

# Product Specification for the *Ġbejna tan-nagħaġ* Protected Designation of Origin (PDO)

## Competent authority

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## Applicant group

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**Composition:** Producers

**Type of product:** Cheeses 1.3

### 1. Designated Product Name

*Ġbejna tan-nagħaġ.*

'*Ġbejna tan-nagħaġ*' is the name historically used to describe the specific product in the geographical area defined in section 3, shall be protected as a designation of origin and used for both trade purposes and in common language.

In addition, producers may give an additional (i.e. optional) descriptor to the protected name as stipulated below:

*friska*

or

*niexfa*

or

*tal bżar*

*‘Ġbejna tan-nagħaġ’ friska,*

*‘Ġbejna tan-nagħaġ’ niexfa*

*‘Ġbejna tan-nagħaġ’ tal-bżar*

to define the three specific varieties, as explained in section 2.

These descriptors shall be reserved for those products that meet the requirements set in this product specification and not for any other products.

## **2. Product Description**

The ‘*Ġbejna tan-nagħaġ*’ is a fresh cheese produced with whole raw milk from sheep (*Ovis aries*) of the ‘Maltese’ breed and its crosses with the Friesian breed or others, and that are registered in the Maltese islands, including Malta, Gozo, and Comino. Sheep of the ‘Maltese’ breed are slender with a head that is mostly masked reddish, sable or black, with a long neck and semi lop ears. Muzzles have no wool and their long slim body with long silky coat is mostly white fleece but may have patches at any place; the patches are of the same colour of the head. Head and feet are not fleeced, while their long tail is covered with long fleece. The crossed breeds tend to retain most characteristics of the Maltese sheep breed mentioned above, though they are usually entirely white and have a wider girth.

The raw sheep milk should possess the following chemical characteristics:

- A pH ranging between 6.4 and 6.7
- Fat content ranging between 4.5% and 8.0%
- Protein content ranging between 5.0% and 6.5%
- Dry matter content ranging between 15.0% and 18.0%

The '*Gbejna tan-nagħaġ*' can be given an additional (optional) descriptor to better inform the consumer as given below. If it is sold fresh ('*Gbejna tan-nagħaġ friska*'), air-dried ('*Gbejna tan-nagħaġ niexfa*'), or pickled and peppered ('*Gbejna tan-nagħaġ tal-bżar*').

The '*Gbejna tan-nagħaġ friska*' should possess the following physical, chemical, and organoleptic characteristics:

- It is white and glossy, with a fresh and soft core.
- Its surface takes the shape of the motifs of the mould in which it is processed.
- Appears as a truncated cone of small dimensions, with a height ranging between 3cm to 5cm, and a weight of 65g to 110g. The base diameter ranges between 5cm to 7cm while the top diameter ranges between 3cm to 5.5cm.
- The Total Protein should range between 15% and 20%.
- The Total Fat should range between 15% and 20%.
- Have an acidulous taste typical of sheep milk.
- When cut into smaller portions, it is very soft with a smooth texture, and it melts in the mouth in seconds.
- Its taste is that of fresh creamy milk and, similarly, can be used as a spread.

The '*Gbejna tan-nagħaġ niexfa*' should possess the following physical, chemical, and organoleptic characteristics:

- It has a firmer consistency and varies in colour from white to off white to very light straw colour; the yellowish taint increases, and the parameters vary, as the drying and storage period increases (as described in Section 5 below).
- Height between 1.5cm and 5cm.
- Weight between 30g and 100g.
- Have a pH between 4.8 and 5.3.
- The Total Solid Content should range between 40% and 56%.
- The Total Protein should range between 14% and 40%.
- The Total Fat should range between 15% and 40%.
- It is a fresh cheese but may develop into a semi-hard cheese on further drying and storage.
- Its taste is stronger and more noticeable compared to the '*Gbejna tan-nagħaġ friska*', surpassing the creamy taste undertones given by the sheep milk.

