

SPECIFICATION

COMPOSITION FOR FOOD PRODUCTS

5 TECHNICAL FIELD

[0001]

The present invention relates to a composition for food products.

10 BACKGROUND ART

[0002]

As technologies for improving the quality of foods, there are those disclosed in Patent Documents 1 to 6.

Patent Document 1 (Japanese Unexamined Patent Publication No. 15 2007-274927) describes that a filling material contains glucomannan, esterified starch and/or etherified starch, and gum ghatti and/or gum arabic in specific amounts. In this way, it is possible to provide a quality improving agent for a filling material that enhances water retention property and emulsifying property, significantly reduces 20 water separation and oil separation, and can grant a body taste, a good melt-in-mouth feeling, and a smooth texture to a filling material such as flower paste, custard cream, and side dish filling.

[0003]

Patent Document 2 (International Publication No. W02016/117630) 25 describes a technology relating to an oil-in-water emulsion containing specific amounts of starch, saccharides other than starch, water, and fats and oils containing specific amounts of medium-chain

fatty acid-containing triacyl glycerols. Patent Document 2 also describes that such emulsion has a high fat and oil content and a high saccharide content, has good melt-in-mouth feeling in spite of good shelf life, has less oily feeling, has a heat-resistant shape retention property suitable for cooking with heat such as baking along with a good browned surface, and can be preferably used for producing confectionery and bread as a filling material with a high oil content. [0004]

Patent Document 3 (International Publication No. W02012/176281) describes about a water-soluble powder component dispersion composition which contains edible oil and fat, water, protein, reduced starch saccharified product and polysaccharide, in which the edible oil and fat and a water-soluble powder component in a non-dissolved state are respectively dispersed, and which has a total light transmittance in a specific range, and also describes that in a case where such a composition is blended with a high-moisture food ingredient such as vegetables and eggs to prepare a dish, the composition absorbs water from the high-moisture food ingredient to form a thick oil-in-water emulsion, which is integrated with the whole dish, and thus water separation from the dish is prevented. [0005]

Patent Document 4 (International Publication No. W02013/061653) describes about a W/O/W type emulsified seasoning containing an edible oil and fat, an emulsifier, a thickener, and a salt, in which the viscosity, the content of edible oil and fat, the content of salt, and average particle size and water separation rate of W/O/W type emulsified particles are within specific ranges, respectively.

According to Patent Document 4, in a case where the emulsified seasoning is mixed with a food ingredient, it is possible to effectively reduce the water separation from the food ingredient while maintaining a texture of the food ingredient, and in this way, it is possible to maintain the appearance, the texture, and flavor of the food ingredient.

[0006]

Patent Document 5 (Japanese Unexamined Patent Publication No. 2011-254770) describes a technology relating to a processed food in which an ingredient and bread or rice are in contact with each other. According to the document, the ingredients include a specific cellulosic powder and water in specific amounts, respectively, and thereby it is possible to provide a processed food having less water separation, good shape retention property, and good texture and flavor retention over time.

[0007]

On the other hand, Patent Document 6 (Japanese Unexamined Patent Publication No. 2010-136695) describes that in a case where starch is dispersed in water and heated, it swells irreversibly and gelatinizes and the swollen starch is extremely brittle and prone to disintegration, and this not only causes deterioration of viscosity or shape retention property but also causes deterioration of a texture which causes a paste-like feeling and a stringiness. As a method for modifying starch, adding an emulsifier is disclosed, and in the same document, using a specific polyglycerin fatty acid ester as a starch modifier is described.

RELATED DOCUMENT

PATENT DOCUMENT

[0008]

[Patent Document 1] Japanese Unexamined Patent Publication No.

5 2007-274927

[Patent Document 2] International Publication No.

W02016/117630

[Patent Document 3] International Publication No.

W02012/176281

10 [Patent Document 4] International Publication No.

W02013/061653

[Patent Document 5] Japanese Unexamined Patent Publication No.

2011-254770

[Patent Document 6] Japanese Unexamined Patent Publication No.

15 2010-136695

SUMMARY OF THE INVENTION

TECHNICAL PROBLEM

[0009]

20 As a result of studies by the present inventors, even using the technologies describes in the patent documents mentioned above, there was room for improvement from a viewpoint of reducing stringiness while ensuring water retention property of foods. More specifically, it was found that foods containing guar gum or xanthan gum have high

25 water retention property but may cause stringiness. In a case where stringiness occurs in a food, not only a texture is deteriorated but also the appearance looks rotten, and the product value is

significantly deteriorated.

The present invention provides a composition for food products which can reduce stringiness while ensuring water retention property of foods.

5 SOLUTION TO PROBLEM

[0010]

According to the present invention, there is provided a composition for food products including a following component (A) and a following component (B),

10 in which a content of the component (A) is equal to or more than 5% by mass and equal to or less than 70% by mass with respect to an entire composition, and

a content of the component (B) is equal to or more than 10% by mass and equal to or less than 40% by mass with respect to the entire
15 composition.

Component (A): pregelatinized crosslinked starch (excluding pregelatinized acetylated crosslinked starch, pregelatinized etherified crosslinked starch, and pregelatinized acetylated etherified crosslinked starch)

20 Component (B): one or two types selected from the group consisting of guar gum and xanthan gum

[0011]

According to the present invention, there is provided a method for producing a composition for food products, including a step of
25 mixing a following component (A) and a following component (B),

in which a blending amount of the component (A) is equal to or more than 5% by mass and equal to or less than 70% by mass with respect

to an entire composition, and a blending amount of the component (B) is equal to or more than 10% by mass and equal to or less than 40% by mass with respect to the entire composition.

Component (A): pregelatinized crosslinked starch (excluding
5 pregelatinized acetylated crosslinked starch, pregelatinized etherified crosslinked starch, and pregelatinized acetylated etherified crosslinked starch)

Component (B): one or two types selected from the group consisting of guar gum and xanthan gum

10 [0012]

According to the present invention, there is provided a method for producing a dressed food, including:

a step of obtaining a composition by the method for producing a composition of the present invention described above; and

15 a step of mixing a food ingredient with the composition,

in which in the step of mixing, a blending amount of the composition is equal to or more than 0.5 parts by mass and equal to or less than 5 parts by mass with respect to 100 parts by mass of the food ingredient.

20 [0013]

In addition, according to the present invention, there is provided a method for producing a dressed food, including:

a step of mixing a following component (A) with a following component (B) and a food ingredient,

25 in which in the step, a blending amount of the component (A) is equal to or more than 13 parts by mass and equal to or less than 700 parts by mass with respect to 100 parts by mass of the component

(B), and

a total amount of a blending amount of the component (A) and the component (B) is equal to or more than 0.5 parts by mass and equal to or less than 5 parts by mass with respect to 100 parts by mass
5 of the food ingredient.

Component (A): pregelatinized crosslinked starch (excluding pregelatinized acetylated crosslinked starch, pregelatinized etherified crosslinked starch, and pregelatinized acetylated etherified crosslinked starch)

10 Component (B): one or two types selected from the group consisting of guar gum and xanthan gum
[0014]

In addition, according to the present invention, there is provided a method for producing a food, including a step of adding
15 a dressed food obtained by the method for producing a dressed food according to the present invention described above to a food.

In addition, according to the present invention, there is provided a method for reducing stringiness of a dressed food containing a following component (B), the method including

20 adding a following component (A) such that a content of the component (A) is equal to or more than 13 parts by mass and equal to or less than 700 parts by mass with respect to 100 parts by mass of the component (B).

