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Educational booklet

Sensory analysis of PDO cured meats from Piacenza

**Guide to the
appreciation and
evaluation of
conformity to
traditional
products**

Coppa Piacentina DOP
Pancetta Piacentina DOP
Salame Piacentina DOP





Sensory analysis of PDO cured meats from Piacenza



Guide to the appreciation and evaluation of conformity to traditional products



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Foreword

Before starting this booklet, the reader should be aware that the acronym DOP has been translated as PDO (Protected Designation of Origin) and IGP as PGI (Protected Geographical Indication). Throughout the text, the name in Italian is followed by the English equivalent in brackets.

For example:

Coppa Piacentina DOP (PDO Coppa from Piacenza)

Pancetta Piacentina DOP (PDO Pancetta from Piacenza)

Salame Piacentino DOP (PDO Salami from Piacenza)

Coppa Piacentina DOP

Pancetta Piacentina DOP

Salame Piacentino DOP

are all registered names protected by the European Union.

Catering colleges and hospitality industry courses in our country perform an important role in training young people to work in the catering industry around the world. It is therefore essential that we introduce them to our traditional products during their training. So, the Consortium of PDO cured meat producers of Piacenza has undertaken a project designed for fourth and fifth year catering college students with the aim of promoting the culture of high-quality traditional production methods in general, and in particular, PDO cured meat products from Piacenza. Discovering how to recognise the characteristics of these products and learning the correct way to inform consumers about them will not only enhance students' professional skills but will be of great use during their careers.

This project has been approved and financed by the Italian Ministry of Agriculture, Food and Forests. Numerous schools in the north of Italy have supported this project, which was welcomed enthusiastically by both teachers and students. They showed a lively interest in the course and responded by taking an active role in the lessons.

This booklet is intended for distribution to all students who took part in the project. It collects together and analyses the contents of the course, with the aim of giving students and their teachers material which is simple to consult and full of interesting information and new ideas. Its main objective is to make a useful addition to the curriculum that students study at catering college.



The Consortium of PDO cured meat producers of Piacenza



The advancement and achievements of the many cured meat producers prompted the Chamber of Commerce to found the Consortium of Cured Meat Producers of Piacenza in 1971. Its role is to protect the three local products: PDO Coppa Piacentina, PDO Pancetta Piacentina and PDO Salame Piacentino. At the time the Consortium was founded, there was already a defined geographical area of production, even though EU regulations governing traditional production did not yet exist. Producers belonging to the Consortium voluntarily followed and insisted on the traditional methods of production: dry-salting, the addition of seasoning (to give a delicate flavour) and an extended maturing time. Preparation and maturing methods were overseen by a technical commission who were responsible for issuing the metal tags bearing the Consortium's logo: a horn of plenty overflowing with cured meats and to one side, a coat of arms recalling that of Cardinal Alberoni's family.

More than thirty years have passed since then and during that time advances in technology and communication have changed radically. Firms have passed from fathers to sons and the Consortium has seen at its head a variety of different leaders in both personality and background. Despite these changes, one thing has remained unchanged: its role to protect the three local products: PDO Coppa Piacentina, PDO Pancetta Piacentina and PDO Salame Piacentino.

This commitment was recognised in 1996 when PDO status was awarded to the three products, only four years after the publication of the first regulation: Regulation (CE) 2081 from 1992. The first cured meats from Piacenza bearing the blue and yellow EU logo appeared on the market less than two years later. During this brief time, the Consortium helped its members to create and organise the documentation necessary to prove that production regulations had been followed and, therefore, certification requirements had been fully met.

As well as providing technical assistance to producers, the Consortium with the support of the Province of Piacenza, has also undertaken to promote and inform consumers about the culture and taste of Coppa, Pancetta and Salami through a variety of ventures. These initiatives vary from taking part in food fairs and local events as well as organising courses for consumers and school students to appearing in local and national media. The Consortium has organised courses for retailers and promoters of cured meat products as well as recently training panels of judges to carry out tasting tests. Further details about tasting tests are included in this booklet.

In August 2007, The Consortium of PDO cured meat producers of Piacenza was formed. Like the previously mentioned Consortium, it has the task of officially safeguarding the DPO cured meats of Piacenza, by protecting them from the improper or illegal use of the registered designation of origin. The protection Consortium works under the surveillance of the Ministry of Agriculture, Food and Forests which is a national agency for controlling adherence to EU regulations.

What are PDO products?

PDO products

Both PDO and PGI appeared in 1992 following Regulation (CE) 2081/92, updated in 2012 with Reg EU 1151/2012. They aim to protect traditional products from European countries from imitation and to satisfy growing consumer demands for quality food produced according to the traditions of an identifiable geographical location. Since the introduction of PDO and PGI regulations, food products have become instantly recognisable to consumers thanks to their distinctive European identification symbols, shown below:



PDO: Protected Designation of Origin.



PGI: Protected geographical indication.

PDO and PGI labels

In order for food products to be allowed to use these two symbols, they must follow a detailed, strict recognition procedure, initially at national and then at European level. Before being launched onto the market, they have to undergo strict inspection by the Certification Authority which operates under the auspices of the Ministry of Agriculture, Food and Forests (MIAPAAF).

What are the main differences between PDO and PGI?

According to article 5, regulation (EU) 1151/2012, 'designation of origin means: a name which identifies a product:

- a) coming from a given place, region, or, in exceptional circumstances, a country;**
- b) whose quality or characteristics are due essentially or exclusively to a particular detail and to its intrinsic natural and human factors;**
- c) whose stages of production take place in the defined geographic area.**

The term 'geographic indication' is used in cases in which ' a name which identifies a product originating:

- a) from a given place, region or country;**
- b) whose quality, reputation or other characteristics are essentially attributable to its geographic origin; and**
- c) whose production includes at least one of its two stages taking place in the defined geographic area.'**

Although the two definitions appear to be almost identical, there are substantial differences between them. In the case of PDO, the complete production process (from the production of raw materials through to the final product) have to take place in the area of designation. Whereas in the case of PGI, only one of the stages (production of the raw material, processing or development) must be linked to the area of origin.

Another substantial difference is in the fact that while PDO status requires the quality or characteristics of the product to be traceable to the geographic environment of origin, PGI requires only a link between the product's

reputation and its area of origin. In order to obtain the PDO, there is a waiver to the recognition principle regarding the source of raw materials, which can be sourced from outside the area of origin as long as the following conditions are met:

- the production area of raw materials is defined
- the existence of special conditions for the production of raw materials
- there is a control system in place to guarantee that these conditions are observed.

The areas of origin of raw materials used in cured meats from Piacenza are limited to the regions of Emilia-Romagna and Lombardy.

PDO registration

Italy has approved the ministerial administrative order Regulation no. 12511/14 October 2013 on the regime of the quality of agricultural products and food, known as the 'quality package.'

To obtain PDO recognition, producers have to be affiliated to an official association which declares among its aims the desire to register a product. The associations are usually Consortiums which have to apply to both the Ministry of Agriculture, Food and Forests (MIAPAAF) and the local regional authority. The application must be accompanied by a production specifications document. This document should include the following information:

- the name of the agricultural or food product which includes the designation of origin;
- a product description (which should include: raw materials, main physical, chemical, microbiological and organoleptic characteristics);
- the boundaries of the geographical area and a list of the elements that identify the product as being from that area;
- a description of the method attainment;
- the features which justify the link between the quality or characteristics of the product and the given geographical location;
- detailed information about the authorities or agencies which confirm adherence to production specifications;
- all regulations referring to product labelling.

The application should be accompanied by the production specifications and a report on the history of the product, complete with bibliography. The report must demonstrate that the item has been in production, not necessarily continuously, for at least twenty-five years. It must also provide evidence of the product's well-established position in the market or in everyday language.

The application should be sent to the Ministry of Agriculture, Food and Forests (MIAPAAF) and to the interested region who will decide if it is acceptable or not. In the case of a positive decision at national level, the application will be forwarded to the European Commission. Once it has been accepted, the member country will be notified within six months of registration of the designation in the European register by means of publication in the Official European Gazette.

PDO recognition of Coppa piacentina, Pancetta piacentina and Salami piacentino was registered with the publication of regulation (CE) number 1263/96.

Controls

In Italy, all controls on compliance with the standards of Regulation (EU) 1151/2012 are the responsibility of the Ministry of Agriculture, Food and Forests (MIAPAAF). The Ministry authorises specific certification authorities to carry out the checks on production specifications.

