create blood and help make antibodies to help fight illness. Protein rich foods include milk, fish, meat, nuts, cheese and eggs.
- **Recommended Daily Allowance:** Recommended Daily Allowances, known as RDAs, are recommendations for nutrient intakes, stating the amount of a nutrient that is needed for most people to stay healthy. They are different for children, adults, males, and females.
- **Whole grain:** Whole grains are cereal grains which retain the bran and germ as well as the endosperm, in contrast to refined grains which retain only the endosperm.



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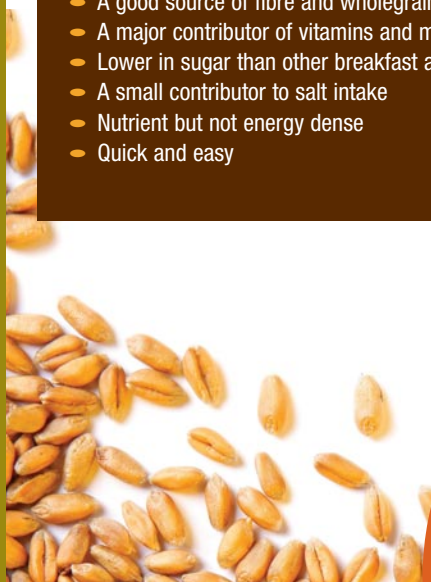
BREAKFAST CEREALS - A HEALTHY CHOICE FOR BREAKFAST

With an extensive variety of flavours and options, breakfast cereals are a healthy breakfast choice. They are typically:

- Low in fat
- A good source of fibre and wholegrain
- A major contributor of vitamins and minerals to the diet
- Lower in sugar than other breakfast alternatives
- A small contributor to salt intake
- Nutrient but not energy dense
- Quick and easy



VISIT WWW.CEEREAL.EU
FOR MORE INFORMATION ON
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