

SPECIFICATION

[TITLE OF INVENTION] DUSTING POWDER FOR FRIED FOOD

5 TECHNICAL FIELD

[0001]

The present invention relates to a dusting powder for fried food.

10 BACKGROUND ART

[0002]

As a technique for improving the flavor and texture of coating, Patent Document 1 (International Publication No. W02021/044452) describes a dusting powder mix for deep-fried
15 foods containing starch processed with oil or fat and rice flour. According to Patent Document 1, using such a dusting powder mix makes it possible to coat the surface of stuffing with the dusting powder by a simple operation and to manufacture battered deep-fried foods with excellent texture.

20 Patent Document 2 (Japanese Unexamined Patent Publication No. 2002-335896) describes a quality improvement agent for fried foods containing a thickening and stabilizing agent and carboxymethyl cellulose. According to Patent Document 2, using such a quality improvement agent enables coating to remain
25 crispy even as time passes after frying or heating in a microwave oven, and makes it possible to obtain fried foods that keep the stuffing juicy.

RELATED DOCUMENT

PATENT DOCUMENT

[0003]

5 [Patent Document 1] International Publication No.
WO2021/044452

 [Patent Document 2] Japanese Unexamined Patent Publication
No. 2002-335896

10 SUMMARY OF THE INVENTION

TECHNICAL PROBLEM

[0004]

 However, in a case where the aforementioned techniques are
used, there is still room for enhancement in improving dryness
15 and suppresses sogginess of a fried food even in a case where
the fried food obtained by heating and cooking is reheated after
storage, and making it possible to obtain a fried food having
coating and stuffing that adhere well together.

SOLUTION TO PROBLEM

20 [0005]

 According to the present invention, there is provided a
dusting powder for fried food described below.

[0006]

 [1] A dusting powder for fried food containing a cellulose
25 derivative and a starch processed with oil or fat.

 [2] The dusting powder for fried food described in [1], in
which the cellulose derivative is one compound or two or more

compounds selected from the group consisting of methyl cellulose, hydroxypropyl methyl cellulose, and carboxymethyl cellulose.

[3] The dusting powder for fried food described in [1] or
5 [2], in which the cellulose derivative is carboxymethyl cellulose.

[4] The dusting powder for fried food described in any one of [1] to [3], in which the starch processed with oil or fat is one starch or two or more starches selected from the group
10 consisting of tapioca starch processed with oil or fat, corn starch processed with oil or fat, potato starch processed with oil or fat, wheat starch processed with oil or fat, rice starch processed with oil or fat, and pea starch processed with oil or fat.

15 [5] The dusting powder for fried food described in any one of [1] to [4], in which a content of the cellulose derivative in the dusting powder is 1% by mass or more and 70% by mass or less with respect to entirety of the dusting powder.

[6] The dusting powder for fried food described in any one
20 of [1] to [5], in which a mass ratio of a content of the cellulose derivative in the dusting powder to a content of the starch processed with oil or fat in the dusting powder is 0.02 or more and 3 or less.

[7] A fried food containing the dusting powder for fried
25 food described in any one of [1] to [6].

[8] A manufacturing method of a fried food, including a step of coating outside of stuffing with the dusting powder for

fried food described in any one of [1] to [6], and

a step of heating and cooking the stuffing coated with the dusting powder for fried food.

[9] A method of improving texture of a fried food,

5 including a step of incorporating a cellulose derivative and starch processed with oil or fat into a dusting powder for fried food.

[10] A method of improving texture in a case where a fried

10 food is reheated after storage, the method including a step of incorporating a cellulose derivative and starch processed with oil or fat into a dusting powder for fried food.

ADVANTAGEOUS EFFECTS OF INVENTION

[0007]

15 According to the present invention, a dusting powder for fried food can be provided which improves dryness and suppresses sogginess of a fried food even in a case where the fried food obtained by heating and cooking is reheated after storage, and makes it possible to obtain a fried food having coating and
20 stuffing that adhere well together.

DESCRIPTION OF EMBODIMENTS

[0008]

Hereinafter, embodiments of the present invention will be
25 described with specific examples of each component. As each component, one substance can be used alone, or two or more substances can be used in combination.

The terms "sogginess" and "dryness" in the present embodiment will be described. "Sogginess" means a state opposite to "dryness". "Sogginess" is different from "stickiness of coating", and means a state where the texture between coating and stuffing is wet, viscous, and unnatural. "Dryness" means a state where food is less soggy and the texture between coating and stuffing is excellent and natural.

Furthermore, in the present embodiment, "stickiness of coating" means that it is difficult to bite through food when chewing the food, and "improving the stickiness of coating" means easing the difficulty of biting through and enhancing crispiness.

[0009]

(Dusting powder for fried food)

The dusting powder for fried food in the present embodiment contains a cellulose derivative and starch processed with oil or fat.

Hereinafter, the cellulose derivative and the starch processed with oil or fat will be more specifically described.

[0010]

(Cellulose derivative)

The cellulose derivative refers to a water-soluble polymer obtained by partially modifying cellulose.

The cellulose derivative in the present embodiment is preferably cellulose ether obtained by introducing different substituents into a hydroxy group of cellulose via an ether bond. Among cellulose ethers, one cellulose ether or two or

more cellulose ethers are preferable which can be used for foods and are selected from the group consisting of methyl cellulose, hydroxypropyl methyl cellulose, and carboxymethyl cellulose.

In a case where methyl cellulose is to be used, it is possible to use methyl cellulose in which a methoxy group content is, for example, 25.0% or more and 33.0% or less with respect to the entirety of the methyl cellulose. In a case where hydroxypropyl methyl cellulose is to be used, it is possible to use hydroxypropyl methyl cellulose in which a methoxy group content is, for example, 19.0% or more and 30.0% or less with respect to the entirety of the hydroxypropyl methyl cellulose. In a case where carboxymethyl cellulose is to be used, it is possible to use carboxymethyl cellulose in which the content of a methoxy group is, for example, 19% or more and 33% or less with respect to the entirety of the carboxymethyl cellulose.

The methoxy group content is measured according to Japan's Specifications and Standards for Food Additives (2018), 9th edition, B General Test Method, 38. Methoxy Group Quantification Method (Methyl Cellulose) and D Articles of Component Specification/Storage Standard, Paragraph of Hydroxypropyl cellulose (Hydroxypropyl Cellulose). For carboxymethyl cellulose, the methoxy group content can also be measured according to the aforementioned measurement method for methyl cellulose.

[0011]

From the viewpoint of achieving excellent balance among

dryness improvement, suppression and improvement of sogginess, improvement of the stickiness of coating, maintaining of crispy texture, and excellent adhesion between coating and stuffing in a case where fried food is reheated after storage, the cellulose derivative in the present embodiment is more preferably
5 carboxymethyl cellulose.