The Ministry authorises Certification Authorities to check that production specifications are followed. Such authorities must conform to European Standard EN 45011 or to the ISO/CEI 65 guide (General requirements relative to bodies which manage certification systems of products) and which must be accredited. Production specification checks are carried out before the product is launched onto the market and include controls at all stages of the production chain, farming and labelling. Since 1998, cured meats from Piacenza have been checked and certified by the Agriculture and Food Products Certification Authority which operates under specific authorisation from the Ministry.

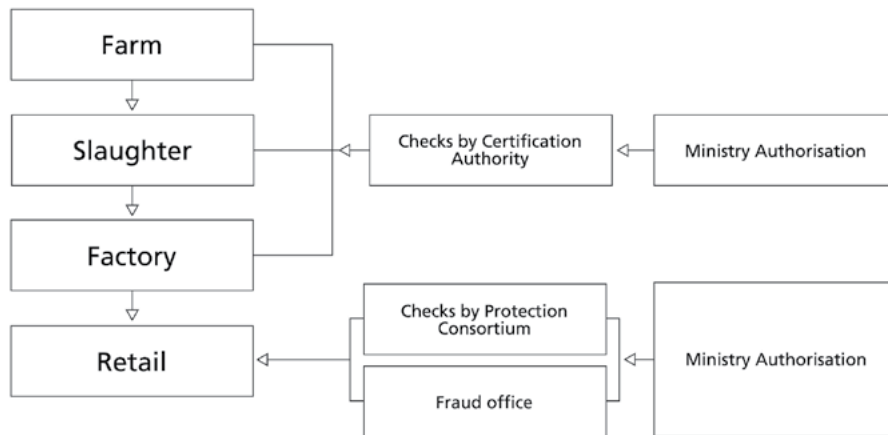
Protection

Article 13 of Regulations (EU) 1151/2012 asserts that ' the registered names are protected against:

- a) any commercial use, whether direct or indirect, of a registered name for products that are not the object of registration, in so far as they are comparable with registered products with this name or the use of such name will allow the reputation of the protected name to be exploited, even in the case of the products being used as ingredients;
- b) any form of usurpation, imitation, evocation, even if the origin of the real products or services are indicated or if the protected name is a translation or is accompanied by an expression such as 'kind', 'type', 'method', ' in the style of', 'imitation' or similar and also in the case of the products being used as ingredients;
- c) any other incorrect or misleading indication regarding the place of origin, the origins, the nature or the essential qualities of the product used on the packaging or wrapping, in advertising or on product leaflets as well as the use of packaging and containers which could give misleading information regarding the origins of the product.
- d) any practice which could mislead the consumer as to the true origins of the product.'

PDO protection is guaranteed by Protection Consortiums which are recognised by the Ministry of Agriculture, Food and Forests (MIPAAF). Protection Consortiums check that the designation is not used illicitly. Surveillance also covers the sale of the products in retail outlets (supermarkets, shops, wholesalers etc) where Certification Authorities are not allowed to operate. The illicit use of PDO can lead to the prosecution and punishment of the parties involved.

Certification and protection



Cured meats from Piacenza

The history of cured meats from Piacenza

Pig breeding appears to originate from as long ago as 4000 BC, when the Chinese were the first people to domesticate pigs using a rational system. In Europe, the origins of eating pork go back far into history. Pigs are easy to breed in a domestic environment and they produce an abundance of tasty meat and fat. In the second half of the 1800s, pigs bones were found in archaeological excavations in pile-dwelling settlements in the province of Parma at Castione Marchesi and in the province of Piacenza at Montata dell'Orto (Caorso) and Castelnuovo Fogliani. These discoveries suggest that pigs were kept by the inhabitants of the Po Valley during the Bronze Age (about 1000 BC).

The Romans, who are known to have eaten large quantities of pork, also left behind evidence of pig-keeping in the province of Piacenza, in the form of a bronze pendant shaped like a small pig, which is on display in the Museum of Piacenza.

The earliest ways of preserving meat involved fire: drying and smoking, while salting was introduced at a later date. During the Middle Ages, techniques for smoking meat were developed in some European countries, whereas in France and Italy, salting pork was more widespread. For centuries in Emilia, families salted pork for their own consumption. In the early Middle Ages in the Piacenza area, a notary was required to be present when a pig was slaughtered to certify that the animal weighed more than 250 kgs. Butchers also had to make sure the meat they sold was from a healthy animal and to do this, they would watch the way the animal walked into the slaughterhouse.

There is evidence to show that the practice of pork butchering was widespread during the Middle Ages in the province of Piacenza. There are two examples which are to be found in the local artistic heritage and both are in 12th century mosaics. One of the mosaics is on the floor of the church of San Savino in Piacenza, the other is in the church of San Colombano in Bobbio. Both works of art show a calendar with a central panel divided into four sections with each one showing the work carried out in the countryside during that season. The slaughtering of pigs is shown in December when the low temperatures make conditions suitable for working with meat.

It was not until the 14th century that the sale of cured meats in Piacenza was recorded in the city's ancient statute books. From these documents it can be ascertained that the sale of preserved meats (carnes sicus) was exclusively reserved for the members of the guild of cheesemongers, some of whom had permanent stalls in Piazza Duomo. Increased consumption of cured pork products led to the constitution of a special category of cured meat traders. They joined forces with the cheesemongers, thus creating the Guild of Cheesemongers and Cured Meat Traders which later became known as the Shopkeepers. By the end of the 18th century, the guild had over one hundred and eighty-six members. The cured meat products made in Piacenza were very much in demand by the traders of Milan and the rest of Lombardy. To differentiate them from similar products from other parts of Emilia, they were often called ' Piacenza stuff'.

Butchering and pork curing skills became a valued trade in the province. Skilled butchers would come down from the mountains in winter and earn their living by going from house to house slaughtering pigs and curing the meat products for the owners.

It was in the early decades of the 18th century that the fame of the cured meat of Piacenza reached the courts of France and Spain. This was mainly due to a clever diplomat from the city called Cardinal Giulio Alberoni. He knew that by serving the high-quality cured meats and cheeses from Piacenza, he would ingratiate himself with influential people. He worked on a number of important international political projects and ended up as prime minister in the court of Spain.

There are numerous letters between Alberoni and the recently crowned queen of Spain, Elisabetta Farnese. She was the step-daughter of Francesco, Duke of Parma and Piacenza and she became the wife of King Philip V of Spain thanks to the expert political manoeuvring of the illustrious cardinal from Piacenza. In her letters, Elisabetta frequently asked for supplies of cured meats to be sent from Piacenza as she was so fond of them.

During the early years of the 20th century, cured meat production began to increase and soon took on semi-industrial proportions until it reached the situation we have today with many cured meat producers scattered around the province.

Production methods (extracts from production specifications)



Raw materials for the production of cured meats from Piacenza

For the production of Coppa, Pancetta and Salami, meat from large Italian pigs is used. These animals need to be born, raised and slaughtered in the regions of Emilia Romagna and Lombardy. The pigs must weigh a minimum of 160 kgs, with a tolerance of more or less 10% and they must be at least 9 months old. They should also possess all the characteristics of Large White Italian pigs.

Coppa Piacentina DOP (PDO Coppa from Piacenza)

Coppa is produced all over the province of Piacenza. A fresh piece of meat, weighing at least 2.5 kgs, is cut from perfectly bled neck muscles of the pig carcass. When the meat is taken to the processing unit, the blood vessels are trimmed and drained before chilling in a refrigerator. The curing process begins with dry salting, which means rubbing the meat with the following mixture or salt, seasoning and preservatives (quantities for 100 kg of meat):

Sodium chloride	min 1.5 kg	max 3.5 kg
Sodium and/or potassium nitrate	max 15 g	
Sodium nitrate	max 10 g	
Black and/or white pepper, whole and/or ground	min 15 g	max 30 g

Seasoning composed of:

Cinnamon	max 15 g
Cloves	max 25 g
Bay leaves	max 10 g
Nutmeg	max 10 g

After salting, the meat is beaten by hand and then chilled in a fridge for at least 7 days. Following this, the meat is covered with pig membranes, then tied up and pricked before being hung up to drain.

The meat is then moved to a ventilated drying kiln which has a temperature of 15° - 25° C and humidity levels of 49% - 90% . This stage lasts for at least 7 days, which is usually long enough for the formation of the bloom, which gives Coppa its distinctive pink colour.