Component (A): pregelatinized crosslinked starch (excluding
25 pregelatinized acetylated crosslinked starch, pregelatinized etherified crosslinked starch, and pregelatinized acetylated etherified crosslinked starch)

Component (B): one or two types selected from the group consisting of guar gum and xanthan gum
[0015]

It should be noted that any combination of each of these
5 configurations, or a conversion of the expression of the present invention between methods and devices is also effective as an aspect of the present invention.
[0016]

For example, according to the present invention, there is
10 provided a method for reducing stringiness of a dressed food, including blending the composition of the present invention described above into the dressed food.

ADVANTAGEOUS EFFECTS OF INVENTION

15 [0017]

According to the present invention, it is possible to provide a composition for food products that is excellent in the effect of reducing stringiness while ensuring the water retention property of the food.

20

DESCRIPTION OF EMBODIMENTS

[0018]

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

[0019]

(Composition for food products)

In the present embodiment, the composition for food products (hereinafter, also simply referred to as "composition") contains the following components (A) and (B).

Component (A): pregelatinized crosslinked starch (excluding
5 pregelatinized acetylated crosslinked starch, pregelatinized etherified crosslinked starch, and pregelatinized acetylated etherified crosslinked starch)

Component (B): one or two types selected from the group consisting of guar gum and xanthan gum

10 The content of the component (A) in the composition is equal to or more than 5% by mass and equal to or less than 70% by mass with respect to the entire composition, and the content of the component (B) in the composition is equal to or more than 10% by mass and equal to or less than 40% by mass with respect to the entire composition.

15 [0020]

In the present embodiment, the composition for food products is preferably used for foods such as a dressed food (Aemono) from a viewpoint of reducing stringiness while ensuring the water retention property of the food. In addition, the dressed food is
20 preferably used for a cooked rice processed food, noodles, a bakery food, or the like. Specific examples of dressed foods and foods will be mentioned below.

Moreover, the composition according to the present embodiment is preferably for water retention.

25 [0021]

(Component (A))

The component (A) is pregelatinized crosslinked starch. Here,

the pregelatinized crosslinked starch is one which has been subjected to pregelatinization treatment and crosslinking treatment, and does not contain one or more which are acetylated or etherified. That is, any one of pregelatinized acetylated crosslinked starch, 5 pregelatinized etherified crosslinked starch, and pregelatinized acetylated etherified crosslinked starch is not contained in the component (A).

The component (A) may be one that has been subjected to only pregelatinization treatment and crosslinking treatment. In 10 addition, the component (A) may be one which has been further processed other than acetylated or etherified, may be, for example, one which has been subjected to an oxidation treatment, an acid treatment, or an enzyme treatment, and is preferably starch which has been subjected to only pregelatinization treatment and crosslinking treatment. 15 Specific examples of the crosslinking treatment include phosphoric acid crosslinking treatment and adipic acid crosslinking treatment, and phosphoric acid crosslinking treatment is preferable.

[0022]

Examples of an origin of the component (A) include those derived 20 from various plants, and specific examples of the plant include corn, potato, tapioca (cassava), wheat, rice, sago palm, sweet potato, mung bean, and peas. The component (A) is preferably one or two types selected from the group consisting of pregelatinized crosslinked potato starch and pregelatinized crosslinked tapioca starch, and more 25 preferably pregelatinized crosslinked potato starch.

[0023]

The viscosity of the component (A) is preferably equal to or

less than 5,000 mPa·s, and more preferably equal to or less than 4,200 mPa·s, from a viewpoint of enhancing a dispersibility of the composition in a food. In addition, from a viewpoint of enhancing the water retention property of the food, it is preferably equal to or more than 10 mPa·s, and more preferably equal to or more than 20 mPa·s.

Here, the viscosity of the component (A) means a value measured by a B-type viscometer at 10°C of a 4 mass% slurry in terms of dry matter mass of the component (A). The method for measuring the viscosity is described in the Example section.

[0024]

The content of the component (A) in the composition is equal to or more than 5% by mass, preferably equal to or more than 8% by mass, more preferably equal to or more than 15% by mass, and further more preferably equal to or more than 23% by mass with respect to the entire composition, from a viewpoint of reducing stringiness of the food.

In addition, from a viewpoint of improving the water retention property of the food, the content of the component (A) in the composition is equal to or less than 70% by mass, preferably equal to or less than 60% by mass, more preferably equal to or less than 56% by mass, and further more preferably equal to or less than 52% by mass, with respect to the entire composition.

[0025]

(Component (B))

The component (B) is one or two types selected from the group consisting of guar gum and xanthan gum.

[0026]

From a viewpoint of enhancing the water retention property of the food, the component (B) preferably contains guar gum and xanthan gum.

5 In a case where the component (B) contains guar gum and xanthan gum, a mass ratio of the content of xanthan gum to the content of guar gum in the component (B) (xanthan gum/guar gum) is preferably equal to or more than 0.01, more preferably equal to or more than 0.05, and preferably equal to or more than 0.1, from a viewpoint of
10 reducing or preventing stringiness of the food.

 In addition, from a viewpoint of enhancing the dispersibility of the composition in foods, the mass ratio (xanthan gum/guar gum) in the component (B) is preferably equal to or less than 20, more preferably equal to or less than 10, and further more preferably equal
15 to or less than 5.

[0027]

 The content of the component (B) in the composition is equal to or more than 10% by mass, preferably equal to or more than 12% by mass, more preferably equal to or more than 15% by mass, and further
20 more preferably equal to or more than 20% by mass, with respect to the entire composition, from a viewpoint of enhancing the water retention property of the food.

 In addition, from a viewpoint of reducing the stringiness of the food, the content of the component (B) in the composition is equal
25 to or less than 40% by mass, preferably equal to or less than 38% by mass, more preferably equal to or less than 36% by mass, and further more preferably equal to or less than 33% by mass, with respect to

the entire composition.

[0028]

In the present embodiment, the composition for food products may further include components other than the components (A) and (B) mentioned above.

For example, the composition for food products may contain the following component (C).

[0029]

(Component (C))

10 The component (C) is a granular material containing equal to or more than 75% by mass of starch. The component (C) contains, as a starch, a lowered molecular weight starch which is a starch containing equal to or more than 5% by mass of amylose in a granular material in an amount of equal to or more than 3% by mass and equal
15 to or less than 45% by mass, the peak molecular weight of the lowered molecular weight starch is equal to or more than 3×10^3 and equal to or less than 5×10^4 , a degree of swelling in cold water of the granular material at 25°C is equal to or more than 7 and equal to or less than 20, and a content of a fraction in the granular material
20 that remains on a sieve having an opening of 0.5 mm in the granular material is equal to or less than 50% by mass with respect to the entire granular material, and a content of a fraction in the granular material that remains on a sieve having an opening of 0.075 mm in the granular material is equal to or more than 50% by mass with respect
25 to the entire granular material.

Hereinafter, the component (C) will be described more specifically.

[0030]

The component (C) is a granular material containing starch. From a viewpoint of reducing stringiness of a food, the component (C) contains equal to or more than 75% by mass of starch. In addition,
5 from the above viewpoint, the starch content is preferably equal to or more than 80% by mass, and more preferably equal to or more than 85% by mass.

In addition, an upper limit of the starch content in the component (C) is not limited and is equal to or less than 100% by mass, but
10 depending on the properties of the food, for example, may be equal to or less than 99.5% by mass, equal to or less than 99% by mass, or equal to or less than 95% by mass.