The '*Ġbejna tan-nagħaġ' tal-bżar* should possess the following physical, chemical, and organoleptic characteristics:

- It presents itself with a varying amount of fine to rough ground crushed black pepper attached to its surfaces.
- Height between 1.5cm and 5cm.
- Weight between 30g and 65g.
- Have a pH between 4.7 and 5.1.
- The Total Solid Content should range between 37% and 52%.
- The Total Protein should range between 14% and 40%.
- The Total Fat should range between 25% and 40%.
- It retains the consistency and texture of the '*Ġbejna tan-nagħaġ' niexfa*, but its taste is enhanced through the use of vinegar and pepper.
- Its colour may change depending on the type of vinegar used (red or white wine vinegar), whereas the overtones of pepper may vary depending on the type of pepper utilised.

### **3. Defined geographical area**

The Maltese archipelago consists of three inhabited islands (Malta, Gozo, and Comino) and some other uninhabited minor islands. The '*Ġbejna tan-nagħaġ*' is produced in the three main inhabited islands of the Maltese archipelago.

### **4. Proof of Origin**

Historical records indicate that grazing sheep have been present on the Maltese islands since medieval times, while the earliest reports on cheesemaking date back to the 15<sup>th</sup> century and again in the 17<sup>th</sup> century.

The arid terrain typical of the Maltese islands favours the keeping and feeding of sheep, as these animals can use marginal agricultural areas unsuitable for other agricultural purposes. The Maltese islands are situated almost in the centre of the Mediterranean Sea. In and around Malta, evaporation greatly exceeds precipitation, and this renders the sea water with a specific gravity of 1.0300 (which is much higher than the Atlantic), and with relatively warm surface temperatures. The large volumes of sea water around the islands greatly affect the climate,

which is largely equable although, in recent years, it is suffering changes caused by the global climate change. Largely the climate is characterised by mild wet winters and hot dry summers; 60% of prevailing winds are from the west to the northwest whilst on hot days the heat is often aided by southerly winds that sometimes carry the 'gibli' bringing over red sand from the Sahara. The flora is typical of the region and of pelagic islands that have a similar geological formation. There are no rivers or freshwater lakes in Malta. The valleys and ravines are sometimes described as dry riverbeds, and these fill up with water during the rainfall periods. In view of the hot dry summers without rainfall, natural flora during this period is inexistent and therefore grazing during this period is not possible. Maltese soils are prevalently calcareous with a pH usually over 8. These soils are derived from the calcareous rock formations that make up the islands. The distribution of plant communities in the Maltese islands is closely related to the geology and topography of the country. According to weather conditions, salt spray may be blown on to any vegetation and culture on the island. The arable crops mainly cultivated as fodder include chickpea (*Cicer arietinum*), sulla (*Hedysarium coronarium*), barley (*Hordeum vulgare*), pale pea (*Lathyrus ochrus*), Indian pea (*Lathyrus sativus*), lentil (*Lens culinaris*), prickly scorpion's-tail (*Scorpiurus muricatus*), common wheat (*Triticum aestivum*), southern vetch (*Vicia ervilia*), and common vetch (*Vicia sativa*). These crops are frequently sown in small very poor areas where there is a large increase in the native weed species, particularly Leguminosae, a wide variety of trifolium which are harvested with the rest of the sown crop. The plants of *Vicia faba* grown to supply broad beans for human consumption are also harvested, dried, and used as summer fodder. The feed of sheep is also supplemented with cladodes of prickly pear (*Opuntia ficus-indica*) and locust beans from the carob tree (*Ceratonia siliqua*).

Cheesemaking was a logical way to preserve the milk for longer periods of time, especially since dairy produce could only be consumed on meat-eating days in view of the prevailing Catholic cultures and traditions. The know-how of the cheesemaking process has been passed on from generation to generation, and a recent survey on the production of the 'Ġbejna tan-nagħaġ' confirmed that most current producers learnt the process from their parents or grandparents.