[0012]

From the viewpoint of improving dryness, suppressing sogginess, improving the stickiness of coating, maintaining
10 crispy texture, and achieving excellent adhesion between coating and stuffing in a case where fried food is reheated after storage, the content of the cellulose derivative with respect to the entirety of the dusting powder for fried food is preferably 1% by mass or more, more preferably 2% by mass or more, even
15 more preferably 3% by mass or more, still more preferably 4% by mass or more, yet more preferably 5% by mass or more, and particularly preferably 8% by mass or more. From the same viewpoint, the content of the cellulose derivative with respect to the entirety of the dusting powder for fried food is
20 preferably 70% by mass or less, more preferably 50% by mass or less, even more preferably 40% by mass or less, still more preferably 35% by mass or less, and yet more preferably 30% by mass or less.

[0013]

25 From the viewpoint of improving dryness, suppressing sogginess, improving the stickiness of coating, maintaining crispy texture, and achieving excellent adhesion between coating

and stuffing in a case where fried food is reheated after storage, a mass ratio of the content of the cellulose derivative to the content of the starch processed with oil or fat, which will be described later, is preferably 0.02 or more, more preferably 0.03 or more, even more preferably 0.04 or more, 5 still more preferably 0.05 or more, yet more preferably 0.06 or more, and particularly preferably 0.08 or more. From the same viewpoint, the mass ratio is preferably 3 or less, more preferably 2 or less, even more preferably 1 or less, still more preferably 0.8 or less, and yet more preferably 0.5 or less. 10 [0014]

(Starch processed with oil or fat)

In the present embodiment, the starch processed with oil or fat refers to a starchy material produced through a step including operations of adding edible oil or fat to raw material 15 starch, followed by mixing and heating. [0015]

Preferred examples of the raw material starch used for the starch processed with oil or fat include starches including 20 maize starch such as high-amylose corn starch, corn starch, and waxy corn starch, tapioca starch, sweet potato starch, potato starch, wheat starch, high-amylose wheat starch, rice starch, bean starch such as mung bean starch and pea starch, sago palm starch, and the like, and processed starches obtained by 25 chemically, physically, or enzymatically processing the above starches.

Examples of the chemical processing treatments include an

esterification treatment such as an acid treatment, an alkali treatment, an oxidation treatment, or acetylation, an etherification treatment such as hydroxypropylation, a crosslinking treatment, and the like. Examples of the physical processing treatments include a heating treatment, a pregelatinization treatment, a moist heat treatment, a ball mill treatment, a fine pulverization treatment, and the like. Examples of the enzymatic processing treatments include a treatment using α -amylase treatment, and the like.

From the viewpoint of improving the attachment of the dusting powder to stuffing and enhancing the adhesion between stuffing and coating, the starch processed with oil or fat of the present embodiment is preferably one starch or two or more starches selected from the group consisting of tapioca starch processed with oil or fat, corn starch processed with oil or fat, potato starch processed with oil or fat, wheat starch processed with oil or fat, rice starch processed with oil or fat, and pea starch processed with oil or fat, and more preferably one starch or two starches selected from the group consisting of tapioca starch processed with oil or fat and corn starch processed with oil or fat.

[0016]

From the viewpoint of more stably obtaining the adhesion between coating and stuffing, the content of the raw material starch in the starch processed with oil or fat with respect to the entirety of the starch processed with oil or fat is preferably 80% by mass or more, more preferably 84% by mass or

more, even more preferably 87% by mass or more, and still more preferably 90% by mass or more. From the same viewpoint, the content of the raw material starch in the starch processed with oil or fat with respect to the entirety of the starch processed with oil or fat is less than 100% by mass, preferably 99.9% by mass or less, more preferably 99.5% by mass or less, and even more preferably 99.0% by mass or less.

[0017]

Specific examples of edible oil or fat used for the starch processed with oil or fat include soybean oil, safflower oil such as high linoleic safflower oil, corn oil, rapeseed oil, perilla oil, linseed oil, sunflower oil, peanut oil, cottonseed oil, olive oil, rice oil, palm oil, sesame oil, palm kernel oil, coconut oil, and the like. From the viewpoint of workability, liquid oil is preferably used as the edible oil or fat, and one liquid oil or two or more liquid oils selected from the group consisting of soybean oil, rapeseed oil, corn oil, high linoleic safflower oil, linseed oil, and perilla oil are more preferable.

As the edible oil or fat, oil or fat having an iodine value of 100 or more is more preferably used, and oil or fat having an iodine value of 135 or more is even more preferably used. The oil or fat having a high iodine value are readily oxidized by heating, and very effectively modify the raw material starch. Therefore, in a case where such oil or fat are mixed with the dusting powder, the adhesion of coating to stuffing is expected to be more effectively improved. Specific examples of oil or fat having an iodine value of 135 or more include high linoleic

safflower oil, linseed oil, and perilla oil. The upper limit of the iodine value of the edible oil or fat is not limited, and is, for example, 250 or less.

[0018]

5 From the viewpoint of more reliably obtaining the effect of modifying the raw material starch, assuming that the total amount of the raw material starch is 100 parts by mass, the content of the edible oil or fat in the starch processed with oil or fat is preferably 0.005 parts by mass or more, more
10 preferably 0.01 parts by mass or more, even more preferably 0.02 parts by mass or more, and still more preferably 0.05 parts by mass or more. From the viewpoint of more stably obtaining the adhesion between coating and stuffing, assuming that the total amount of the raw material starch is 100 parts by mass, the
15 content of the edible oil or fat is preferably 5 parts by mass or less, more preferably 4 parts by mass or less, even more preferably 2 parts by mass or less, and still more preferably 1 part by mass or less.

[0019]

20 From the viewpoint of more stably obtaining the adhesion between coating and stuffing, it is preferable that the starch processed with oil or fat further contain a protein material.

 Examples of the protein material include natural protein material having a high plant protein content, a high animal
25 protein content, or the like, a crude purified protein derived from a natural protein material, a purified protein, and the like. Examples of the plant protein include wheat protein, soy

protein, corn protein, and the like. Examples of the animal protein include egg proteins such as egg white protein and egg yolk protein, milk proteins such as whey protein and casein, blood proteins such as plasma protein and blood cell protein, muscle proteins such as meat protein and fish protein, and the like.

[0020]

From the viewpoint of further improving the balance among three effects including the workability in handling the dusting powder, the adhesion between coating and stuffing, and the pleasantness of texture of the contact layer between coating and stuffing, the protein material preferably includes one protein or two or more proteins selected from the group consisting of plant proteins such as soy protein and wheat protein; and animal proteins such as milk proteins, egg proteins, and gelatin, and more preferably includes soy protein. Examples of the soy protein include defatted soy flour, full-fat soy flour, concentrated soy protein, isolated soy protein, and the like. Among these, defatted soy flour is preferable.