[0031]

In addition, the component (C) contains, as the starch, a lowered
15 molecular weight starch made from a starch having equal to or more than 5% by mass of amylose as a raw material at a specific ratio, and a lowered molecular weight starch having a specific size is used. That is, the starch in the component (C) contains a lowered molecular weight starch made from a starch having equal to or more than 5% by
20 mass of amylose as a raw material in the component (C) in an amount of equal to or more than 3% by mass and equal to or less than 45% by mass, and a peak molecular weight of the lowered molecular weight starch is equal to or more than 3×10^3 and equal to or less than 5×10^4 .

25 [0032]

A lower limit value of the peak molecular weight of the lowered molecular weight starch is, for example, equal to or more than $3 \times$

10³, and preferably equal to or more than 8×10^3 , from a viewpoint of improving the water retention property of the food. In addition, an upper limit value of the peak molecular weight of the lowered molecular weight starch is equal to or less than 5×10^4 , preferably
5 equal to or less than 3×10^4 , and more preferably equal to or less than 1.5×10^4 , from a viewpoint of improving the balance between the water retention property of the food and the dispersibility of the composition. The method for measuring the peak molecular weight of starch after decomposition will be described in the Example
10 section.

[0033]

From a viewpoint of improving the dispersibility of the composition, the content of the lowered molecular weight starch in the component (C) is, for example, equal to or more than 3% by mass,
15 preferably equal to or more than 8% by mass, and more preferably equal to or more than 13% by mass, with respect to the entire component (C).

On the other hand, the upper limit of the content of the lowered molecular weight starch in the component (C) is, for example, equal
20 to or less than 45% by mass, preferably equal to or less than 35% by mass, and more preferably equal to or less than 25% by mass based on the entire component (C), from a viewpoint of improving the balance between the water retention property of the food and the dispersibility of the composition.

25 The amylose content in the raw starch of the lowered molecular weight starch is, for example, equal to or more than 5% by mass, preferably equal to or more than 12% by mass, more preferably equal

to or more than 22% by mass, and further more preferably equal to or more than 50% by mass. The upper limit of the amylose content in the raw starch of the lowered molecular weight starch is not limited, and is equal to or less than 100% by mass.

5 [0034]

As a starch containing equal to or more than 5% by mass of amylose which is a raw material of the lowered molecular weight starch, high-amylose corn starch, corn starch, tapioca starch, sweet potato starch, potato starch, wheat starch, high-amylose wheat starch, rice
10 starch, and one type or two or more types selected from the group consisting of processed starch obtained by chemically, physically, or enzymatically processing these raw materials can be used. From a viewpoint of improving the balance between the water retention property of the food and the dispersibility of the composition, it
15 is preferable to use one or two types selected from high-amylose corn starch, corn starch, and tapioca starch, and it is more preferable to use high-amylose corn starch. High-amylose corn starch having equal to or more than 40% by mass of amylose is available.

[0035]

20 In addition, the component (C) has a configuration in which the degree of swelling in cold water and the particle size satisfy specific conditions.

First, from a viewpoint of enhancing the water retention property of the food, the degree of swelling in cold water of the
25 component (C) is, for example, equal to or more than 7, preferably equal to or more than 7.5, and more preferably equal to or more than 8.

In addition, from a viewpoint of enhancing the dispersibility of the composition, the degree of swelling in cold water of the component (C) is, for example, equal to or less than 20, and preferably equal to or less than 17.

5 Here, the degree of swelling in cold water of the component (C) is measured by the following method.

(1) A sample is heated and dried at 125°C using a moisture meter (manufactured by Ken Seiko Co., Ltd., electromagnetic moisture meter: model number MX50) to measure the moisture content, and a dry substance
10 amount is calculated from the obtained moisture value.

(2) 1 g of the sample in terms of dry matter mass is dispersed in 50 mL of water at 25°C, gently stirred for 30 minutes in a constant temperature bath at 25°C, then centrifuged at 3,000 rpm for 10 minutes (centrifuge: manufactured by Hitachi Corporation, Hitachi Desktop
15 Centrifuge CT6E type; rotor: T4SS type swing rotor; adapter: 50TC × 2S adapter), and separated into a precipitation layer and a supernatant layer.

(3) The supernatant layer is removed, the mass of the precipitation layer is measured, and this is designated as B(g).

20 (4) A mass at a time when the precipitation layer is dried and solidified (105°C, constant weight) is designated as C(g).

(5) B/C is designated as the degree of swelling in cold water.

[0036]

Regarding the particle size of the component (C), from a
25 viewpoint of reducing stringiness of foods, the content of particles that remains on a sieve having an opening of 0.5 mm in JIS-Z8801-1 standard is equal to or less than 50% by mass, preferably equal to

or less than 30% by mass, more preferably equal to or less than 10% by mass, and further more preferably 0% by mass, with respect to the entire component (C). In addition, the lower limit of the content at a time when containing particles over the sieve having an opening
5 of 0.5 mm is not limited, and is equal to or more than 0% by mass with respect to the entire component (C).

[0037]

In the component (C), the content of the oversize particles on the sieve having an opening of 0.075 mm of the sieve of JIS-Z8801-1
10 standard is equal to or more than 50% by mass, preferably equal to or more than 60% by mass, more preferably equal to or more than 70% by mass, and further more preferably equal to or more than 80% by mass with respect to the entire component (C), from a viewpoint of reducing stringiness of the food. From the same viewpoint, the
15 content of the oversize particles on the sieve having an opening of 0.075 mm is equal to or less than 100% by mass, and preferably equal to or less than 90% by mass with respect to the entire component (C).

[0038]

In addition, in the component (C), the content of a fraction
20 of the undersize particles passing through a sieve having an opening of 0.25 mm of a sieve of JIS-Z8801-1 standard preferably equal to or more than 70% by mass, more preferably equal to or more than 80% by mass, further more preferably equal to or more than 90% by mass, and even further more preferably 100% by mass with respect to the
25 entire component (C), from a viewpoint of reducing stringiness of the food. In addition, the upper limit of the content of the undersize sieve particles that have passed through a sieve having an opening

of 0.25 mm is not limited, and is equal to or less than 100% by mass with respect to the entire component (C).

[0039]

In the present embodiment, various starches can be used as the starch component other than the lowered molecular weight starch in the component (C). Specifically, starches that are generally commercially available depending on the usage, for example, starches for foods may be of any type, but one or more types may be appropriately selected from starches such as corn starch, potato starch, tapioca starch, wheat starch, and the like; and processed starches obtained by processing these starches chemically, physically, or enzymatically. Preferably, the starch may contain one or two types of starches selected from the group consisting of corn starch and processed starches thereof.

15 [0040]

In addition, the component (C) in the present embodiment may be blended with a component other than starch.

Specific examples of components other than starch include saccharides such as sugar (excluding polysaccharides); fats and oils; pigments; emulsifiers; and insoluble salts such as calcium carbonate and calcium sulfate.

[0041]

Subsequently, a method for producing the component (C) will be described. The method for producing the component (C) includes, for example, the following steps.

(Step of preparing lowered molecular weight starch) A step of lowering a molecular weight of a starch having equal to or more than

5% by mass of amylose to obtain a lowered molecular weight starch having a peak molecular weight of equal to or more than 3×10^3 and equal to or less than 5×10^4 .

(Granulation step) A step of pregelatinizing and granulating a raw material, which contains equal to or more than 3% by mass and equal to or less than 45% by mass of a lowered molecular weight starch, and in which the total amount of the lowered molecular weight starch and starch other than the lowered molecular weight starch is equal to or more than 75% by mass.