All steps involved in the cheesemaking process can be and are typically carried out by the producer, and most ingredients are locally sourced. Moreover, the drying of the 'Ġbejna tan-nagħaġ' is carried out naturally taking advantage of the dry, warm, and salty climate typical of this geographical area.

The '*Ġbejna tan-nagħaġ*' is an integral part of the Maltese culinary heritage and has also made its way into several Maltese expressions and idioms, highlighting the linkage between the '*Ġbejna tan-nagħaġ*' and Maltese culture.

## **5. Description of the production method (including packaging)**

The sheep farms of production should be located in the geographical delimited area described in Section 3 above and be compliant with other relevant national and European legislation.

The sheep are fed locally sourced hays of leguminous and cereal plants for at least 55% of their intake (including barley, lolium, wheat, vetches, fava, sulla, maize, sorghum, alfalfa, ryegrass, and clover, amongst others), supplemented with concentrates produced from raw materials and distributed by the major feed mills. Depending on availability, sheep may also be fed locally sourced plants such as carobs and cladodes of prickly pears. The taste of the '*Ġbejna tan-nagħaġ*' is related to this use of local feed. The locally sourced intake cannot be higher due to the lack of rainfall and limited availability of land.

The sheep are milked at the farm, and the milk is then transformed within 1-2 hours. In view of operational circumstances, the milk may occasionally be stored at 4°C and used within 24 hours from milking. The milk is first filtered through a very fine strainer to remove any animal hairs that may have fallen in the milk during the milking process. While the milk is still warm (or, if necessary, after re-heating to 37°C), '*qtar tat-tames*' (i.e., the rennet produced on the farm using the stomach lining of a suckling lamb or kid that has not yet been weaned) or other commercially available milk coagulating enzymes is added to the milk.

Following the addition of the curdling agent, the milk is left to coagulate, and after approximately 20 to 30 minutes the curd ('*baqta*') is formed. The curd is collected into small moulds ('*qaleb*') which are then placed in a stainless steel or plastic tray and left to drain. The moulds were originally made of rushes but, for hygienic purposes, these have been replaced with plastic drain moulds.

To facilitate draining, the '*Ġbejna tan-nagħaġ*' is turned over inside the mould once or twice, after which it is usually sprinkled with a pinch (i.e. 2 to 5mg) of locally sourced sea-salt (obtained locally from the natural drying of sea water in salt pans close to the shore) and then placed in a refrigerator at a temperature of 4 to 12°C to allow it to set in the traditional shape.

The '*Ġbejna tan-nagħaġ' friska*' is normally processed and sold within 24 hours of production. This is normally sold in whey or exuding whey; sometimes the whey is replaced by brine (*Appendix A* below).

To obtain the '*Ġbejna tan-nagħaġ' niexfa*', the '*Ġbejna tan-nagħaġ*' is dried in the '*qanniċ*', a wooden or metal frame cupboard covered in wire or nylon mesh with a mesh size  $\leq 2$  mm. The '*qanniċ*' is placed outside in a ventilated area, normally on a rooftop, to air dry the '*Ġbejna tan-nagħaġ*' in a natural environment in rural areas of the Maltese Islands. The time required for complete drying depends on the wind direction; northerly blowing wind ('*riħ fuq*') is considered better than southerly blowing wind ('*riħ isfel*'). Under certain circumstances, and to avoid ruining the product, the '*Ġbejna tan-nagħaġ*' can also be air-dried in assisted chambers. Specifically, this can be done during prolonged humid weather conditions ('*riħ isfel*') or when dusty desert rain ('*xita tal-ħamrija*') is forecast. Once the '*Ġbejna tan-nagħaġ*' has dried sufficiently, it can be sold as '*Ġbejna tan-nagħaġ' niexfa*' (*Appendix A* below).

The '*Ġbejna tan-nagħaġ' tal-bżar*' is obtained by pickling the '*Ġbejna tan-nagħaġ' niexfa*' (*Appendix A* below). The latter is left in locally sourced vinegar (derived from the fermentation of locally produced wine) for up to 24 hours, after which it is coated with coarse freshly ground or crushed black pepper.