[0021]

From the viewpoint of more reliably obtaining the effect of modifying the raw material starch, assuming that the total amount of the raw material starch is 100 parts by mass, the content of the protein material in the starch processed with oil or fat is preferably 0.05 parts by mass or more, more preferably 0.1 parts by mass or more, even more preferably 0.5 parts by mass or more, and still more preferably 0.8 parts by mass or

more. From the viewpoint of more stably obtaining the adhesion between coating and stuffing, assuming that the total amount of the raw material starch is 100 parts by mass, the content of the protein material is preferably 20 parts by mass or less, more preferably 15 parts by mass or less, even more preferably 10 parts by mass or less, and still more preferably 5 parts by mass or less.

[0022]

Next, the manufacturing method of starch processed with oil or fat in the present embodiment will be described.

The starch processed with oil or fat is obtained, for example, by a manufacturing method including the following steps by using the raw material starch, edible oil or fat, and protein material described above and other components used as appropriate.

(First step) A step of mixing together the raw material starch, the edible oil or fat, and the protein material to prepare a composition containing these.

(Second step) A step of performing heat treatment on the composition obtained in the first step.

[0023]

In the first step, the order of mixing the components is not limited. However, it is preferable that the components other than the edible oil or fat be mixed together, and then the edible oil or fat be added thereto, followed by mixing.

[0024]

In the second step, the composition obtained in the first

step is heated to obtain the starch processed with oil or fat.

From the viewpoint of more stably obtaining the adhesion between coating and stuffing, the heat treatment is preferably performed at a temperature of 130°C or less, more preferably performed at a temperature of 120°C or less, even more preferably performed at a temperature of 105°C or less, and still more preferably performed at a temperature of 90°C or less. The lower limit of the heating temperature is not limited. From the viewpoint of appropriately shortening the maturation period to improve the productivity, the lower limit of the heating temperature is, for example, 40°C or higher, preferably 45°C or higher, and more preferably 55°C or higher.

[0025]

The duration of the heating treatment is set according to the condition of the starch processed with oil or fat to be obtained and the heating temperature. From the viewpoint of more stably obtaining the adhesion between coating and stuffing, the duration of heating is, for example, 0.5 hours or longer, preferably 5 hours or longer, more preferably 6 hours or longer, and even more preferably 24 hours or longer. From the same viewpoint, the upper limit of the duration of heating is, for example, 25 days or less, preferably 20 days or less, and more preferably 18 days or less.

[0026]

Containing the starch processed with oil or fat obtained through the manufacturing steps described above, the dusting powder for fried food of the present embodiment can improve

dryness, suppress sogginess, improve the stickiness of coating, maintain crispy texture, and achieve excellent adhesion between coating and stuffing in a case where fried food is reheated after storage.

5 [0027]

From the viewpoint of improving dryness, suppressing sogginess, improving the stickiness of coating, maintaining crispy texture, and achieving excellent adhesion between coating and stuffing in a case where fried food is reheated after
10 storage, the content of the starch processed with oil or fat in the dusting powder for fried food with respect to the entirety of the dusting powder for fried food is, for example, more than 0% by mass, preferably 50% by mass or more, more preferably 55% by mass or more, even more preferably 60% by mass or more, and
15 still more preferably 65% by mass or more.

From the same viewpoint, the content of the starch processed with oil or fat in the dusting powder for fried food with respect to the entirety of the dusting powder for fried food is, for example, less than 100% by mass, preferably 99% by
20 mass or less, more preferably 97% by mass or less, even more preferably 95% by mass or less, and still more preferably 92% by mass or less.

[0028]

(Other components)

25 The dusting powder for fried food may further contain components other than the starch processed with oil or fat and the cellulose derivative. Examples of other components include

starch other than the starch processed with oil or fat, such as unprocessed starch (raw starch); cereal flour such as wheat flour including cake flour or rice flour; dried egg such as whole egg powder; a leavening agent such as baking powder; a
5 coating material such as bread crumbs; a protein such as gluten; seasonings; food colorings; an emulsifier, and the like.

[0029]

(Fried food)

The fried food in the present embodiment contains the
10 dusting powder of the present embodiment described above.

[0030]

Specific examples of the fried food of the present embodiment include deep-fried foods such as Karaage, Tatsutaage, fried chicken, and chicken nuggets; cutlets such as pork cutlet,
15 minced meat cutlet, and chicken cutlet; croquettes such as cream croquette, potato croquette, and pumpkin croquette; fried dishes such as fried fish, fried shrimp, fried oyster, and fried squid; and fried breads such as curry breads and doughnuts.

From the viewpoint of improving dryness, suppressing
20 sogginess, improving the stickiness of coating, maintaining crispy texture, and achieving excellent adhesion between coating and stuffing in a case where fried food is reheated after storage, as the fried food of the present embodiment, it is preferable to use one food selected from the group consisting of
25 deep-fried foods, cutlets, croquettes, and fried dishes.

[0031]

The stuffing of fried food in the present embodiment is not

limited, and it is possible to use stuffing that is generally used in fried foods. Examples of the stuffing include meats such as chicken, pork, and beef; processed meat products and meat-like processed products; seafood such as shrimp, squid, 5 oyster, scallop, horse mackerel, and cod; processed marine products such as sea food paste products; fresh produce such as vegetables; breads such as curry bread; sauces such as white sauce in cream croquettes and curry in curry breads; crushed vegetables in potato croquettes and pumpkin croquettes; and 10 cheeses. In addition, the stuffing of the fried food in the present embodiment can include both the solid ingredients prepared by cutting meat, seafood, vegetables, fruits, pastas, and the like into small pieces and solid ingredients such as corn and green peas that are originally in the form of small 15 pieces.

[0032]

(Manufacturing method of fried food)

The manufacturing method of fried food includes a step of coating the outside of a stuffing with the dusting powder for 20 fried food and a step of heating and cooking the stuffing coated with the dusting powder for fried food to obtain food.

[0033]

The manufacturing method of fried food in the present embodiment may include the following steps in addition to the 25 steps described above. It is preferable that the dusting powder for fried food of the present embodiment be not an outermost layer.

(Batter coating step): A step of coating the outside of a stuffing coated with the dusting powder for fried food of the present embodiment with a batter

(Breeder coating step): A step of coating the outside of a
5 stuffing coated with the dusting powder for fried food of the present embodiment with a breeder

(Step of forming outermost dusting powder layer): A step of coating the stuffing coated with the dusting powder for fried food of the present embodiment with bread crumbs as an outermost
10 dusting powder layer other than the dusting powder for fried food of the present embodiment.