After drying, the maturing stage starts. The meat matures for at least six months from the date of salting in an environment with a temperature of between 10° and 20°C and humidity levels at between 70% and 90% with tolerance of more than 10%.

The complete maturing stage generally includes periods of time in basements, cellars or in places with optimal maturing conditions.

The finished product must have a minimum weight of 1,5 kg.

Nutritional facts: (average values per 100g)

Fat	31%
Protein	27%
Humidity	36%
Kcal	533



Pancetta Piacentina DOP (PDO Pancetta from Piacenza)

Pancetta is produced all over the province of Piacenza and it is made from the fat of the pig. The fat used comes from the central part covering the side of pork, which goes from the sternum to the groin and across the belly as far as the teats. Pancetta is one of the fatty cuts of pork and is made from the belly of pork. After removing the belly of pork from the carcass, it is trimmed and cut into a square.

The first stage of the curing process begins with dry salting, which means rubbing the meat with the following mix of salt, seasoning and preservatives (quantities for 100 kg of meat):

Sodium chloride	min 1,5 kg	max 3.5 kg
Sodium and/or potassium nitrate	max 15 g	
Sodium nitrate	max 10 g	
Black and/or white pepper, whole and/or ground	min 30 g	max 50 g
Cloves	max 40 g	
Sugar	max 1.5 kg	
Sodium L-ascorbate (E301)	max 200 g	

The salted pieces of meat are chilled in a refrigerator for about 10 days at a temperature of 3° - 5°C with humidity levels of 70 - 90%. After chilling, the meat is scraped to remove all the residue from curing and excess salt and seasoning. Some lean meat may be added to each piece before it is rolled and sewn up. On the end without any rind, the exposed meat is covered with strips of pig bladder, membranes or other types of pig intestines. Membranes, other types of pig intestines or paper of vegetable origin is placed along the side to cover the stitching so as to ensure that all the meat is completely covered during the maturation.

The Pancetta is then tied up, pricked and left to rest for a few hours at a temperature of 0° - 5°C. It is left to dry for about 7 days at a temperature of 15° - 25°C. It is at this stage that the skin begins to take on its characteristic colour, which is a sign that the meat is maturing.

The Pancetta must mature for at least 4 months from the date of salting, in a controlled environment with a temperature of 18°C and humidity levels of 70 - 90% with tolerance of more than 10%.

The finished Pancetta Piacentina DOP should weigh between 4 and 8 kgs.

Nutritional facts: (average values per 100 g)

Fat	49%
Protein	13%
Humidity	33%
Kcal	627



Salame Piacentino DOP (PDO Salami from Piacenza)

Salami is produced all over the province of Piacenza. It is made from pork meat which corresponds to the characteristics outlined in the production specifications.

Between 10% and 30% of fat is used depending on the quantity of lean meat available. The lean meat does not include the cuts from the head, whereas as the fat is made up of fatty meat, gullet and the parts of the belly without any soft fat.

The lean meat and fat are chopped up and then minced finely (the holes on the mincer should be smaller than 10 mm diameter). The minced meat is salted using the following mix of salt, seasoning and preservatives

(quantities for 100kg of meat):

Sodium chloride	min 1.5 kg	max 3.5 kg
Potassium nitrate	max 15 g	
Sodium nitrate	max 10 g	
Black and/or white pepper, whole and/or ground	min 30 g	max 50 g
Garlic and wine infusion	max 500 g garlic (5 -20 g), wine (0.1 – 0.5 litres)	
Sugar	max 1.5 kg	
Sodium L-ascorbate (E301)	max 200 g	

The salted meat is mixed and forced into a piece of pig intestine and then tied and pricked. The next stage is drying which takes place at a temperature of 15° - 25°C and at humidity levels of 40% - 90%. The Salami must mature for at least 45 days at a temperature of 12° - 19°C and at humidity levels of 70 - 90% with tolerance of more than 10%.

- The weight of the finished product should be between 400 g and 1 kg.

Nutritional facts: (average values per 100 g)

Fat	25%
Protein	30%
Humidity	40%
Kcal	500



The sensory organs and sensory evaluation

The sensory organs

Our senses of **sight, hearing, touch, taste** and **smell** give us the information we need to move around and interact with our environment. The sensory organs, which transform external information into nerve impulses and transmit them to the central nervous system, are made up of special nerve cells that are stimulated by an appropriate impulse:

for sight it is light;

for touch, mechanical pressure;

for hearing, the vibrations of the air;

for taste and smell, certain chemical molecules.

Sight is, without doubt, the most complex sensory organ system. The eye can be compared to a camera obscura projecting images from the outside onto the retina, which serves as a type of screen. As for hearing, the ear receives sound waves and transmits them as nerve impulses to the brain, more specifically to the temporal lobe. Not only can the ear tell us which direction a sound is coming from but it also contains a liquid which helps us to maintain our balance. Receptors on the tongue and in the nose give us our senses of taste and smell. These are sensitive to chemical stimulation and often act together to improve our perception of taste and smell. Our sense of touch, by means of receptors in the skin (even in the mouth), enables us to perceive external changes, such as temperature, the shape and external features of objects and pain stimuli. All our sensory organs transmit information about the outer world to the brain. The sense of hearing will not be discussed further as it is of little relevance to our subject matter.

Sight

Sight is a physical sensory organ situated in the eye which enables perception of the surrounding environment through a type of electromagnetic energy: light. Electromagnetic waves in the visible spectrum are between 400 and 760 nanometres long. Colour is perceived according to the wave lengths captured by the eye. The colour of a surface is determined by the wave length of the reflected light.

The light passes through the cornea and the crystalline lens and ends up on the retina, where two types of sensory cells are found: rods and cones. The rods, which are sensitive to colour and detail, control daylight vision; whereas the cones give more approximate vision and require less energy. They are therefore used for twilight vision. Signals from the rods and cones are transmitted to the brain through the optic nerve. When we look at an object, our sense of sight enables us to evaluate its size, shape, consistency (liquid, solid, gelatinous...), surface texture (smooth, rough, shiny, opaque), colour (tone, intensity), etc.

Visual evaluation

Sight is the sense we trust most, partly because it is immediate but mainly because it gives us simple, tangible information that we can communicate to others. Visual information is easily remembered and it can be given a precise name which is universally understood by those who speak the same language.

For example, if we look at a lemon we immediately notice the colour yellow. Its colour does not change even if we stare at it for a few minutes and this enables us to memorise it very efficiently.

If we use the term 'lemon yellow' we can be sure that other people will understand exactly what we are describing. Because visual perception is so immediate and certain, it inevitably conditions us and consequently reflects negatively on the sensory evaluations of consumers, judges and qualified tasters. We are slower at visual assessment than at evaluation using the other senses. A further consequence of the influence of sight is that we tend to give so much importance to appearance that we let it dominate and influence our overall assessment - what looks good must taste good. The effect of synaesthesia, as previously explained, could compromise the objectivity of later evaluation.

Smell

Our sense of smell is based on chemical reactions. The nerve cells that function as smell receptors are situated in the nasal cavity and are called olfactory cells. They are connected to the olfactory bulb which in turn is connected to the brain by the olfactory nerve. These receptors are sensitive to chemical substances in the breath which they use to generate nerve impulses. Different types of smells vary from one substance to another, depending on the shape of their molecules: each shape corresponds to a different smell. Humans have a very fine sense of smell. We can distinguish between hundreds of thousands of smells even very faint ones. However, this ability diminishes in proportion to the intensity of the smell.

A strong, persistent smell is only perceived for a certain amount of time, after which the receptors adapt or get used to it and stop sending signals to the brain. Smells are highly evocative in comparison to the other senses. The olfactory organ has a greater connection to the limbic system and hypothalamus, the areas of the brain that controls emotion. It is no coincidence that olfactory memory is closely connected to situations of great emotional involvement. A molecule can be recognized by the olfactory system in two ways:

- by entering the nose through the nostrils: direct olfactory pathway;

- by entering the nose through the mouth: the after-smell pathway.

Smell evaluation

Among the five senses that we use to understand our surroundings, smell is undoubtedly the hardest to record and classify. This is why smell evaluation is considered the most complex in sensory analysis.

