# Chapter 9 Traditional Italian Bread



Giulia Selvolini and Giovanna Marrazza

## 1 Introduction

Bread is one of the most popular and consumed foods in Italy. The Italian legislation indicates bread as the edible product obtained by baking in the oven a suitably leavened dough, prepared with cereal flour, water and yeast with or without the addition of common salt (LEGGE 4 luglio 1967 1967). Each Italian region has preserved an immense variety of breads linked to the gastronomic traditions of its territory; they are distinctive in ingredients, preparation processes and shapes.

Bread history is very ancient and intertwined, and it is associated with the emergence of agriculture and the domestication of grains during the Neolithic in Southwest Asia. The oldest known bread dates back to around 14,000 BC and was found in Jordan (Arranz-Otaegui et al. 2018). Archaeological and archaeobotanical discoveries indicate that stones were used for grinding grains of cereals in the caves. A kind of dark and grainy flour was obtained, which was mixed with water. The final mixture was consumed, raw or cooked on a red-hot stone (Cozzolino et al. 2015). The Egyptians can be considered the first true bakers in history because of the use they made of yeast and, therefore, of leavening around 2600 BC; we can consider yeasts as the greatest discovery for bread production. In fact, they observed that the mixture of flour and water if left to rest in the air began to swell and the resulting bread, after being baked, was softer and more fragrant. Refined cooking techniques, with respect to the initial one, were also developed on red-hot stones, such as the covering with overturned pots, and the creation of holes dug in the ground and covered with stones. The first real ovens were made of clay, in the shape of a cone, so as to house the fire inside and, on the outer wall, the bread. Later, the secrets of bread making were passed on to the Greeks, who attributed important

G. Selvolini · G. Marrazza (🖂)

Department of Chemistry "Ugo Schiff", University of Florence, Sesto Fiorentino, FI, Italy e-mail: giulia.selvolini@unifi.it; giovanna.marrazza@unifi.it

religious meanings to it. From Greece, the art of baking arrived in the Roman Empire by the Greek prisoners captured in Macedonia. The Romans refined the grinding techniques and, for the first time, the category of millers appeared. They began a convenient production of bread, setting up public ovens where the bakers could work.

In ancient Rome, since the first century BC, bread entered in the daily use for a large part of the population. The demand for wheat was sometimes so great that, when it was lacking in Italy, it was imported from Egypt and North Africa. A specific legislation, the Roman edict, was enacted, establishing quality and cost of bread: for example, wheat bread was considered healthier and preferable to *"polenta"* bread and other cereal mixes in use; therefore, wheat had a lower price in public granaries than the market price.

Roman bread was generally prepared with poor quality flours (which absorbed less water than the best ones) and with a small amount of yeasts, which are the reasons of its hardness. The yeasts were prepared once a year at harvest time, with grape must and bread dough. However, many types of bread were prepared, according to different uses, with various doughs and baking methods; the *panis ador* was used in sacrificial offerings, *panis palatius* at the imperial tables, *panis siligineus* at the tables of the rich people, black *panis plebeius* was intended for the canteen of the poor, *panis canfusaneus* was for gladiators and athletes, *panis castrensis* for the soldiers, *panis nauticus* for the sailors; finally, *panis gradilis* was distributed during the games in the amphitheaters to give bread and entertainment to the people attending the scenes, and it is from this practice that the expression "panem et circenses" comes from.

During the Middle Age, the skill of bread preparation achieved by the Romans was lost. Cereal growing stopped due to continuous wars and the consequent abandonment of the fields; the farmers produced poor bread without yeast and salt, made with ground oats and bran. On the contrary, the feudal lords, who controlled the territory and the population through the possession of ovens and mills, were used to eat white wheat bread.

In the Renaissance, bread was still different according to the social category to which people belonged. Therefore, different breads were prepared and their names identified the category for which they were prepared, *e.g.*, pope's bread, king's bread, knight's bread, squire's bread, *etc.* Bread was the basis of the people's diet, while the upper classes had instead a varied diet, based primarily on meat and on some ingredients that for the time were considered delicious. The best bakers worked at the papal court and the courts of the kings and nobles of the time. It is told that the cooks at the court of the Medici in Florence were the first to use brewer's yeast to improve bread leavening, and that this custom was then spread in France by Maria de' Medici (1573–1642), who got married to King Henry IV.

In the modern era, bread has become a public service, with a taxed and fixed price. In 1600 in Italy, bread underwent many different taxes, starting from the "gabelle" for flour to the "duty" for baking in private ovens. The increase in the price of bread during the famine in 1628 in Milan led to the rebellion of the people, as told by the Italian writer Alessandro Manzoni in the book "*I Promessi Sposi*".

Bread was generally produced at home or in small ovens until 1800; its production began to be on an industrial scale only from 1900 onwards.

Over the centuries, the hard working of cooks, bakers and housewives made possible to obtain a gradually pleasant, fragrant and "typical" bread for each region and locality, which are different in shape, ingredients and packaging methods. Today, the surveyed Italian breads are 250, with over a thousand variations to which at least another 150 types must be added, including *focaccia*, *pizza*, *pitte*, *calzoni* (Pani Regionali Italiani n.d.).

