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(54) Title: CANDIED TOMATOES

(57) Abrégé/Abstract:

Process for the preparation of candied tomato pieces, in which peeled tomatoes are cut into pieces, these pieces are sprinkled with a mixture based on sugar and salt and then they are cooked, so as to obtain candied tomato pieces.

Abstract

Candied tomatoes

Process for the preparation of candied tomato pieces, in which peeled tomatoes are cut into pieces, these pieces are sprinkled with a mixture based on sugar and salt and then they are cooked, so as to obtain candied tomato pieces.

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Candied tomatoes

The subject of the present invention is a process for the preparation of candied tomato pieces, candied tomato pieces and their use for the manufacture of food products.

5 It is known to prepare candied tomatoes.

Thus, CN 88108671 describes a process for the manufacture of candied tomatoes, in which the tomatoes are washed, prepared in a syrup, candied and then cooked before being packaged.

10 Moreover, HU 863805 describes a process for the preservation of green tomatoes, in which the green tomatoes are peeled, cut into pieces, treated with steam in a bath containing acetic acid and then soaked in a syrup containing 50% sugar at 80°C and flavouring agents.

15 All the known prior art processes propose candied tomato preparations in which the candied tomato pieces are in immersion in a sterilized syrup. Thus, no known process makes it possible to prepare candied tomatoes without a soaking stage causing the loss of part of the flavour of the tomatoes. Moreover, no known process allows the freezing of candied tomatoes in individual
20 pieces.

The aim of the present invention is to provide a quick process which makes it possible to obtain individual pieces of candied tomatoes not bathing in a solution.

25 To do this, the subject of the present invention is a process for the preparation of candied tomato pieces, in which peeled tomatoes are cut into pieces, they are sprinkled with a mixture based on sugar and salt and they are then cooked at a temperature of about 180-250°C for 3-15 min and preferably 160-220°C for 8-20 min, so as to obtain candied tomato pieces.

30 It has been observed, surprisingly, that the process according to the invention makes it possible to obtain candied tomato pieces having a nice red colour and having a good taste. These candied tomato pieces can be easily frozen, without water being discharged after defrosting.

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Thus, in the process for the preparation of candied tomato pieces according to the present invention, peeled tomatoes are cut into pieces so as to obtain 3-8 cm³ dice.

If frozen tomatoes are used to carry out the process according to the invention, 5-8 cm³ pieces are preferably cut, because the shrinkage of these tomato pieces during the cooking stage is greater.

These tomato pieces are then sprinkled with a mixture based on sugar and salt. This mixture makes it possible to improve the candying during the subsequent cooking stage. Preferably, this mixture contains, relative to the quantity of tomatoes, 0.5-2% salt and 2-5% sugar.

It is possible to add to this mixture, relative to the quantity of tomatoes, 0.05-0.2% calcium chloride, so as to preserve and reinforce the texture of the candied tomato pieces, and 0.05-0.2% ascorbic acid, so as to maintain the colour and the taste of the candied tomato pieces. The ascorbic acid has the role of an antioxidant.

It is also possible to add herbs and spices, so as to flavour the tomato pieces.

They are then cooked at 180-250°C for 3-15 min and preferably 160-220°C for 8-20 min, so as to obtain candied tomato pieces. It is possible to carry out this stage in a continuous cooking oven equipped with a grid conveyor on which the tomato pieces are placed. The cooking is therefore carried out in a medium with good ventilation and some moisture, so as to carry out the candying of the tomato pieces without these pieces becoming dry and burned during the cooking stage. Preferably, the moist temperature during this stage is 70-90°C.

The candied tomato pieces thus prepared can then be rapidly cooled to room temperature with pulsated air, before carrying out an individual quick deep-freezing. To carry out this deep-freezing, it is

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possible, in particular, to use the deep-freezer "Flowfreezer*" marketed by the company Friscoscandia.

Preferably an individual quick deep-freezing of the candied tomato pieces is therefore carried out.

5 The subject of the present invention is also the candied tomato pieces obtained using the process.

Preferably, the tomato pieces exhibit a water loss of 4-10%, relative to the water content of the tomatoes at the start. It is possible to use tomatoes
10 having a dry matter content of 4-6%, so as to produce candied tomato pieces having a dry matter content of 10-16%.

Finally, the subject of the present invention is the use of candied tomato pieces for the manufacture
15 of a food product. It is possible in particular to use the candied tomato pieces for the manufacture of sauces or for the manufacture of toppings for a pizza, for snacks or for prepared meals.