These difficulties derive from certain characteristics of the sense of smell:

- it is very difficult to recall a smell. When we think of a lemon, we can easily remember the colour, but we cannot recall the smell;

- smells are difficult to communicate. The description of a smell is always open to personal interpretation and misunderstanding simply because it is so subjective;

- naming a smell is often difficult, sometimes impossible; we can recognise a smell as being familiar, but we often fail to identify it or give it a name. We have all had the experience of smelling an odour that seems to be familiar and that we are sure we have already smelt, yet are unable to identify;

- smells can induce strong emotions and have great potential for evoking situations connected to them, and therefore, they have a strong influence on our judgements;

Our sense of smell can be improved through training: this involves sniffing a range of natural and artificial aromas and naming each one.

Taste

Our sense of taste is formed by means of taste receptors which are situated mostly on the tongue, but also on the roof of the mouth, the epiglottis and on the pharynx. The velvety surface of the tongue is covered in small round formations called taste buds. They are protuberances of varying sizes and shapes densely covering the membrane of the tongue and are divided in to three categories according to their shape: filiform papillae, fungiform papillae, and foliate papillae.

The foliate papillae are concentrated on the surface of the back of the tongue. The foliate papillae are mainly on the sides of the tongue. The fungiform papillae are concentrated on the tip of the tongue. The chemical substances contained in food are dissolved by saliva, which stimulates impulses. The impulses are gathered by the nerve endings of the lingual nerve and transmitted to the brain. The taste of a particular food is determined by a combination of its taste, smell and temperature. Taste buds can only perceive 4 basic tastes: sweet, salty, sour and bitter; whereas the mouth can also perceive smell (aromas) and touch (temperature, consistency, spiciness, etc).

The tip of the tongue is sensitive to all four of the basic tastes, but especially to sweet and salty, the sides of the tongue are sensitive to sour and the back of the tongue to bitter tastes.

Taste evaluation

Tasting is a simpler form of evaluation than smelling, yet still more complex than visual assessment.

One of the most difficult aspects of tasting is differentiating it from smell and touch. To train the sense of taste, solutions at predefined molecular concentrations are used to produce tastes: sodium chloride is used for salty, sucrose for sweet, caffeine for bitter and citric acid for sour. The ability of tasters to perceive tastes correctly can be tested by carrying out flavour recognition tests.

Sweetness is produced by substances such as sugar, polysaccharides, alcohol, ketones, proteins and saccharin. It contrasts with bitter and sour flavours and when combined with salty flavours it creates a savoury taste. Sweetness is perceived one second after tasting. A rise in the temperature of the food increases its perceived sweetness.

Saltiness is produced by some inorganic composites such as sodium, potassium and magnesium chlorides and sodium and potassium nitrates, along with some organic compounds. Saltiness accentuates bitterness and sourness and contrasts with sweetness. A salty flavour is perceived less than a second after tasting. A rise in the temperature of the food increases the perceived saltiness.

Sourness is sensed every time the taste buds come into contact with a molecule that releases a significant number of hydrogen ions, such as citric acid in lemons. It contrasts with sweetness, which is why a pinch of sugar is often added to a tomato sauce if the tomato puree used is too sour. Sourness is perceived less than a second after tasting and the intensity of the sourness does not vary with temperature, at least within the normal ranges for food and drink.

Alkaloids, such as nicotine and caffeine, higher alcohols, polyphenols, aldehydes, ketones and other substances are responsible of **bitterness**. It is reduced by sweetness but increased by sourness and saltiness. Bitterness decreases with rising temperatures up to a certain point after which it increases. It is perceived more than two seconds after tasting, making it the slowest taste to be perceived and also the one that lasts longest. This explains the expression 'it has a bitter aftertaste'.

Touch

Touch is both a chemical and physical sense. There are tactile receptors all over the body, even inside it. Various types of cells can be identified among the physical receptors: Merkel cells, which react to pressure exerted on the skin; Meissner corpuscles, situated between the skin and the epidermis, that detect small changes in pressure; Ruffini corpuscles that measure the variations in tension of the skin; Pacini corpuscles which respond to vibrations; the Golgi apparatus that basically determines position and, finally, the nerve endings that allow us to perceive movement, pain and temperature. Chemical perception is derived from the responses of chemo receptors to certain chemical stimuli, especially those in the membranes.

The impulse is sent from the receptors to the brain, using a complex web of nerve tracts and nerve centres, where processing starts. The information travels along the nerve tracts until it reaches the appropriate system to recognize the impulse. This sensory system also includes the trigeminal nerve, which gives sensitivity to the face and the oral and nasal membranes, the facial nerve, covering two thirds of the tongue, the glossopharyngeal nerve, that covers the top of the tongue, and the vagus nerve, that transmits impulses detected by the oesophagus from the oropharyngeal region down to the lungs.

All these receptors are found in various concentrations throughout the body, according to necessity. As far as sensory evaluation is concerned, the useful tactile zones are: the skin, the oral membrane and, to a lesser extent, the nasal membrane.

Tactile evaluation

For our purposes, we will limit ourselves to the sense of touch detectable in the mouth for the sensory analysis of food. Through physical stimulation we can define an object's shape, roughness (geometrical features), hardness, elasticity, viscosity, adhesion (mechanical features), spatial position and temperature.

The most common chemical tastes are: **astringent, sharp, spicy, burning, cooling and metallic.**

Astringency is the taste produced by the combination of epithelium proteins and/or of the precipitation of the proteins that lubricate saliva, by means of certain composites like polyphenol, alcohol, highly concentrated acids, aluminium salts, chrome, zinc, and lead. In other words, it is the taste that you have when you eat an unripe persimmon, a raw artichoke or when you drink red wine with a high polyphenol content.

Sharpness derives from a trigeminal response to stinging molecules, such as acetic acid, caustic soda (sodium hydroxide), hydrochloric acid.

Spiciness is due to molecules such as piperine in pepper, capsaicin in chilli peppers or allyl isothiocyanate in mustard.

Burning/cooling derives from contact between the membranes and highly alcoholic liquids.

A metallic taste is caused by contact between the tongue and metallic objects.

The most common defects in cured meats

Introduction

As with all forms of production, imperfections in the finished product can sometimes occur and cured meats are no exception. As a result, the quality of the cured meat is compromised. This phenomena is not as common today as it was in the past thanks to modern technology, scientific research and experience acquired by producers in preventing product deterioration. Defects can be caused by mistakes made at all stages of production: from the choice of raw materials or of maturing environments to the production process itself. In order to identify a quality defect in cooked meat with a certain amount of precision, it is very useful to discover the underlying causes. Suitable measures can then be taken to make sure that it does not re-occur. Some of the most common sensory quality defects are reported below along with some explanation of their causes. The following is not an exhaustive dissertation as it only deals with the most common imperfections found in whole, raw cured meats (such as Pancetta and Coppa) and raw matured sausages (Salami).

Unpleasant appearance

From a visual point of view, one of the most common defects is incrustation on the skin, which tends to be dark in colour. Incrustation is usually caused by unsuitable conditions during the drying stage if temperatures are too high and humidity levels too low. It can also occur when the maturing environment is too dry. Such conditions cause the outside of the cured meat to become dehydrated which leads to the formation of a hard, dark crust. The drier the conditions, the thicker the crust.

Occasionally, there are lighter areas (that have a faded appearance) in the middle of a whole Coppa or Pancetta. This can mean that the salt and seasoning have not been evenly absorbed. It should also be noted that spots of blood might be found. These are caused by blood vessels not being properly emptied and by bruising just before slaughter. More infrequently, abnormal grey or green colouring may be visible which is caused by animal feed problems, incorrect salting, or from undesirable bacteria (for example sulfhydryl bacteria which form the green-coloured sulfomoglobin).

Fat with a yellow-ish tinge is another undesirable sight. This is generally due to a process of oxidation caused by excessively high temperatures or too much light in the maturing environment. It may also be the result of pig feed with too much maize and soya and even, in some cases, of animals that have been slaughtered too young when their fat has not had time to form perfectly. Yellow fat is only acceptable in almost imperceptible amounts and in a well-matured cured meat.

In whole, raw, matured cured meat, splits or infiltration from the outside to the inside may be found. Splits become apparent once maturing has already started and generally lead to the meat becoming rancid or mouldy. Other signs of deterioration may be visible in Salami, such as the minced mixture being loosely bound which is caused by fermentation problems during the drying process. When cut, the slices fall apart and crumble. The sausage also breaks very easily. Another typical defect in sausages made from minced meat is the development of a brown colour and the middle going rancid. The brown colour is due to fermentation and an alteration in the myoglobin accounts for the brown discolouration. Salami goes rancid if the minced mixture is not forced into the intestine properly so that air pockets form. The resulting exposure to the air turns the fat yellow and the muscle brown.

