

SPECIFICATION

5 STARCH FOR BAKED CONFECTIONERY

TECHNICAL FIELD

[0001]

The present invention relates to a starch for baked
10 confectionery.

BACKGROUND ART

[0002]

Patent Documents 1 and 2 disclose techniques relating to a starch
15 used for baked confectionery.

Patent Document 1 (Japanese Unexamined Patent Publication No.
2013-212104) describes a technique relating to a mix for baked
confectionery capable of producing baked confectionery which is
transparent after baking by baking a batter using a heated mold and
20 can maintain the transparency and the shape even in a case where the
batter is stored after baking and it is described that the mix for
baked confectionery contains a specific type of potato starch in a
specific amount and does not substantially include cereal flour.

[0003]

25 In addition, Patent Document 2 (Japanese Unexamined Patent
Publication No. 2009-82108) describes that a starch composition for
producing cakes contains specific amounts of natural starch, modified

starch, and processed starch with respect to the total amount of cereal flour, and the blending weight ratio thereof is set to be in a specific range. With this constitution, according to the starch composition for producing cakes described in the same document, it is possible to provide a starch composition for producing cakes which forms a stable cake batter even in a case where wheat flour is entirely replaced with starch as cereal flour, has excellent batter foam stability in a heating step and can be industrially stably produced and has excellent eating texture, such as soft feeling, elasticity, melt-in-the-mouth feeling, and moist feeling, which is difficult to achieve only with flour.

RELATED DOCUMENT

PATENT DOCUMENT

[0004]

[Patent Document 1] Japanese Unexamined Patent Publication No. 2013-212104

[Patent Document 2] Japanese Unexamined Patent Publication No. 2009-82108

20

SUMMARY OF THE INVENTION

TECHNICAL PROBLEM

[0005]

However, the present inventors have found that in a case where the above-mentioned technique is used, even in a case where gluten-free and gliadin-free baked confectionery is used, there is room for improvement in obtaining baked confectionery having an

excellent balance of external appearance, eating texture, melt-in-the-mouth feeling, finely texture of a batter after baking, and sweetness.

5 MEANS OF SOLVING THE PROBLEM

[0006]

According to the present invention, there is provided a starch for baked confectionery including the following components (A) and (B):

- 10 (A) hydroxypropylated starch; and
(B) distarch phosphate,

in which a content of the component (A) with respect to a total of the components (A) and (B) is 0.03 or more and 0.18 or less by mass ratio.

15 [0007]

According to the present invention, there is provided a mix for baked confectionery including the starch for baked confectionery of the present invention.

In addition, according to the present invention, there is
20 provided a batter for baked confectionery including the starch for baked confectionery of the present invention.

Further, according to the present invention, there is provided baked confectionery including the starch for baked confectionery of the present invention.

25 [0008]

According to the present invention, there is provided a method for improving melt-in-the-mouth feeling of baked confectionery

including the starch for baked confectionery of the present invention in a batter and baking the batter.

[0009]

It is to be noted that any combination of these respective
5 constitutions and those obtained by converting the expression of the present invention between a method, an apparatus, and the like are also effective as embodiments of the present invention.

For example, the present invention also includes the use of the starch for baked confectionery of the present invention in a mix for
10 baked confectionery, a batter for baked confectionery, or a method for producing baked confectionery.

In addition, the present invention also includes the use of the mix for baked confectionery of the present invention in a method for producing a batter for baked confectionery or baked confectionery.

15 Further, the present invention also includes the use of the batter for baked confectionery of the present invention in a method for producing baked confectionery.

ADVANTAGEOUS EFFECTS OF THE INVENTION

20 [0010]

As described above, according to the present invention, it is possible to obtain baked confectionery having an excellent balance of external appearance, eating texture, melt-in-the-mouth feeling, finely texture of a batter after baking, and sweetness even in a case
25 where gluten-free and gliadin-free baked confectionery is produced.

DESCRIPTION OF EMBODIMENTS

[0011]

Hereinafter, embodiments of the present invention will be described with reference to specific examples of each component. Each component can be used alone or in combination of two or more thereof.

[0012]

(Starch for Baked Confectionery)

In the embodiment, a starch for baked confectionery is a composition including two or more types of starches, and includes component (A): hydroxypropylated starch, and component (B): distarch phosphate.