10 [0042]

A step of preparing a lowered molecular weight starch is a step of decomposing a starch having equal to or more than 5% by mass of amylose to obtain a lowered molecular weight starch. Here, the term "decomposition" as used herein refers to decomposition accompanied by lowering the molecular weight of starch, and examples of typical decomposition methods include acid treatment, oxidation treatment, and enzyme treatment. Among these, acid treatment is preferable from a viewpoint of decomposition rate, cost, or reproducibility of decomposition reaction.

20 [0043]

In addition, in the granulation step, a general method used for heating and gelatinization of starch can be used. Specifically, a method using a machine such as a drum dryer, a jet cooker, an extruder, and a spray dryer is known, but in the present embodiment, from a viewpoint of reliably obtaining the component (C) of which the degree of swelling in cold water satisfies the specific condition (C) mentioned above, heating and pregelatinization by an extruder or a

drum dryer is preferable, and an extruder is more preferable.

According to the method using an extrusion granulator such as an extruder, at least the vicinity of the surface of the particles of the component (C) is gelatinized, and a granular material having
5 an appropriately low density is obtainable, and thus it is possible to further reliably obtain the component (C) capable of enhancing the dispersibility of the composition. In a case of the extruder treatment, water is added to a raw material containing starch to adjust the water content to about 10 to 60% by mass, and then heating and
10 swelling is performed under conditions of a barrel temperature of 30 to 200°C, an outlet temperature of 80 to 180°C, a screw rotation speed of 100 to 1,000 rpm, and a heat treatment time of 5 to 60 seconds, for example.

[0044]

15 In the present embodiment, it is possible to obtain the component (C) of which degree of swelling in cold water satisfies a specific condition by a step of pregelatinizing the specific raw material, for example.

In addition, the granulated product obtained by the
20 pregelatinization may be pulverized and sieved when needed, and appropriately adjusted in size to obtain the component (C), depending on the necessity. By doing so, it is possible to more reliably adjust the degree of swelling in cold water of the component (C).

[0045]

25 The component (C) obtainable as described above is a granular material containing a lowered molecular weight starch, and all of the starch content, the degree of swelling in cold water, the particle

size, and the peak molecular weight of the lowered molecular weight starch satisfy specific conditions. Therefore, in a case where the component (C) is blended in the composition containing the components (A) and (B), it is possible to improve the balance between the water retention property and reduction of stringiness of a food such as a dressed food.

[0046]

From a viewpoint of improving the dispersibility of the composition, the content of the component (C) in the composition is preferably equal to or more than 10% by mass, more preferably equal to or more than 14% by mass, and further more preferably equal to or more than 18% by mass, with respect to the entire composition. From a viewpoint of further improving the balance between the water retention property and reduction of stringiness, the content of the component (C) in the composition is preferably equal to or less than 65% by mass, more preferably equal to or less than 50% by mass, and further more preferably equal to or less than 44% by mass with respect to the entire composition.

[0047]

(Other components)

Components other than the components (A) to (C) can also be used in the composition as long as the effects of the present invention are not impaired. Specific examples thereof include starch other than the component (A); gums other than the component (B); polysaccharides such as dextrin (excluding starch and gums); water; edible oils and fats; taste adjusting materials such as sugar, salt, and acidulants; an antioxidant such as vitamin C; a preservative such

as a pH adjusting agent; and the like.

[0048]

(Method for producing composition for food products)

Subsequently, a method for producing a composition will be
5 described.

In the present embodiment, the method for producing a composition includes a step of mixing the components (A) and (B) described above with each other. Then, in the step of mixing, the blending amount of the component (A) is equal to or more than 5% by
10 mass and equal to or less than 70% by mass with respect to the entire composition, and the blending amount of the component (B) is equal to or more than 10% by mass and equal to or less than 40% by mass with respect to the entire composition.

[0049]

15 In addition, the method for producing a composition may further include a step of mixing the component (C) described above in an amount of equal to or more than 10% by mass and equal to or less than 65% by mass with respect to the entire composition. Here, the step of mixing the component (C) may be in a step of mixing the component
20 (A) and the component (B) with each other, or may be a separate step from the step of mixing the component (A) and the component (B) with each other.

[0050]

Since the composition obtainable in the present embodiment
25 contains the components (A) and (B) in specific amounts, respectively, it is possible to effectively reduce the stringiness of the food while ensuring the water retention property of the food.

Hereinafter, the food in which the composition is blended will be described more specifically.

[0051]

(Food)

5 In the present embodiment, examples of the food in which the composition is blended include a dressed food. Here, the dressed food is specifically a food obtainable by mixing a food ingredient with a seasoning, and is preferably a food that is eaten without being cooked after mixing a food ingredient with the seasoning. A dressed
10 food may be produced by preparing a dressing by mixing the composition with the seasoning, and further mixing thereof with food ingredients.

Specific examples of the food ingredients include marine products such as tuna, shrimp, squid, octopus and shellfish; vegetables such as onions, leeks, cucumbers, tomatoes, radishes, and
15 potatoes; fruits such as melons, strawberries, tangerines, kiwifruits, peaches, pineapples, mangoes, and bananas; pickles of vegetables such as pickles, and dried plums; dairy products such as fresh cream and yogurt; eggs; and the like.

Specific examples of seasonings include mayonnaise; salt; soy
20 sauce; miso; sweeteners such as sugar, aspartame, sucralose; vinegar; mirin; spices such as mustard, wasabi, and karashi (mustard); and the like.

Specific examples of the dressed foods include salads such as tuna mayonnaise (tuna mayo) salad, onion mayonnaise salad, egg salad,
25 potato salad, and fruit salad; dressing with food ingredients such as tartar sauce; wasabi-ae (foods dressed with wasabi); karashi-ae (foods dressed with karashi); miso-ae (foods dressed with miso);

mizore-ae (food dressed with grated daikon); bainiku-ae (foods dressed with pickled plum pulp); salted seafood such as shuto (salted and fermented bonito intestines).

[0052]

5 The dressed food may be eaten alone or may be an ingredient in other foods. In addition, the food may have a part made of a dressed food and the other part.

For example, the dressed foods may be used in cooked rice processed foods such as rice balls and sushi; noodles such as soba
10 (buckwheat noodles), udon, kishimen, hiyamugi (Japanese chilled wheat noodles), somen, ramen, hiyashi-chuka (chilled Chinese noodles), and pasta; bakery foods such as sandwiches, side dish bread, pizza, crepes, and pancakes. In addition, the dressed foods may be ingredients, fillings, and the like of these foods.

15 [0053]

Subsequently, a method for producing the dressed food will be described.

The dressed food includes, for example, a step of obtaining a composition containing the components (A) and (B) by the method for
20 producing a composition described above, and a step of mixing a food ingredient with the composition.

In the step of mixing, the blending amount of the composition is preferably equal to or more than 0.2 parts by mass, and more preferably equal to or more than 0.5 parts by mass with respect to
25 100 parts by mass of the total amount of the food ingredient and the seasoning, from a viewpoint of improving the water retention property of the dressed food. From a viewpoint of maintaining the taste of

the dressed food, the blending amount of the composition is preferably equal to or less than 10 parts by mass, and more preferably equal to or less than 5 parts by mass, with respect to 100 parts by mass of the total amount of the food ingredient and the seasoning.

