

**PRODUCT SPECIFICATION OF THE  
PROTECTED DESIGNATION OF ORIGIN  
“PARMIGIANO REGGIANO”**

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**CHEESE PRODUCTION STANDARDS**

Article 1

The Parmigiano Reggiano PDO is a hard, cooked and slowly matured cheese, made from raw, partially skimmed milk from dairy cows whose feed consists mainly of forage from the area of origin. The milk shall not undergo any heat treatment or physical or mechanical treatments such as centrifugation, bactofugation or microfiltration, and no additives may be used.

Article 2

The production area includes the part of the province of Bologna to the left of the River Reno, the part of the province of Mantua to the right of the River Po, and the provinces of Modena, Parma and Reggio nell'Emilia.

Article 3

All milk delivered to the dairy shall comply with the Production Regulations of Parmigiano Reggiano cheese.

The time for milking the whole cattle on each of the two milkings allowed to produce milk intended for the PDO product shall not exceed seven hours, inclusive of the relevant delivery time to the dairy.

The milk obtained from the evening milking and from the morning milking is delivered raw to the dairy, within two hours from the completion of each milking.

The milk may be chilled immediately after milking and kept at a temperature not lower than 18°C.

The evening milk is partially skimmed by letting the cream rise naturally to the surface in open, naturally ventilated steel tanks. On delivery to the cheese dairy, the morning milk is mixed with the partially skimmed milk from the previous evening; it may also be partially skimmed by letting the cream rise naturally to the surface.

The fat/casein ratio of the milk in the vat, calculated as weighted average value of the vat batches on the processing day, may not exceed 1.10 + 10%.

Up to 15 % of the morning milk may be set aside for the next day's cheesemaking. More than 15 % may be set aside as long as this quantity allows no more than one wheel of cheese to be made. This milk, which shall

be kept at the dairy in steel containers at a temperature not lower than 10 °C, shall be left to stand in the skimming tanks, together with the evening milk, to allow the cream to rise naturally to the surface.

A continuous whey starter, a natural culture of lactic acid bacteria obtained by leaving 'sweet' whey left over from the previous cheesemaking operation to spontaneously ferment in controlled temperature conditions, is added to the milk. Neither lactic acid bacteria cultures for adjustment or strengthening nor nutritional supplements promoting the development of lactic flora may be added to the continuous whey starter. Only the addition of a single portion of milk is permitted.

Milk coagulation, obtained exclusively by the use of calf rennet, takes place in bell-shaped copper vats to make up to two wheels for each vat.

The vats shall be used only once a day. No more than 15% of the vats may be used for a second cheesemaking process on the same day.

Following coagulation, the curd is broken up and cooked. The granules are then given the time to settle on the bottom of the vat, so as to obtain a solid mass. These operations shall be performed by the end of the morning.

Once it has settled at the bottom of the vat, the cheese mass is transferred into the appropriate moulds to form the wheels.

After a few days, the salting is performed by immersing the wheels in brine. Maturation shall continue for at least 12 months, starting from the cheese moulding. In summer the temperature in the maturation room shall not be lower than 16°C. The wheels of cheese may be matured on wooden-shelved racks.

#### Article 4

Parmigiano Reggiano shall not be subjected to any treatment that impairs its chemical/physical or organoleptic characteristics and has the following characteristics:

- wheels of cheese with slightly convex or almost straight sides with a slightly raised edge on the flat faces;
- dimensions of a wheel: wheels measure 35- 43 cm in diameter across the flat faces and 20-26 cm side height;
- minimum weight of a wheel: 30 kg;
- rind colour: natural straw colour, which may evolve over time;
- cheese paste colour: from light straw-coloured to straw-coloured;
- characteristic aroma and taste of the paste: fragrant, delicate and flavoursome without being strong;
- texture of the paste: fine-grained and flaky;
- rind thickness: around 6 mm;
- fat content on dry matter: 32 % minimum;
- no additives;
- total free amino acids: more than 15% of total proteins (HPLC method and ion exchange chromatography);

- isotopic and mineral composition: typical of Parmigiano Reggiano; it is on file at the Parmigiano Reggiano Cheese Consortium, at the Control Body and the Italian Ministry for Agricultural, Food and Forestry Policies and it is determined via isotope ratio mass spectrometry (IRMS) methods;
- cyclopropane fatty acid ratio: less than 22 mg per 100 g of fat (already accounting for measurement uncertainty, determined by gas chromatography-mass spectrometry [CG-MS]).