[0013]

(Component (A))

The hydroxypropylated starch of the component (A) is, specifically, a starch that is not pregelatinized, that is, a β starch.

The swelling degree in cold water of the component (A) is preferably 2 or more and less than 3.5.

The component (A) does not include a distarch such as the component (B): distarch phosphate, which will be described later.

20 [0014]

As the raw material starch of the component (A), one or two or more selected from the group consisting of tapioca starch, potato starch, and waxy corn starch are preferable and tapioca starch is more preferable from the viewpoint that the balance of external appearance, eating texture, melt-in-the-mouth feeling of baked confectionery, finely texture of a batter after baking, and sweetness of baked confectionery is preferable.

[0015]

The content of the component (A) in the starch for baked confectionery is more than 0% by mass, preferably 1% by mass or more, more preferably 3% by mass or more, even more preferably 5% by mass or more, and still even more preferably 7% by mass or more with respect to the entire starch for baked confectionery from the viewpoint that the balance of external appearance, eating texture, melt-in-the-mouth feeling, finely texture of the batter after baking, and sweetness of baked confectionery is preferable.

In addition, from the same viewpoint, the content of the component (A) in the starch for baked confectionery is, for example, 20% by mass or less, preferably 18% by mass or less, more preferably 16% by mass or less, and even more preferably 15% by mass or less with respect to the entire starch for baked confectionery.

[0016]

(Component (B))

The distarch phosphate (phosphoric acid crosslinked starch) of the component (B) is specifically starch which is not pregelatinized, that is, β starch.

The swelling degree in cold water of the component (B) is preferably 2 or more and less than 3.5.

The component (B) may be subjected to processing other than crosslinking with phosphoric acid within a range not impairing the effects of the present invention.

[0017]

As the raw material starch of the component (B), one or two or more selected from the group consisting of tapioca starch, potato

starch, and waxy corn starch are preferable and tapioca starch is more preferable from the viewpoint that the balance of external appearance, eating texture, melt-in-the-mouth feeling of baked confectionery, finely texture of a batter after baking, and sweetness
5 of baked confectionery is preferable.

The raw material starch of the component (A) and the raw material starch of the component (B) may be the same or different from each other, and are preferably the same, and more preferably, both are tapioca starch.

10 [0018]

The content of the component (B) in the starch for baked confectionery can be set to, for example, a remainder excluding starches other than the component (B) in the starch for baked confectionery.

15 In addition, the content of the component (B) in the starch for baked confectionery is more than 0% by mass, preferably 20% by mass or more, more preferably least 40% by mass or more, even more preferably 60% by mass or more, still even more preferably 70% by mass or more, still further more preferably 80% by mass or more, and
20 particularly preferably 82% by mass or more with respect to the entire starch for baked confectionery from the viewpoint of improving the eating texture of the baked confectionery.

In addition, from the same viewpoint, the content of the component (B) in the starch for baked confectionery is less than 100%
25 by mass, preferably 97% by mass or less, more preferably 95% by mass or less, and even more preferably 93% by mass or less with respect to the entire starch for baked confectionery.

Further, the content of the component (A) in the starch for baked confectionery may be 1% by mass or more and 18% by mass or less with respect to the entire starch for baked confectionery, and the content of the component (B) may be 20% by mass or more and 97% by mass or less with respect to the entire starch for baked confectionery.

[0019]

The content of the component (A) with respect to the total of components (A) and (B) of the starch for baked confectionery is 0.03 or more and preferably 0.04 or more by the mass ratio $((A)/((A) + (B)))$ from the viewpoint of improving the eating texture and melt-in-the-mouth feeling of baked confectionery.

In addition, from the same viewpoint, the mass ratio $((A)/((A) + (B)))$ is 0.18 or less, preferably 0.16 or less, and more preferably 0.12 or less.

[0020]

Further, the starch for baked confectionery may include starch other than the components (A) and (B), and may preferably further include component (C): pregelatinized starch as starch other than the components (A) and (B).

(Component (C))

Next, the component (C) will be described.

The component (C) is pregelatinized starch that is processed for a pregelatination, such as jet cooker processing, drum dryer processing, and extruder processing.

The swelling degree in cold water of the component (C) is preferably 3.5 or more, more preferably 5 or more, and even preferably 10 or more from the viewpoint that the balance of eating texture,

melt-in-the-mouth feeling, finely texture of a batter after baking, and sweetness of baked confectionery is preferable.

