SINGLE DOCUMENT

Council Regulation (EC) No 510/2006 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs**[[1]](#footnote-1)\***

'**JAMÓN DE TERUEL' / 'PALETA DE TERUEL'**

EC No: ES-PDO-0217-0987-10.04.2012

**PGI ( ) PDO ( X )**

# Name

'Jamón de Teruel' / 'Paleta de Teruel'

# Member State or third country

Spain

# Description of the agricultural product or foodstuff

## Product type

Class 1.2. Meat products (cooked, salted, smoked, etc.)

## Description of product to which the name in point 1 applies

'Jamón de Teruel' and 'Paleta de Teruel' are meat products obtained by submitting pig forelegs and hind legs to a process of salting, cleaning, post-salting, curing (drying and maturation) and ageing.

Morphological characteristics

The cured hams and shoulders have:

a) Form: long, trimmed and rounded at the edges up to the muscle, with the trotter attached. May be completely covered with rind or trimmed by means of a V-shaped cut with its vertex in the middle of the thickest part of the cured shoulder or leg of ham.

b) Weight: greater than or equal to 7 kg for hams and 4.5 kg for cured shoulders, at the end of the established minimum production time.

Organoleptic characteristics:

The outer surface of the cuts may be covered in typical mould, or clean and coated in oil or fat. The cut surface has the following characteristics:

a) Colour: Red and shiny when cut, with partial fat infiltration in the muscle tissue.

b) Meat: subtle taste, not very salty.

c) Fat: greasy consistency, shiny, yellowish-white colour, aromatic and pleasant-tasting.

## Raw materials (for processed products only)

The pigs suitable for producing the cured hams and shoulders covered by this designation are obtained from crosses between:

Dam: Landrace, Large White or a cross of the two breeds.

Sire: Duroc.

Only pigs born and fattened in farms in the province of Teruel and slaughtered and butchered in facilities that are also in the province of Teruel can provide hind legs and forelegs intended for producing the protected cured hams and shoulders.

The animals used for breeding are not used to provide hind legs and forelegs for the production of cured hams and shoulders covered by the designation of origin.

The males are castrated before entering the fattening farm and the females are not in oestrus at the time of slaughter.

Only cuts from pig carcasses with a warm carcass weight of at least 86 kg and a back fat thickness – measured in the lumbar region at the tip of the hind leg – of between 16 mm and 45 mm can be used for the production of cured hams and shoulders covered by the designation of origin.

## Feed (for products of animal origin only)

The producers of compound feedstuffs for feeding the pigs covered by the PDO must be based within the geographical area of the province of Teruel or its neighbouring provinces, namely Zaragoza, Guadalajara, Cuenca, Valencia, Castellón and Tarragona.

The animal feed is composed essentially of cereals, with a set minimum of 50% cereal content in the percentages of raw material in the feed, which should as far as possible come from the production area.

The inspection body will be responsible for evaluating the compositions and origins of the raw material to verify this availability, on the basis of the production data.

## Specific steps in production that must take place in the defined geographical area

Steps in the production area:

* Animal production
* Slaughter and butchering of animals

Steps in the processing area:

* Salting
* Cleaning
* Post-salting
* Curing
* Ageing

## Specific rules concerning slicing, grating, packaging, etc.

The inspection body, on a non-discriminatory basis, authorises the sales of cured shoulder and ham, de-boned, in portions and in slices – all packaged – by those registered drying and packaging facilities in the processing area provided they meet the requirements established in the specification and pass the established checks and certification process.

The limitation of the processing and subsequent packaging of these products to the processing area follows strict technical criteria to guarantee the product quality is retained, as this could change if the conditions for storage and handling are changed.

## Specific rules concerning labelling

The commercial labels of each registered company must bear the words: Protected designation of origin 'Jamón de Teruel' or 'Paleta de Teruel', as appropriate for each product.

The whole cuts of hams and shoulders for sale must be identified with the word 'TERUEL' and the 8-point star heat-branded into them, as well as the numbered label (seal) bearing the PDO logo. These labels must be applied within the industry, always in such a way that they cannot be reused.

The packaged de-boned cuts, portions or slices of the hams and cured shoulders must bear a numbered secondary label with the words 'Jamón' or 'Paleta', as appropriate, and the PDO logo.

The content of this numbered secondary label may be integrated into the commercial label of those companies who request authorisation for this.