For the textural characteristics of the cheese, reference should be made to the product categories defined in the Rules on Markings.

For anything not directly provided for herein, reference is made to the practices set by fair and constant local usages.

#### Article 5

Grating, portioning and the subsequent packaging of grated 'Parmigiano Reggiano' and portions, with or without rind, shall take place within the area of origin in order to guarantee quality, traceability and control.

For this purpose, traceability of the Parmigiano Reggiano wheels (dairy number, production month/year and weight) used for the above-mentioned operations shall be always guaranteed.

As already provided for by Decree of the Italian Prime Minister of 4 November 1991, the designation of origin "Parmigiano Reggiano" is extended to grated cheese, obtained exclusively from whole cheese bearing the designation of origin "Parmigiano Reggiano", upon condition that grating is performed within the cheese production area and that the grated cheese is packaged immediately afterwards, without any treatment and without the addition of any substance.

However, the use of 'trimmings' is also permitted under the conditions set out above.

The designation type in question is reserved to grated cheese meeting also the following technical and technological parameters:

- moisture: not lower than 25% and not higher than 35%;
- appearance: non-powdery and homogeneous, with the proportion of particles measuring less than 0.5 mm in diameter not exceeding 35%;
- rind content: not more than 18% by weight.

#### Article 6

Grating, portioning, and pre-packaging for direct sale may be carried out at the retail outlet solely for the purpose of sale to the final consumer.

#### Article 7

Offcuts from the processing of Parmigiano Reggiano which are to be used by operators within the control system to prepare other formats are referred to as 'trimmings'.

#### Article 8

Except when used as 'trimmings', offcuts from the processing from the faces and sides of wheels of cheese (pieces with more than 18 % rind) shall not bear the name «Parmigiano Reggiano».

## Article 9

In order to guarantee the authenticity and allow the correct identification of the prepacked, grated or portioned Parmigiano Reggiano cheese placed on the market, each pack shall bear a logo shown below, containing in its upper part a stylised depiction of a wedge and a wheel of Parmigiano Reggiano cheese and, at the bottom, the wording PARMIGIANO REGGIANO, which must be printed in colour following the technical specifications laid down by the pertinent Consortium agreement.



To ensure correct identification of the maturation of prepacked Parmigiano Reggiano cheese placed on the market in pieces weighing more than 15 grams, the minimum age of the cheese shall be stated on the label.

As the aroma and taste of the paste of 'Parmigiano Reggiano' evolve over the course of the maturing process, in order to convey the organoleptic characteristics, the following descriptive adjectives may be used on the label, in addition to the maturing time, for certain maturity classes:

- delicato [delicate] (12-19 months);
- armonico [harmonious] (20-26 months approx.);
- aromatico [aromatic] (27-34 months approx.);
- intenso [intense] (35-45 months approx.).

Stating the dairy's registration number or name on the label is only compulsory for grated cheese or portions originating from wheels marked as 'Premium' pursuant to Article 15 of the Rules on Markings.

## Article 10

Operators (dairy farmers, dairies, operators maturing the cheese and operators grating or cutting the cheese) are within the control system and on specific lists kept by the Control Body. By keeping documentary records under a self-regulatory scheme, which are audited by the Control Body, operators ensure that they can demonstrate the origin of feedstuffs, raw materials and products from the area of origin, as well as their supplier and recipient. Incoming consignments, outgoing consignments and the correlation between them shall be recorded at each stage.