5 In addition, from a viewpoint of enhancing the balance between the water retention property and the taste of the dressed food, in the step of mixing, the blending amount of the composition is preferably equal to or more than 0.5 parts by mass and equal to or less than 5 parts by mass with respect to 100 parts by mass of the
10 food ingredient.

[0054]

In addition, it is possible to obtain a dressed food by the following production method.

That is, the method for producing a dressed food may include
15 a step of mixing the component (A), the component (B), and the food ingredient with one another.

Then, in the step of mixing, the blending amount of the component (A) is preferably equal to or more than 13 parts by mass, more preferably equal to or more than 30 parts by mass, further more
20 preferably equal to or more than 50 parts by mass, and even further more preferably equal to or more than 65 parts by mass, with respect to 100 parts by mass of the component (B), from a viewpoint of reducing stringiness of the dressed food. From a viewpoint of improving water retention property, the blending amount of the component (A) is
25 preferably equal to or less than 700 parts by mass, and more preferably equal to or less than 350 parts by mass, with respect to 100 parts by mass of the component (B).

In addition, in the step of mixing, the total amount of the blending amount of the component (A) and the component (B) is preferably equal to or more than 0.2 parts by mass, and more preferably equal to or more than 0.5 parts by mass with respect to 100 parts by mass of the total amount of the food ingredient and the seasoning, from a viewpoint of improving the water retention property and reducing the stringiness of the dressed food. From a viewpoint of maintaining the taste of the dressed food, the total amount of the blending amount of the component (A) and the component (B) is preferably equal to or less than 10 parts by mass, and more preferably equal to or less than 5 parts by mass, with respect to 100 parts by mass of the total amount of the food ingredient and the seasoning.

[0055]

In addition, a food may be produced by using the obtained dressed food. For example, in the present embodiment, the method for producing a food includes a step of adding the dressed food obtained by the production method described above to a food.

Examples of the obtained food include the cooked rice processed food, noodles, and bakery food described above.

[0056]

In the dressed food obtainable in the present embodiment and the food including thereof, since the components (A) and (B) in the dressed food are mixed in a specific blending amount, the water retention property of the dressed food is excellent, and stringiness of the dressed food can be reduced.

In addition, according to the present embodiment, for example, it is possible to reduce stringiness when eating the dressed food

while reducing a transfer of water contained in the dressed food to packaging materials such as a plastic film or other foods.

[0057]

In addition, in the present embodiment, a method for reducing stringiness of a dressed food containing the component (B) includes adding the component (A) with respect to 100 parts by mass of the components (A) and (B) in an amount of equal to or more than 13 parts by mass and equal to or less than 700 parts by mass, for example.

10 Examples

[0058]

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

[0059]

15 First, raw materials used in the following examples are shown.

Pregelatinized crosslinked potato starch: "Bake-up B- α ", viscosity 4170 mPa·s, manufactured by J-Oil Mills Co., Ltd.

Pregelatinized corn starch: Starch produced by the method of Production Example 1 to be mentioned

20 Pregelatinized etherified crosslinked waxy corn starch:

"Jelcall G- α ", manufactured by J-Oil Mills Co., Ltd.

Pregelatinized acetylated crosslinked tapioca starch: "Jelcall GT- α ", manufactured by J-Oil Mills Co., Ltd.

Pregelatinized etherified crosslinked tapioca starch:

25 "Ultra-sperse 2000", manufactured by Ingredion Incorporated

Pregelatinized crosslinked tapioca starch: pregelatinized distarch phosphate from tapioca starch produced by the method of

Production Example 4 to be mentioned, viscosity 20 mPa·s

Guar gum: "Guapack PF-20", manufactured by DSP Gokyo Food & Chemical Co., Ltd.

Xanthan gum: "Xanthan FJ", manufactured by Maruzen

5 Pharmaceutical Co., Ltd.

Dextrin: "FZ-100", manufactured by J-Oil Mills Co., Ltd.

Granular material 1: Granular material produced by the method of Production Example 2 to be mentioned

Granular material 2: Granular material produced by the method
10 of Production Example 3 to be mentioned

Formulation containing guar gum and xanthan gum: "Minute W", guar gum content 87% by mass, xanthan gum content 13% by mass, manufactured by DSP Gokyo Food & Chemical Co., Ltd.

Mayonnaise: Pure Select Mayonnaise, manufactured by Ajinomoto
15 Co., Inc.

Tuna flakes: Light Tuna Super Non-Oil, manufactured by Inaba Foods Co., Ltd.

Seasoning: Salt, sugar and pepper mixed in a mass ratio of salt: sugar: pepper = 1:1:0.1.

20 [0060]

(Method of measuring viscosity)

(1) A sample was heated and dried at 130°C to measure the moisture content using a moisture meter (Kensei Kogyo Co., Ltd., electromagnetic moisture meter: model number MX50), and the dry
25 substance amount was calculated from the obtained moisture value to prepare a sample of 8 g in terms of dry matter.

(2) Distilled water in an amount obtained by subtracting the

sample amount of the sample containing water from 200 g was put in a 500 mL plastic beaker, and the temperature was adjusted to 14°C.

(3) A stirrer (MAZELAZ, manufactured by Tokyo Rikakikai Co., Ltd.) was equipped with stirring blades (angled fan turbine, manufactured by Tokyo Rikakikai Co., Ltd.), and the above (2) was stirred at 450 rpm.

(4) The sample of 8 g in terms of dry matter was added to the above (3) for 1 minute while maintaining stirring.

(5) After the sample was added, the rotation speed of the stirrer was increased to 600 rpm and the mixture was stirred for 2 minutes to prepare a slurry.

(6) The slurry of the above (5) was transferred to a 200 mL tall beaker and covered with a wrap.

(7) The above (6) was immersed in a water bath at 10°C and left standing for 15 minutes.

(8) After removing the wrap from the above (7) and gently stirring, using a B-type viscometer (VISCOMETER BM, manufactured by Tokyo Keiki Co., Ltd.) equipped with a rotor, a measurement value at a time point of performing rotation at a rotation speed of 60 rpm for 1 minute was taken as the viscosity. For the measurement of pregelatinized crosslinked potato starch, Rotor No. 4 was used, and for the measurement of pregelatinized crosslinked tapioca starch, Rotor No. 3 was used, respectively.

[0061]

(Method of measuring degree of swelling in cold water)

(1) A sample was heated and dried at 130°C to measure the moisture content using a moisture meter (Kensei Kogyo Co., Ltd.,

electromagnetic moisture meter: model number MX50), and the dry substance amount was calculated from the obtained moisture value.

(2) 1 g of the sample in terms of dry matter mass was dispersed in 50 mL of water at 25°C, gently stirred for 30 minutes in a constant temperature bath at 25°C, then centrifuged at 3,000 rpm for 10 minutes (centrifuge: manufactured by Hitachi Corporation, Hitachi Desktop Centrifuge CT6E type; rotor: T4SS type swing rotor; adapter: 50TC × 2S adapter), and separated into a precipitation layer and a supernatant layer.

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

(4) A mass at a time when the precipitation layer was dried and solidified (105°C, constant weight) was designated as C(g).

(5) B/C was defined as the degree of swelling in cold water.

[0062]

(Production Example 1) Production of pregelatinized corn starch

A slurry was prepared by mixing 100 parts by mass of corn starch (corn starch Y, manufactured by J-Oil Mills Co., Ltd.) with 200 parts by mass of water while stirring, the slurry was gelatinized with an onrator (outlet temperature around 100°C) while stirring, the paste solution was immediately spread thinly on a drum dryer by a conventional method, heated at 150°C, dried, and then pulverized by a pulverizer to obtain a pregelatinized corn starch.