Unpleasant smell

Most unpleasant smells found in cured meats are of: mould, rancid or rotting meat, gas and smells reminiscent of the pigsty or cellar. A mouldy smell can be traced back to a maturing environment with insufficient ventilation and excessive humidity levels. This is accompanied by grey-green mould or black

marks on the skin of the cured meat. If the producer does not intervene promptly, there is a high chance of the finished product tasting of mould. Unfortunately, once a mouldy smell has developed, it is too late to correct it. A rancid smell is caused by exposure of the fat to the air. The larger the affected area, the stronger the smell. When there is only a small amount of yellow fat, trimming it off usually removes the rancid smell.

When the cured meats are not dried properly, bacteria can develop producing a gas which gives the cured meat a smell of hydrocarbons. Animal stress, prolonged lack of food, deep wounds, the jugular vein being cut incorrectly during slaughter as well as badly bled meat and salting in an unsuitable environment are the most common causes of the development of proteolytic bacteria which rot cured meat. These bacteria produce a very unpleasant smell which sometimes develops into a gas. There is another smell which can be found on the skins of well-matured cured meats, and which is often defined as 'a cellar smell'. If it is not too strong, it is a smell which is appreciated by many. There can also be other abnormal smells, whose origins are mainly caused by: animal feed, animal gender (meat from adult boars), illness (uremia, the smell of urine, jaundice) and a smell reminiscent of a pigsty.

Unpleasant tastes

The worst flavours a cured meat can have are bitter, sour or salty. In very well-matured cured meats such as raw ham, bitterness can be caused by excessive proteolysis which reduces dipeptide or mono-peptide proteins thus giving a slightly bitter taste. Other causes of bitterness can be traced back to the animal such as jaundice, or to the formation of mould resulting from storage in unsuitable conditions. A bitter flavour is always considered as a defect.

Sourness is typical in young cured meats. It is acceptable as long as it is not excessive and it tends to disappear as the cured meat matures. However, when sourness is caused by abnormal fermentation it is usually considered to be a fault because it gives the meat an unpleasant taste.

The degree of saltiness can vary greatly depending on the type of cured meat and the extent to which it is appreciated or not depends very much on personal taste. Cured meats from Piacenza tend to be mild in flavour, so excessive saltiness is generally considered to be undesirable.

Unpleasant texture

As regards texture, astringency and pungency are essentially the worst characteristics in cured meats. Extreme dryness, hardness or a rubbery texture are not generally considered to be real defects.

The chewing consistency changes as the meat matures and this is physiological feature of all raw cured meats. In the early stages of maturation, cured meats tend to be rubbery then they reach the optimum point when they melt in the mouth before becoming tough and dry as maturation is prolonged. The best time to eat cured meats depends on personal tastes.

Tasting techniques for cured meats from Piacenza

An introduction to tasting

Features of the tasting premises

To conduct a sensory test in ideal conditions the following points must be considered:

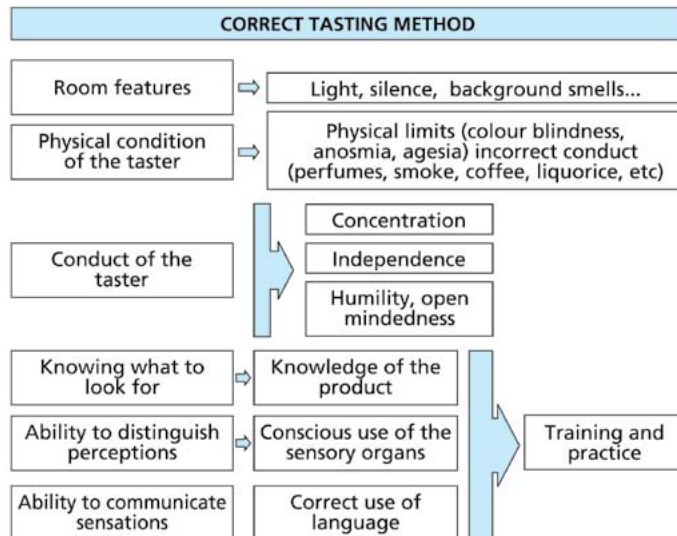
- the room must be well lit (preferably by natural light);
- there must be no external smells that might compromise the fragrance of the sample (for example: cosmetics, perfume, the smell of other food, smoke, etc.);
- the temperature and humidity must not cause discomfort to the tasters ;
- the room must be as quiet and calm a possible, without noises or other elements that might be a source of distraction (such as people moving or talking).

The psychophysical conditions of the taster

When carrying out a food tasting, the judge must not be influenced by emotional or physical stress. The tasters should be rested, relaxed and calm so that they can give a reliable assessment. Before the tasting session, judges should avoid substances that could limit perceptiveness, such as tobacco, coffee, sweets and other aromatic and persistent flavours

The taster's conduct

The tasting should be carried out with concentration, completely independently (to avoid judges influencing each other), with humility and open mindedness (there is always something to learn).



When to taste

The ideal times for tasting sessions are between 10am and 12 noon, and 4 and 6 pm, which are neither too close nor too far from meal times. The reason for this is to avoid the tasters on the panel feeling either very hungry or too full. However, these times may not be possible to organise due to the availability of the members of the tasting panel.

Materials

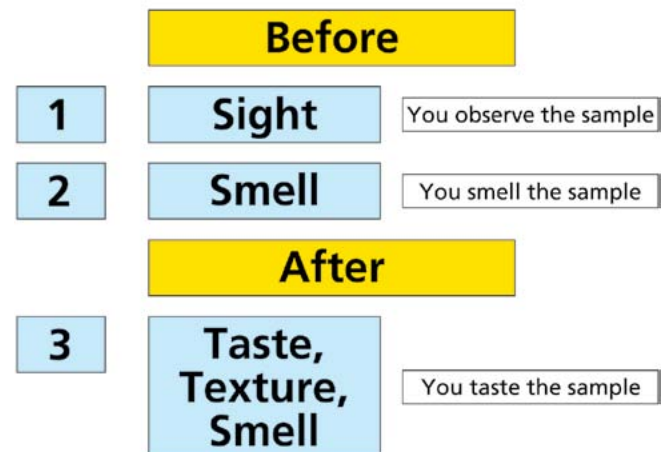
To carry out a proper tasting session of cured meats it is necessary to procure some readily available and easily useable items. The samples must be presented on a white plate; a coloured background could change the appearance of the colour of the cured meat. Some water, packets of unsalted bread sticks (Turin type) to eat between samples, cutlery and serviettes should also be available.

The condition of the samples

The samples must be served immediately after slicing. The cured meats should have been previously removed from the fridge, so that when the slices are on the plate they are at a temperature of 15°C -18° C. The whole slices of cured meat, must be placed in the middle of the plate, making sure they are completely flat. The thickness of the slices must be the same for all samples and for all the judges; 1 mm for Coppa and Pancetta and between 1 and 2 mm for Salami.

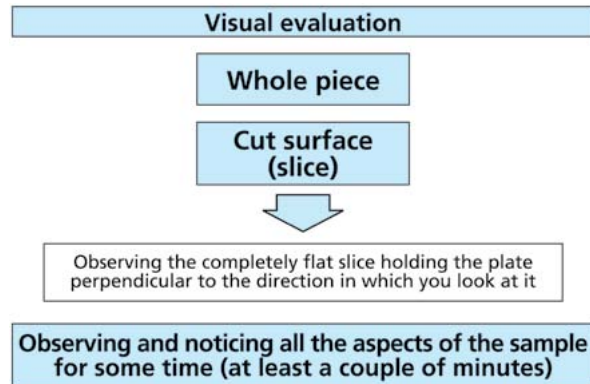
Correct tasting techniques

The evaluation follows a logical sequence in method and time



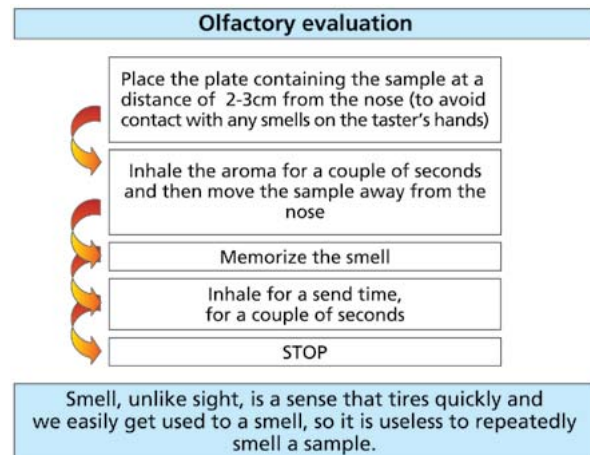
Visual evaluation

The appearance of the cured meats is judged by observing a slice, holding the plate perpendicular to the direction in which the taster is looking. With Coppa and Pancetta it is recommended that at least two slices be served one on top of the other so that the colour can be seen more clearly. The transparent nature of the finely cut slices may mean that the true colour is not visible. Salami, which is sliced thicker, can be judged with a single slice.