In addition, from the same viewpoint, the swelling degree in cold water of the component (C) is preferably 40 or less, more
5 preferably 30 or less, and even more preferably 20 or less.

The method for measuring the swelling degree in cold water of the component (C) will be described later in Examples.

[0021]

As the raw material starch of the component (C), one or two or
10 more selected from the group consisting of tapioca starch, potato starch, waxy corn starch, and processed starches thereof are preferable, one or two or more selected from the group consisting of tapioca starch and processed starch thereof are more preferable, and acetylated distarch phosphate from tapioca starch is even more
15 preferable from the viewpoint that the balance of external appearance, eating texture, melt-in-the-mouth feeling of baked confectionery, finely texture of a batter after baking, and sweetness of baked confectionery is preferable.

In addition, the derived material of the component (C) and the
20 derived materials of the components (A) and (B) may be the same or different from each other. The derived material of the component (C) is preferably the same as the derived materials of components (A) or (B), the derived materials of components (A) to (C) are more preferably the same, and the derived materials of the components (A)
25 to (C) are even more preferably cassava.

In addition, a starch obtained from cassava is called tapioca starch.

[0022]

In a case where the starch for baked confectionery includes the component (C), the content of the component (C) is preferably 1% by mass or more, more preferably 2% by mass or more, even more preferably 3% by mass or more, and still even more preferably 4% by mass or more with respect to the entire starch for baked confectionery from the viewpoint of obtaining more preferable finely texture of the batter after baking of baked confectionery.

In addition, from the same viewpoint, the content of the component (C) in the starch for baked confectionery is preferably 20% by mass or less, more preferably 10% by mass or less, and even more preferably 8% by mass or less with respect to the entire starch for baked confectionery.

[0023]

In a case where the starch for baked confectionery includes the component (C), the content of the component (C) with respect to the total of components (A) and (B) is preferably 0.01 or more, and more preferably 0.02 or more by mass ratio $((C)/((A) + (B)))$ from the viewpoint of improving the eating texture and melt-in-the-mouth feeling of baked confectionery.

In addition, from the same viewpoint, the mass ratio $((C)/((A) + (B)))$ is preferably 0.2 or less, more preferably 0.15 or less, and even more preferably 0.1 or less.

[0024]

Since the starch for baked confectionery in the embodiment includes the components (A) and (B), the starch can be preferably used for baked confectionery. More specifically, by using the starch

for baked confectionery including the components (A) and (B), even in a case where the starch is gluten-free and gliadin-free, baked confectionery having an excellent balance of external appearance, eating texture, melt-in-the-mouth feeling, finely texture of a batter
5 after baking, and sweetness can be obtained.

In addition, by using the starch for baked confectionery including the components (A) and (B), for example, in a gluten-free and gliadin-free baked confectionery, an effect of enhancing sweetness can be obtained, and thus the amount of sweetness component,
10 such as sugar, to be blended into the baked confectionery can also be reduced.

In addition, by using the starch for baked confectionery including the components (A) and (B), for example, the melt-in-the-mouth feeling of baked confectionery can also be
15 improved.

[0025]

(Mix for Baked Confectionery)

In the embodiment, a mix for baked confectionery is a composition including the starch for baked confectionery described above. More
20 specifically, the mix for baked confectionery is a mixed powder including the components (A) and (B), and is preferably a mixed powder including the components (A), (B), and (C).

[0026]

Further, the mix for baked confectionery may further include
25 components other than the components (A) to (C).

Examples of components other than the components (A) to (C) include starches other than the components (A) to (C) described above,

cereal flours, sweetness components such as sugar and sweeteners, dairy products, eggs such as egg powder and egg white powder, emulsifiers, leavening agents, seasonings, flavors, flavor powders such as green tea and cocoa powder, pigments, thickeners, and oils and fats, and among these, powdery components are preferable. Further, solids such as nuts and chocolate chips may be added.

The mix for baked confectionery is preferably gluten-free and gliadin-free.