[0063]

(Production Example 2) Production of granular material 1

A granular material was prepared using an acid-treated starch as a lowered molecular weight starch.

(Method for producing acid-treated high-amylose corn starch)

High-amylose corn starch was suspended in water to prepare a 35.6% (w/w) slurry, and the temperature was raised to 50°C. A hydrochloric acid aqueous solution adjusted to 4.25 N was added thereto while stirring in an amount of 1/9 times at a slurry mass ratio to start the reaction. After reaction for 16 hours, the resultant product was neutralized with 3% NaOH, washed with water, dehydrated and dried to obtain an acid-treated high-amylose corn starch.

A peak molecular weight of the obtained acid-treated high-amylose corn starch was measured by a method to be mentioned and the peak molecular weight was 1.2×10^4 .

[0064]

(Method for measuring peak molecular weight)

A peak molecular weight was measured using an HPLC unit manufactured by Tosoh Corporation (Pump DP-8020, RI detector RS-8021, degassing device SD-8022).

(1) A sample was pulverized, and an undersize sieve fraction having an opening of 0.15 mm was recovered using a sieve of JIS-Z8801-1 standard. The recovered fraction was suspended in a mobile phase so as to be 1 mg/mL, and the suspension was heated at 100°C for 3 minutes to be completely dissolved. Filtration was performed using a 0.45- μ m filtration filter (manufactured by ADVANTEC, DISMIC-25HP PTFE 0.45 μ m), and the filtrate was used as an analytical sample.

(2) The molecular weight was measured under the following analysis conditions.

Column: TSKgel α -M (7.8 mm ϕ , 30 cm) (manufactured by Tosoh

Corporation) 2 pieces

Flow rate: 0.5 mL/min

Mobile phase: 90% (v/v) dimethyl sulfoxide solution containing
5 mM NaNO_3

5 Column temperature: 40°C

Analysis amount: 0.2 mL

(3) Detector data was collected by software (multi-station GPC-8020 model II data recovery ver 5.70, manufactured by Tosoh Corporation), and the molecular weight peak was calculated.

10 For the calibration curve, Pullulan with a known molecular weight (Shodex Standard P-82, manufactured by Showa Denko KK) was used.

[0065]

(Method for producing granular material)

15 79% by mass of corn starch, 20% by mass of acid-treated high-amylose corn starch obtained by the above method, and 1% by mass of calcium carbonate were mixed in a bag until they were sufficiently homogeneous. The mixture was heat-treated under pressure using a twin-screw extruder (KEI-45 manufactured by Kowa Industry Co., Ltd.).

20 The treatment conditions are as follows.

Raw material supply: 450 g/min

Addition of water: 17% by mass

Barrel temperature: 50°C, 70°C, and 100°C from the raw material inlet to the outlet

25 Outlet temperature: 100°C to 110°C

Screw rotation speed 250 rpm

The pregelatinized product obtained by the extruder treatment

in such a manner was dried at 110°C to adjust the water content to 10% by mass.

Subsequently, the dried pregelatinized product was pulverized with a desktop cutter pulverizer and then sieved with a JIS-Z8801-1 standard sieve. The sieved pregelatinized product was mixed at the following blending ratio to prepare a granular material 1.

On 0.5 mm-opening: 0% by mass

Passed 0.5 mm-opening, on 0.25 mm-opening: 0% by mass

Passed 0.25 mm-opening, on 0.18 mm-opening: 11% by mass

10 Passed 0.18 mm-opening, on 0.075 mm-opening: 76% by mass

Passed 0.075 mm-opening: 13% by mass

The degree of swelling in cold water of the granular material 1 was 10.5 when measured by the method described above.

[0066]

15 (Production Example 3) Production of granular material 2

In Production Example 2, the granular material 2 was obtained by the same production method as that of Production Example 2 except that the sieved pregelatinized product was mixed at the following blending ratio.

20 On 0.5 mm-opening: 18% by mass

Passed 0.5 mm-opening, on 0.25 mm-opening: 42% by mass

Passed 0.25 mm-opening, on 0.18 mm-opening: 13% by mass

Passed 0.18 mm-opening, on 0.075 mm-opening: 22% by mass

Passed 0.075 mm-opening: 5% by mass

25 The degree of swelling in cold water of the granular material 2 was 10.5 when measured by the method described above.

[0067]

(Production Example 4) Production of pregelatinized distarch phosphate from tapioca starch

1. 300 g of water was added to 20 g of distarch phosphate from tapioca starch ("Actbody TP-4", manufactured by J-Oil Mills Co., Ltd.) and stirred to prepare a slurry.

2. The slurry of the above 1. was heated and boiled until the moisture content was evaporated by 30 g to obtain a paste solution.

3. The paste solution of the above 2. was applied onto a hot plate heated to 200°C and heated until a film was formed.

4. The film of the above 3. was peeled off with a spatula, recovered, put in a constant temperature bath set at 40°C for 18 hours, and dried.

5. The dried film of the above 4. was pulverized with a desktop pulverizer, and the undersize sieve fraction having passed through a sieve having an opening of 0.25 mm of JIS-Z8801-1 standard was recovered to obtain a pregelatinized distarch phosphate.

[0068]

(Examples 1 to 9 and Comparative Examples 1 to 6)

In Examples 1 and 2 and Comparative Examples 1 to 4, onion dressed with mayonnaise was prepared and evaluated. Table 1 shows the blending of compositions used in an onion dressed with mayonnaise and the evaluation results of the onion dressed with mayonnaise.

In addition, in Examples 3 to 9 and Comparative Examples 5 and 6, tuna dressed with mayonnaise was prepared and evaluated. At the same time, regarding the composition of the blending of Example 1, a tuna dressed with mayonnaise was also prepared and evaluated. Table 2 shows the blending of compositions used in a tuna dressed with

mayonnaise and the evaluation results of the tuna dressed with mayonnaise.

In Tables 1 and 2, the unit “%” of the blending amount of the raw materials is “% by mass”.

5 The production method and the evaluation method for each dressed food are as follows.

[0069]

(Method for producing onion dressed with mayonnaise)

(Blending)

10	<u>Raw material</u>	<u>Blending (% by mass)</u>
	Mayonnaise	52.8
	Onion (after squeezing)	45.2
	<u>Composition</u>	<u>2</u>
	Total	100

15 [0070]

(Procedure)

1. Onions were cut into about 5-mm square pieces and boiled in boiling water for 2 minutes.

2. The onions of the above 1. were transferred to a colander,
20 and drained, and the mass of the boiled onions were weighed.

3. The boiled onions were squeezed until the mass became 75% by mass of the mass of the above 2.

4. The squeezed onions of the above 3. were transferred to a bowl and the composition was added and dressed.

25 5. Mayonnaise was added to the above 4. and mixed well with a spatula to obtain an onion dressed with mayonnaise.

[0071]

(Evaluation method)

The obtained onion dressed with mayonnaise was stored at 4°C for 16 hours, and the stringiness and the water retention property were evaluated. The evaluation criteria will be mentioned below.

5 [0072]

(Method for producing tuna dressed with mayonnaise)

(Blending)

<u>Raw material</u>	<u>Blending (g)</u>
Tuna flakes	29.5
Seasoning	0.9
<u>Onion dressed with mayonnaise</u>	<u>19.5</u>
Total	49.9

10

[0073]

(Procedure)

15 Each raw material was put in a bowl and mix well with a spoon to obtain a tuna dressed with mayonnaise. Among the raw materials, the onion dressed with mayonnaise was prepared by the method described above.