[0034]

In a case where the manufacturing method includes the step of coating with a batter or breeder, it is possible to
15 appropriately use a general batter or breeder consisting of coating materials such as cereal flour, starch, and bread crumbs. From the viewpoint of improving dryness, suppressing sogginess, improving the stickiness of coating, and maintaining crispy texture in a case where fried food is reheated after
20 storage, it is preferable to use the batter described below.

As the batter used in combination with the dusting powder of the present embodiment, a batter is preferable which contains a powdery granular material satisfying the following conditions (1) to (4) and one starch or two starches selected from the
25 group consisting of, oxidized starch, and crosslinked starch.

(1) A starch content in the powdery granular material is 75% by mass or more.

(2) A content of a low-molecular-weight starch obtained from a starch having an amylose content of 5% by mass or more is 3% by mass or more and 45% by mass or less in the powdery granular material, and a peak molecular weight of the low-molecular-weight starch is 3×10^3 or more and 5×10^4 or less.

(3) A cold water swelling degree of the powdery granular material at 25°C is 5 or more and 20 or less.

(4) A content of a fraction that passes through a sieve having a mesh size of 3.35 mm and remains on a sieve having a mesh size of 0.038 mm is 50% by mass or more and 100% by mass or less in the powdery granular material.

[0035]

Regarding the condition (1), the starch content in the powdery granular material is preferably 75% by mass or more, and more preferably 85% by mass or more. Furthermore, the starch content is, for example, 100% by mass or less.

In the powdery granular material, the starch is preferably one starch or two or more starches selected from tapioca starch, maize starch, rice starch, bean starch, and processed starches of these.

[0036]

Regarding the condition (2), it is preferable that the powdery granular material specifically contain a low-molecular-weight starch and other starches.

The amylose content in the raw material starch of the low-molecular-weight starch is preferably 5% by mass or more, and more preferably 22% by mass or more. Furthermore, the amylose

content is, for example, 100% by mass or less.

As the starch having an amylose content of 5% by mass or more that is a raw material of the low-molecular-weight starch, preferably, it is possible to use one starch or two or more
5 starches selected from high-amylose corn starch, corn starch, tapioca starch, bean starch, and processed starches of these. Among these, the high-amylose corn starch is more preferable.
[0037]

In the powdery granular material, the content of the low-
10 molecular-weight starch is preferably 3% by mass or more, and more preferably 8% by mass or more. Furthermore, the content of the low-molecular-weight starch is preferably 45% by mass or less, and more preferably 35% by mass or less.

In the powdery granular material, the peak molecular weight
15 of the low-molecular-weight starch is preferably 3×10^3 or more, and more preferably 8×10^3 or more. The peak molecular weight of the low-molecular-weight starch is preferably 5×10^4 or less, and more preferably 3×10^4 or less. The method of measuring the peak molecular weight of the low-molecular-weight
20 starch will be described in the section of Examples.
[0038]

The low-molecular-weight starch is preferably one starch or two or more starches selected from the group consisting of acid-treated starch, oxidized starch, and enzyme-treated starch, and
25 more preferably acid-treated starch.
[0039]

It is preferable that the powdery granular material contain

starch other than the low-molecular-weight starch described above. The starch other than the low-molecular-weight starch includes, for example, one starch or two or more starches selected from the group consisting of maize starch such as corn starch, wheat starch, potato starch, tapioca starch, bean starch, and processed starch of these, and more preferably includes corn starch.

[0040]

Regarding the condition (3), the cold water swelling degree of the powdery granular material at 25°C is preferably 5 or more, and more preferably 6 or more. Furthermore, the cold water swelling degree is preferably 20 or less, and more preferably 13 or less. The method of measuring the cold water swelling degree will be described in the section of Examples.

[0041]

Regarding the condition (4), in the powdery granular material, the content of a fraction (particles) that passes through a sieve having a mesh size of 3.35 mm and remains on a sieve having a mesh size of 0.038 mm with respect to the entirety of the powdery granular material is preferably 50% by mass or more, more preferably 70% by mass or more, and even more preferably 90% by mass or more. Furthermore, the content of such a fraction is preferably 100% by mass or less, and more preferably 99% by mass or less.

[0042]

The manufacturing method of the powdery granular material includes the following steps, for example.

(Step of preparing low-molecular-weight starch) A step of performing a depolymerization treatment on starch having an amylose content of 5% by mass or more to obtain low-molecular-weight starch having a peak molecular weight of 3×10^3 or more and 5×10^4 or less.

(Granulation step) A step of heating and gelatinizing a raw material to granulate the raw material in which a content of low-molecular-weight starch is 3% by mass or more and 45% by mass or less and a total amount of the low-molecular-weight starch and starch other than the low-molecular-weight starch is 75% by mass or more.

[0043]

In the batter, the content of the powdery granular material with respect to the total solid content of the batter is preferably 3% by mass or more, more preferably 5% by mass or more, even more preferably 10% by mass or more, and still more preferably 15% by mass or more. Furthermore, the content of the powdery granular material is preferably 55% by mass or less, and more preferably 40% by mass or less.

[0044]

It is preferable that the batter further contain one starch or two starches selected from the group consisting of oxidized starch and crosslinked starch, in addition to the powdery granular material described above.

[0045]

The raw material starch of the oxidized starch is preferably one starch or two or more starches selected from the

group consisting of maize starch, tapioca starch, sweet potato starch, potato starch, wheat starch, high-amylose wheat starch, rice starch, bean starch, and sago palm starch. The raw material starch of the oxidized starch is preferably unprocessed starch.

The oxidized starch is preferably one starch or two or more starches selected from the group consisting of oxidized tapioca starch and oxidized maize starch, and more preferably oxidized tapioca starch.

10 [0046]

The raw material starch of the crosslinked starch is preferably one starch or two or more starches selected from the group consisting of maize starch, tapioca starch, sweet potato starch, potato starch, wheat starch, high-amylose wheat starch, rice starch, bean starch, and sago palm starch. The raw material starch of the crosslinked starch is preferably unprocessed starch.

The crosslinked starch is preferably one starch or two or more starches selected from the group consisting of phosphoric acid crosslinked starch and derivatives thereof and adipic acid crosslinked starch and derivatives thereof.

The crosslinked starch is preferably starch that is obtained by performing only a crosslinking treatment on raw material starch, more preferably phosphoric acid crosslinked starch, and even more preferably phosphoric acid crosslinked tapioca starch.

[0047]

In the batter, the content of starch with respect to the total solid content of the batter is preferably 5% by mass or more, more preferably 10% by mass or more, and even more preferably 20% by mass or more. Furthermore, the content of starch is preferably 90% by mass or less, and more preferably 60% by mass or less.

The content of starch refers to the total amount of oxidized starch and crosslinked starch.