## **RULES ON MARKINGS**

### **CHAPTER 1**

#### General provisions and definitions

## Article 1 - Markings

1. The distinctive marks of Parmigiano Reggiano cheese are the origin markings and selection markings.
2. Each dairy shall mark its wheels of cheese with origin information by:
  - a) attaching a casein plate to each wheel of cheese or using an equivalent system that ensures the unique identification of each wheel (hereinafter 'plate' or 'plates');
  - b) impressing the words 'Parmigiano-Reggiano' in pin-dot lettering (see Image no. 1 and Image no. 1-bis), the dairy's registration number, the year and month of production, and the acronym "DOP" [PDO] around the sides of the wheel using stencilling bands.
3. Selection markings are made by the Parmigiano Reggiano Cheese Consortium, as established in Articles 4, 5, 6, 7 and 8 below, once the checks have been performed by the authorised Control Body.

## Article 2 - Tasks of the Parmigiano Reggiano Cheese Consortium

1. Pursuant to Italian law no. 526/1999, the Consortium establishes the procedures to use the markings in compliance with the product specification and supervises their proper use at the dairies. In the event of improper use of the origin markings or other breaches of the specification filed pursuant to Regulation (EU) No. 1151/12 as amended, assessed by the competent Bodies, the Consortium shall order the withdrawal of the stencilling bands and casein plates and/or the application of a penalty in compliance with the rules in force.
2. The Consortium assigns a registration number to each dairy producing Parmigiano Reggiano; this number is also given to the Control Body and entered in the control system;
3. Any use on the wheels of other marks that are not envisaged by these Rules shall be expressly authorized by the Consortium, which establishes the relevant features and affixing methods, as such marks shall not overlap the PDO marks and shall ensure that the latter prevail.

## Article 3 - Obligations of Dairies

1. Before commencing activity, dairies intending to produce Parmigiano Reggiano cheese shall submit the relevant application to the Consortium, specifying that they have been included in the control system, in order to be given a registration number and request stencilling bands and casein plates, with a view to affix the origin markings.
2. Dairies shall be responsible for the preservation and proper use of stencilling bands and casein plates, which are supplied to them on the basis of trust.
3. Dairies shall update their Production Record on a daily basis, which shall be authenticated by the Consortium and shall be made available to the Control Body to perform its duties, as well as to the competent Authorities.
4. Dairies have the obligation to keep records of their entire production. Should dairies fail to keep the required records properly, the penalties provided for by the applicable legislation and regulations shall apply.
5. Dairies have the obligation to make the cheese available or to ensure it is made available to the Consortium in order for the operations of classification, mark-affixing and mark-cancellation to be carried out pursuant to Articles 4, 5, 6, 7, 8 and 9. In the event of non-compliance, the Consortium shall order the withdrawal of stencilling bands and casein plates and/or the imposition of a penalty, in compliance with the current legislation.

6. Dairies shall be required to provide the Consortium and its authorized agents with all and any elements that are useful for the implementation of these Rules.

#### Article 4 - Definition of production batches and quality inspection

1. The production of each dairy shall be subdivided into batches:
  - a) 1st batch: cheese produced from January to April;
  - b) 2nd batch: cheese produced from May to August;
  - c) 3rd batch: cheese produced from September to December.
2. Before affixing the selection markings, each single wheel of Parmigiano Reggiano is inspected by an inspection panel appointed by the Consortium, consisting of experts on the relevant list that is kept by the Consortium and notified to the Control Body.
3. Quality inspection and mark affixing operations shall be performed in the area of origin.

## CHAPTER 2

### Procedures

#### Article 5 – Quality Inspection

Quality inspection operations shall be performed for the three production batches in three periods of time, based on the following schedule:

- a) the cheese in the first batch shall be inspected starting from 1st December of the year of production;
- b) the cheese in the second batch shall be inspected starting from 1st April of the following year;
- b) the cheese in the third batch shall be inspected starting from 1st September of the following year.