The most purchased bread in Italy is fresh and artisanal still now, as shown by a recent research by the Italian Bakery Ingredients Association (AIBI) (AssoPanificatori Pasticceri n.d.). Furthermore, the results document that 1.5 million tons on average are produced per year, for a *per capita* daily consumption of 80 g (Ansa.it 2020). Bread consumption over the years had noticed a progressive containment of consumption starting from 1861, when Italy was unified; the decreasing of sales has been particularly noticeable during crisis periods (Fig. 9.1) (Coldiretti 2013; Mocarelli and Piñeiro 2013).

However, during the Covid-19 pandemic in 2020, bread has gained a great visibility, being the symbolic food of lockdown period (Assitol 2020).

#### 2 The Italian Bread

## 2.1 Bread in the Italian Legislation

In the years of the economic boom following the Second World War, the Italian Parliament promulgated the law no. 580 of 4th July 1967, which regulated the processing and trade of cereals, flours, bread and pasta. The law established the different types of bread, the maximum water content to be used in the various bread recipes, and their sales denominations. About 30 years later, Presidential Decree (DPR) of 30th November 1998 no. 502, contained rules for the revision of the legislation on bread processing and trading. Another type of bread, namely special bread, was identified and the permitted ingredients were established: malted cereal flour, malt extracts, alpha and beta amylase, dried sourdough, pregelatinized wheat flours, gluten, food starches and sugars. The use of fats (butter, olive oil, lard), milk, figs, olives, etc. was also allowed. When food ingredients other than those provided by law are used in the production of bread, the sales denomination must be completed by the mention of the ingredients used and, in the case of several ingredients, of that or those characterizing. This kind of bread, when sold in bulk, must be kept in separate shelves in the sales premises. For breads obtained with flours of other cereals than wheat or mixed with the latter, as well as to breads obtained with the addition of other food ingredients (lard, oil, etc.), the percentages of moisture increased by 10% (w/w) with respect to nonspecial breads. It is also possible to put on sale partially baked bread, frozen bread or bread obtained by completing the

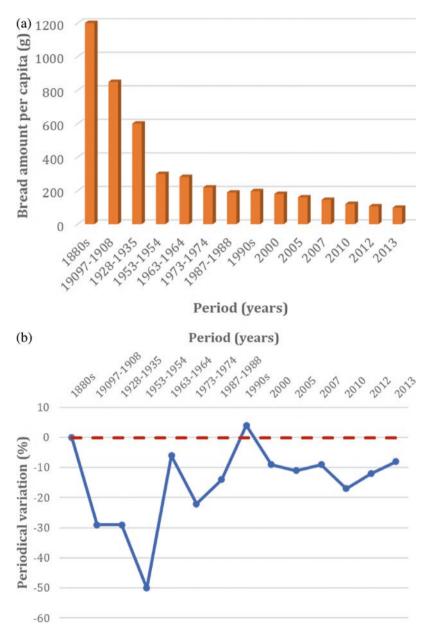


Fig. 9.1 Daily consumption of bread *per capita* in Italy (a) and percentage variation in the consumption with respect to the previous periods (b)

baking of partially baked bread, whether frozen or not. Finally, it should be taken into account that in 2018 the Italian Minister of Economic Development, in agreement with the Minister of Agricultural, Food, Forestry and Tourism Policies and the Minister of Health, issued the Interministerial Decree of 1 October 2018, no. 131 (1998) concerning the Regulations governing the denomination of "bakery", "fresh bread" and the adoption of the term "preserved bread". The text of the Ministerial Decree provides that "bakery" includes the companies that have facilities for the production of bread, but also other bakeries and similar which carry out the entire production cycle from the processing of raw materials to the final baking.

## 2.2 The Baking Technique

The quality of the bread is strongly correlated to the ingredients and the used technologies during the baking process. As for the ingredients, the quality and the type of the used flour are very important, the characteristics of the water and salt.

Cereal production in Italy mainly regards wheat (soft and hard), maize, barley and rice. Different types of bread are often named according to the type of flour used. Bread made from soft wheat flour (*Triticum aestivum*), also called "white bread", which is the most widespread (even if especially found in Northern Italy) with a variety of shapes and can also be mixed with other cereal flours (*e.g.*, rye, oat, rice, corn bread, *etc.*). Durum wheat (*Triticum durum*) bread, which can be preserved for a long time and is typical of the regions of Southern Italy. Another type of bread produced in this area of Italy is durum wheat semolina bread. This type of flour is also used to make other typical bakery products such as *taralli* and *friselle*. Another type of bread is wholemeal bread made with flour rich in bran, which comes from the outer coating of the grain of wheat and gives a darker color with respect to that of white bread and has higher fiber content.

From a technological point of view, the mixing, rest, leavening and baking are the multiple operations, which represent important parts of the baking process. These steps are adapted to produce all the different types of bread. The dough is the phase in which the basic ingredients (flour, water, yeast and salt) are assembled and mixed through mechanical energy: a physicochemical process then begins, by which the wheat cereal proteins, gliadin and glutenin, become hydrated and form the gluten – whose amount in the wheat flour is a measure of its strength and which constitutes the supporting structure of the dough and gives it elasticity and cohesion.