[0048]

10 In the present embodiment, in a case where the manufacturing method of fried food includes a step of coating the outside of a stuffing with a batter, either of the step of coating the outside of a stuffing with the dusting powder for fried food or the step of coating the outside of a stuffing with
15 a batter may be performed first. From the viewpoint of obtaining excellent texture and excellent adhesion between coating and stuffing in a case where the obtained fried food is reheated after storage, it is preferable that the step of coating with a batter be performed after the step of coating
20 with the dusting powder for fried food.

[0049]

From the viewpoint of obtaining excellent texture in a case where the obtained fried food is reheated after storage, specifically, the form of cooking in the step of heating and
25 cooking to obtain food is preferably deep frying in cooking oil, for example. The temperature of the deep frying is preferably, for example, about 100°C to 200°C.

[0050]

The manufacturing method of food may further include a step of freezing the food for preservation, after the step of obtaining food. The freezing temperature for preservation can
5 be, for example, about -10°C to -50°C .

[0051]

The manufacturing method of food may further include a step of thawing the food by heating, after the step of freezing the food for preservation. In the step of thawing by heating, from
10 the viewpoint of obtaining excellent texture, it is preferable to use a microwave oven or a steam convection oven to thaw the food by heating.

[0052]

(Method of improving quality of fried food)

15 The method of improving quality of fried food of the present embodiment includes a step of incorporating a cellulose derivative and starch processed with oil or fat into a dusting powder for fried food.

Specifically, examples of "quality of fried food" include
20 improving dryness, suppressing sogginess, and improving the adhesion between coating and stuffing.

[0053]

With the method of improving quality of fried food of the present embodiment, it is possible to improve the dryness and
25 suppress the sogginess of fried food and to obtain fried food having coating and stuffing that adhere well together.

In addition, with the method of improving quality of fried

food of the present embodiment, it is also possible to improve the stickiness of coating and maintain crispy texture.

[0054]

(Method of improving texture of fried food)

5 The method of improving texture of fried food of the present embodiment includes a step of incorporating a cellulose derivative and starch processed with oil or fat into a dusting powder for fried food.

[0055]

10 With the method of improving texture of fried food of the present embodiment, it is possible to improve the dryness and suppress the sogginess of fried food.

In addition, with the method of improving texture of fried food of the present embodiment, it is also possible to improve
15 the stickiness of coating and maintain crispy texture.

[0056]

(Method of improving adhesion between coating and stuffing of fried food)

The method of improving adhesion between coating and
20 stuffing of fried food of the present embodiment includes a step of incorporating a cellulose derivative and starch processed with oil or fat into a dusting powder for fried food.

[0057]

With the method of improving adhesion between coating and
25 stuffing of fried food of the present embodiment, it is possible to improve the adhesion between coating and stuffing of fried food.

[0058]

(Method of improving quality in a case where fried food is reheated)

The quality improving method of the present embodiment, the
5 method of improving quality in a case where fried food is reheated, includes a step of incorporating a cellulose derivative and starch processed with oil or fat into a dusting powder for fried food.

Specifically, examples of "quality of fried food" include
10 improving dryness, suppressing sogginess, and improving the adhesion between coating and stuffing.

[0059]

With the quality improving method of the present embodiment, the method improving quality in a case where fried
15 food is reheated, it is possible to improve the dryness and suppress the sogginess of fried food and to obtain fried food having coating and stuffing that adhere well together.

In addition, with the quality improving method of the present embodiment, the method improving quality in a case where
20 fried food is reheated, it is also possible to improve the stickiness of coating and maintain crispy texture.

[0060]

(Method of improving texture in a case where fried food is reheated)

25 The texture improving method of the present embodiment, the method improving texture in a case where fried food is reheated, includes a step of incorporating a cellulose derivative and

starch processed with oil or fat into a dusting powder for fried food.

[0061]

With the texture improving method of the present
5 embodiment, the method improving texture in a case where fried food is reheated, it is possible to improve dryness and suppress sogginess even in a case where fried food is reheated after storage.

In addition, with the texture improving method of the
10 present embodiment, the method improving texture in a case where fried food is reheated, it is also possible to improve the stickiness of coating and maintain crispy texture.

[0062]

(Method of improving adhesion between coating and stuffing
15 in a case where fried food is reheated)

The adhesion improving method of the present embodiment, the method improving adhesion between coating and stuffing in a case where fried food is reheated, includes a step of incorporating a cellulose derivative and starch processed with
20 oil or fat into a dusting powder for fried food.

[0063]

With the adhesion improving method of the present
embodiment, the method improving adhesion between coating and stuffing in a case where fried food is reheated, it is possible
25 to improve the adhesion between coating and stuffing of fried food.

Examples

[0064]

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

In the following examples, unless otherwise specified, "%" means "% by mass". In addition, unless otherwise specified, "parts" means "parts by mass".

[0065]

(Raw materials)

The following materials were mainly used as raw materials.

10 Starch 1 processed with oil or fat: Starch processed with oil or fat manufactured in Manufacture Example 1 that will be described later

Starch 2 processed with oil or fat: Tapioca starch processed with oil or fat, "HB-150", manufactured by J-OIL
15 MILLS, INC.

Starch 3 processed with oil or fat: Corn starch processed with oil or fat, "HB-310", manufactured by J-OIL MILLS, INC.

Mixture 1: Mixture manufactured in Manufacture Example 2 that will be described later

20 Hydroxypropyl methyl cellulose: "VIVAPUR Hydroxypropyl Methyl Cellulose", manufactured by Derivados Macroquimicos S. A. de C. V.

Carboxymethyl cellulose: "Sodium carboxymethyl cellulose (CMC) (Type FVH9-2)", manufactured by CHONGQING LIHONG FINE
25 CHEMICALS CO., LTD., methoxy group content: 28 to 30%

Methyl cellulose: "Methocel A4M", manufactured by DDP SPECIALTY PRODUCT GERMANY GMBH & CO. KG

Cake flour: "Special flour", manufactured by UNITED FLOUR MILL PUBLIC CO., LTD.

Powdery granular material 1: Powdery granular material 1 manufactured in Manufacture Example 4 that will be described
5 later

Oxidized starch: Oxidized starch manufactured in Manufacture Example 5 that will be described later

Tapioca starch: Manufactured by Siam Starch (1966) Co., Ltd.