[0074]

20 (Evaluation method)

Evaluation of the stringiness and the water retention property was performed on the tuna dressed with mayonnaise after storing at 4°C for 16 hours. The evaluation criteria will be mentioned below.

[0075]

25 Evaluation of the dispersibility of the composition was performed by the dispersibility evaluation method and evaluation criteria to be mentioned.

[0076]

(Evaluation items and evaluation criteria)

(Stringiness)

A spoon was inserted into the dressed food obtained in each
 5 example, and scooped up at 6 cm/sec. From an adhered state of the
 dressed food to the spoon when scooped up, evaluation was performed
 by the following criteria, and equal to or more than 3 points were
 regarded as pass.

5: Whether the dressed food does not have stringiness, or has
 10 stringiness, a string of the dressed food is cut within 1 cm

4: The string of the dressed food is cut into more than 1 cm
 and equal to or less than 2 cm.

3: The string of the dressed food is cut into more than 2 cm
 and equal to or less than 4 cm.

15 2: The string of the dressed food is cut into more than 4 cm
 and equal to or less than 6 cm.

1: The string of the dressed food is not cut even if it is more
 than 6 cm.

[0077]

20 (Water retention property)

The dressed food that was stored at 4°C for 16 hours after being
 prepared was evaluated by the following evaluation criteria, and the
 one with equal to or more than 3 points were regarded as pass.

4: Water separation cannot be confirmed even if tilted and
 25 further strongly compressed with a spoon.

3: Water separation cannot be confirmed even if tilted, but
 slight water separation can be confirmed when strongly compressed

with a spoon.

2: Water separation cannot be confirmed by being visually observed, but slight water separation can be confirmed when tilted.

1: Water separation can be visually confirmed.

5 [0078]

(Dispersibility)

Evaluation was performed by the following evaluation criteria, and those with equal to or more than 2 points were regarded as pass.

10 1. 99 g of water was placed in a 100-mL glass beaker having a diameter of 5 cm, a stirring bar of 3 cm was further placed therein, and the mixture was stirred at 700 rpm with a magnetic stirrer.

2. A dispersion state at a time when 1 g of the composition was put in the above 1. for the time described in the evaluation criteria was evaluated by the following evaluation criteria.

15 3: The composition does not become a lump and is dispersed homogeneously even if the composition is put over 30 seconds.

2: If the composition is put over 1 minute, the composition does not become lump and is dispersed homogeneously.

20 1: Even if the composition is put over 1 minute, the composition is lumped and is not dispersed homogeneously.

[Table 1]

Raw material	Example 1	Example 2	Comparative Example 1	Comparative Example 2	Comparative Example 3	Comparative Example 4
Pregelatinized crosslinked potato starch	54%					
Pregelatinized crosslinked tapioca starch		54%				
Pregelatinized corn starch			54%			
Pregelatinized etherified crosslinked waxy corn starch				54%		
Pregelatinized acetylated crosslinked tapioca starch					54%	
Pregelatinized etherified crosslinked tapioca starch						54%
Guar gum	4%	4%	4%	4%	4%	4%
Xanthan gum	12%	12%	12%	12%	12%	12%
Dextrin	30%	30%	30%	30%	30%	30%
Total	100%	100%	100%	100%	100%	100%
Stringiness	5	4	2	2	2	2
Water retention property	3	3	3	3	3	3

[0080]

In Table 1, as a result of eating the onion dressed with mayonnaise of Examples 1 and 2, all were smooth without any unnatural stringiness. Among these, Example 1 had a preferable texture. On
5 the other hand, the onion dressed with mayonnaise of each comparative example had strong stringiness and had an appearance unsuitable for food.

[Table 2]

Raw material	Comparative Example 5	Example 3	Example 4	Example 5	Example 6	Example 1	Comparative Example 6	Example 7	Example 8	Example 9
Pregelatinized crosslinked potato starch		10%	30%		50%	54%		20.0%	25.0%	30%
Pregelatinized crosslinked tapioca starch				30%						
Formulation containing guar gum and xanthan gum	30%	30%	30%	30%	30%			34.3%	32.1%	30%
Guar gum						4%	34%			
Xanthan gum						12%				
Dextrin						30%				
Granular material 1	70%	60%	40%	40%	20%		66%	45.7%	42.9%	
Granular material 2										40%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stringiness	2	3	5	5	5	5	1	4	5	4
Water retention property	3	3	3	3	4	3	2	4	4	3
Dispersibility	3	3	3	3	3	2	3	3	3	3

[0082]

In Table 2, the tuna dressed with mayonnaise of each example had no stringiness or weak stringiness, and the water was sufficiently retained. In addition, as a result of eating, all had preferable texture. Among these, Examples 4, 5, 6, and 8 had no stringiness and had preferable appearances. On the other hand, the tuna dressed with mayonnaise of Comparative Example 5 had strong stringiness and had an appearance unsuitable for food. In addition, the tuna dressed with mayonnaise of Comparative Example 6 had further strong stringiness and insufficient water retention property, and thus had an appearance that was not suitable for food.

[0083]

(Example 10)

In Example 10, as will be mentioned, the raw materials constituting the composition of Example 4 were separately mixed with food ingredients to prepare an onion dressed with mayonnaise. In addition, a tuna dressed with mayonnaise was prepared according to the method for preparing a tuna dressed with mayonnaise described above, and evaluated. Table 3 shows the evaluation results of the tuna dressed with mayonnaise.

[0084]

(Method for preparing onion dressed with mayonnaise of Example 10)

(Blending)

25	<u>Raw material</u>	<u>Blending (mass %)</u>
	Mayonnaise	52.8
	Onion (after squeezing)	45.2

Pregelatinized crosslinked potato starch	0.6
Formulation containing guar gum and xanthan gum	0.6
<u>Granular material 1</u>	<u>0.8</u>
Total	100

5 [0085]

(Procedure)

1. Onions were cut into about 5-mm square pieces and boiled in boiling water for 2 minutes.

2. The onions of the above 1. were transferred to a colander,
10 and drained, and the mass of the boiled onions were weighed.

3. The boiled onions were squeezed until the mass became 75% by mass of the mass of the above 2.

4. The squeezed onions of the above 3. were transferred to a bowl and the formulation containing guar gum and xanthan gum was added
15 and dressed.

5. The granular material 1 was added to the above 4. and dressed.

6. A pregelatinized crosslinked potato starch was added to the above 5. and dressed.

7. Mayonnaise was added to the above 6. and mixed well with a
20 spatula to obtain the onion dressed with mayonnaise.

[0086]

[Table 3]

	Example 4	Example 10
Stringiness	5	5
Water retention property	3	3

[0087]

Similar to Example 4, Example 10 had no stringiness and had
 5 favorable water retention property. As a result of eating the tuna
 dressed with mayonnaise of Example 10, it was slightly stickier than
 that of Example 4, but was smooth and had a favorable texture.

[0088]

(Production example of food)

10 Hereinafter, production examples of each food are shown.

(Preparation of tuna mayo rice ball)

1. A pot of a rice cooker (NP-VQ10 type, manufactured by Zojirushi
 Mahobin Co., Ltd.) was taken out, 300 g of commercially available
 non-washed rice (Koshihikari produced in Ibaraki Prefecture) and 480
 15 g of water were added and mixed gently.