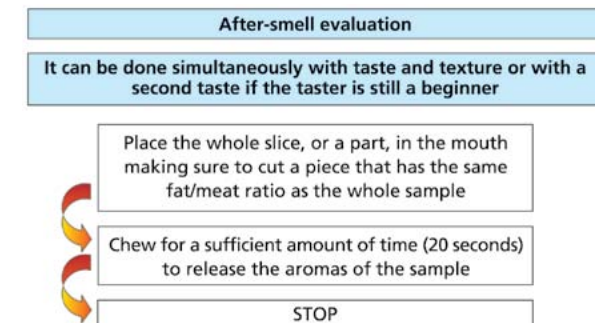
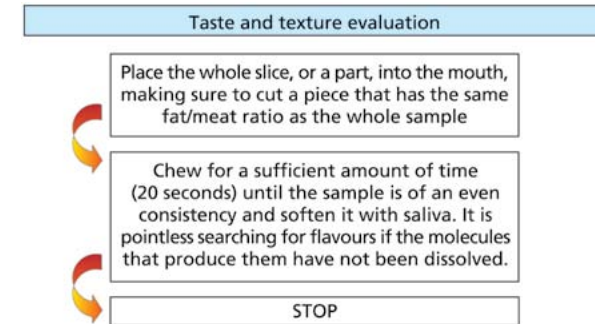
Smell evaluation

Smell evaluation is carried out by holding the plate containing the sample at a distance of 2-3 cm from the nose. The taster then inhales the aroma for a couple of seconds before moving the plate away. This process can be repeated a second time, to confirm the first impression. Smell, unlike sight, is a sense that tires quickly. Repeatedly smelling a sample is useless because we very quickly get used to a smell.



Taste, texture and after-smell evaluation

Taste, texture and after-smell evaluation should be carried out by placing a whole slice of the cured meat sample in the mouth. If the slice is too big, it can be cut in half, making sure that the two halves have approximately the same fat/meat ratio as the whole slice. This is essential to ensure the uniformity of the samples. The sample must be chewed until it is of an even consistency and sufficiently softened by saliva. It is pointless searching for flavours if the molecules which produce them have not been dissolved. It is important to concentrate on distinguishing the four tastes (sweet, salty, sour and bitter) from the texture (spiciness, astringency, consistency, etc) and on evaluating separately the smells (aromas) that are perceived retro-nasally, as the nose and mouth are connected.



The sensory characteristics of cured meats from Piacenza

What to look for in Coppa

When carrying out a thorough evaluation of Coppa, the following aspects should be taken into consideration:

Appearance

Lean meat colour: this refers to the colour of the meat (muscle), which should be a bright, deep ruby red.

Colour uniformity: there should not be any areas of lighter or darker coloured meat in the slice. The Coppa should have a uniform colour, without external incrustation or lighter spots in the middle. A thin outer layer of a more intense red is acceptable. This is due to the fact that the outer layer is more susceptible to the effects of drying.

Fat colour: the fat should be milky white or pink. Any other discolouration such as yellow, is the result of oxidation.

Veining: this refers to the infiltration of the fat into the meat, which looks like a spider's web. A well-veined Coppa is generally more tender and has a milder flavour, but the veining should not be excessive.

Slice compactness: this refers to the way the meat and the fat are bound together to form a single piece. There should not be any signs of splitting or infiltration etc.

Smell evaluation

Smell intensity: this refers to the immediate impact of the smell when the Coppa is sniffed. It includes all the various smells, both good and bad. The fragrance of Coppa should be quite intense.

Seasoning: the seasoning should be delicate, without the dominance of one particular flavour.

Fresh meat smell: the smell of fresh meat is found in cured meats that have only been matured for a short time. This smell tends to disappear during the maturing process and should not be evident at all after 6 months.

Unpleasant smells: Coppa should never smell mouldy, rancid, rotten or have overtones of intestines or smells reminiscent of pigsties.

Taste/touch evaluation

Mild: Coppa should have a mild flavour

Salty: Coppa should be tasty, but it should never be salty.

Bitter: it should never be bitter

Sour: it should never be sour

Chewing consistency: this refers to the effort required to chew Coppa. It should be tender, and neither tough nor rubbery.

After-smell evaluation:

All the smells already mentioned are evaluated along with the duration of the flavour.

Taste duration: this is the time taken between swallowing and the disappearance of the taste.

What to look for in Pancetta

When carrying out a thorough evaluation of Pancetta, the following aspects should be taken into consideration:

Appearance

Lean meat colour: this refers to the red colour of the meat. Pancetta should be a bright, deep ruby red in the middle and a lighter red towards the edges.

Fat colour: the fat should be milky white or pink. Other discolouration such as yellow, is the result of oxidation.

Slice compactness: this refers to the layers of the slice staying tightly bound together and not unrolling. Compactness increases during maturation and storage at low temperatures.

Smell evaluation

Smell intensity: this refers to the immediate impact of the smell when Pancetta is sniffed. It includes all the various smells, both good and bad. Pancetta should have an intense fragrance.

Seasoning: the seasoning should be delicate, without the dominance of one particular flavour.

Fresh meat smell: this is a smell of fresh meat found in cured meats that have only been matured for a short time. This smell tends to disappear during maturation.

Unpleasant smells: Pancetta should never smell bad (mouldy, rancid, rotten or have overtones of intestines or a pigsties).

Taste/touch evaluation

Mild: Pancetta should have a mild flavour

Salty: Pancetta should be distinctly savoury, but it should never be salty.

Bitter: it should never be bitter

Sour: there may be a hint of sourness when fresh

Chewing consistency: this refers to the effort required to chew Pancetta, which should melt in the mouth. Tenderness increases as the meat matures. Fresh Pancetta can be tough and rubbery.

After-smell evaluation:

All the smells already mentioned are evaluated along with the duration of the flavour.

Taste duration: this is the time taken between swallowing and the disappearance of the taste.

What to look for in Salami

When carrying out a thorough evaluation of Salami, the following aspects should be taken into consideration:

Appearance

Lean meat colour: this refers to the colour of the meat (muscle), which should be a bright, deep ruby red.

Colour uniformity: this means that there shouldn't be any areas of lighter or darker coloured meat in the slice. Salami should have a uniform colour, without any incrustation on the skin or lighter spots in the middle. A thin outer layer of a more intense red colour is acceptable. This is due to the fact that the outer layer is more susceptible to the effects of drying. There should not be any signs of abnormal discolouration such as a brown or green.

Fat colour: the fat should be milky white or pink. Other discolouration such as yellow, is the result of oxidation.

Fat distribution: this refers to the uniformity of the distribution of the pieces of fat. As Salami is a coarsely-minced mixture, the small pieces of fat do not tend to be spread out very evenly.

Slice compactness: this refers to the way the meat and the fat are bound together. If the mixture tends to fall apart, (as it does in a raw sausage) and have holes in it, it means that the meat and fat have not been bound together very well. Whereas, if a slice stays in one piece, even when gently pulled, it means the mixture has been bound together well and is therefore compact. This should not be confused with tenderness: one slice of Salami can be very tender and another quite tough but in both the meat and fat can be compact.

Smell evaluation

Smell intensity: this refers to the immediate impact of the smell when the Salami is sniffed. It includes all the various smells, both good and bad. The smell of Salami should be intense.

Seasoning: the seasoning should be very delicate. The flavour of the garlic may be perceptible, depending on the quantities used.

Fresh meat smell: the smell of fresh meat found in cured meats that have only been matured for a short time. This smell tends to disappear as maturation proceeds.

Unpleasant smells: Salami should never smell mouldy, rancid, rotten or have overtones of intestines or pigsties).

After-smell evaluation

All the smells already mentioned are evaluated along with the duration of the flavour.