10 Phosphoric acid crosslinked tapioca starch: "ACTBODY TP-2", manufactured by J-OIL MILLS, INC.

Baking powder: "Baking Powder Double Acting Formula", manufactured by UNILEVER THAI HOLDINGS LIMITED

Gluten: "Wheat Gluten", manufactured by MANILDRA STARCHES
15 PTY CO., LTD.
[0066]

(Manufacture Example 1) Manufacturing of starch 1 processed with oil or fat

Maize starch (Cornstarch Y, manufactured by J-OIL MILLS, INC., 50 parts by mass), 50 parts by mass of tapioca starch (manufactured by Siam Starch (1966) Co., Ltd.), 0.1 parts by mass of high linoleic safflower oil (iodine value 150), and 1 part by mass of defatted soy flour (NIKKA MILKY S, manufactured by J-OIL MILLS, INC.) were homogeneously mixed together in a
25 mixer (Super Mixer, manufactured by KAWATA MFG. CO., LTD.) at 2,000 rpm for 3 minutes, thereby obtaining a mixture (water content 12.5% by mass). The mixture was heated at 70°C for 14

days in a shelf-type dryer, thereby obtaining starch 1 processed with oil or fat.

[0067]

(Manufacture Example 2) Manufacturing of mixture 1

5 Maize starch (Cornstarch Y, manufactured by J-OIL MILLS, INC., 50 parts by mass), 50 parts by mass of tapioca starch (manufactured by Siam Starch (1966) Co., Ltd.), 0.1 parts by mass of high linoleic safflower oil (iodine value 150), and 1 part by mass of defatted soy flour (NIKKA MILKY S, manufactured
10 by J-OIL MILLS, INC.) were homogeneously mixed together in a mixer (Super Mixer, manufactured by KAWATA MFG. CO., LTD.) at 2,000 rpm for 3 minutes, thereby obtaining a mixture 1 (water content 12.5% by mass).

[0068]

15 (Manufacture Example 3) Manufacturing of low-molecular-weight starch

Acid-treated high-amylose corn starch was manufactured as low-molecular-weight starch that was a raw material of a powdery granular material 1.

20 The high-amylose corn starch (manufactured by J-OIL MILLS, INC., HS-7, amylose content 70% by mass) was suspended in water to prepare a 35.6% (w/w) slurry, and the slurry was heated to 50°C. While the slurry was being stirred, a 4.25 N aqueous hydrochloric acid solution was added thereto at a mass ratio of
25 1/9 (HCl solution/slurry) such that a reaction was initiated. After the reaction for 16 hours, the reaction mixture was neutralized with 3% NaOH, rinsed with water, dehydrated, and

dried, thereby obtaining acid-treated high-amylose corn starch.

The peak molecular weight of the obtained acid-treated high-amylose corn starch was measured by the method that will be described later. The peak molecular weight was 1.2×10^4 .

5 [0069]

(Method of measuring peak molecular weight)

The peak molecular weight was measured using an HPLC unit manufactured by TOSOH CORPORATION (Pump DP-8020, RI detector RS-8021, deaerator SD-8022).

10 (1) The sample was pulverized and put through sieves meeting the JIS-Z8801-1 standard, and a fraction passing through a sieve having a mesh size of 0.15 mm was collected. The collected fraction was suspended in the mobile phase at 1 mg/mL, and the suspension was heated at 100°C for 3 minutes such that
15 the fraction completely dissolved. The suspension was filtered through a 0.45 µm filter (manufactured by ADVANTEC Group, DISMIC-25HP PTFE 0.45 µm), and the filtrate was used as an analysis sample.

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

Column: TSKgel α-M (7.8 mmφ, 30 cm) (manufactured by TOSOH CORPORATION), 2 pieces

Flow rate: 0.5 mL/min

Mobile phase: 5 mM sodium nitrate-containing 90% (v/v)
25 dimethyl sulfoxide solution

Column temperature: 40°C

Analysis amount: 0.2 mL

(3) The detector data was collected by software (multi-station GPC-8020 model II data collection ver 5.70, manufactured by TOSOH CORPORATION), and the molecular weight peak was calculated.

5 Pullulan (Shodex Standard P-82, manufactured by SHOWA DENKO K.K.) with a known molecular weight was used for the calibration curve.

[0070]

(Method of measuring cold water swelling degree)

10 (1) A sample was heated and dried at 125°C by using a moisture meter (manufactured by Kensei Kogyo Co., Ltd., model number MX-50) to measure the moisture content, and the mass of the dried substance was calculated from the obtained moisture content.

15 (2) The sample in an amount of 1 g equivalent to the mass of the dried substance was dispersed in 50 mL of water at 25°C, the dispersion was gently stirred in a thermostatic bath at 25°C for 30 minutes, and then the dispersion was centrifuged for 10 minutes at 3,000 rpm (centrifuge: manufactured by Hitachi Koki
20 Co., Ltd., Hitachi tabletop centrifuge CT6E; rotor: T4SS swing rotor; adapter: 50TC × 2S adapter) such that the dispersion was separated into a sediment layer and a supernatant layer.

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

25 (4) The mass obtained when the sediment layer was dried and solidified (105°C, constant quantity) was designated as C (g).

(5) The value obtained by dividing B by C was defined as a

cold water swelling degree.

[0071]

(Manufacture Example 4) Manufacturing of powdery granular material 1

5 Corn starch (CORN STARCH Y, manufactured by J-OIL MILLS, INC., 79% by mass), 20% by mass of the acid-treated high-amylose corn starch obtained in Manufacture Example 1, and 1% by mass of calcium carbonate were mixed together in a bag until the mixture became thoroughly homogeneous. The mixture was treated by
10 pressing and heating with a twin screw extruder (KEI-45, manufactured by KOWA KOGYO Inc.). The treatment conditions are as follows.

Supply of raw material: 450 g/min (heat treatment time: about 10 seconds)

15 Addition of water: water was added such that the water amount was 17% by mass with respect to the entire raw materials.

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

Outlet temperature: 100°C to 110°C

20 Rotation speed of screw: 250 rpm

The heated and gelatinized substance obtained as above by the extruder treatment was dried at 110°C such that the water content was adjusted to 10% by mass.

25 Next, the heated and gelatinized substance that was dried was pulverized with a tabletop cutter pulverizer, and then sieved with sieves meeting the JIS-Z8801-1 standard. The heated and gelatinized substances that were sieved were mixed together

at a predetermined mixing ratio, thereby preparing the powdery granular material 1 having the particle size distribution shown in Table 1. The cold water swelling degrees of the powdery granular material 1 measured at 25°C by the above method are shown in Table 1.

