PTL 2: WO2017/014234A
PTL 3: JP6650433B2
PTL 4: JP6810543B2
PTL 5: JP2022-047226A
PTL 6: JP2009-232701A
PTL 7: JP2008-220216A
PTL 8: JPS53-099359A
PTL 9: JPS55-039764A

Non-patent Literature

[0005]

NPL 1: Zenkoku Beika Industrial Association website “Arare/osenbei ga dekirumade (How Arare and Senbei are Made)” (https://www.arare-osenbei.jp/make/)

Summary

Technical Problem

[0006]

An object to be achieved by the present disclosure is to increase the degree of gelatinization of a baked confection and improve the texture such as melting mouthfeel.

Solution to Problem

[0007]

Under such circumstances, the present inventors have conducted studies on various production methods and finally found that a baking step of jetting moist hot air at 150 to 350°C, which is a mixture of heated air at 150 to 350°C and steam at 100 to 350°C, onto confectionery dough may be performed to increase the degree of gelatinization of a baked confection and improve the melting mouthfeel. The present disclosure is based on such novel findings. The present inventors have further conducted extensive trial and error on the type of powder to be blended in the confectionery dough, the shape of the confectionery dough to be subjected to the baking step, and the like, and have completed the present disclosure. Accordingly, the present

disclosure provides the following items:

Item 1. A method for producing a baked confection, the method including a baking step of jetting moist hot air at 150 to 350°C, which is a mixture of heated air at 150 to 350°C and steam at 100 to 350°C, onto confectionery dough.

[0008]

Item 2. The method according to item 1, wherein in the baking step, the moist hot air is jetted at 1 to 13 m/s.

[0009]

Item 3. The method according to item 1 or 2, wherein the moist hot air is jetted in the baking step for 1 to 10 minutes.

[0010]

Item 4. The method according to any one of items 1 to 3, wherein the confectionery dough contains 20 to 100 mass% of at least one grain or grain powder selected from the group consisting of whole grain flour, barley flour, brown rice flour, rye flour, oat flour, adlay flour, sorghum flour, buckwheat seed flour, amaranthus, quinoa, black sesame, white sesame, wheat bran, and rice bran in blending ingredients.

[0011]

Item 5. The method according to any one of items 1 to 3, wherein the confectionery dough contains 5 to 50 mass% of at least one selected from the group consisting of whole grain flour, barley flour, brown rice flour, rye flour, oat flour, adlay flour, sorghum flour, buckwheat seed flour, amaranthus, quinoa, black sesame, white sesame, wheat bran, rice bran, soybean flour, pea flour, wheat protein, insect powder, algal protein, cheese, cheese powder, soybean protein, rice protein, inulin, indigestible dextrin, and phosphated distarch phosphate in blending ingredients.

[0012]

Item 6. The method according to any one of items 1 to 5, wherein

the confectionery dough contains rice flour,

the method further including the steps of:

extruding and molding the confectionery dough into a

Item 14. The rod-shaped rice cracker according to item 11 or 12, wherein dough containing rice flour and at least one material selected from the group consisting of starch, active gluten, maltose, trehalose, sugar alcohol, and vegetable fat and oil is baked by jetting moist hot air at 150 to 350°C, which is a mixture of heated air at 150 to 350°C and steam at 100 to 350°C, resulting in gelatinization and/or surface blistering.

[0020a]

In an aspect, there is provided a method for producing a baked confection, the method comprising a baking step of jetting moist hot air at 150 to 350°C, which is a mixture of heated air at 150 to 350°C and steam at 100 to 350°C, onto confectionery dough.

[0020b]

In another aspect, there is provided a baked confection obtained by the method as described herein.

[0020c]

In another aspect, there is provided a rod-shaped rice cracker having a degree of gelatinization of 70% or more.

Advantageous Effects of Invention

[0021]

According to the present invention, it is possible to provide a baked confection having an increased degree of gelatinization and improved texture such as melting mouthfeel. In the present invention, the melting mouthfeel of the baked confection means ease of dissolution by saliva, smooth texture or feeling on the tongue without roughness or powdery texture. In a preferred embodiment, the present invention can improve not only melting mouthfeel but also a stuck texture (improvement of a crispy texture), and reduce a crunchy, too-hard texture, or the like. In a preferred embodiment, the present invention can provide a baked confection further improved in texture.

Brief Description of Drawings

[0022]

Fig. 1 shows photographs of cross sections of confectionery of a test group and a control group in Example 2. The left photograph shows a test group, and the right photograph shows a target group.

Fig. 2 shows a photograph of the appearance of stick-shaped rice crackers of each test group in Example 4.

Fig. 3 shows the measurement results of the degree of gelatinization (degree of pregelatinization) of test groups and a conventional rice cracker in Example 4.

Fig. 4 shows the results of sensory evaluation of a test group (JET) and a target group (batch) in Example 5.