Salt is not added in some dough, such as in the regions of Tuscany, Umbria and Lazio. The dough is left to rest for a time that varies depending on the recipe and the strength of the flour. During dividing and forming phase, the dough is divided into pieces of the desired weight: this phase is carried out by hand or with machines called dividers or with automatic groups which, in addition to dividing the dough, create the bread shapes.

In the wheat leavening phase, the loaves of bread double or triple their volume. The bread is placed on wooden boards or trays for a time that varies according to the quantity and type of yeast used. The production of most of the typical Italian breads involves the use of sourdough, thus falling within the group of artisanal production. In this phase, various chemical reactions take place which, starting from sugars,

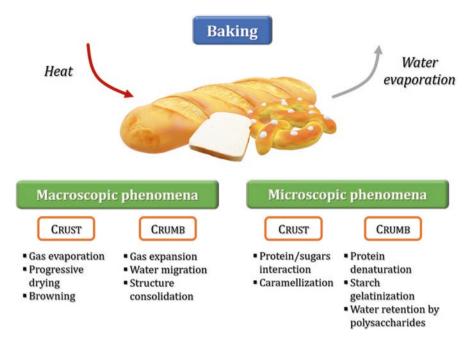


Fig. 9.2 Macroscopic and microscopic phenomena occurring to crust and crumb during baking procedure

producing alcohol and carbon dioxide, which is retained by gluten. During this phase, bread can be covered with sheets (in linen or plastic) to avoid the formation of a crust caused by the evaporation of water from the surface. Adjusting the temperature and moisture of the air can be done through the use of leavening cells.

The last phase for the production of bread is its baking which, by a series of chemical, biological and physical transformations, allows to obtain an edible product, which can be easily digested. The action of heat, at a temperature usually between 180 and 200 °C, works to stiffen the gluten network, thus stopping the volume and shape given to the dough. A porous crumb is formed as water and gas evaporate, while the sugars on the surface caramelize and, consequently, coloring the bread crust. The involved processes are shown in Fig. 9.2.

#### 2.3 Breads with Protected Status

Italy has obtained the highest number of bakery products protected by the European Protected Designation of Origin (PDO) and the Protected Geographical Indication (PGI) brands (European Commission n.d.; Ministero delle politiche agricole alimentari e forestali n.d.). In particular, *Altamura* bread, the *Pagnotta del Dittaino*, and Tuscan bread, that belong to the tradition of the different Italian regions, have

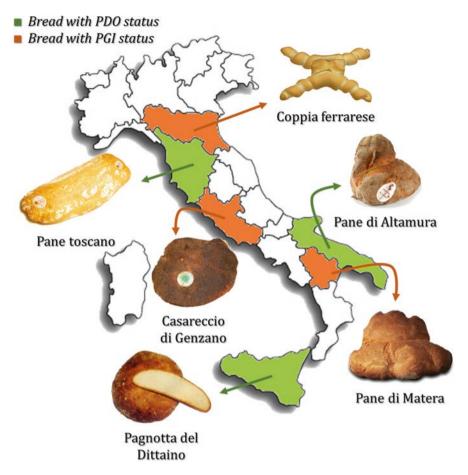


Fig. 9.3 Map of the regional distribution of protected breads, retaining the PDO or PGI status

obtained the recognition of the PDO status, while the breads called *Casareccio di Genzano*, *Coppie di Ferrara* and *Matera* bread have obtained the recognition of the PGI status, instead (Fig. 9.3) (Camera di Commercio di Roma n.d.).

*Altamura* bread was the first bread granted with PDO status in Europe (European Commission 2003). It is a type of naturally leavened bread made from remilled durum wheat semolina from the Altamura area, in the Apulia region. By law, it must be produced according to a range of stricted conditions, including the use of particular varieties of durum wheat (all locally produced) of 80% (w/w) and above in the recipe, a certain specification of water, a consistent production method, and a final crust of at least 3 mm in thickness. The shape of the bread is not an essential characteristic for a loaf to be certified, but there are some traditional shapes.

The processing technology is based on the use of sourdough after at least three refreshments, to increase the fermented mass by adding water and durum wheat semolina, in the percentage of 20% (w/w) compared to the quantity of re-milled

semolina durum wheat to knead. In addition to semolina, water, sourdough and sea salt (2% w/w) is added to the mixture. The kneading operation is completed in about 20 min thanks to the use of a kneading machine that homogeneously and energetically mixes the various ingredients. The dough mixture obtained is left to rest for at least 90 min at room temperature, covered with a cotton cloth. Then, the dough is divided into pieces weighing 0.5, 1 or 2 kg, and the first shaping is carried out, strictly by hand, followed by a second resting phase of 30 min. The various loaves therefore require further remodeling, which will give the final shape, followed by a rest period of at least 15 min to complete the leavening. Before being baked, cuts are made on the loaves to avoid the breaking of the crust during baking. The dough is then baked at 250 °C for 15 min in an open oven, for 45 min in a closed oven and, finally, for 5 min in an open oven to allow the formation of a dry and crunchy crust (Ministero delle politiche agricole alimentari e forestali 2000). The oven is preferably powered by wood or gas, indirectly heated, and must reach a temperature of 250 °C. The direct heating of the ovens used for baking Altamura bread must be fueled with oak type wood, which guarantees the excellent baking of the product, by burning slowly and gradually while increasing the heat. The final product is characterized by a crust with a minimum thickness of 3 mm, a straw-yellow crumb with a homogeneous honeycomb, a characteristic aroma and a maximum moisture content of 33% (w/w).