#### Article 6 – Cheese Classification

1. The cheese quality inspection is performed by assessing the external appearance, the texture and olfactory characteristics of the cheese paste, examining the wheels through a percussion hammer and a screw-needle, in accordance with usages and habits, in accordance with the classification laid down in the Annex;
2. To help the inspectors in their assessment of the cheeses, the inspection panels shall cut at least one wheel per batch and, in any case, as many cheeses as are necessary in order to assess the textural and organoleptic characteristics. Dairies shall make the wheels chosen by the experts available in order for them to be cut and shall allow the possible taking of a portion of the same.

#### Article 7 - Ink stamping

During the quality inspections referred to in Article 6, the wheels shall be stamped in indelible ink, or using an equivalent system, with a provisional marking assigning one of the following categories as defined in the Annex:

- a) first category, consisting of the wheels classified as “first-grade”, “zero” and “one” Parmigiano Reggiano cheese;
- a) second category, consisting of the wheels classified as “medium-grade” or “Prima Stagionatura” (“first maturing”) Parmigiano Reggiano cheese;
- c) third category, consisting of the wheels classified as “downgraded” and “reject” cheese.

#### Article 8 - Affixing of Markings

- 1. First and second category wheels shall be affixed with an oval mark bearing the wording “Parmigiano Reggiano Consorzio Tutela” and the year of production (see Image No. 2);
- 2. second-category cheese shall be identified by an indelible mark on the sides of the wheels;
- 3. the above operations may be carried out seven days after the quality inspection, based on the instructions given by the Control Body.

#### Article 9 - Cancellation of markings

The origin markings shall be removed from around the sides of third-category wheels by Consortium staff, as well as from around the sides of the wheels showing serious structural defects that have prevented the cheese from being matured and from wheels that have been mended in such a way to prejudice their appearance and/or the quality of the cheese paste and/or the marks identifying the month, the year of production and the dairy registration number. Alternatively, these wheels shall be delivered to one or more processing firms, with which the Consortium has signed a specific agreement. With regard to these wheels, the dairy shall keep the documentation issued by such processing firms, proving that the marks have been cancelled. The marks shall be cancelled also from wheels where such marks have not been affixed correctly.

#### Article 10 - Drawing-up of Inspection Records

- 1. A report shall be drawn up to record quality inspection operations, identification and marking of first and second category wheels, as well as cancellation of the marks for each lot or lot fraction of the production batch. This report shall be signed by the staff in charge of such operations and by the legal representative of the dairy or by a person expressly appointed for the purpose.

#### Article 11 – Appeals

- 1. Dairies shall have the right to appeal against the verdict of a quality inspection by sending the relevant notification to the Consortium in writing within two (2) days of the date of the completion of each individual quality inspection session.
- 2. Appeals shall be examined by an Appeal Committee, which may decide to repeat the quality inspection within 15 days of notification receipt. shall be examined by a Committee of Appeal, which may decide to have the quality inspection repeated within 15 days of notice receipt. This Committee shall be appointed by the Consortium and it shall consist of at least three members that are not part of the Quality Inspection Panels, pursuant to Article 4.

## CHAPTER 3

### Other provisions

#### Article 12 - Requesting the correction of origin markings

1. If, during maturation, a casein plate no longer adheres properly to the wheel or work has to be performed on the part of the rind where the casein plate is located to correct rind defects that have developed during maturation, the dairy shall promptly ask the Consortium to replace the casein plate with an indelible stamp. The dairy concerned shall keep the removed casein plates and hand them over to the Consortium.

#### Article 13 - Requesting the cancellation of origin markings

If defects develop during maturing that are so serious that the minimum maturing process cannot continue, dairies are entitled to request, prior to the quality inspection, that the Consortium cancel the origin markings around the sides of the affected wheels or that the affected wheels be handed over in accordance with Article 9.

