



PURE



FLOUR



**FROM
EUROPE**

ORGANIC & SUSTAINABLE
FLOUR EXPERIENCE

**ENJOY
IT'S FROM
EUROPE**



Pure Flour from Europe

Europeans are very particular about the quality of their flours for the breads, pizzas, pastas, pastries, cakes and biscuit products they are so justly proud of. When baking, or making pasta and pizza, choose the beautiful, high-quality flours of Europe for success on your table.

The universally-recognised excellence of the European milling sector is the result of centuries of experience and mastery, including selection of the best grains, a skilful mix of tradition and cutting-edge technologies and the constant production of high-quality flours of which there are about 600 types.

Pure Flour from Europe is a programme to promote Europe's high-quality flours via information and awareness-raising activities, educational workshops history and recipes.



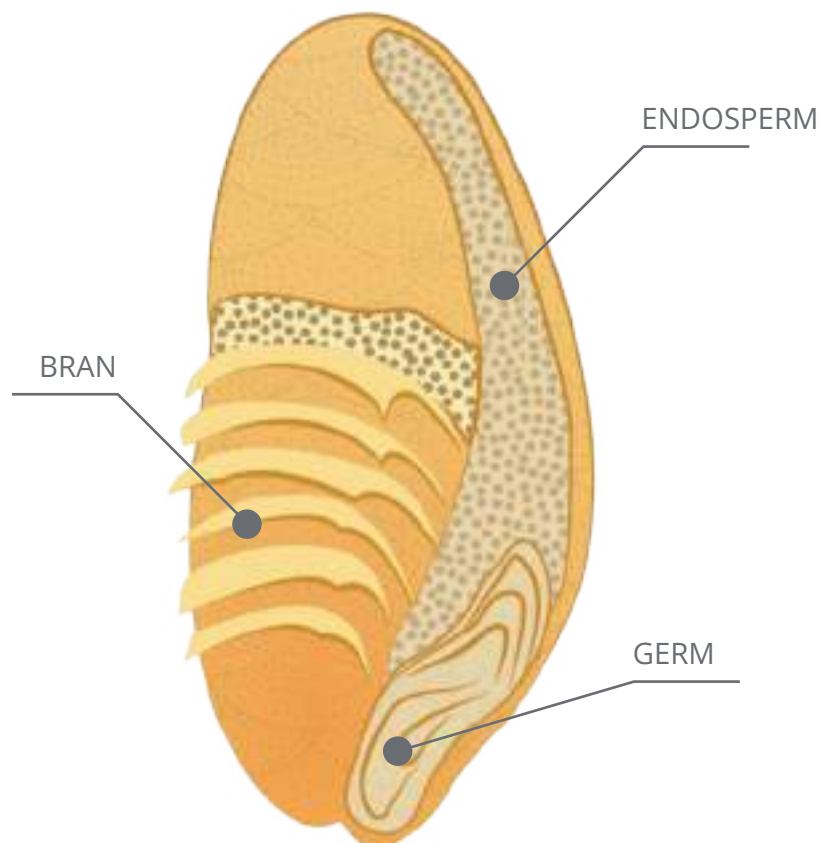
IT STARTS WITH THE GRAINS

Wheat, like corn, barley and rye, consists of many species and as a cereal, is a staple food worldwide.

Wheat makes up the genus *Triticum*, which includes different species--among them:

- *Soft wheat (Triticum Aestivum)* is used to produce flour, grown mainly in warm and temperate regions.
- *Durum wheat (Triticum Durum)*, mainly used to produce wheat semolina and then pasta in Europe, is grown in drier areas.

The soft wheat grain has different layers:



Semolina and flours are products obtained from milling soft wheat or durum wheat grain – in botany called a caryopsis.

The caryopsis is composed of three distinct parts:

- *The endosperm makes up between 80% and 85% of the weight of the grain and is generally preferred for food.;*
- *The pericarp, perisperm and aleurone layer – that give rise to the bran - are the external layers of the caryopsis and make up about 15% of the weight of the kernel;*
- *the germ, or embryo, makes up about 2-3 % of the weight of the kernel.*

The **milling** process of the grain allows the production of different compositions of flours and semolina which have different names, according to national regulations, and have different nutritional properties.





MILLING: FROM GRAIN TO FLOUR

Milling is the process of grinding that creates flours from the kernels of the cereal grains.

When the grain arrives at the mill, it is carefully inspected to ensure it meets the quality standards; the reception, consignment and bulk storage in silos is controlled and recorded by a computerized traceability system.

The grains are then cleaned of impurities using two processes of cutting-edge technologies, such as optic sorters, before the milling of the grain begins.