2. After returning the pot to the rice cooker and soaking thereof
 for 1 hour, rice was cooked by pressing a rice cooking button with
 settings of white rice and non-wash rice.

3. The cooked rice was put in a vat and cooled to 20°C with a
 20 vacuum cooler.

4. A tuna mayo rice ball was prepared by using 3 g of the tuna
 dressed with mayonnaise of Example 4 as a filling in 100 g of cooled
 rice.

[0089]

25 (Preparation of tuna mayo sandwich)

1. 30 g of the tuna dressed with mayonnaise of Example 4 was evenly spread on a commercially available bread (for super-ripe sandwich, manufactured by Shikishima Bread Co., Ltd.).

2. A bread was placed on the above 1. to prepare a tuna mayo sandwich.

[0090]

(Preparation of tuna mayo spaghetti)

1. 2 L of water was added to a pasta pot, and boiled.

2. 100 g of commercially available spaghetti (Oh my spaghetti 1.3 mm, manufactured by Nippon Milling Co., Ltd.) was put in the above 1. and boiled for 5 minutes.

3. The spaghetti from which hot water was drained was placed on a plate, and 50 g of the tuna dressed with mayonnaise of Example 4 was put on the plate to prepare tuna mayo spaghetti.

[0091]

Priority is claimed on Japanese Patent Application No. 2018-086394, filed April 27, 2018, the content of which is incorporated herein by reference.

CLAIMS

1. A composition for food products comprising:

a following component (A); and

5 a following component (B),

wherein a content of the component (A) is equal to or more than 5% by mass and equal to or less than 70% by mass with respect to an entire composition, and

a content of the component (B) is equal to or more than 10% by mass and equal to or less than 40% by mass with respect to the entire composition,

the component (A): pregelatinized crosslinked starch (excluding pregelatinized acetylated crosslinked starch, pregelatinized etherified crosslinked starch, and pregelatinized acetylated etherified crosslinked starch)

the component (B): one or two types selected from the group consisting of guar gum and xanthan gum.

2. The composition according to Claim 1,

20 wherein the component (A) is one or two types selected from the group consisting of pregelatinized crosslinked potato starch and pregelatinized crosslinked tapioca starch.

3. The composition according to Claim 1 or 2, further comprising:

25 a following component (C),

wherein a content of the component (C) is equal to or more than 10% by mass and equal to or less than 65% by mass of the with respect

to the entire composition,

the component (C): a granular material containing equal to or more than 75% by mass of starch,

as the starch, the granular material contains equal to or more than 3% by mass and equal to or less than 45% by mass of a lowered molecular weight starch of a starch having equal to or more than 5% by mass of amylose,

the lowered molecular weight starch has a peak molecular weight of equal to or more than 3×10^3 and equal to or less than 5×10^4 ,

a degree of swelling in cold water of the granular material at 25°C is equal to or more than 7 and equal to or less than 20,

a content of a fraction in the granular material that remains on a sieve having an opening of 0.5 mm is equal to or less than 50% by mass with respect to the entire granular material, and

a content of a fraction in the granular material that remains on a sieve having an opening of 0.075 mm is equal to or more than 50% by mass with respect to the entire granular material.

4. The composition according to Claim 3,

wherein a content of a fraction in the granular material that has passed through a sieve having an opening of 0.25 mm is equal to or more than 70% by mass with respect to the entire granular material.

5. The composition according to any one of Claims 1 to 4,

wherein the composition is used for a dressed food.

6. The composition according to Claim 5,

wherein the dressed food is used for a cooked rice processed food, noodles, or a bakery food.

7. The composition according to any one of Claims 1 to 6,

5 wherein the composition is for retaining water.

8. A method for producing a composition for food products, comprising:

10 a step of mixing a following component (A) and a following component (B),

15 wherein in the step, a blending amount of the component (A) is equal to or more than 5% by mass and equal to or less than 70% by mass with respect to an entire composition, and a blending amount of the component (B) is equal to or more than 10% by mass and equal to or less than 40% by mass with respect to the entire composition,

the component (A): pregelatinized crosslinked starch (excluding pregelatinized acetylated crosslinked starch, pregelatinized etherified crosslinked starch, and pregelatinized acetylated etherified crosslinked starch)

20 the component (B): one or two types selected from the group consisting of guar gum and xanthan gum.

9. The method for producing a composition according to Claim 8,

25 wherein the component (A) is one or two types selected from the group consisting of pregelatinized crosslinked potato starch and pregelatinized crosslinked tapioca starch.

10. The method for producing a composition according to Claim 8 or 9, further comprising a step of mixing a following component (C), wherein a content of the component (C) is equal to or more than 10% by mass and equal to or less than 65% by mass with respect to the entire composition,

the component (C): a granular material containing equal to or more than 75% by mass of starch,

as the starch, the granular material contains equal to or more than 3% by mass and equal to or less than 45% by mass of a lowered molecular weight starch of a starch having equal to or more than 5% by mass of amylose,

the lowered molecular weight starch has a peak molecular weight of equal to or more than 3×10^3 and equal to or less than 5×10^4 ,

a degree of swelling in cold water of the granular material at 25°C is equal to or more than 7 and equal to or less than 20,

a content of a fraction in the granular material that remains on a sieve having an opening of 0.5 mm is equal to or less than 50% by mass with respect to the entire granular material, and

a content of a fraction in the granular material that remains on a sieve having an opening of 0.075 mm is equal to or more than 50% by mass with respect to the entire granular material.

11. The method for producing the composition according to Claim 10,

wherein a content of a fraction in the granular material that has passed through a sieve having an opening of 0.25 mm is equal to or more than 70% by mass with respect to the entire granular material.

12. A method for producing a dressed food, comprising:

a step of obtaining a composition by the method for producing a composition according to any one of Claims 8 to 11; and

a step of mixing a food ingredient with the composition,

5 wherein in the step of mixing, a blending amount of the composition is equal to or more than 0.5 parts by mass and equal to or less than 5 parts by mass with respect to 100 parts by mass of the food ingredient.

10 13. A method for producing a dressed food, comprising:

a step of mixing a following component (A) with a following component (B) and a food ingredient,

wherein in the step, a blending amount of the component (A) is equal to or more than 13 parts by mass and equal to or less than 700
15 parts by mass with respect to 100 parts by mass of the component (B), and

a total amount of a blending amount of the component (A) and the component (B) is equal to or more than 0.5 parts by mass and equal to or less than 5 parts by mass with respect to 100 parts by mass
20 of the food ingredient,

the component (A): pregelatinized crosslinked starch (excluding pregelatinized acetylated crosslinked starch, pregelatinized etherified crosslinked starch, and pregelatinized acetylated etherified crosslinked starch)

25 the component (B): one or two types selected from the group consisting of guar gum and xanthan gum.

14. A method for producing a food, comprising:

a step of adding a dressed food obtained by the production method according to Claim 12 or 13 to a food.

5 15. The method for producing a food according to Claim 14,
wherein the food is a cooked rice processed food, noodles, or
a bakery food.

16. A method for reducing stringiness of a dressed food containing
10 a following component (B), the method comprising:

adding a following component (A) such that a content of the
component (A) is equal to or more than 13 parts by mass and equal
to or less than 700 parts by mass with respect to 100 parts by mass
of the component (B),

15 the component (A): pregelatinized crosslinked starch (excluding
pregelatinized acetylated crosslinked starch, pregelatinized
etherified crosslinked starch, and pregelatinized acetylated
etherified crosslinked starch)

the component (B): one or two types selected from the group
20 consisting of guar gum and xanthan gum.