#### Article 14 - Transfer of wheels before the 12th month of maturation

1. Cheese may be placed on the market for consumption under the Parmigiano Reggiano protected designation of origin only when the wheel bears the oval selection mark and has reached 12 months of minimum maturation.
2. In case of any transfer of wheels that have not reached their 12th month of maturation, but within the area of production, and even if already bearing the oval mark, delivery documents and invoices shall contain the following statement, already signed by the dairy's legal representative on the quality inspection and marking reports: "The cheese shall not be put on the market for consumption under the Parmigiano-Reggiano protected designation before having reached the 12th month of maturation".

#### Article 15 - "Export" and "Premium" Markings

1. Starting from the 18th month of maturation, Parmigiano Reggiano holders may request the Consortium to affix the "Export" marking. To be eligible for the above marking, the cheese shall meet the product characteristics set for "scelto sperlato" ["first-grade"] Parmigiano Reggiano pursuant to the Annex referred to in Article 7.
2. Starting from the 24th month of maturation, Parmigiano Reggiano holders may request the Consortium to affix the "Premium" marking. To be eligible for the above marking, the cheese shall meet the product characteristics set for "scelto sperlato" ["first-grade"] Parmigiano Reggiano pursuant to the Annex referred to in Article 7. Moreover, for each maturation batch, a sensory analysis rating shall be assigned to the cheese and suitability for this classification shall be assigned only to the cheese having a rating higher than the Parmigiano Reggiano average figure according to the procedures defined by the Consortium.
3. The wheels certified in accordance with the previous paragraphs may become suitable to bear the above-mentioned markings even if maturation continues in premises located outside the production area.
4. Any expenses relating to the marking operations shall be paid by those requesting the markings.

#### Article - 16 Costs



1. For the delivery of stencilling bands and casein plates, securing the fulfilment of the related obligations, the Consortium shall be entitled to ask the dairies for a guarantee deposit, whose amount shall be fixed by the Consortium on an annual basis.
2. For the service of mark cancellation for third-category wheels, pursuant to Articles 9 and 13, and to affix the stamp replacing casein plates, pursuant to Article 12, dairies shall be asked to refund expenses for each wheel, the amount of which shall be established by the Consortium.
3. Dairies may be required to cover the cost of replacing stencilling bands that have worn out ahead of time or are otherwise damaged.

## **Annex**

### **PRODUCT CLASSIFICATION OF THE CHEESE**

Classification refers to the cheese at the time of quality inspection.

#### **1. Parmigiano Reggiano “scelto sperlato” (“First-grade” Parmigiano Reggiano)**

This qualification is given to those wheels that are free from any external and internal defects (size, rind, hammer, screw-needle, cheese texture, aroma, flavour) that can be detected both visually and by screw-needle and hammer inspection.

#### **2. “Zero (0) and one (1)” Parmigiano-Reggiano**

This qualification includes:

- a) **zero**: wheels that, although meeting the specifications for first-grade cheese, have surface splits on the rind, small erosions, slightly worn edges and some limited mending that, however, do not cause wheel deformation.
- b) **one**: wheels having slight texture anomalies, and specifically:
  - one or two holes (round and oblong cavities that have formed in the cheese paste) with diameters not exceeding 3-4 cm and upon condition that no olfactory defects are found probing the hole with the screw-needle;
  - localised hornet’s nest (area of spongy cheese) of a few centimetres without any olfactory defects;
  - a few “fish mouths”, i.e. oblong holes, not exceeding 3-4cm in size;
  - thin leaves, formed by some slits in the cheese paste, not exceeding 3-4 cm in length;
  - widely-spaced and not excessively recurrent small holes;
  - so-called “loose” wheels, i.e. wheels that have a hollow sound when tapped with the hammer.