The '*Ġbejna tan-nagħaġ' friska*' can be preserved as is for up to three days (*Appendix A* below). The '*Ġbejna tan-nagħaġ' niexfa*' can be preserved for up to six weeks, while the '*Ġbejna tan-nagħaġ' tal-bżar*' can be preserved for up to six months. The preservation times are based on shelf-life studies which were conducted by an accredited laboratory, and certificates are attached to the Single Document.

All '*gbejniet*' are sold in their entire form. The '*Ġbejna tan-nagħaġ' friska*' is sold solely by quantity, while the '*Ġbejna tan-nagħaġ' niexfa*' and the '*Ġbejna tan-nagħaġ' tal-bżar*' are sold by either weight or quantity. The '*Ġbejna tan-nagħaġ*' is packed either singly or in small groups, in various transparent plastic or glass containers, each sealed with a band sticker and labelled as described in Section 8 below.

Normally 1 kilogramme of '*gbejniet tan-nagħaġ*' at 24-hour drip are produced from 6.8 to 8 litres of sheep milk depending on season and diet. This works out as 125g to 147g of '*gbejna tan-nagħaġ*' (i.e., 1.25kg to 1.47kg of '*gbejniet tan-nagħaġ*') at 24-hour drip per litre of sheep milk.

## **6. Link with the geographical area**

The characteristics of the '*Gbejna tan-nagħaġ*' are inextricably linked with the Maltese islands and are due to inherent natural and human factors found in this geographical environment.

The presence of the '*Gbejna tan-nagħaġ*' in Maltese culinary culture is very strong. This product has always been retained as important and its production methods and skills to produce it have been passed on from generation to generation by word of mouth. Indeed, there are very little documented procedures. This transmission from one generation to another is a very clear indicator of the importance attributed to this product. During the many different eras, sheep have been kept largely in very small and limited flocks belonging to each household to provide the necessary milk and dairy products for their own subsistence. Larger flocks have been kept throughout the ages to produce the same typical products utilising the same methodologies and to be marketed commercially. The commercial herds are becoming more important in present times in view of the larger urbanization occurring on the islands, and the demand for this product.

The '*Gbejna tan-nagħaġ*' is produced with whole raw milk of the 'Maltese' breed sheep and its crosses. The cheesemaking process is part of the traditional Maltese lore and heritage. It relies heavily on locally sourced ingredients such as sea-salt and vinegar, and the salty dry warm climate typical of these islands, particularly for the dry and peppered forms.

Most ingredients (rennet, salt, and vinegar) are locally sourced, and, whenever possible, the sheep are fed locally produced hays and fodder typical of the Mediterranean climate (e.g., carob, prickly pears). This is reflected in the flavour and structure of the product. Depending on the season and the prevailing type of fodder, the milk will obtain related flavours which are then transferred to the cheese. For example, in the winter months when green vetch is fed, a typically lighter and sweeter tasting milk is produced, while in the summer months when dried vetch is fed, the milk is creamier with hints of dried broad beans and other legumes.



## 7. Inspection Body

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## 8. Labelling

The product shall carry a rectangular label indicating:

- The product name: ***'Ġbejna tan-nagħaġ'***

And may in addition have the optional descriptors:

**friska** or **niexfa** or **tal-bżar**

And would then be given as follows:

***'Ġbejna tan-nagħaġ' friska,***

***'Ġbejna tan-nagħaġ' niexfa,***

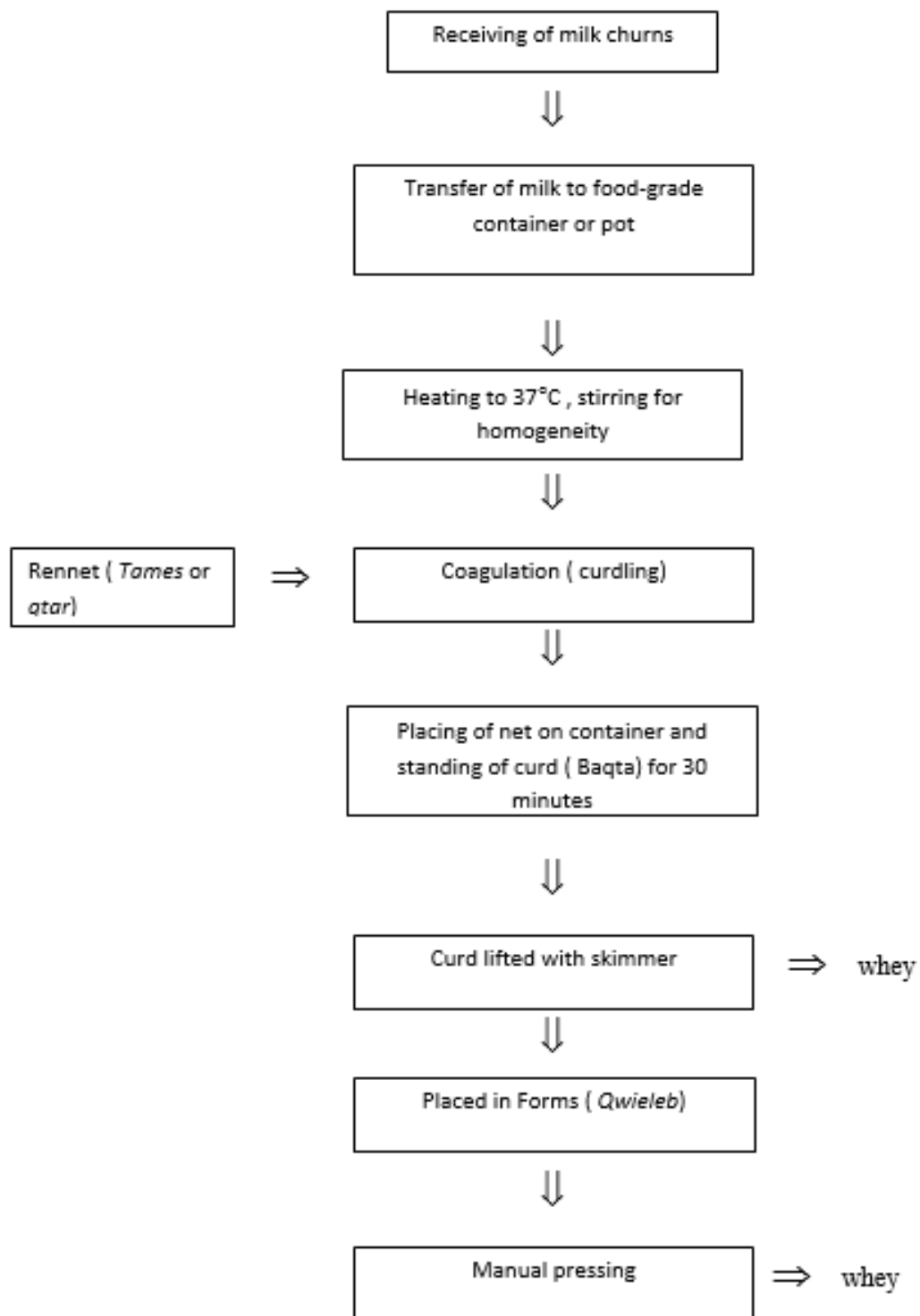
***'Ġbejna tan-nagħaġ tal-bżar'.