Taste duration: this is the time taken between swallowing and the disappearance of the taste.

How to buy, keep and serve PDO cured meats

European and Italian legislation regarding the identification and safeguarding of Protected Designation of Origin status is based on a number of principles which protect both the product and the consumer. Transparency is the main consideration in all regulations on food and drink products. As a result, a considerable number of laws concerning the presentation of goods have been published in various European and national gazettes in order to safeguard against misleading advertising and labelling. In this section, we will give the reader a few simple tips on buying cured meats, without going into the intricacies of all the rules and regulations. We will give advice on how to make an informed choice when buying PDO cured meats, understanding labels and finally some tips on the storage of cured meat in the home.

Labels

PDO cooked meat products can be sold whole, in pieces and ready-sliced in vacuum packs. The information on the label depends on how the products are sold, however the following information must always be included:

- **The registered name of the product, for example: Coppa Piacentina DOP (DPO Coppa from Piacenza) or Coppa Piacentina followed by "Protected Designation of Origin";**

- **The European Union symbol;**



- **The words 'certified by a control body authorised by the Ministry of Agriculture, Food and Forests';**

- **The logo of the Consortium of DPO Cured Meat Producers of Piacenza and a reference to the EU regulation concerning the recognition of the registered name (Reg CE 1263/96) may also be used.**

All cured meat on sale to the public must be labelled with the information above. The only exception is made for freshly sliced cured meats sold at the counter, when the label attached to the package at the time of sale does not act as a guarantee, as in the case of pre-packed products. The retailer usually keeps the label which was attached to the whole cured meat product until it has all been sold. However, whole cured meats on display must have the producer's label on them as they are considered sales items.

Any other form of presentation which differs from the one described above constitutes illicit designation and the product, as well as not being guaranteed, is almost certainly not authentic.

Keeping cured meats in the home

It is important to store cured meats correctly after purchase so that they can be enjoyed at their best.

If you buy a whole piece of cured meat, for example a Salami, it is best to keep it in a cool, damp place such as a cellar until it is needed. If you do not have a suitable place (with a temperature of 10° - 14°C and about 80% humidity) to store cured meats, it is best to buy them when you need them and not to keep them for a long time. If not stored correctly, cured meats run the risk of becoming excessively dry or developing undesirable mould (if the place of storage is too damp) with the consequent loss of flavour and texture. It is advisable to remove the outer skin of Coppa and Salami and to wash the rind of Pancetta, before wrapping it in a slightly damp tea towel and then storing it in the fridge. Coppa and Salami can be stored in this way for up to two weeks, while Pancetta can be kept for longer. Pieces of cured meats, which are not in vacuum packs, can also be stored in the same way.

Large pieces of cured meats in vacuum packs should not be opened until required. Once opened, the meat can be stored in the way described above.

Sliced cured meat in vacuum packs or on sealed plastic trays should be kept in the fridge and once opened, should be eaten within 24 hours. The same applies to freshly sliced cured meats

Serving

If you have bought a whole cured meat or a big piece of Coppa, Pancetta or Salami, the chances are that you will keep it in a cool place and slice it as and when you need it. Before slicing, you should carry out a few simple procedures to get rid of any parts of the meat that have been exposed to the air. It is also important to discard the first slice because the outer surface will have deteriorated. The thickness of the slice to discard depends on the length of time the meat has been in the fridge since the last slice was cut. You should discard the slices you cut until the meat of the cut surface looks fresh and shows no darkening due to oxidation. Sometimes, when the meat has been in the fridge for a long time you may need to trim off any brown bits that have formed as well as any yellowing of the fat. The rind of Pancetta should be removed before slicing. To be sure of having compact slices of Salami that do not fall apart, slice the sausage when it is cold and then leave it to reach the optimum temperature of about 10°C before serving so that its full flavour can develop.

Serving wine with cured meats

We will just give a few tips here about the types of wine that go well with cured meats from Piacenza and some reasons for our choices.

On the one hand, there is the character and intensity of the aroma and taste of the food, and on the other that of the wine. In theory, both have to be taken into consideration when initially evaluating the type of wine that would complement a particular food. Let's start by summarising the specific characteristics of the cured meats from Piacenza, starting with Coppa. Coppa that has matured for six or seven months should be delicate in all respects: decidedly savoury yet mild at the same time, with a hint of seasoning, fragrant and quite fatty.

When Pancetta has been matured for about 4 months, it also has a delicate fragrance and taste, but unlike Coppa, it has a more marked flavour of the seasonings used. As it is a rolled product, the seasoning tends to stay in the middle. It contains a high proportion of fat and sometimes there is a hint of residual sourness, which tends to disappear the longer it is matured.

While Salami is also quite delicate in flavour, it has a more intense fragrance than Coppa and Pancetta because it is made by mincing and fermenting meat with wine, garlic and pepper.

Delicate flavours call for wines with an equally subtle taste. They should have the simple bouquet which is typical of young, light wines. The fat content of cured meats needs a wine that can rinse the mouth to remove the veil of fat that has formed. A sparkling wine would therefore be suitable because the bubbles of carbon dioxide dissolve the residual fat. The balance of mildness with the more decisive flavour found in the cured meats, would suggest a flavoursome or neutral wine. A wine with a reasonable level of acidity will stimulate sufficient saliva, which helps to prepare the mouth for the next tasty morsel.

The description given above is of a young, light, sparkling wine. Now, the question is: red or white? Given the delicate flavours of the three cured meats, it is important that the wine is equally delicate. The choice of wine also depends on the occasion on which it is to be drunk. If the cured meats are served as a starter, a white wine is preferable, especially if the following courses are to be served with a series of white wines. When served between meals, a glass of good red wine is the best solution, especially for those who enjoy a more structured wine. Pancetta is, however, an exception as white wine tends to bring out its best points.

Now that we have discussed the technical aspects, it is time to think about tradition because this is where many of the greatest food - wine pairings originate. We would suggest DOC (controlled designation of origin) wines from the hills of Piacenza: Ortrugo or other young, white wines to accompany the three cured meats, and also an incisive, sparkling Gutturino to drink with Salami and Coppa.

The successful pairing of a wine to a particular food is not valid in all circumstances because wines and cured meats of the same types can vary enormously, particularly regarding the degree of maturation. Well-matured Coppa and Salami could go well with a more mature wine. The only way to confirm the theory is the practice!

A final suggestion is based on the conviction that there is nothing in the kitchen more valuable than the tastes and preferences of the individual. In other words, taste, experiment and give a free rein to your curiosity and imagination to find which wines work best for you. Enjoyment guaranteed!

*Serving suggestions and recipes from
Pietro Fumi
President of the Cookery Academy of Piacenza*

THE THREE PDO CURED MEATS WITH MELON

(Pancetta Piacentina DOP - Coppa Piacentina DOP - Salame Piacentino DOP)

Ingredients for 6 people:

- Pancetta Piacentina DOP
- Coppa Piacentina DOP
- Salame Piacentino DOP
- Melon
- Butter

Method:

Remove the skin and seeds from the melon and then slice it. Arrange the slices in a fan shape on a serving dish. On the other half of the dish, arrange the slices of the three cured meats. Dot with knobs of butter.

BURTLEINA

Ingredients for 6 people:

- 300g white flour
- 1 glass of water
- 500g lard
- A large pinch of salt

Method:

Melt the lard in a frying pan (30-35mm diameter). Mix the flour, water and salt to make a very thick batter. When the lard is hot (before it reaches smoking point), using a spoon or a small ladle, put small amounts of the mixture into the hot fat so that they form small oval shapes.

Fry until they are a uniform golden colour on both sides. Cut, drain and put on absorbent kitchen paper. They are best served warm with slices of PDO cured meats: Pancetta, Coppa and Salame.

SALAME PIACENTINO DOP AND FIGS

Ingredients for 6 people:

- 18 green and black figs
- 24 slices of Salame Piacentino DOP

Method:

For each serving: cut three slices of salami, remove the skin and arrange them in a fan-shape on a small plate. Make lengthwise incisions in the figs and peel down the strips of skin, leaving them attached at the base to form the petals of a flower. Then arrange the figs behind the slices of salami.

Alternatively, arrange the peeled figs on one half of a large serving dish and the slices of salami on the other. Serve as a starter.