*Altamura* bread, in addition to its characteristic aroma, is also highly appreciated for its shelf-life, which was necessary to satisfy the dietary needs of farmers and shepherds of the past. The custom of baking in public ovens was based on the prohibition placed on citizens "of any state or condition" to bake any type of bread or focaccia in their homes. The milling activity was also to be concentrated entirely in Altamura, considering that at the beginning of the 1600s there were as many as 26 processing plants in full operation (Ministero delle politiche agricole alimentari e forestali 2000).

Another bread that has the PDO status is the Pagnotta del Dittaino, a typical product of the Valle del Dittaino (central Sicily island) (QualiGEO n.d.) obtained from a dough prepared with re-milled durum wheat semolina from varieties produced within the production area to which water, sourdough and salt are added. The origin of Pagnotta del Dittaino can be traced in the historical and cultural tradition of using durum wheat for the processing of bakery products in its production area. It is characterized by a crust of medium toughness and a thickness of between 3 and 4 mm, a highly elastic and soft yellow crumb with a fine, compact and uniform alveolation, and moisture not exceeding 38% (w/w). Thanks to the use of re-milled durum wheat semolina and sourdough, Pagnotta del Dittaino maintains unaltered its sensory characteristics for about 5 days. The production area involves the provinces of Enna and of Catania (European Commission 2008). According to the discipline of production, the remilled durum wheat semolina to be used to produce Pagnotta del Dittaino must come for at least 70% (w/w) from grains belonging to the Simeto, Duilio, Arcangelo, Mongibello, Ciccio and Colosseo cultivars. The remaining 30% (w/w) must be represented by durum wheat belonging to other 16 varieties and, in any case, all the cereal grains must come from local crops. Semolina is mixed with water, salt and sourdough, which is refreshed daily using 25% (w/w) of the sourdough produced the previous day. After the dough has risen, it is divided into pieces weighing about 0.5 or 1 kg, which are shaped into a round shape and baked in the oven (European Commission 2008). The regulation does not mention either the type of oven or the baking conditions (temperature and duration), but, traditionally, baking takes place in wood-burning ovens. After baking, the loaves are immediately packaged with micro-perforated plastic film or in a modified atmosphere composed of a mixture of carbon dioxide and nitrogen (Gobbetti and Corsetti 2010).

Pane Toscano is a type of bread typical from the Tuscany region, recognized with the protected designation of origin label. With the European directive 2016/58, published in the Official Journal of the European Union on 4 March of the same year (European Commission 2016), Tuscan bread obtained the PDO recognition. What sets it apart most is the fact that it is completely salt-free and with a slightly acidic crumb taste (Consorzio di Tutela Pane Toscano DOP n.d.). Tradition tells that the lack of salt is due to a dispute occurred in the twelfth century between the Pisans and the Florentines. On the other hand, the legend of a similar clash between the Pope and the Perugians is widespread in the Umbrian area, even if a research on saltless bread in Perugia seems to disprove these legends (Nowak 2011). In the seventeenth canto of the Paradise of Dante Alighieri's "Divina Commedia", Messer Cacciaguida prophesied the future exile of the Tuscan poet, describing the anguish of those who will have to eat the bread of others made with salt. A first written testimony on the production of "insipid" bread, that is without salt, is already provided in the sixteenth century by Pierandrea Mattioli (Pane Toscano n.d.). A text of 1765 by Saverio Manetti reports news about the Tuscan custom of not using salt during the preparation of this particular type of bread, in addition to the use of sourdough, called in Tuscany "formento", consisting of sour dough that was stored in the socalled cupboard in the middle of the flour; there is also no lack of evidence regarding the centrality of bread prepared without salt in the diet of nineteenth-century Tuscan sharecroppers. This choice was the natural consequence of using salt, mainly for the preservation of pork meat, given its high price. In the twentieth century, Giuseppe Negri praised the labors of the baker, referring to "the insipid Tuscan loaf" (Pane Toscano n.d.). Some later writers have narrated the goodness and peculiarity of this unsalted bread, with a crunchy crust and soft but consistent crumb.

The "0" type soft wheat, being cultivated in different areas of Tuscany, has different qualitative characteristics. By mixing different batches of wheat, it is possible to obtain a balanced raw material with characteristics suitable for bread making and the right amount of gluten. *Pane Toscano* has various shapes, mainly rectangular, round or ovoid. The weight is usually 500 g, while the shape has a thickness ranging from 5 to 10 cm. The crust is crumbly and crunchy with a golden color, while the crumb is soft, irregularly alveolated and characterized by a white and ivory-white color. The primary scent of *Pane Toscano* PDO is that of toasted hazelnut and the flavor is saltless but not bland since the types of wheat used, together with the sourdough, give it a unique flavor despite the lack of salt. Naturally leavened *Pane*  *Toscano* means the product obtained from the bread making of the following ingredients: type "0" Tuscan soft wheat flour, sourdough and water.