[0072]

[Table 1]

		Powdery granular material 1
Fraction (% by mass)	Passing through 3.35 mm sieve and remaining on 1.4 mm sieve	
	Passing through 1.4 mm sieve and remaining on 1 mm sieve	
	Passing through 1 mm sieve and remaining on 0.5 mm sieve	
	Passing through 0.5 mm sieve and remaining on 0.25 mm sieve	
	Passing through 0.25 mm sieve and remaining on 0.15 mm sieve	36.4
	Passing through 0.15 mm sieve and remaining on 0.075 mm sieve	48.0
	Passing through 0.075 mm sieve and remaining on 0.038 mm sieve	11.4
	Passing through 0.038 mm sieve	4.2
	Total	100.0
	Passing through 3.35 mm sieve and remaining on 0.038 mm sieve	95.8
	Passing through 0.5 mm sieve and remaining on 0.075 mm sieve	84.4
	Passing through 0.25 mm sieve and remaining on 0.038 mm sieve	95.8
Cold water swelling degree		7.3

[0073]

(Manufacture Example 5) Manufacturing of oxidized starch

Tapioca starch (150 g) and 190 g of distilled water were

added to and dispersed in a separable flask, thereby preparing a slurry having a concentration of 38.2% by mass equivalent to the mass of dry matters.

The temperature of the obtained slurry was adjusted to
5 37°C, 18.2 mL of an aqueous sodium hypochlorite solution
(effective chlorine concentration: 14.3%) was then added thereto
at a time such that the effective chlorine concentration to the
mass equivalent to the dry starch was adjusted to 2% by mass/g.

After the addition of the aqueous sodium hypochlorite
10 solution, a 3% by mass aqueous sodium hydroxide solution was
added dropwise thereto to adjust the pH to 9.9.

Thereafter, the sodium hydroxide solution was added
dropwise at the proper time such that the pH was kept in a range
of set pH $\pm$ 0.03 until the end of the reaction, thereby
15 obtaining oxidized starch.

The point in time when a small amount of the slurry sampled
added dropwise to a saturated potassium iodide solution did not
turn purple was regarded as the end of the reaction.

After the confirmation of the end of the reaction, 3% by
20 mass hydrochloric acid was added to the slurry such that the
slurry was neutralized to pH 6, and then the oxidized starch in
the slurry was washed and dehydrated.

Then, the resultant was dried at 40°C overnight,
pulverized, and sieved with a 60-mesh sieve (mesh size: 250 μ m),
25 and the obtained resultant was used as oxidized starch of the
present example.

[0074]

(Manufacture Example 6) Manufacturing of batter

Cake flour (30 parts by mass), 22.4 parts by mass of the powdery granular material 1 obtained in Manufacture Example 4, 28.7 parts by mass of oxidized starch obtained in Manufacture Example 5, 18.9 parts by mass of phosphoric acid crosslinked tapioca starch, 1 part by mass of baking powder, 3 parts by mass of gluten, and 178 parts by mass of water were mixed together and used as a batter.

[0075]

10 (Examples 1 to 11 and Comparative Examples 1 to 3)

In the present examples, Karaage was prepared and evaluated.

(Manufacturing method of Karaage)

1. Chicken breast was cut into pieces each weighing about
15 20 g.

2. Ingredients were mixed together according to the formulation shown in each table, thereby preparing a dusting powder.

3. The chicken breast of 1. was coated with the dusting
20 powder.

4. The chicken breast coated with the dusting powder in 3. was coated with the batter obtained in Manufacture Example 6. The amount of the batter was about 6 g/piece for the chicken breast.

25 5. The chicken breast battered in 4. was deep-fried in palm oil ("refined palm olein oil", manufactured by Sime Darby oils morakot public company limited) at a temperature of 170 to 180°C

for 4 minutes.

6. The chicken breast deep-fried in 5. was arranged on a pad, cooled to room temperature, then put in a plastic container, and stored at -10°C for 1 day.

5 7. The chicken breast after storage in 6. was heated in a microwave oven (800 W, 2 minutes).

8. The chicken breast heated in the microwave oven in 7. was left to stand at room temperature for 5 minutes.

9. For the Karaage obtained by the above procedure, the
10 texture and the adhesion between coating and stuffing were evaluated. The evaluation method, evaluation items, and scoring criteria will be shown below.

[0076]

(Texture Evaluation)

15 Five expert panelists conducted sensory evaluations on the stickiness of coating, crispiness, dryness, and sogginess of the Karaage based on the following scoring criteria, and the average score was adopted as the evaluation score. The samples scored 3.0 or more were considered as acceptable. The results are
20 shown in Tables 2 to 4.

(Stickiness of coating)

1 point: Very sticky

2 points: Sticky (time taken for swallowing the sample is longer than the time taken for swallowing the sample scored 3
25 points)

3 points: Slightly sticky (time taken for swallowing the sample is shorter than the time taken for swallowing the sample

scored 2 points)

4 points: Substantially not sticky (the sample is not sticky at all at first, but feels sticky when chewed)

5 points: Not sticky at all

5 (Crispiness)

1 Point: Not crispy at all

2 Points: Substantially not crispy

3 Points: Slightly crispy

10 4 Points: Crispy (the coating is easily crushed when chewed)

5 Points: Very crispy (the coating is very easily crushed when chewed)

(Dryness and sogginess)

1 Point: Very soggy

15 2 Points: Soggy

3 Points: Substantially not soggy (the sample feels slightly moist)

4 Points: Dry (the sample does not feel moist and has natural texture)

20 5 Points: Very dry

[0077]

(Adhesion)

Five expert panelists evaluated the adhesion between coating and stuffing by the following procedure. The Karaage obtained in (Manufacturing method of Karaage) was halved. For the cut surface, the adhesion between coating and stuffing was evaluated based on the following scoring criteria. Scoring was

conducted through consensus, and a sample graded A was considered as passing. The results are shown in Tables 2 to 4.

A: Coating is not peeled off.

B: Coating is slightly peeled off.

5 C: Coating is peeled off.

[0078]

(Evaluation with texture analyzer)

In Examples 2 to 6, the physical properties of the Karaage obtained in (Manufacturing method of Karaage) were evaluated
10 with a texture analyzer as follows.

Specifically, a plunger was brought into contact with the center of the Karaage, and the Karaage was compressed by 15 mm. At this time, the maximum strength (g) (breaking strength (g)) applied when the sample was broken and the peak count (g) were
15 measured. For each example, the average of values measured for 6 samples was adopted as the measured value. The results are shown in Table 3.

The larger the value of the breaking strength (g), the harder the coating of the Karaage. The larger the value of the
20 peak count (g), the more the coating is crispy. The device and measurement conditions used in the test are as below.

Texture analyzer

Device: TA-XT Plus (manufactured by Stable Micro Systems)

Plunger: Cylinder with a diameter of 5 mm

25 Test speed: 2 mm/s

Trigger force: 5 g

Compression condition: 15 mm compression

[0079]

[Table 2]

		Unit	Comparative Example 1	Comparative Example 2	Example 1	Comparative Example 3
Formulation	Starch 1 processed with oil or fat	Parts by mass	100		90	
	Mixture 1			100		90
	Carboxymethyl cellulose				10	10
	Total		100	100	100	100
Texture evaluation	Stickiness of coating		3.0	3.0	5.0	5.0
	Crispiness		3.0	1.0	4.0	4.0
	Dryness and sogginess		2.0	2.0	4.0	4.0
Adhesion			A	C	A	C

[0080]

As is evident from Table 2, using the dusting powder of the present embodiment made it possible to improve dryness, suppress sogginess, improve the stickiness of coating, maintain crispy texture, and obtain Karaage having coating and stuffing that adhered well together (Example 1).