The candied tomatoes, the process for the
20 preparation of candied tomatoes and their use are described in greater detail with the aid of the examples below. In these examples, the percentages are given by weight unless otherwise stated.

25 **Example 1**

Candied tomato pieces are prepared using the process according to the invention.

To do this, 10 kg of tomatoes are washed and then peeled before cutting them into 4-6 cm³ dice.

30 The tomato dice thus prepared are placed on a grid and they are sprinkled with 300 g of mixture consisting of 100 g of salt and 200 g of sugar.

The sprinkled tomato dice are then cooked at 220°C for 10 min, so as to produce candied tomato
35 pieces having a pleasant texture and a nice red colour.

The candied tomato pieces thus produced are then rapidly cooled to room temperature with pulsated air, before carrying out an individual quick deep-freezing to -20°C.

* trade-mark

Example 2

The influence of the mixture based on sugar and salt on the quality of the candied tomatoes is evaluated.

To do this, 10 kg of tomatoes are washed and then peeled before cutting them into 4-6 cm³ dice.

These tomato dice are divided into two batches.

One of the two batches (Batch No. 1) is placed on a grid and the tomato dice are cooked at 220°C for 10 min without sprinkling the tomato dice with a mixture based on sugar and salt beforehand, so as to produce candied tomato pieces.

The other batch (Batch No. 2) is placed on a grid and the tomato dice are sprinkled with 150 g of mixture consisting of 50 g of salt and 100 g of sugar before carrying out the cooking stage as described above.

Moreover, two other batches (Batch No. 3 and Batch No. 4) of candied tomato pieces are prepared in the manner described above, except that the tomatoes are not peeled.

The proportion of tomato pieces burned during the cooking stage is compared. All the results are stated in Table I below.

Table I

Batch	Cooking temperature (°C)	Cooking time (min)	Proportion of tomato pieces burned (%)
Batch No. 1	220	10	58.6
Batch No. 2	220	10	52.8
Batch No. 3	220	10	55.2
Batch No. 4	220	10	55.9

Legend: Batch No. 1 peeled tomatoes

Batch No. 2 peeled tomatoes + mixture based on sugar and salt

Batch No. 3 unpeeled tomatoes

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Batch No. 4 unpeeled tomatoes + mixture based
on sugar and salt

The results stated in Table I therefore
5 demonstrate the fact that if the candied tomato pieces
are prepared according to the process of the invention,
that is to say if the tomatoes are peeled and are
sprinkled with a mixture based on sugar and salt,
candying is performed during the cooking stage without
10 the proportion of tomato pieces burned being too high.

Example 3

Candied tomato pieces as produced according to
the present invention are used for the preparation of a
15 pizza.

To do this, a mixture comprising, relative to
the total weight of the mixture, 45% of candied
tomatoes, 10% of mozzarella-type cheese, 10% of chorizo
sausage, 15% of onions, 10% of anchovy and 10% of
20 olives, is placed on a pizza dough.

The pizza thus produced is cooked in a
traditional oven at 170°C for 20 min. A pizza with
Italian flavours having a good tomato taste is thus
produced.

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CLAIMS:

1. A process for the preparation of candied tomato pieces comprising the steps of:

peeling tomatoes;

cutting the peeled tomatoes into pieces;

sprinkling the tomato pieces with a mixture comprised of sugar and salt; and

cooking the tomato pieces at a temperature of about 180°C. to about 250°C. for about 3-15 minutes.

2. The process of claim 1 wherein the candied tomato pieces are frozen.

3. The process of claim 1 further comprising cooling the tomatoes to room temperature after they are cooked and individually deep-freezing the candied tomato pieces.

4. The process of claim 1 wherein the mixture comprising sugar and salt further comprises herbs or spices to flavor the tomato pieces

5. Process according to any one of claims 1-4, in which the mixture based on sugar and salt contains, relative to the quantity of tomatoes, 0.5-2% of salt and 2-5% of sugar.

6. The process of claim 5 wherein the mixture based on sugar and salt further comprises, relative to the quantity of tomatoes, 0.05-0.2% calcium chloride to preserve and reinforce the texture of the candied tomatoes and 0.5-0.2%

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ascorbic acid to maintain the color and taste of the candied tomato pieces.

7. Candied tomato pieces obtained by the process of any one of claims 1-6.

8. The candied tomato pieces of claim 7, wherein the water loss of the candied tomato pieces is 4-10% relative to the water content of the tomatoes at the start of the process.

9. A food product comprising the candied tomato pieces of claim 7 or 8.

10. The food product of claim 9 wherein the food product is a sauce, a topping, a pizza, a snack, or a prepared meal.