***

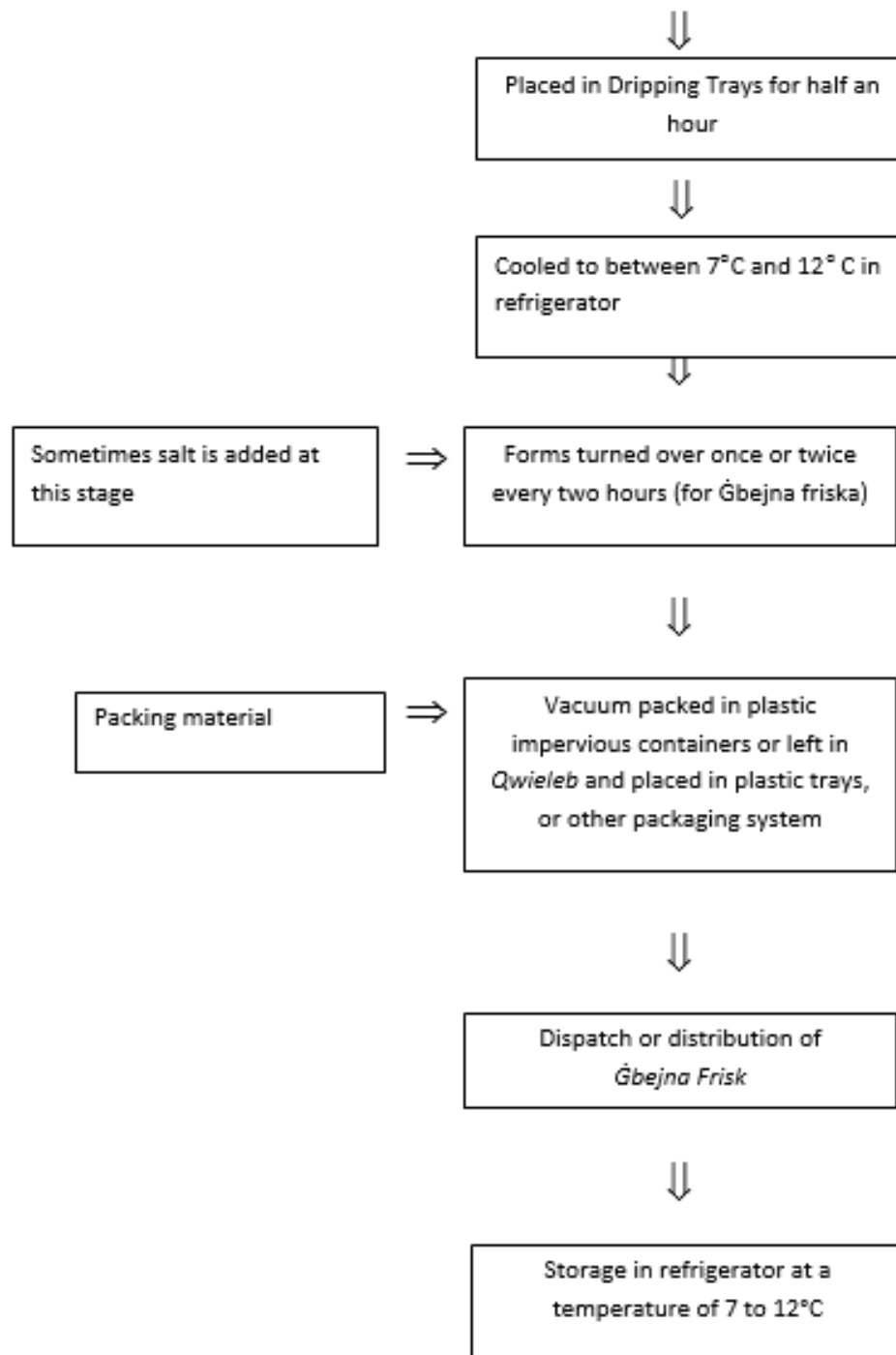
- The European Union quality symbol for Protected Designation of Origin.
- The logo of the certifying control authority.