These activities related to the correct use of the words 'Protected Designation of Origin' and the word 'TERUEL' must not be applied on a discriminatory basis. Labels and secondary labels must be issued automatically to any product shown to comply with the specification, on the basis of the reports prepared by the regulatory body which undertakes the certification activities, thereby ensuring that no operators are discriminated against in these activities.

# Concise definition of the geographical area

The production area consists of the province of Teruel.

The production area for cured hams and shoulders is composed of those municipalities of the province of Teruel situated at an average altitude of 800 m or higher, although the drying facilities must be situated at an altitude of at least 800 m above sea level. The average altitude is measured using 'digital terrain model' (DTM) or other such technology and the absolute altitude of the drying facility is measured using the Aragón Territorial Information System [Sistema de Información Territorial de Aragón - SITAR] or other such system, with a 6% margin of tolerance in both cases.

# Link with the geographical area

## Specificity of the geographical area

The excellent quality of the product 'Jamón de Teruel' / 'Paleta de Teruel' is mainly due to the conditions in which the animals are kept before, during and after slaughter, but we must distinguish between the geographical area where the animals are reared, slaughtered and butchered, hereinafter the 'production area', and the geographical area for processing the hams and cured shoulders, hereinafter the 'processing area'.

Natural factors

The processing area for the hams and cured shoulders is characterised by its continental climate with Mediterranean influences, and with long, cold winters and heavy frosts in the highlands. The climate is dry, with lots of cloudless days. Annual precipitation is around 400 mm, with about 70 rainy days a year.

The annual average temperature is 12 °C, with an average absolute maximum temperature of 37 °C and average absolute minimum of -10 °C. The difference between the average summer and winter temperatures is 19 °C. The frost-free period between May and October creates conditions favourable to the meat industry.

The hams and shoulders mature in the excellent climatic conditions of the geographical processing area, with a dry, cold climate — ideal parameters for obtaining high-calibre hams and shoulders.

Human factors

The Spanish naturalist, lawyer and historian, Jordan de Asso, made specific references in his work on the history of Aragón's economic policy, 'Historia de la Economía Política de Aragón' (1798), to 'the pigs raised in Abarracín, highly prized for their delicacy. These animals greatly love the leaves of the asphodel (Aspholedus ramosus), and they are dried for fodder in the winter.' Despite the small number of animals and the high slaughter weight achieved through fattening, the 'domestic' pig was a veritable treasure in rural households, forming the basis of peasant families’ diets in Teruel throughout the entire year. These pigs were the raw animal material which, with their special diet and the fact that they happened to be fed on acorns, together with the cold and dry climate of the Jiloca, Albarracín, Gúdar and Maestrazgo highlands, allowed a solid tradition of high-quality meats, hams and pork shoulders to develop. Obviously those animals have disappeared, but the expertise and know-how of numerous artisan farmers has survived through their experience handed down in breeding these animals to retain the characteristics of those races (the Molina Celtic origin breed and Morella Iberian breed which has the best tendency to gain fat), allowing this high-calibre meat tradition from the past to be preserved.

An essential characteristic of this designation that must undoubtedly be highlighted is the know-how to emulate past experience in breeding suitable animals from the Landrace, Large White and Duroc breeds. This suitable pig is the product of a cross between the aforementioned breeds to benefit from the hybrid strength. Its morphological characteristics are largely due to the selection criteria applied to its progenitors.

Obviously all this shared knowledge is enhanced by the expertise of those operators who slaughter the pigs, which must not only have a carcass weight of at least 86 kg but also the right level of back fat thickness, measured at the point of the half-carcass, to be accepted for processing into a PDO product. With regard to the butchering, emphasis will again be placed on the expertise on how to separate or cut without breaking the hind leg or the foreleg, to bleed the animal, remove the excess skin, transfer to the drying facility and classify the cuts, based on their weight and internal temperature, so as to obtain homogeneous products which can be accepted by the processors, it being known that those pieces with fat cover and without lesions are those that will be used to produce the product.

The expertise in the practice of salting, leaving the salt to remain in contact with the cuts for between 0.65 and 1 day per kilogram of fresh weight of the hind leg or foreleg, has been handed down to the present day, allowing the ham to develop a palatable, delicate and slightly salty flavour. Likewise, the understanding of the processing area's local climate has made this salting practice possible.