COPPA PIACENTINA DOP WITH PORCINI MUSHROOMS

Ingredients for 6 people

- 4 small *porcino* mushroom caps, finely sliced
- 18 slices of Coppa Piacentina DOP
- Extra virgin olive oil
- Chopped parsley and garlic
- 1 glass of milk
- A knob of butter
- 2 spoons of flour
- 1 stock cube
- Chopped and fried mushroom stalks
- Filo or shortcrust pastry

Method

Make a béchamel sauce with the flour, milk, butter and stock cube, then stir in the fried mushroom stalks.

Roll out the pastry and line 6 small pastry moulds (4cm diameter and 1.5 - 2 cm high) then blind bake. Fill the pastry cases with the béchamel and mushroom sauce. For each serving, put one of the mushroom tarts on a small plate, arrange three slices of coppa and some slices of mushroom in a semicircle and finish with a sprinkle of black pepper and a drizzle of oil.

Serve as a starter or main course.

*Recipes devised by
Ettore Ferri*

Chef at La Colonna Restaurant in San Nicolò, Piacenza.

APPETIZER OF COPPA PIACENTINA DOP

Ingredients for 4 people

100g butter
4 anchovies
4 slices white bread
150g Coppa Piacentina DOP



Method

Make the anchovy butter by beating the butter and anchovies together and then spoon the mixture into an icing bag. Press the slices of bread through a pasta maker so they are about 5mm thick, lightly butter and arrange the slices of Coppa on top. Squeeze a strip of anchovy butter onto the bread and then roll up. Put in the freezer for 2 hours. Slice each of the rolls into 2cm pieces. Arrange on a plate and serve with a fork.

POTATO SUSHI WITH PANCETTA PIACENTINA DOP AND ROSEMARY

Ingredients for 4 people

300g finely sliced potatoes
450g boiled potatoes
1 onion (about 100g)
60g egg yolk
Salt and pepper
Slices of Pancetta Piacentina DOP



Method

Mash the boiled potatoes or pass them through a potato ricer and add the onion, which has been fried in olive oil, the egg yolk and season. Spread a sheet of plastic food wrap on the table and cover with the potato slices which have been sliced on a mandolin. Add a layer of the potato mixture and then make another layer with slices of Pancetta and some rosemary. Then roll up and put in the freezer for 15 minutes. Fry the rolls in oil until the potatoes are crisp. Drain on absorbent kitchen paper and then season. Cut the sushi into 3cm pieces with a sharp knife. Garnish with chervil leaves and drizzle with olive oil.

TIMBALL OF POLENTA WITH GRANA PADANO CHEESE AND PANCETTA PIACENTINA DOP.

Ingredients for 4 people

150g maize flour (polenta)
550cc water
1 teaspoon salt
50g grana padano cheese
Butter for greasing the moulds
Pancetta Piacentina DOP



Method

Make the polenta by pouring the maize flour into the salted water and mixing for about 40 minutes until cooked. Take from the heat and stir in the grated grana padano cheese. Butter the moulds, fill with polenta and bake for 5 minutes at 180°C. Remove from the oven and take out of the moulds. Arrange the polenta towers in the centre of a serving dish and garnish with slices of Pancetta.

PANZEROTTI OF COPPA PIACENTINA DOP GARNISHED WITH WAFERS OF COPPA PIACENTINA DOP

Ingredients for 4 people:

For the pancakes:

600 ml milk
200g white flour
3 eggs
30g extra virgin olive oil
Salt and pepper

For the filling:

300g ricotta
50g grana padano cheese
100g Coppa Piacentina DOP
Tomato sauce



Method

Make the pancakes and put to one side. Finely chop the coppa and mix with the ricotta and grated grana padano cheese. Season to taste, then spread evenly over the pancakes. Roll up each pancake and then cut it into 3cm pieces. Arrange the rolls in a greased baking dish so that they are standing up, then cover with a thin layer of fresh tomato sauce and cream. Sprinkle with grated grana padano cheese and bake in the oven at 200°C for about 15 minutes. Serve with Coppa wafers, made by drying out slices of Coppa in the oven.

***BOBBIO MACARONI WITH SALAME
SAUCE AND JULIENNE STRIPS
OF SALAME PIACENTINO DOP***

Ingredients for 4 people

1 medium onion
1 carrot
1 stick celery
1 clove garlic
Chopped rosemary and parsley
½ glass white wine
Extra virgin olive oil
200g minced salami
8 slices Salame Piacentino DOP
1 glass fresh tomato sauce



Method

Chop the vegetables and heat them in a frying pan with a drop of olive oil, add the minced salami, fry then add the wine. Bring to the boil and simmer until the liquid has reduced by $\frac{3}{4}$. Add the fresh tomato sauce, season and cook over a low heat for about an hour and a half. When the macaroni has been boiled in salted water, put it into a serving dish and pour over the meat sauce. Add a knob of butter and stir to coat the pasta in the meat sauce. Cut the Salame into thin strips and add to the dish.

***RABBIT LOIN COATED
IN COPPA PIACENTINA DOP WITH ARTICHOKE
AND CARROT PURÉE***

Ingredients for 4 people

600 g rabbit loin
Coppa Piacentina DOP
200 g carrots
1 potato
4 artichokes
1 shallot
1 glass white wine
Salt and pepper



Method

Pan-fry the rabbit meat in a little oil and butter, then season to taste. After the meat has cooled, wrap each piece in a slice of coppa. Prepare and boil the artichokes in water with a drop of lemon or vinegar in it. Remove the artichokes from the heat before they are completely cooked, cut them into cubes and pan-fry them in a little oil and butter. In another saucepan, boil the potato and carrots. When they are cooked, mash and season and then pan-fry with a little oil and butter, put to one side. Heat the rabbit pieces in a little oil and butter before putting them in the oven to cook for 10 minutes at 160°C. Meanwhile, chop the shallot and soften in a frying pan, then add the white wine. Reduce the sauce then add a knob of butter and strain. Arrange the carrot purée and artichokes on a serving dish then cut the rabbit pieces in half and arrange on top of the vegetables. Finally, pour over the sauce and serve.

Glossary

Ageusia: loss of the sense of taste.

Anosomia: inability to perceive smells.

Production specifications: a document which defines the conformity requisites of the product applying for certification, in other words, the features which define the product.

PDO: Protected Designation of Origin.

Certification authority: control body nominated by the MIPAAF (Ministry of Agriculture, Food and Forests) to check that the regulations in the product specifications are being followed in the production of PDO and PGI products.

Labelling: all mention, indications, trademarks and brand names, images and symbols related to food products and which appear directly on the packaging or the label or closing device or on tags, rings or wrappers attached to the product, or in its absence, on the documents accompanying the food product .

PGI: Protected geographical indication.

Central inspectorate for the repression of fraud: instituted with the law 462/86, it is the state technical body whose aim is to prevent and eliminate violations in the preparation and trading of agricultural products, food and substances used in farming and forestry.

Batch: group of units of foodstuffs, produced, manufactured or packaged in practically identical circumstances.

MIPAAF: the Italian Ministry of Agriculture, Food and Forestry.

Nitrates and nitrites: preservatives used in food production. They protect against the development of pathogenic microorganisms like clostridium botulinum as well as favouring the development of red colouring.

Sensory organs: these are the physical structures found in the bodies of all living creatures in the animal kingdom through which they interact with the world around them.

Taste buds: these are tiny neuroepithelial structures on the upper surface of the tongue, in the upper larynx and in the rear of the pharynx. They give us the ability to taste the food we eat.

Traceability: the ability to verify and trace the history of a food product, animal feed, an animal destined for human consumption or a substance through all the stages of production, processing and distribution by means of documented, recorded identification. (Regulation CE 178/02).

Sodium L- Ascorbate: antioxidant used to slow the process of deterioration in a food product.

What is PDO?

It is the highest level of recognition given to a food product.

Who awards PDO?

A special commission of the European Union.

What does PDO stand for?

Protected Designation of Origin: this means that a food is produced according to strictly controlled production specifications following old, traditional recipes, only and exclusively in a clearly defined geographical area.

PDO Cured meats from Piacenza

On 02.07. 1996, the European Commission awarded PDO recognition to Coppa Piacentina, Pancetta Piacentina and Salame Piacentino.

Piacenza is the only province in the European Union to have three cured meats recognised as PDO.

Photos: Alfredo Zagni, Andrea Sala, Dimensione Immagine
Organisational secretary: Lorella Ferrari

Educational booklet

Sensory analysis of PDO cured meats from Piacenza

**Guide to the appreciation and evaluation
of conformity to traditional products**



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