## **Appendix A: Flow diagrams for the preparation of the three types of ‘*Gbejna tan-naghag*’**

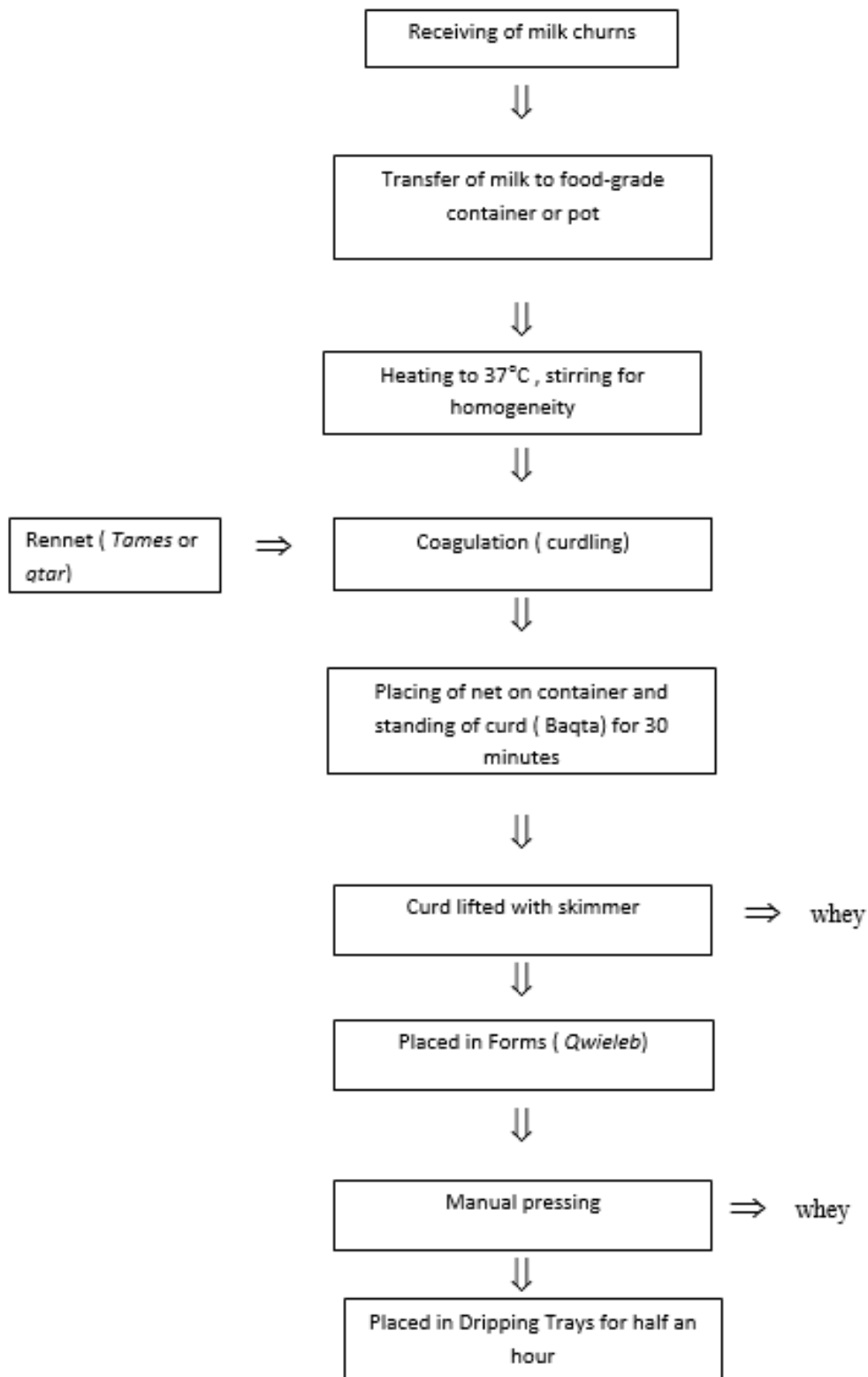
These flow diagrams are intended as a guide. Flow diagrams may vary slightly between different producers of ‘*Gbejna tan-naghag*’ given that there may be minor differences both as regards the process steps, but also in the method of wrapping and packing the final product and the delivery system. Such deviations must be taken into account by each individual producer of ‘*Gbejna tan-naghag*’, and the flow diagram adapted accordingly.