[0027]

The content of the starch for baked confectionery in the mix for baked confectionery can be set, for example, according to the type of baked confectionery, and from the viewpoint that the balance of external appearance, eating texture, melt-in-the-mouth feeling of baked confectionery, finely texture of the batter after baking, and sweetness of baked confectionery is preferable, the content of the starch is preferably 50% by mass or more, preferably 60% by mass or more, more preferably 70% by mass or more, and even more preferably 80% by mass or more with respect to the entire mix for baked confectionery.

From the same viewpoint, the content of the starch for baked confectionery in the mix for baked confectionery is 100% by mass or less, and preferably 99% by mass or less with respect to the entire mix for baked confectionery.

[0028]

(Batter for Baked Confectionery)

In the embodiment, a batter for baked confectionery is a composition including the starch for baked confectionery described

above. More specifically, the batter for baked confectionery is a batter including the components (A) and (B), and preferably includes a batter including the components (A), (B), and (C).

[0029]

5 The batter for baked confectionery may further include components other than the components (A) to (C).

Examples of components other than the components (A) to (C) include starches other than the components (A) to (C) described above, cereal flours, sweetness components such as sugar, honey, and
10 sweeteners, dairy products, eggs such as whole eggs, egg white, egg yolk, and egg powder, emulsifiers, leavening agents, seasonings, flavors, flavor powders such as green tea and cocoa powder, pigments, thickeners, oils and fats, fruit and vegetable juices, soy milk, and water. Further, solids such as nuts and chocolate chips may be added.

15 The batter for baked confectionery is preferably gluten-free and gliadin-free.

[0030]

The content of the starch for baked confectionery in the batter for baked confectionery can be set, for example, according to the
20 type of baked confectionery, and from the viewpoint that the balance of external appearance, eating texture, melt-in-the-mouth feeling, finely texture of the batter after baking, and sweetness of baked confectionery is preferable, the content of the starch is preferably 10% by mass or more, more preferably 15% by mass or more, even more
25 preferably 20% by mass or more, and still even more preferably 25% by mass or more with respect to the entire batter for baked confectionery.

From the same viewpoint, the content of the starch for baked confectionery in the batter for baked confectionery is 50% by mass or less, preferably 45% by mass or less, more preferably 40% by mass or less, and even more preferably 35% by mass or less with respect
5 to the entire batter for baked confectionery.

[0031]

(Baked Confectionery)

In the embodiment, baked confectionery includes the starch for baked confectionery described above.

10 Specific examples of baked confectionery include pound cake, madeleine, sponge cake, baumkuchen, and financier. From the viewpoint of improving the balance of external appearance, eating texture, melt-in-the-mouth feeling of baked confectionery, finely texture of the batter after baking, and sweetness of the baked
15 confectionery, the baked confectionery is preferably one selected from the group consisting of pound cake, madeleine and sponge cake, and is more preferably pound cake.

The starch for baked confectionery is preferably gluten-free and gliadin-free.

20 [0032]

In the embodiment, the baked confectionery can be obtained, for example, by a production method including adding the above-mentioned starch for baked confectionery in a batter and baking the batter.

Since the baked confectionery obtained in the embodiment
25 includes the starch for baked confectionery including the components (A) and (B) in the batter, the baked confectionery has an excellent balance of external appearance, eating texture, melt-in-the-mouth

feeling, finely texture of the batter after baking, and sweetness.

In addition, in the embodiment, a method for improving the melt-in-the-mouth feeling of the baked confectionery includes, for example, including the starch for baked confectionery in a batter
5 and baking the batter.

Further, in the embodiment, the method for improving the sweetness of the baked confectionery includes, for example, including the starch for baked confectionery in a batter and baking the batter.

[Examples]

10 [0033]

Examples of the present invention are shown below, but the gist of the present invention is not limited thereto.

In the following examples, "%" is "% by mass" unless otherwise specified. Unless otherwise noted, "parts" means "parts by mass".

15 [0034]

(Raw Material)

The following materials were mainly used as raw materials.

Margarine: MEISTER GENERTA, manufactured by J-Oil Mills. Inc.

Sugar: caster sugar, manufactured by Nissin Sugar Manufacturing
20 Co., Ltd.

Hydroxypropylated tapioca starch (component (A)): JELCALL POT-05, manufactured by J-Oil Mills. Inc., swelling degree in cold water: 2.3

Distarch phosphate from tapioca starch (component (B)): ACTBODY
25 TP-4W, manufactured by J-Oil Mills. Inc., swelling degree in cold water: 2.1

Pregelatinized acetylated distarch phosphate from tapioca

starch (component (C)): JELCALL GT- α , manufactured by J-Oil Mills.
Inc., swelling degree in cold water: 14.1

Soft flour: HEART, manufactured by Nippon Flour Mills Co., Ltd.