During the grinding of the wheat, a complex process of crushing the cereal grain and subsequent sieving of the cereal flour is carried out. During processing, the germ remains an integral part of the ground flours exclusively for the production of this bread (commonly, however, the germ is eliminated, depriving the flours from vitamin E, an essential antioxidant with a high nutritional value). In order to have a good PDO Tuscan bread only with water and wheat flour, without the addition of additives of any kind, it is necessary to start with sourdough coming from a previous processing, which stored in an environment suitable undergoes a gradual processes of fermentation and acidification. This portion of sourdough, suitably refreshed, placed in new dough is able to cause it to rise. At the end of the refreshments it "comes off" a portion of dough to guarantee the sourdough for the following day.

*Casareccio di Genzano* is a homemade bread from Genzano and is the first PGI in Europe; it is produced with soft wheat flour, water, sourdough and salt; owes its goodness to the quality of the basic ingredients used, in particular to cereals, water and, according to the inhabitants, to the air of the town that has been producing it for over than 300 years (Comune di Genzano di Roma n.d.).

The cereal flour is mixed with sourdough dissolved in warm water (approximately  $37 \,^{\circ}$ C) and salt in the mixer. The dough is left to rise for about an hour and then the bread, transformed into loaves with a weight varying from 0.5 to 2.5 kg, is left to rest in wooden crates with hemp cloths and sprinkled with bran or mince. At this point the bread is placed in a warm environment where it will undergo another growth; then, it is baked in the oven, which can be heated with wood or indirectly, at a temperature between 300 and 320 °C, giving to the bread a consistent crust of at least 3 mm.

Crunchy on the outside and very light on the inside, it has a savory flavor and a scent that recalls that of granaries and can be attributed to the use of sourdough and the quality/variety of the cereals used. The dark brown rind is very important because it protects the crumb and keeps it soft and spongy for a long time. Sourdough, that is, the dough from the previous process made acidic, rich in active enzymes, retains the fragrance of the bread even for several days after baking. Precisely because this bread contains a huge amount of live ferments, it does not tolerate vacuum packing or, even less, plastic (Comune di Genzano di Roma n.d.). It is packaged in the shape of a loaf with "kissing at the hips" or round and long strands weighing from 0.5 to 2.5 kg. It cannot be marketed with additional qualifications such as "extra", "fine", "top" or "selected".

*Coppie di Ferrara* is the bread traditionally linked to the city of Ferrara (Coppia Ferrarese n.d.). It consists of two pieces of dough attached to each other that form a pair, joined in the central part and forming four arms, called *crostini*. Type "0" soft wheat flour is used, to which water, pure pork lard, extra virgin olive oil, salt, malt and sourdough are added. Sourdough is obtained by mixing type "0" soft wheat flour with a strength (W) of 220 and with a protein content (P/L) of 0.45–0.50 with water (water/flour ratio of 45% w/w) and possibly adding red wine vinegar, hops or grape must. The sourdough is then fermented for 24 h at room temperature.

Sourdough must be refreshed every 12 h, by adding water and wheat flour, for five consecutive days, while the day before use it is wrapped in a cotton cloth. The dough is processed in a fork mixer and, subsequently, after the refining phase inside laminating machines, it is cut into strips of 20 cm long and 4 cm thick. There are two techniques for the preparation of the "couple": the strips of dough can be finely worked between the fingers and the palms of the hands, until they take on the particular spiral appearance, or they can be placed in the die that forms half pairs, which are then joined manually. After forming, the bread is left to rise covered with a cloth on wooden boards. Baking allows obtaining crunchy and fragrant bread with a savory flavor, characterized by a hard, smooth and golden crust. This bread is characterized by compact structure inside with small and uniform alveolation at the ends, while a more uneven one can be found in the central part where the two arms join. There is a conservation regulation according to which the Ferrara couple must be marketed within 24 h of its production without being deep-frozen or frozen.

*Matera* bread is obtained through an ancient processing system, typically used by bakers in the province of Matera (Associazione per la Promozione e la Valorizzazione del Pane di Matera n.d.). This system provides for the exclusive use of durum wheat semolina. It has a very long tradition dating back to the Kingdom of Naples and beyond, as confirmed by numerous and verified historical sources. It has always been a typical food of the Matera region, a traditional area of cereal cultivation, as it is also evident from various artistic and literary testimonies that attest to the importance and worship of bread in the life and economy of the whole territory. Particularly suggestive is the rite of the three cuts impressed with a knife on the dough, which represented the Holy Trinity, a gesture of deep devotion with which the families thanked God for the opportunity to take advantage of this primary good. *Matera* bread must have the following characteristics: croissant or high bread shape; 1 or 2 kg size; crust thickness of at least 3 mm; crumb of straw yellow color with characteristic alveolation; moisture not higher than 33% (w/w).