The modern day grinding system is simply the mechanisation of the traditional grinding which was done at home in ancient times. After grinding, the wheat grain fragments are separated by passing them through a complex arrangement of sieves. White endosperm particles are then channelled into a series of smooth reduction rolls for final milling into white flour.

In short, the milling process has remained broadly unchanged over the centuries: it is based only on mechanical actions. However, compared to the past, technological developments now guarantee the production of flours with high hygiene and food safety standards and technological characteristics that differ according to market demands.

Types of Italian Flour

The flours used in Italy for the production of typical Made in Italy food products – such as bread, pizza, pies, cakes and biscuits – are produced exclusively in Italy by the Italian milling industry.

Different types of soft wheat flours are produced for specific uses: breads, biscuits, cakes and pizzas all need flours with specific technological characteristics.

All types of flours – from Italian finely-milled 00 flour to wholemeal flour – have **important nutritional and health properties**: there is no such thing as flours that are better or less good as they are all excellent and **appropriate for a healthy diet**; the type of flour to choose depend on taste and different nutritional needs.





CHARACTERISTICS

Depending on the degree of the removal of the outermost parts of the wheat grain during the milling process, flours of different compositions can be obtained which have different denominations, in accordance with the Italian legislation governing the production of soft wheat flours in Italy.

This regulates the different types of flour, from wholemeal flour, gradually more is removed to make type 2 flour, and then type 1 flour, type 0 flour and type 00 flour. The different types of flours have a different ash content (that is the mineral substances contained in the caryopsis) and protein content.

The different types of flours also differ in starch content and fibre and have different nutritional and technological qualities.

EUROPEAN AND ITALIAN FLOUR: QUALITY AND SAFETY FIRST

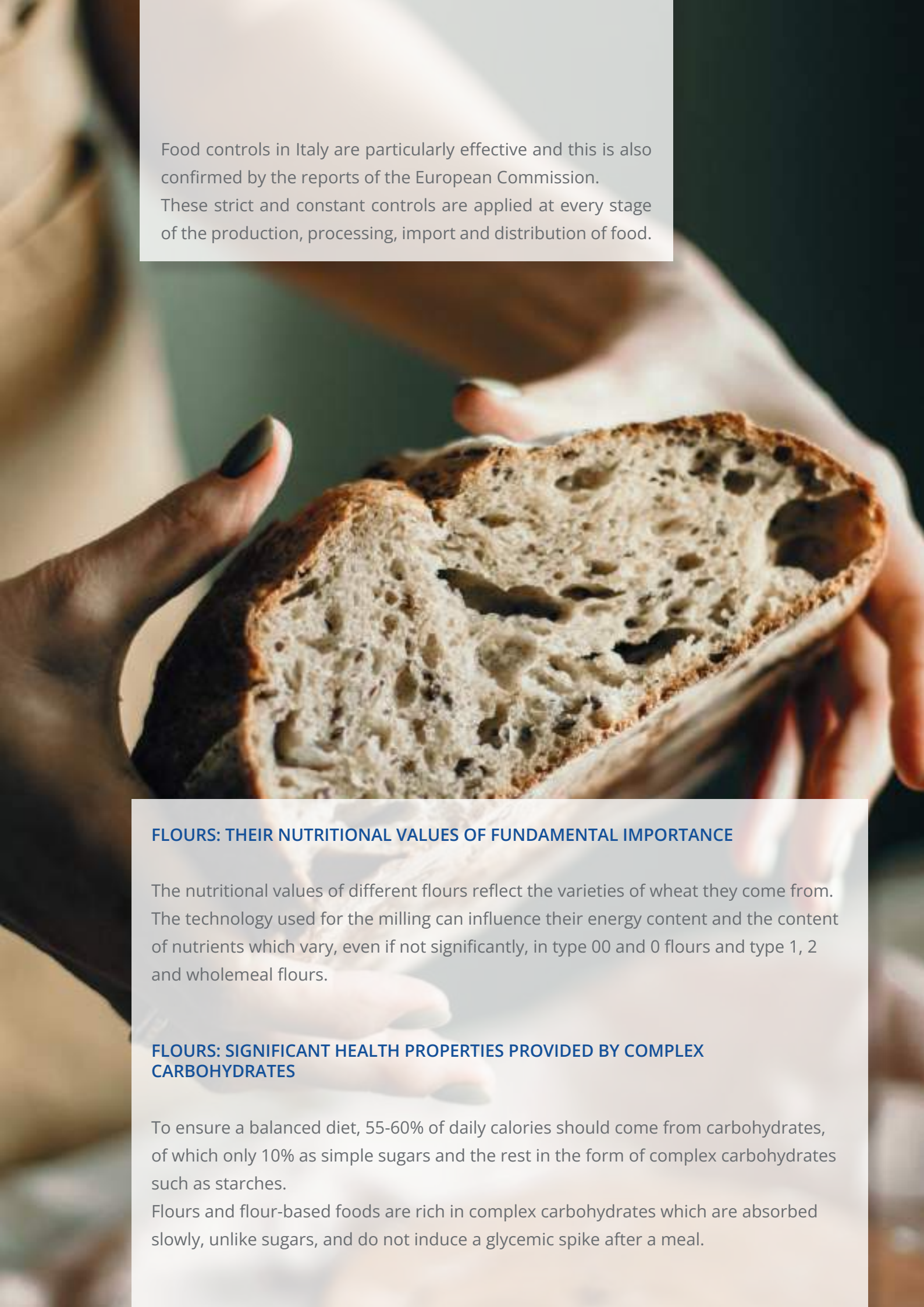
Thanks to stringent European standards, buying European flour assures you of the highest food quality and safety in the world. Italy and the European Union have always been in the vanguard regarding food safety and the high quality of food products.

