



Process for the manufacture of food mousses, mousse obtained by this process, composition for the manufacture of this mousse, and process for the manufacture of this composition.

5 The subject of the present invention is a process for the manufacture of food mousses, in particular fruit mousses, the mousse obtained by this process, a composition for the manufacture of these mousses, as well as the process for the manufacture of this composition.

10 It is known that some culinary preparations, in particular pastry preparations, use fruit mousses.

 These mousses are prepared from fruit purées emulsified with cream and fixed with gelatin.

 The traditional manufacture of fruit mousses is
15 a delicate job which, to be performed successfully, should in practice be carried out by good professionals.

 According to this traditional process, the process starts with heating, to about 60°C with gelatin, part of the fruit purée which it is desired to use so as
20 to cause the melting of the gelatin and its incorporation into the fruit purée.

 The remainder of the fruit purée is then introduced and mixed intimately with the gelatin.

 Crème Chantilly is then prepared by whipping
25 crème fraîche to which sugar has been added and the fruit purée-based preparation is incorporated into the crème Chantilly with, optionally, egg white.

 This process proves difficult to carry out because it requires the knowledge of skills relating in
30 particular to the incorporation of crème Chantilly into the preparation of fruit purée and gelatin, it being necessary for this incorporation, inter alia, to be carried out at the right temperature without breaking the foam which characterizes crème Chantilly.

35 In order to facilitate the manufacture of fruit mousses and to make it more rapid, a technique is also used which involves an industrial preparation in the form of a powder which is commercially available and which is in general based on a powder of freeze-dried fruits, of

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powdered gelatin, of dextrose as well as various preservatives, colourings and flavourings.

In order to prepare the mousse with the aid of this industrial preparation, the preparation in the form
5 of a powder simply has to be diluted in hot water.

The fruit-based liquid thus obtained is then incorporated into the crème Chantilly previously prepared, the process being carried out as with the traditional method.

10 As can be seen, the usefulness of the industrial technique lies essentially in the fact that the preparation based on fruits and gelatin is carried out easily by dispersing powder in hot water.

The subject of the present invention is a process
15 for the manufacture of food mousses having the same taste qualities and the same preservation and behaviour qualities as the mousses obtained by the traditional process performed by the most competent professionals.

The invention is also intended to simplify
20 considerably the manufacture of food mousses by purely and simply eliminating the most delicate operation which consists in incorporating the preparation based on a purée of, for example, fruits into the crème Chantilly manufactured beforehand.

25 The invention makes it possible, indeed, to obtain directly, in this example the fruit mousse, by working for a few minutes in a beater a composition based on fruits according to the invention and liquid cream of animal or plant origin not whisked into crème Chantilly.

30 The present invention will be described with reference more particularly to a fruit mousse, but it is clear that it can also apply to various food mousses such as vegetable, fish or crustacean mousses for example.

The subject of the present invention is a process
35 for the manufacture of food mousses such as fruit mousses, based on purée, gelatin and cream, characterized in that: the purée is mixed with a composition consisting of gelatin containing a finely dispersed filler; a composition mainly consisting of a mixture of gelatin and

emulsifier is incorporated into the mixture thus obtained; and the composition thus obtained, to which a cream-based composition has been added, is treated in a beater, which makes it possible to obtain the food mousse
5 directly.

The filler contained in the gelatin used in the first phase of the process may consist of any food powder which is not substantially soluble in the molten gelatin.

It is possible, according to the invention, to
10 use advantageously a filler consisting of a milk protein or plant protein powder.

In accordance with the invention, it is preferable to use a mixture of gelatin and filler which contain between about 1 and 8% by weight and preferably between
15 2 and 5% by weight of filler.

The composition based on gelatin and emulsifier which is added to the mixture of gelatin and filler comprises for example from 15 to 50% and preferably from 25 to 35% by weight of an emulsifier which may consist,
20 for example, of the product sold under the trademark CREMODAN by the company GRINSTED.

In accordance with the invention, the gelatin-based compositions may be used in an amount for example of 2.5 to 5.5 kg, and preferably of 3.5 to 4.5 kg of
25 mixture of gelatin and emulsifier per 1 kg of mixture of gelatin and filler.

In accordance with the invention, the incorporation into the purée of the gelatin containing the filler is carried out advantageously at a relatively low temperature, for example of 10°C in order to avoid damaging
30 the taste qualities of the purée.

The proportion of gelatin containing the filler may be for example from 2 to 10% by weight of the purée, and preferably from about 5 to 6%.

35 The gelatin containing the filler is advantageously incorporated into the purée by treating in a beater for a few minutes.