The choice of old varieties of wheat, which retain in their genetic heritage some characteristics which are not present in others, gives rise to flours that transfer the unique taste and flavor that make this bread to be distinguished from others, without mentioning the manufacturing process and, specifically, the creation of the sourdough produced with fresh fruit, which adds further and particular taste sensations. The product is obtained through the ancient production process, which involves the use of sourdough, durum wheat semolina, salt and water. It can be baked both in wood and in a gas oven. The obtained product, thanks to the ingredients used and the specificity of the manufacturing process, is characterized by a yellow color, a typical and very uneven porosity (with pores, inside the bread, ranging in diameter from 2–3 mm up to 60 mm), an extremely characteristic taste and smell. Its shelf life can reach 7 days for 1 kg pieces and 9 days for 2 kg pieces (Consorzio di Tutela del Pane di Matera n.d.).

# 2.4 The Most Famous Traditional Breads of Italian Regions

In Italy, every region has kept an immense variety of breads, different for ingredients, processes, forms and traditions, which have survived over time. In this section, the most famous traditional types of bread of each Italian region are reported (Ubaldi 2019). Some of these typical breads are shown in Fig. 9.4.

#### Friuli Venezia Giulia

The ancient *Pan di Sorc*, today a Slow Food Presidium, takes its name from the corn flour present (*sorc*), combined with rye flour, wheat, dried figs, raisins and fennel seeds. It's about bread that is a little sweet and a little spicy, widespread above all in the Gemonese area. In Trieste, sandwiches, prepared with oil or lard, are often eaten with hot cooked ham from Trieste and Kren, while brown bread is widespread throughout the region, which, with a mix of dark flours, replaced the white one for years.

#### Valle d'Aosta

The main breads in this region are three: rye bread; one with dried figs, walnuts and chestnuts; and *Micòoula*, a sweet loaf of rye and wheat with chestnuts, dried figs and raisins which is prepared traditionally in the Christmas period. In 2001 *Micòoula*, which in patois means "smaller and special bread", was included in the national list of traditional agro-food products of this region.

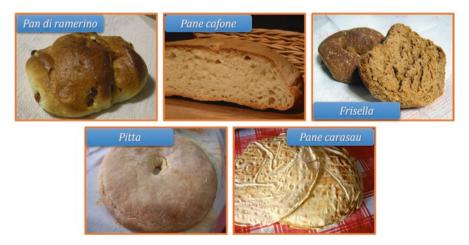


Fig. 9.4 Some of the most typical Italian breads. (Reproduced from Wikipedia.it under Creative Commons licence)

#### Piedmont

The most popular bread is the classic *mica*, which is widespread not only in Piedmontbut in all of Northern Italy and whose name comes from crumb, with a dough of flour of soft wheat, yeast and salt. There are numerous variants depending on the area and shape. Standing out completely from the others, the Carlo Alberto's bread with eggs, butter, walnuts and anchovies.

#### Veneto

In this region, breads of corn, rice, di rye, buckwheat and figs are very widespread.

#### Lombardy

*Milanese* bread for excellence, but widespread throughout Lombardy, is the *michetta*. From the same family of blown breads typical of the North Italy, with low moisture and hard dough, we can find other types such as *rosetta*, *ciabatta*, *miccone pavese*, *ricciolina*, *busella* (in the area of Bergamo), Mantuan trunk, semolina banana, *luvadel*, *al panon*, beetle, *chisolina* (the Mantuan *schiacciata*) and various oil sandwiches that change name according to their shape and to the place they come from.

#### Trentino

The bread of this region almost stands out from the others because of the presence of rye flour, that can be found in the following specialties: *the breatl* sourdough with fennel seeds, cumin and coriander; *Fela Struzn* and *Vinschgauer Struzn*, two loaves in the shape of a horseshoe; the loaf with 4 *tritelli*, also containing barley and oats; the *pindl*, which with the addition of dried apples, cinnamon and lemon becomes the *apfelbrot*, while with pears and grapes sultanas becomes the *palabirabrot*; then, the known *Schuttelbrot*, which is thin and crispy and can be found often in accompaniment to speck.

#### Liguria

In the area of *Valle Argentina*, Italy, there are very interesting breads: the black bread of *Pigna* and the *Carpasina*, or *Carpasio's Pan d'ordiu*, with ground barley, sourdough and spring water. Being very tough, it gets wet with water and vinegar, usually topped with tomato, anchovies, oil and basil, food base of shepherds. Moving towards the capital, Genoa, on find the *libretto*, the classic sandwich soft white of the Genoese, with crumb soft and well alveolate. Finally, a bread that tastes

of Liguria more than any other can also be mentioned: it is the bread of Chiavari, with soft wheat flour and pulp of black olives preserved in extra virgin olive oil olive.

#### Emilia Romagna

Bread from this region is mostly known for wraps, watercresses, fresh and stuffed pasta; but despite everything, it also owns an outstanding position in breadmaking, with types such as hard dough bread from Pavullo with various flours and lard, in different forms such as micca, loaf and *michetta*; or *Pane del Bollo*, from the name of the stamp that in the fifteenth century was used to make loaves for pilgrims on the *Via Francigena*. Finally, there is *Miseria*, a great loaf similar to the original michetta from the city of the musician Verdi, Busseto.