#### **3. “Medium-grade” Parmigiano Reggiano**

This category includes wheels having:

- holes exceeding 3-4cm in diameter without any olfactory defects;

- hornet's nests without any olfactory defects;
- small holes spread throughout the wheel (glossy, round small holes, small-medium sized in diameter);
- some slits and splits arranged horizontally;
- horizontal slits and splits located near one of the flat faces and/or concerning part of the side;
- corrections made to the sides or flat faces of the wheel that are minimal enough to avoid significantly impairing the cheese's external appearance, without any olfactory defects.

#### **4. "Downgraded" cheese**

This category includes wheels having:

- very evident swelling of the wheel faces;
- spongy paste with large and widespread holes;
- multiple and widespread horizontal slits in a folded configuration;
- large slits and splits scattered throughout most of the wheel;
- large cavity in the centre or around the centre having a circular or oblong shape, with or without spongy paste;
- deep and extensive mending to the sides and/or flat faces;
- wheels with evident olfactory defects.

#### **5. "Reject" cheese**

This category includes all those wheels characterized by the presence of a number of serious defects, that is to say all those wheels that cannot be included in the above specified categories, due to their quality.

### **SAMPLE IMAGES**

Image No. 1

PARMIGIANO  
REGGIANO

Image No. 1-bis

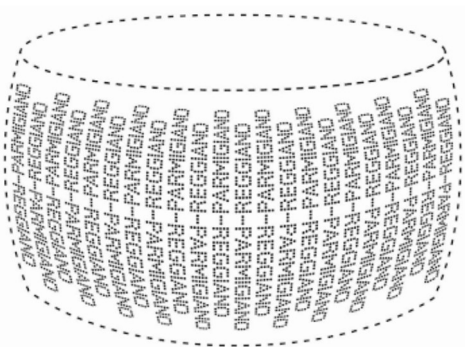


Image No. 2



## **COWS FEEDING RULES**

### **Article 1 - Scope of application**

These rules establish how cows that produce milk to be made into Parmigiano Reggiano cheese shall be fed and, unless otherwise specified, these rules shall apply to lactating cows, dry cows and heifers from the sixth month of pregnancy on. In the following articles, the animals in the above categories are referred to as “dairy cows”.

The milk shall be produced on farms located in the area of origin and included in the control system.

The rearing of replacement dairy cows (‘restocking’) shall be carried out in the area of origin and included in the control system as a specific activity of a dairy farm. The rules laid down in Article 9 apply to livestock originating from other production sectors.

Dairy farms that had restocking activities located outside the area of origin as at 5 January 2021 may continue to conduct this activity outside the area of origin provided that it is included in the control system.

### **Article 2 - General principles for Feed Composition**

The composition of the feed for dairy cows is based on the use of forage grown in the area of production of Parmigiano Reggiano cheese. In the daily feed, at least 50% of forage dry matter shall be provided by hay.

The base feed, consisting of forage, shall be appropriately supplemented with feeds that can balance the intake of the various diet nutrients. The total dry matter provided by feeds shall not exceed the total dry matter provided by forage (forage/feed ratio not lower than 1).

Dairy cows shall not be given any feeds that may confer anomalous aromas and flavours to the milk and alter its technological features, nor feeds that may be sources of contamination or badly preserved.

### Article 3 - Origin of forage

In the feeding of dairy cows:

- at least 50% of used forage dry matter shall be provided by forage produced on the farm land, upon condition that it is located in the area of production of Parmigiano Reggiano cheese;
- at least 75% of forage dry matter shall be provided by forage grown in the area of production of Parmigiano Reggiano cheese.

### Article 4 - Permitted forage

Dairy cows may be given:

- fresh forage obtained from natural meadows, stable mixed meadows and lucerne and clover meadows;
- crops of ryegrass, rye, oat, barley, wheat, triticale, maize, aftermath sorghum, Italian millet, cocksfoot (*Dactylis*), fescue, timothy-grass (*Phleum*), French honeysuckle, sainfoin, given singularly or mixed together;
- crops of pea, vetch and field bean, upon condition that they are combined with at least one of the forage species specified in the previous point;
- hay obtained by field-drying or by forced ventilation (air-drying at temperatures not exceeding 100°C) of the aforesaid forage species;
- cut forage obtained from the whole maize plant, at milk-wax or wax ripening stage, given to the cows immediately after harvesting;
- cereal straw, with the exception of rice straw.