The composition obtained has substantially the same appearance as that of the initial purée, being

however slightly thicker.

In accordance with the invention, the gelatin mixed with the emulsifier is dissolved in hot water in an amount for example of 1 kg of gelatin containing the
5 emulsifier per for example 2 to 4 litres of water, and preferably about 3 litres.

The emulsifier-based gelatin dissolves easily in hot water by whipping.

Sugar, salt or spices may be introduced according
10 to the invention into one of the two gelatin-based compositions or into both or alternatively into the purée if desired, in a quantity which depends on the taste quality which it is desired to confer on the mousse.

Without being cooled, the preparation based on
15 gelatin and emulsifier is then mixed with the composition based on purée and gelatin mixed with a filler.

During the mixing, the heat from the composition based on gelatin and emulsifier is sufficient to allow its incorporation into the composition based on purée
20 which is at low temperature without causing considerable heating of the whole.

This mixing is carried out advantageously for a few minutes in a beater and with injection of nitrogen under vacuum so as to avoid oxidation of the constituents
25 and to avoid denaturation of the taste and the colour of the purée.

In accordance with the invention, 3 kg to 5 kg of gelatin and emulsifier dissolved in water are used per
30 100 kg of preparation based on purée, gelatin and filler.

It should be understood that in order to enhance the quality of the product obtained, it is desirable to dissolve the gelatin containing the emulsifier in a quantity of hot water which is as small as possible while allowing a good dissolution and a good fluidity of the
35 composition obtained, this in order to dilute the purée as little as possible.

In accordance with the invention, in order to obtain the best fruit mousse, it is preferable to use fruit purée consisting exclusively of fruits which are

ground and filtered with the addition of sugar, but it is clear that purées prepared, at least in part, from freeze-dried or dehydrated fruits and from dextrose as well as colourings and food flavourings can also be used.

5 The composition according to the invention thus obtained may be deep-frozen and marketed in this state.

 It can also be packaged under vacuum, treated by flash pasteurization or treated at ultra-high frequencies.

10 The preparation of the mousse is then extremely easy since a mixture of the composition based on purée and gelatin according to the invention with a composition based on cream simply have to be treated in a beater for a few minutes in order to obtain immediately a mousse
15 whose qualities are equal to those of the best mousses obtained according to the traditional process.

 The composition based on this cream which is used to prepare the food mousse according to the invention may comprise one or more creams of animal or plant origin
20 optionally incorporated into a milk which is also of animal or plant origin.

 This mixing is advantageously carried out in an amount of 1 kg of purée-based preparation with for example half to three quarters of a litre of cream.

25 It is remarkable that, according to the invention, the crème fraîche may be used as such and that contrary to the other processes known, it does not need to be whisked beforehand into crème Chantilly.

 The mousse obtained according to the invention
30 has the appearance, the texture and the taste qualities of the best mousses prepared by the traditional process. It can be deep-frozen and it exhibits a good resistance to thermal shocks.

 Its overrun is of the order of 2 to 3 times the
35 volume of its constituents.

 This mousse has a fine, nonelastic and nonsticky texture.

 It is stable during the entire period during which it can be consumed, and it allows good cutting.

With the aim of making the invention understood more clearly, an exemplary embodiment thereof will now be described by way of illustration and with no limitation being implied.

5 To prepare a strawberry mousse according to the invention, the following are introduced into a beater:

- 18 g of strawberry purée containing 19% dry extract
- 2.2 kg of granulated sugar
- 10 - 1 kg of a mixture of gelatin and filler containing 45% by weight of milk protein finely dispersed in the mass of the gelatin.

These products are mixed in a beater for about 2 minutes at the temperature of 10°C.

15 The mixture is allowed to stand for 10 minutes and a composition is obtained which has substantially the same appearance as that of strawberry purée, except that it is slightly thicker.

2.2 kg of granulated sugar and 1 kg of gelatin
20 containing 0.3 kg of an emulsifier such as that marketed under the trademark CREMODAN by the company GRINSTED are dissolved in three litres of water at 85°C.

The mixture is whipped in order to ensure the melting and the dispersion of the gelatin in the water as
25 well as the dissolution of the sugar.

The two compositions obtained are then immediately mixed as has just been described, while they are, for the first, at a temperature of about 10°C, and for the second, at a temperature of about 85°C.

30 The mixing is carried out for 2 minutes in a beater under nitrogen.

The final temperature of the mixture is about 18°C.

This composition contains about 38% dry extract.