The varied geography of Teruel has produced numerous old and traditional recipes. In their gastronomic treatises, two ethnologists and gastronomes, professor Antonio Beltrán and José Manuel Porquet, mention recipes representative of the province of Teruel that include 'Jamón de Teruel' as an ingredient: 'Teruel garlic soup', with diced ham and 'Teruel-style ham with tomato'. Lastly, let us not forget the 'regañaos' commonly eaten at the 'Vaquilla del Ángel' festival in Teruel — a dough base rubbed with oil and covered in slices of ham and red pepper, oven-roasted or pan-fried.

## Specificity of the product

* The Duroc breed is characterised by its optimum growth rate, great hardiness, good prolificacy and high yields. The meat of this breed has a high fat content, which makes it possible to obtain high-quality meat.
* The Landrace is an above-average animal in terms of size and length, making it a good source of meat for the designation of origin. This breed stands out for its excellent shape, high daily growth rate, high feed efficiency and back fat thickness.
* The Large White breed is a very adaptable, hardy, fecund and fertile breed with decent growth and technical gain rates and excellent quality meat, defined primarily by its succulence, texture, shape and colour.

The positive influence of the Duroc breed, as well as the special type of cereal-based feed, complemented by a high carcass weight, have defined and refined the expertise of numerous artisan farmers from the past. It is the experience that they have handed down, together with modern technology, that make it possible to obtain the quality of products such as 'Jamón de Teruel' and 'Paleta de Teruel'.

The fundamental qualitative characteristics that distinguish these from other similar products are already apparent in the fresh cuts that are to be cured, which have a

* slightly higher pH and slower rate of decomposition
* darker colouring
* greater 'water-retention capacity'
* greater 'succulence'
* higher level of intramuscular fat (greater % of intramuscular fat)
* less saturated fat
* smoother texture and more 'tender' meat (fattier and more succulent)
* better adapted for conservation and maturation.

As for the processed product, it is characterised by being less salty and with a more pronounced 'cured' flavour, as described in point 3.2.

## Causal link between the geographical area and the quality or characteristics of the product (for PDO) or a specific quality, the reputation or other characteristic of the product (for PGI)

For the processing of meat products, it is necessary that the raw material be submitted to a series of conservation techniques, which essentially means salting and dehydrating, with the aim of stabilizing the microbiological properties of the end product. The geographical conditions of altitude above sea level, precipitation, ambient temperatures in the processing area, together with the traditions handed down from generation to generation, give these products their special organoleptic properties, notably:

* their delicate flavour, with a minimum salt content due to the type of salting used, namely piling the cuts with dry salt in very low temperatures for the minimum time required for the right amount of salt to penetrate.
* standing the pieces after salting, also in very low temperatures.
* the red colour and brilliant appearance of the cut, due to the mild ambient temperatures during the drying process. a drying process which emulates the typical climate in the province of Teurel, generally fresh and average-to-low humidity, which allows for slow, well-balanced drying. This, in turn, makes the maturation intense, allowing a great aroma and flavour to develop, along with a smooth and easily chewable texture. The intramuscular fat favours this process of slow drying and intense maturation.
* the handling in the final phases of maturation and ageing which increase the proteolytic and lipolytic enzyme activity, thereby refining and complementing the aromas, flavours and textures of both the lean and the fat.
* greasy consistency, brilliant white-yellowish colour, aromatic and palatable taste, due to: the ideal genotype of the pigs by including sires from the Duroc breed in the paternal line, the high cereal content in the feed given to the animals and the high slaughter weights of the animals which allow the meat to be 'neither young nor old' at this point, with the right level of intramuscular fat.

All of these characteristics of this product make it special and distinguish it from similar products, as a result of the natural factors and human input described in point 5.1.

**Reference to the publication of the specification**

(Article 5(7) of Regulation (EC) No  510/2006**[[2]](#footnote-2)\***)

<http://www.aragon.es/estaticos/GobiernoAragon/Departamentos/AgriculturaGanaderiaMedioAmbiente/AgriculturaGanaderia/Areas/08_Calidad_Agroalimentaria/jamon_de_teruel_11_2012.pdf>

1. \* Replaced by Regulation (EU) No 1151/2012 of the European Parliament and of the Council of 21 November 2012 on quality schemes for agricultural products and foodstuffs. [↑](#footnote-ref-1)
2. \* Replaced by Regulation (EU) No 1151/2012 of the European Parliament and of the Council of 21 November 2012 on quality schemes for agricultural products and foodstuffs. [↑](#footnote-ref-2)