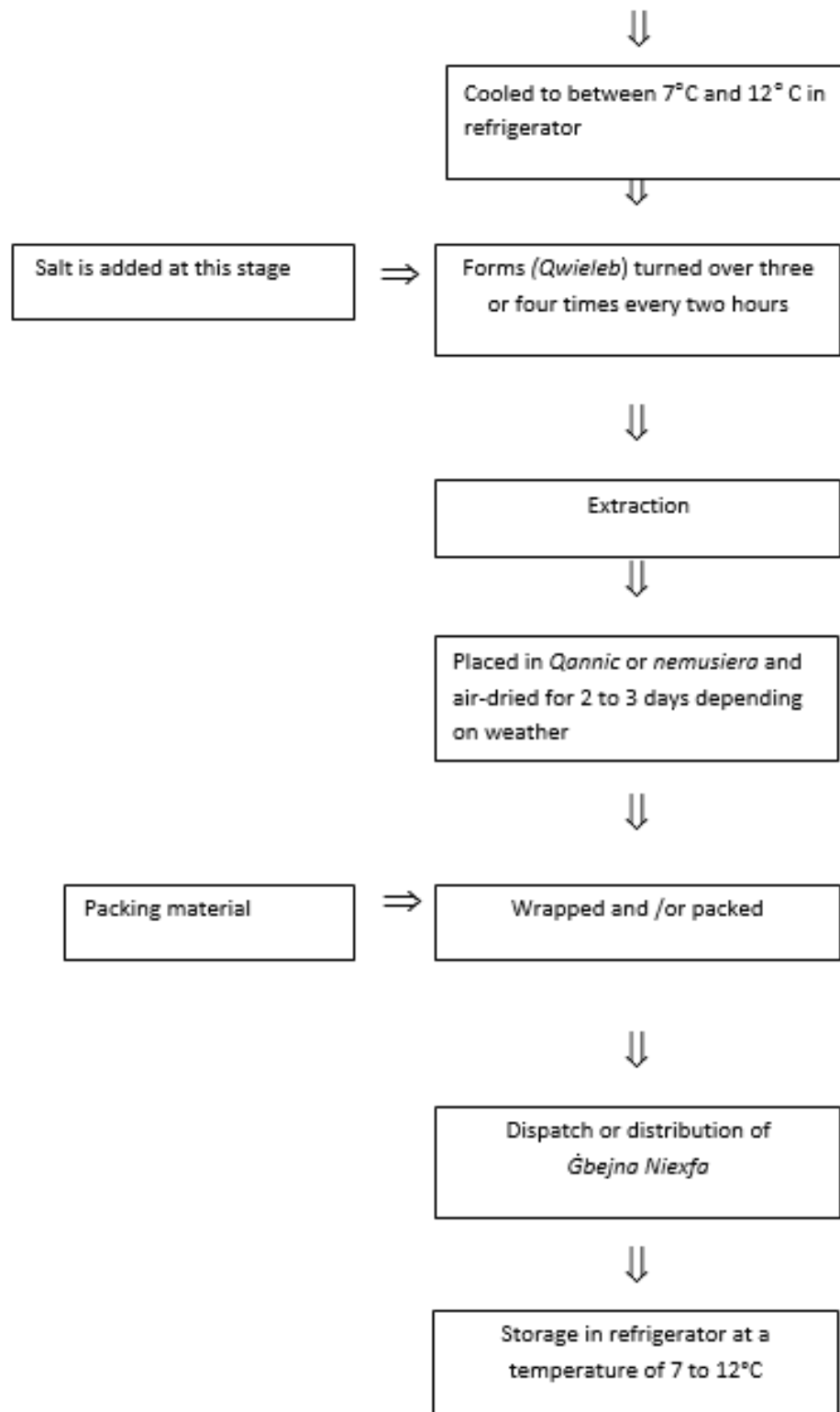
## Flow diagram for the production of '*Ġbejna tan-nagħaġ*' friska





## Flow diagram for the production of 'Ġbejna tan-nagħaġ' niexfa





## Flow diagram for the production of '*Ġbejna tan-nagħaġ*' tal-bżar