35 In accordance with the invention, it is advantageous to avoid as much as possible any heating of the composition containing the strawberry purée, so as not to damage its taste properties.

The composition according to the invention thus

obtained is then packaged and then deep-frozen for its marketing.

In order to subsequently prepare the strawberry mousse, the composition whose manufacture has just been described is allowed to thaw and it is placed in a beater with cold cow's milk cream in an amount of one kilogram of preparation based on strawberry purée per 0.6 litre of cream. It is also possible to use for example a mixture of cow's cream and milk, or alternatively a vegetable cream such as a soya bean cream.

After beating for about 5 minutes, an excellent strawberry mousse is obtained which has the same qualities as those obtained by the traditional process.

It is of course understood that the embodiment which has just been described above does not imply any limitation and that it can be subjected to any desirable modification without departing, as a result, from the framework of the invention.

Accordingly, for example, it is possible according to the invention to prepare any customary mousses based on fruits such as cherries, strawberries, currants, peaches, apricots, citrus fruits, passion fruits or chestnuts and the like.

It is also possible, according to the invention, to prepare, if desired, various mousses such as mousses of vegetables such as carrots, beans, tomatoes, celeries, or alternatively other mousses such as fish or crustacean mousses.

It is also possible to add to the purée serving as a base for the mousse various ingredients such as colourings or flavourings according to the taste qualities which it is desired to confer on the mousse.



CLAIMS

1. Process for the manufacture of food mousses such as fruit mousses, based on purée, gelatin and cream, characterized in that: the purée is mixed with a composition consisting of gelatin containing a finely dispersed filler; a composition mainly consisting of a mixture of gelatin and emulsifier is incorporated into the mixture thus obtained; and the composition thus obtained, to which a cream-based composition has been added, is treated in a beater, which makes it possible to obtain the food mousse directly.
2. Process according to Claim 1, characterized in that a fruit mousse is prepared using fruit purée.
3. Process according to any one of the preceding claims, characterized in that the filler dispersed in the gelatin which is mixed with the purée consists of a food powder which is not substantially soluble in the molten gelatin.
4. Process according to Claim 3, characterized in that the food powder is a milk protein or plant protein powder.
5. Process according to any one of the preceding claims, characterized in that the mixture of gelatin and filler contains between about 1 to 8% by weight and preferably between 2 and 5 % by weight of filler.
6. Process according to any one of the preceding claims, characterized in that the composition based on gelatin and emulsifier which is used in the second phase of the process contains for example from 15 to 50% and preferably from 25 to 35% by weight of an emulsifier which may consist, for example, of the product sold under the trademark CREMODAN by the company GRINSTED.
7. Process according to any one of the preceding claims, characterized in that the gelatin-based compositions are used in an amount of 2.5 to 5.5 kg and preferably of 3.5 to 4.5 kg of mixture of gelatin and emulsifier per 1 kg of mixture of gelatin and filler.
8. Process according to any one of the preceding claims, characterized in that the gelatin containing the



filler is incorporated into the purée at a relatively low temperature, for example of 10°C.

9. Process according to any one of the preceding claims, characterized in that the proportion of gelatin
5 containing the filler is from 2 to 10% by weight, and preferably from 5 to 6% by weight relative to the purée.

10. Process according to any one of the preceding claims, characterized in that sugar, salt or spices are incorporated into at least one of the gelatin-based
10 compositions.

11. Process according to any one of the preceding claims, characterized in that the second phase of the process is carried out in which the composition based on gelatin and emulsifier is incorporated into the compo-
15 sition based on gelatin and purée.

12. Process according to any one of Claims 1 to 11, characterized in that a cream-based composition is used comprising one or more creams of animal or plant origin, optionally incorporated into a milk of animal or plant
20 origin.

13. Food mousse, in particular fruit mousse, obtained by the process according to any one of Claims 1 to 12, characterized in that it exhibits an overrun of about 2 to 3 times the volume of its constituents, in that it has
25 a fine, nonelastic and nonsticky texture, a good stability over time, in that it allows good cutting, in that it can be deep-frozen and in that it exhibits a good resistance to thermal shocks.

14. Mousse according to Claim 13, characterized in that it is prepared based on a purée of fruits, vegetables, fish or crustacea.

15. Composition which makes it possible to obtain a food mousse directly by mixing with crème fraîche, characterized in that it consists of a purée mixed with
35 a composition consisting of gelatin containing a finely divided filler, which has been incorporated into a composition mainly consisting of a mixture of gelatin and emulsifier.

16. Composition according to Claim 15, characterized





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in that it has the characteristics of at least one of
Claims 2 to 11.

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