[0081]

[Table 3]

		Unit	Example 2	Example 3	Example 4	Example 5	Example 6
Formulation	Starch 1 processed with oil or fat	Parts by mass	90	90	90	90	90
	Hydroxypropyl methyl cellulose					10	
	Carboxymethyl cellulose		5	10	15		
	Methyl cellulose						10
	Total		95	100	105	100	100
Starch processed with oil or fat/dusting powder		% by mass	94.74	90.00	85.71	90.00	90.00
Cellulose derivative/dusting powder		% by mass	5.26	10.00	14.29	10.00	10.00
Cellulose derivative/starch processed with oil or fat		Mass ratio	0.06	0.11	0.17	0.11	0.11
Evaluation with texture analyzer	Breaking strength	g	386.1	427.3	456.6	395.2	528.8
	Peak count	g	11.1	17.2	16.1	13.9	20.4
Texture evaluation	Stickiness of coating		3.0	5.0	5.0	3.0	3.0
	Crispiness		3.0	4.0	4.0	3.0	5.0
	Dryness and sogginess		4.0	4.0	4.0	4.0	4.0
Adhesion			A	A	A	A	A

[0082]

As is evident from Table 3, using the dusting powder of each example made it possible to improve dryness, suppress sogginess, improve the stickiness of coating, maintain crispy texture, and obtain Karaage having coating and stuffing that adhered well together.

Specifically, in a case where the Karaage was prepared using the dusting powder in which the content of a cellulose derivative was in a range of 5.26% by mass to 14.29% by mass, in all examples, the dryness was improved, the sogginess was suppressed, the stickiness of coating was improved, the crispy texture was maintained, and Karaage having coating and stuffing that adhered well together could be obtained (Examples 2 to 4).

Specifically, in a case where the Karaage was prepared using the dusting powder that used any of hydroxypropyl methyl cellulose, carboxymethyl cellulose, and methyl cellulose as a cellulose derivative, in all examples, the dryness was improved, the sogginess was suppressed, the stickiness of coating was improved, the crispy texture was maintained, and Karaage having coating and stuffing that adhered well together could be obtained (Examples 3, 5, and 6).

Furthermore, in Examples 3, 4, and 6, more preferable crispiness was obtained. Furthermore, in these examples, more peak counts were obtained in the texture analyzer evaluation.

[0083]

[Table 4]

		Unit	Example 7	Example 8	Example 9	Example 10	Example 11
Formulation	Starch 1 processed with oil or fat	Parts by mass	70	80	90		
	Starch 2 processed with oil or fat					90	
	Starch 3 processed with oil or fat						90
	Carboxymethyl cellulose		30	20	10	10	10
	Total		100	100	100	100	100
Starch processed with oil or fat/dusting powder		% by mass	70.00	80.00	90.00	90.00	90.00
Cellulose derivative/dusting powder		% by mass	30.00	20.00	10.00	10.00	10.00
Cellulose derivative/starch processed with oil or fat		Mass ratio	0.43	0.25	0.11	0.11	0.11
Texture evaluation	Stickiness of coating		4.3	4.3	5.0	3.0	3.7
	Crispiness		5.0	5.0	5.0	4.3	5.0
	Dryness and sogginess		5.0	5.0	5.0	4.7	5.0
Adhesion			A	A	A	A	A

[0084]

As is evident from Table 4, using the dusting powder of each example made it possible to improve dryness, suppress sogginess, improve the stickiness of coating, maintain crispy texture, and obtain Karaage having coating and stuffing that adhered well together.

Specifically, in a case where the Karaage was prepared using the dusting powder for fried food in which the content of starch processed with oil or fat in a range of 70% by mass to 90% by mass, in all examples, the dryness was improved, the sogginess was suppressed, the stickiness of coating was improved, the crispy texture was maintained, and Karaage having coating and stuffing that adhered well together could be obtained (Examples 7 to 9).

In addition, even in a case where different types of starch processed with oil or fat were used, the dryness was improved, the sogginess was suppressed, the stickiness of coating was improved, the crispy texture was maintained, and Karaage having
5 coating and stuffing that adhered well together could be obtained (Examples 9 to 11).

[0085]

This application claims a priority based on Japanese Patent Application No. 2021-113288 filed on July 8, 2021, the entire
10 content of which is incorporated into the present specification.

CLAIMS

[Claim 1] A dusting powder for fried food, comprising:

a cellulose derivative; and

5 a starch processed with oil or fat.

[Claim 2] The dusting powder for fried food according to claim 1,

wherein the cellulose derivative is one compound or two or
10 more compounds selected from the group consisting of methyl
cellulose, hydroxypropyl methyl cellulose, and carboxymethyl
cellulose.

[Claim 3] The dusting powder for fried food according to claim
15 1 or 2,

wherein the cellulose derivative is carboxymethyl
cellulose.

[Claim 4] The dusting powder for fried food according to claim
20 1 or 2,

wherein the starch processed with oil or fat is one starch
or two or more starches selected from the group consisting of
tapioca starch processed with oil or fat, corn starch processed
with oil or fat, potato starch processed with oil or fat, wheat
25 starch processed with oil or fat, rice starch processed with oil
or fat, and pea starch processed with oil or fat.

[Claim 5] The dusting powder for fried food according to claim 1 or 2,

wherein a content of the cellulose derivative in the dusting powder is 1% by mass or more and 70% by mass or less
5 with respect to entirety of the dusting powder.

[Claim 6] The dusting powder for fried food according to claim 1 or 2,

wherein a mass ratio of a content of the cellulose
10 derivative in the dusting powder to a content of the starch processed with oil or fat in the dusting powder is 0.02 or more and 3 or less.

[Claim 7] A fried food comprising:

15 the dusting powder for fried food according to claim 1 or 2.

[Claim 8] A manufacturing method of fried food, comprising:

a step of coating outside of stuffing with the dusting
20 powder for fried food according to claim 1 or 2; and

a step of heating and cooking the stuffing coated with the dusting powder for fried food.

[Claim 9] A method of improving texture of fried food,

25 comprising:

a step of incorporating a cellulose derivative and starch processed with oil or fat into a dusting powder for fried food.

[Claim 10] A method of improving texture in a case where fried food is reheated after storage, the method comprising:

5 a step of incorporating a cellulose derivative and starch processed with oil or fat into a dusting powder for fried food.