#### Tuscany

In addition to unsalted bread *Pane Toscano* described earlier, there are many other interesting types, less known and tastier, such as spelled or potato bread, in Garfagnana; or the *Marocca di Casola* in Lunigiana, which is also protected, prepared with chestnut flour that abounds in the area. *Neccio* is also prepared with chestnut flour, in particular in the surroundings of Pistoia. Other noteworthy breads are the *Pan di Ramerino*, with leaves of rosemary and raisins; *Bozza Pratese* which it also has a consortium that takes care of its own promotion and enhancement; *Pane di Marocco* of Montignoso with chilli and black fresh olives (in fact, it is prepared during the period of olives collection); and *Pane di Vinca*, in Lunigiana, with soft wheat flour and bran, made after a long leavening of at least 12 h.

#### Umbria

*Pan nociato* is really a specialty: it is prepared with seared, peeled and crushed walnut kernels, Norcia pecorino, oil, salt and pepper. Like most of the most valuable recipes, it varies from country to country, where it can also be found in a similar form under the name of *pan caciato*; for example, some varieties have red wine, raisins or cloves inside the dough.

## Marche

There are many focaccias, which are similar to wraps, and there are the classics homemade, wholemeal, spelled loaves. To stand out, the bread with the must, which is prepared during the harvest period, and the loaf of Chiaserna, in the province of Pesaro, with soft wheat flour and sourdough.

#### 9 Traditional Italian Bread

#### Abruzzo

Very large loaves are typical of this region, like spike bread, from the name of the small cuts on the surface that resemble the thorn of wheat; or the chapel bread, prepared with the *Senatore Cappelli* grain. It is not uncommon to find also corn bread.

#### Lazio

In addition to *Casareccio di Genzano*, we can find other kind of breads: the *ciriola romana*, the classic white soft wheat bread which is always present on the table; the *Falia of Priverno*, with an elongated shape, which is closer to one flat bread; the *Velletri bread*, made according to the ancient technique of shelling; *the bread of Salisano*, a classic strand with three incisions on the profile.

#### Basilicata

Here we can find, in addition to very known *Matera* bread, the *Rivello bread* with three flours from Pollino and sourdough; then various donut-shaped loaves are widespread, such as *Bread of Cuddura, u ficcilatidd,* the *mescuotte,* the *varone* and the *pizzatolo.* 

#### Molise

The typical bread of this region is the *parrozzo*, which indicates a type of bread prepared with potatoes, corn and maize flours.

#### Campania

The entire region produces bread with greaves or crumbled pork *cicoli*, or with fat of this animal. In Naples city, the so-called *Pane Cafone* is produced, because of the raw flour used for its preparation. It can be found in various formats such as loaf, cocchia, palatone, etc.

#### Apulia

*Friselle, taralli* and *pucce* are the specialities of this region. In Salento area, there is a real one specialty: the *scéblasti*, the characteristic bread seasoned with yellow pumpkin, olives, onion, courgettes, oil, chilli, salt and capers, baked on stone in wood-burning ovens and celebrated every year on 2nd and 3rd August.

#### Calabria

Here, various *pitte* breads from the Arbëreshë cuisine are produced. There are also other excellent products, like the bread with sesame (the *Giuggiulena*), that of *Mangone* and the bread of *Cutro*, containing grains and with a thick, crunchy crust. An actual speciality is the *pane pizzata*, which is widespread above all on the Ionic side and that distinguish itself from the others by the use of cabbage. In fact, before baking, the dough is wrapped in cabbage leaves that give it that typical "collected" form. Another special loaf is that of *Grano di Pellegrina*, one fraction of Bagnara Calabra, in the province of Reggio Calabria.

#### Sicily

Here, bread changes a lot from one area to the other. In the Western part we find the *muffulettu* in Licata and surroundings, or the *muffoletta* in Palermo, a round loaf that is prepared with spices such as anise, cinnamon, fennel, pepper or cumin. There is also the well-known black bread of Castelvetrano, with a mix of durum wheat wholemeal and tumminia, baked for about 1 h in stone ovens fueled with olive wood; the *Cuccidatu di Carrozza*, a donut bread that is prepared for the feast of the Crucifix, so beautiful that it is also used for decorating the floats during the event; the bread of Monreale, with milk and lemon juice; and wonderful *Salemi breads*, prepared for the holidays in various forms that recall baroque elements.

On the Eastern side of the region, there is the *Vastedda* di Enna, which would be the classic homemade bread; *Pè*, with durum wheat semolina flours passed through a sieve and sourdough; the *Cicciddatu*, also with a shape of a donut; and homemade bread from Lentini, in the Syracuse area, covered with the classic sesame seeds that always characterize the Sicilian bread, and which reminds us of the importance of the Arab presence. Throughout Sicily, *Pupu cu l'ovu* is prepared for Easter, that is a kind of bread with egg inside.

#### Sardinia

Sardinia is one of the regions with the most variety of bread ever. In addition to the most famous *carasau* and *guttiau* (soaked in oil, salted and toasted in the oven) or *pistoccu*, there are some really interesting breads, such as *tunda*. Known for its particular shape with seven points or "lace", it was prepared only on Saturdays to be consumed all week. Other types are the *pintau* bread, prepared in various forms depending on the holidays and the *coccoi a pitzus*, a typical decorated bread of durum wheat semolina, which in the past was prepared for weddings and Easter.