The feed of dairy cows may also include the aforesaid forage species, with the exception of maize cut forage, that have been thermally-treated at temperatures equal to or higher than 100°C, up to a maximum amount of 2kg/head/day. This amount may not be combined with the portion of dehydrated forage that may be given by means of feeds.

### Article 5 - Forbidden forages and by-products

In order to prevent the environment of the cattle housing from being contaminated with silage – including preventing contamination through soil and forage – and to permit the animals' rumens to adapt physiologically to a silage-free diet, dairy farms and restocking units are prohibited from using and possessing silage of any kind.

Farms on which dairy cows are reared or restocking units shall ensure that entirely separate areas are used for any farming activities from other production chains (beef cattle, digesters, etc.). Cereal silage and by-products may be kept and used for those other farming activities.

Even the storage of grass silage preserved in wrapped bales, trenches, stacks or with other techniques is anyway forbidden.

In the feeding of dairy cows, the following is forbidden:

a) use of:

- forage with raised temperatures due to heat from fermentation;
- forage treated with additives;

- forage that is obviously mouldy and/or contaminated by other parasites, soiled or contaminated by toxic or noxious substances;

b) use of:

- rapeseed, rape, mustard, fenugreek, fruit-tree leaves and other leaves, wild garlic and coriander;
- maize and sorghum stalks or tassel, maize bracts and corncob, straw from rice, as well as straw from soy, lucerne and seed clover;
- vegetables in general, including fresh and preserved rejects, waste and by-products;
- fresh and preserved fruit, as well as all fresh by-products from fruit processing;
- sugar and forage beets, including leaves and tops;
- moist yeasts, brewery distillation residues, distillers, cereal fermentation by-products, marc, grape seeds, grape stalks and other agri-food industry by-products;
- all slaughtering by-products, including the rumen content;
- all dairy industry by-products.

#### Article 6 - Raw materials in non-forage feedstuffs

In the feeding of dairy cows, the following raw materials may be used:

- cereals: maize, sorghum, barley, oat, wheat, triticale, rye, spelt, millet and Italian millet;
- seeds of oleaginous plants: soy, flax, sunflower;
- seeds of leguminous plants: broad bean, field bean and protein pea;
- forage: flours of permitted forage species;
- dried beet pulp;
- potato protein concentrate.

Carob, beet and cane molasses, malt extract, propylene glycol and glycerol may also be used in complementary compound feed up to a maximum overall quantity of 6%.

The use of sugar-based products, including those in liquid or molasses-based form (cane or beet molasses), malt extract, propylene glycol and glycerol, in the diets of milking cows, whether administered to individual cows or added to the total mixed ration, is limited to 800 g per head per day. These products shall not be administered via drinking water.

Without prejudice to Article 8, other products and feedstuffs permitted by the applicable legislation concerning dairy cows may also be used subject to assessment by the Parmigiano Reggiano Cheese Consortium, which shall notify the competent bodies once it has verified the compatibility of such products and feedstuffs with the principles laid down in Article 2.

#### Article 7 - Use of simple and compound complementary feed, fortified and non-fortified

Feeds shall have «label tags» specifying the single raw materials they contain in decreasing order of content.

The use of dried beet pulp is forbidden, if it has been wetted.

Feeds shall not be stored inside the cowshed.

Dairy cows shall not be fed any soap or fat of animal or vegetable origin (oil, tallow, lard, butter), either directly or as an ingredient in feed.

Vegetable oils and fats of any type or form may be used only as premix carriers and for the protection of amino acids, vitamins, minerals and other nutrients up to a maximum quantity of 50 g per head per day.