Baking powder: F-UP, manufactured by Aikoku Corporation

5 [0035]

(Method for Measuring Swelling Degree in Cold water)

The swelling degree in cold water was measured by the method described in "Experimental Method for Starches and Related Carbohydrates", pp. 279-280, 1986, Gakkai Shuppan Center.

10 Specifically, the swelling degree in cold water was measured by the following method.

(1) A sample was heated and dried at 125°C using a moisture meter (model number MX50, manufactured by Kensei Co., Ltd.) to measure the moisture content, and the amount of dry substance was calculated from
15 the obtained moisture value.

(2) 1 g of the sample was precisely weighed in terms of the amount of dried substance, placed in a centrifuge tube, and impregnated with 1 mL of methyl alcohol, and distilled water at 25°C was added to make exactly 50 mL while stirring with a glass rod. The mixture was shaken
20 and left to stand at 25°C for 20 minutes. The mixture was centrifuged at $2860 \times g$ at 25°C for 30 minutes to separate a precipitation layer and a supernatant layer.

(3) The supernatant layer was removed, the mass of the precipitation layer was measured, and this measured value was defined
25 as B (g).

(4) The mass when the precipitation layer was dried (105°C, constant mass) was defined as C (g).

(5) The value obtained by dividing B by C was defined as the swelling degree in cold water.

[0036]

(Example 1 and Comparative Examples 1 and 2)

5 In these examples, a pound cake was prepared and evaluated. Table 1 shows formulations and evaluation results of the pound cake of each of Examples along with Reference Example. In each example shown in Table 1, the starch for baked confectionery includes at least one of components (A) to (C).

10 [0037]

(Method for Producing Pound Cake)

1. Among the raw materials shown in Table 1, margarine and sugar were put into a 5- quart bowl and mixed at a medium speed for 8 minutes using a Hobart mixer equipped with a beater.

15 2. Whole eggs were added to the mixture obtained in 1. above in three portions. After each addition, the materials were mixed at a medium speed for 2 minutes to obtain a mixture.

3. On the other hand, among the raw materials shown in Table 1, in Examples and Comparative Examples, the components (A) to (C) and baking powder were uniformly mixed to prepare a mixed powder. In Reference Example, the soft flour and the baking powder were uniformly mixed to obtain a mixed powder. Each of the obtained powders was added to the mixture in 2. above, and mixed at a low speed for 1 minute 30 seconds to obtain a batter. The specific gravity
20 of the batter was about 0.8.

4. 320 g of the batter was put into the pound type (S) and baked under the following conditions.

Oven: Prince oven: PJS3-222B, manufactured by MARUZEN Co., LTD.

Baking temperature: upper stage: 180°C/lower stage: 180°C

Baking time: 35 minutes

[0038]

5 (Evaluation Method)

The external appearance, eating texture, melt-in-the-mouth feeling, finely texture of the batter after baking, and sweetness (intensity of sweetness) of the pound cake were evaluated by the discussion of two expert panelists. The evaluation standards were

10 as follows, and 3 points or higher was accepted.

(External Appearance)

4: Baking shrinkage is very small.

3: Baking shrinkage is small.

2: Baking shrinkage is slightly large.

15 1: Baking shrinkage is large.

(Eating Texture)

4: Soft and moist

3: Slightly soft and moist

2: Slightly hard and dry

20 1: Hard and dry

(Melt-In-the-Mouth Feeling)

4: Very good melt-in-the-mouth feeling

3: Good melt-in-the-mouth feeling

2: Not very good melt-in-the-mouth feeling

25 1: Poor melt-in-the-mouth feeling

(Finely Texture of Batter After Baking)

4: The texture is fine.

3: The texture is slightly fine.

2: The texture is slightly rough or slightly clogged.

1: The texture is rough or the texture is clogged.

(Sweetness (Intensity of Sweetness))

5 4: The sweetness is stronger than that of Reference Example.

3: The sweetness is the same degree as that of Reference Example.

2: The sweetness is weaker than that of Reference Example.