Food safety - that is, the compliance of both soft wheat and soft wheat flours with EU and national regulations regarding the protection of consumer health - **is an imperative priority for the milling industry.**

Compliance with these regulations is guaranteed by the **constant and strict controls** carried out by the supervisory authorities, by the operators in the supply chain in general and, finally, by the milling industry as part of its own self-control plans.

The controls concern both national and imported agricultural products - and both must comply with the same legal requirements for acceptability - both for flour / semolina and byproducts of milling. These checks include the constant verification of the compliance of wheat and flours with EU legislation on contaminants in food products, which include: mycotoxins, heavy metals and residues of pesticides.





Food controls in Italy are particularly effective and this is also confirmed by the reports of the European Commission. These strict and constant controls are applied at every stage of the production, processing, import and distribution of food.

FLOURS: THEIR NUTRITIONAL VALUES OF FUNDAMENTAL IMPORTANCE

The nutritional values of different flours reflect the varieties of wheat they come from. The technology used for the milling can influence their energy content and the content of nutrients which vary, even if not significantly, in type 00 and 0 flours and type 1, 2 and wholemeal flours.

FLOURS: SIGNIFICANT HEALTH PROPERTIES PROVIDED BY COMPLEX CARBOHYDRATES

To ensure a balanced diet, 55-60% of daily calories should come from carbohydrates, of which only 10% as simple sugars and the rest in the form of complex carbohydrates such as starches.

Flours and flour-based foods are rich in complex carbohydrates which are absorbed slowly, unlike sugars, and do not induce a glycemic spike after a meal.



CLEAN ENERGY FROM CARBOHYDRATES

The energy in flour derives above all from carbohydrates; 100g of flour contains 77 g of which only 1.7% not added sugars while the majority is from starch. Consequently, flour can be considered a fundamental element of our diet due to its capacity to provide clean energy from carbohydrates

HIGH QUALITY PLANT PROTEIN

Flour is also a good source of plant protein: 11 g of protein in 100 g. Plant protein has a good biological value which in a balanced diet provides an important contribution to our daily protein requirements.



VITAMINS, MINERALS AND FIBRE

The content of vitamins, mineral salts and dietary fibre changes according to different types of flour. In fact, their concentration is higher in wholemeal and type 2 and 1 flours while it gradually decreases in type 0 and 00 flours.

With regard to dietary fibre in particular, the contribution is significant but it should be complemented by the fibre provided by fruit and vegetables.

POTASSIUM, CALCIUM AND IRON

The quantity of potassium in wholemeal flour is excellent and very good in type 0 and type 00 flours. The quantity of calcium and iron is not very high in absolute terms and their bioavailability is lower than in foods of animal origin, but still important for a healthy and balanced diet.



LOW IN FAT BUT GOOD FAT

Flour is very low in fat with an excellent nutritional quality

ENVIRONMENTAL RESPONSIBILITY

The quality of our life in the future depends on how we live today: responsible production and consumption is the key.

Compared to other industrial sectors, the European milling sector boasts:

- a low use of natural resources.
- use of biomass for sustainable energy production
- reduction of emissions
- productive use of by-products

So there are zero product losses.

A mill is generally a very “simple” and clean plant in which the environmental impact is limited only to the consumption of electricity and water in the conditioning phase of the wheat before its grinding.



**A SECTOR AND A HIGHLY
SUSTAINABLE SUPPLY
CHAIN THAT PROTECTS THE
ENVIRONMENT.**



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