In order to avoid negative interference with ruminal fermentation and deterioration of milk quality, the daily amount of lipids (assessed as ether extract) administered to milking cows:

- shall not exceed 4.0 % of total dry matter;
- shall not exceed 700 g in terms of quantity administered through non-forage feedstuffs as defined in Article 2 of these Rules.

#### Article 8 – Banned raw materials in non-forage feedstuffs and banned products

The following shall not be used in the feeding of dairy cows:

- all food of animal origin: fishmeal, meat, blood, plasma, feathers, miscellaneous slaughter by-products as well as dried milk and egg processing by-products;
- cotton seeds, vetch (including scourings), fenugreek, lupine, rapeseed, rape and grape seeds;
- rice and its by-products;
- cut and/or grounded maize corncob and stalks;
- extraction flours, cakes and expellers of peanut, rapeseed, rape, cotton, grape seeds, tomato seeds, sunflower seeds with less than 30% protein, babassu, common mallow, Niger seed, baobab, Silybum Marianum, coconut, tobacco, poppy, palm kernel, olives, almonds, walnuts and Carthamus tinctorius;
- manioc, potatoes and derivatives, with the exception of potato protein concentrate;
- dehydrated feeds obtained from vegetables and fruit and by-products from their processing, as well as dehydrated feeds obtained from shredded maize and from any type of silage;
- seaweeds, with the exception of those used as essential fatty acid supplements, up to maximum dose of 100g per head per day;
- all by-products from breweries (dried distillation residues) and from the bakery industry;
- fermentation media;
- urea and its derivatives, ammonium salts;
- beet protein concentrate (Italian acronym: CPB), cereal fermentation by-products and distillers of any type and origin.

Dairy cows shall not be given feeds containing:

- additives belonging to the antibiotics group;
- the antioxidants butylated hydroxyanisole, butylated hydroxytoluene and ethoxyquin unless administered with vitamins for technological purposes as stabilising agents.

As a support for mineral and vitamin supplement, products that are not permitted by these Rules shall not be used.

Dairy cows shall not be given feeds that are rancid, mouldy, infested with parasites, decayed, soiled or contaminated by toxic or noxious substances.

Dairy cows shall not be given feeds containing forage of unknown origin, coarsely cut.

In all cases, any forage contained in the complementary feeds, either as flour or pellets, shall not exceed 5mm in length.

#### Article 9 - Livestock originating from other production sectors

The introduction of livestock from production chains other than the 'Parmigiano Reggiano' chain, and therefore not included in the control system, onto dairy farms or restocking units must take place no later on the day on which the animal reaches 10 months of age.

#### Article 10 - Entry of new farms into the production chain

Agricultural holdings not belonging to the 'Parmigiano Reggiano' production system are not authorised to provide milk until at least four months after the inspection by the authorised Control Body.

#### Article 11 - Total mixed ration feeding

Dairy cows may be fed using the 'Total mixed ration feeding' technique, which consists in the preparation of a homogeneous mix of all the daily feed ingredients before giving them to the animals.

The preparation of the mix shall take place on the farm using it.

Moreover:

- no mixing of green forage shall be made, not even if freshly cut maize is used. If green forage is used, it shall be given separately;
- preparation shall not be carried out inside the cowshed;
- if the mass is wetted (moisture higher than 20%), mixing shall be carried out at least twice a day and the feed shall be distributed immediately after being prepared;
- even if the mass is not wetted, it shall be kept outside the cowshed and the distribution of the mixture into the manger shall be carried out at least once a day.

#### Article 12 - New products and technologies

Any use of feeds not provided for in these Rules, as well as any change to the prescribed quantities and the introduction of preparation and administration methods that are not laid down herein, shall be subject to a favourable outcome in the tests and studies assessed by the Parmigiano Reggiano Cheese Consortium. If the outcome is favourable, besides being adopted in accordance with Article 6, they shall be added to the product specification the next time it is amended.