1: The sweetness is much weaker than that of Reference Example.

[0039]

10 [Table 1]

		Reference Example	Example 1	Comparative Example 1	Comparative Example 2
Raw material (g)	Margarine	240	240	240	240
	Sugar	270	250	250	250
	Whole egg	300	300	300	300
	(A) Hydroxypropylated tapioca starch		30		60
	(B) Distarch phosphate from tapioca starch		270	300	240
	(C) Pregelatinized distarch phosphate from tapioca starch		15	15	15
	Soft flour	300			
	Baking powder	3	4	4	4
Total amount of batter (g)		1113	1109	1109	1109
Mixed powder (g)		303	319	319	319
Starch for baked confectionery (g)		0	315	315	315
Content of starch for baked confectionery in mixed powder (% by mass)		0	98.7	98.7	98.7
Content of starch for baked confectionery in total mass of batter (% by mass)		0	28.4	28.4	28.4
(A)/((A) + (B))		-	0.10	0	0.20
(C)/((A) + (B))		-	0.05	0.05	0.05
Evaluation item	External Appearance	4	4	4	2
	Eating texture	4	4	2	2
	Melt-in-the-mouth feeling	3	4	2	1
	Finely texture of batter after baking	4	4	4	4
	Sweetness	3	3	3	3

[0040]

Table 1 shows that the pound cake obtained in Example 1 had a preferable external appearance in which baking shrinkage was suppressed. Further, in Example 1, the balance of external

appearance of the pound cake, eating texture, melt-in-the-mouth feeling, finely texture of the batter after baking, and sweetness was excellent compared to Comparative Examples 1 and 2.

In addition, in the sponge cake of Example 1, the same degree
5 of sweetness was felt as the sweetness in Reference Example with a smaller amount of sugar added than in Reference Example.

[0041]

This application claims priority based on Japanese Patent
Application No. 2017-235760 filed on December 8, 2017, the disclosure
10 of which is incorporated herein in its entirety.

CLAIMS

1. A starch for baked confectionery comprising the following components (A) and (B):

5 (A) hydroxypropylated starch; and

(B) distarch phosphate,

wherein a content of the component (A) with respect to a total of components (A) and (B) is 0.03 or more and 0.18 or less by mass ratio.

10

2. The starch for baked confectionery according to claim 1,

wherein a raw material starch of the component (A) is one or two or more selected from the group consisting of tapioca starch, potato starch, and waxy corn starch.

15

3. The starch for baked confectionery according to claim 1 or 2,

wherein a raw material starch of the component (B) is one or two or more selected from the group consisting of tapioca starch, potato starch, and waxy corn starch.

20

4. The starch for baked confectionery according to any one of claims 1 to 3,

wherein a content of the component (A) in the starch for baked confectionery is 1% by mass or more and 18% by mass or less with respect to an entire starch for baked confectionery, and

25

a content of the component (B) is 20% by mass or more and 97% by mass or less with respect to the entire starch for baked

confectionery.

5. The starch for baked confectionery according to any one of claims 1 to 4, further comprising:

5 component (C): pregelatinized starch.

6. The starch for baked confectionery according to claim 5,
 wherein a content of the component (C) with respect to a total
of the components (A) and (B) in the starch for baked confectionery
10 is 0.01 or more and 0.2 or less by mass ratio.

7. A mix for baked confectionery comprising:

 the starch for baked confectionery according to any one of claims
1 to 6.

15

8. The mix for baked confectionery according to claim 7,
 wherein the mix for baked confectionery is gluten-free and
gliadin-free.

20 9. A batter for baked confectionery comprising:

 the starch for baked confectionery according to any one of claims
1 to 6.

10. The batter for baked confectionery according to claim 9,

25 wherein the batter for baked confectionery is gluten-free and
gliadin-free.

11. Baked confectionery comprising:

the starch for baked confectionery according to any one of claims 1 to 6.

5 12. The baked confectionery according to claim 11,

wherein the baked confectionery is one selected from the group consisting of pound cake, madeleine, and sponge cake.

13. The baked confectionery according to claim 11 or 12,

10 wherein the baked confectionery is gluten-free and gliadin-free.

14. A method for improving melt-in-the-mouth feeling of baked confectionery, the method comprising:

15 including the starch for baked confectionery according to any one of claims 1 to 6 in a batter and baking the batter.