## References

- Ansa.it (2020) Italiani riscoprono l'arte bianca, cresce il consumo del pane. Terra&Gusto. Retrieved from https://www.ansa.it/canale\_terraegusto/notizie/dolce\_e\_salato/2020/05/05/ italiani-riscoprono-larte-bianca-cresce-il-consumo-del-pane-\_83e89e29-3b78-4486-8f70cd6a4c1ff5cd.html
- Arranz-Otaegui A, Gonzalez Carretero L, Ramsey MN, Fuller DQ, Richter T (2018) Proc Natl Acad Sci 115(31):7925–7930
- Assitol (2020) Il pane ai tempi della pandemia
- Associazione per la Promozione e la Valorizzazione del Pane di Matera (n.d.) Il Disciplinare di Produzione del Pane di Matera Indicazione Geografica Protetta. Retrieved from http://www. ssabasilicata.it/CANALI\_TEMATICI/Educazione\_alimentare/Menu3/DOP\_IGP/pane\_ matera\_disciplinare.pdf
- AssoPanificatori Pasticceri (n.d.) AIBI, Pane: Quello Artigianale iol Più Amato dagli Italiani. Retrieved from https://www.assopanificatori.it/?p=301
- Camera di Commercio di Roma (n.d.) Storia e qualità del pane. Pane e Tradizione. Retrieved from www.agrocamera.com
- Coldiretti (2013) Il pane quotidiano nel tempo delle rinunce. XIII Forum Internazionale Dell'Agricoltura e Dell'Alimentazione
- Comune di Genzano di Roma (n.d.) Il Pane Casareccio IGP. Retrieved from http://www.comune. genzanodiroma.roma.it/home/esplorare/il-pane-casareccio-igp
- Consorzio di Tutela del Pane di Matera (n.d.) Il Pane. Retrieved from http://www.basilicatanet. com/ita/web/item.asp?nav=consorziopanedimatera
- Consorzio di Tutela Pane Toscano DOP (n.d.) Il Pane. Retrieved from https://www.panetoscanodop.it/it/il-pane
- Coppia Ferrarese (n.d.) Wikipedia. Retrieved from https://it.wikipedia.org/wiki/Coppia\_ferrarese
- Cozzolino I, Gallo M, Naviglio D (2015) Il piacere della vita. Aracne Editrice, Roma
- European Commission (n.d.) Quality schemes explained. Retrieved from https://ec.europa. eu/info/food-farming-fisheries/food-safety-and-quality/certification/quality-labels/ quality-schemes-explained
- European Commission (2003) Commission Regulation (EC) No 1291/2003 of 18 July 2003 supplementing the Annex to Regulation (EC) No 2400/96 on the entry of certain names in the "Register of protected designation of origin and protected geographical indications" provided for in Council. Off J Eur Union n. L 181 of 19/07/2003
- European Commission (2008) Publication of an application pursuant to Article 6(2) of Council Regulation (EC) No 510/2006 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs. Off J Eur Union n. C 283 of 07/11/2008
- European Commission (2016) Commission Implementing Regulation (EU) 2016/303 of 1 March 2016 entering a name in the register of protected designations of origin and protected geographical indications (Pane Toscano (PDO)). Off J Eur Union n. L 58/24 of 04/03/2016
- Gobbetti M, Corsetti A (2010) Biotecnologia dei prodotti lievitati da forno. CEA, Milano
- LEGGE 4 luglio 1967, n. 580 (1967) Disciplina per la lavorazione e commercio dei cereali, degli sfarinati, del pane e delle paste alimentari. GU Serie Generale n.189 Del 29-07-1967
- Ministero delle politiche agricole alimentari e forestali (n.d.) Sai quel che mangi. Retrieved from www.politicheagricole.gov.it
- Ministero delle politiche agricole alimentari e forestali (2000) Comunicato di rettifica relativo all'avviso recante: proposta di riconoscimento della denominazione di origine protetta "Pane di Altamura." GU Serie Generale n.190 Del 16-08-2000
- Mocarelli L, Piñeiro MV (2013) Il lungo addio al pane nell'Italia del Novecento
- Nowak Z (2011) Il pane sciapo e la guerra del sale di Perugia. Diomede 1:67-81
- Pane Toscano (n.d.) Wikipedia. Retrieved from https://it.wikipedia.org/wiki/Pane\_Toscano
- Pani regionali italiani (n.d.) Wikipedia. Retrieved from https://it.wikipedia.org/wiki/ Pani\_regionali\_italiani

- QualiGEO (n.d.) Pagnotta del Dittaino DOP. Retrieved from https://www.qualigeo.eu/ prodotto-qualigeo/pagnotta-del-dittaino-dop/
- Ubaldi G (2019) Mappa dei pani italiani: le eccellenze di cui andare orgogliosi, regione per regione. Il Giornale Del Cibo. Retreieved from https://www.foodinfo.it/news/ mappa-dei-pani-italiani-le-eccellenze-di-cui-andare-orgogliosi-regione-per-regione/