

CLAIMS

1. A method for producing a fermented milk, comprising the steps of:
 - (1) preparing a fermented milk mix using at least one
5 starting milk material;
 - (2) heat-pasteurizing the fermented milk mix; and
 - (3) adding a starter to the heat-pasteurized
fermented milk mix to ferment the mixwherein, in performing steps (1) to (3) above, the
10 following operation (A) or (B) is carried out:
 - (A) adding glucose oxidase to a fermented
milk mix having a glucose concentration of 0.003 to 0.05 wt% to
thereby prepare the fermented milk mix in step (1) under the
conditions of that glucose concentration; and
 - 15 (B) adding, before step (3), glucose oxidase
to the heat-pasteurized fermented milk mix having a glucose
concentration of 0.003 to 0.05 wt%.
2. The method according to Claim 1 wherein operation (A)
20 is carried out in step (1), and the heat-pasteurizing in step
(2) is carried out at a temperature of 65°C or above.
3. The method according to Claim 1 or 2 wherein the
starter is a combination of *Lactobacillus bulgaricus* and
25 *Streptococcus thermophilus*.
4. The method according to any one of Claims 1 to 3,
which is a method for producing a fermented milk that undergoes
less change in physical properties caused by coagulation of milk
30 protein than a fermented milk produced without adding glucose
oxidase and/or a fermented milk produced by adding glucose
oxidase under the conditions of a glucose concentration of 1
wt% or more.

5. The method according to Claim 4 wherein the change in physical properties caused by coagulation of milk protein is at least one selected from the group consisting of occurrence of syneresis, an increase in particle size of milk protein and/or fat, and development of grainy texture of the fermented milk.

6. The method according to any one of Claims 1 to 5 wherein the at least one starting milk material is unpasteurized milk.

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7. The method according to any one of Claims 1 to 6 wherein the fermented milk is yogurt.

8. A method for suppressing a change in physical properties caused by coagulation of milk protein in a fermented milk produced by a method comprising the following steps:

15 (1) preparing a fermented milk mix using at least one starting milk material;

(2) heat-pasteurizing the fermented milk mix; and

20 (3) adding a starter to the heat-pasteurized fermented milk mix to ferment the mix

wherein, in performing steps (1) to (3) above, the following operation (A) or (B) is carried out:

25 (A) adding glucose oxidase to a fermented milk mix having a glucose concentration of 0.003 to 0.05 wt% to thereby prepare the fermented milk mix in step (1) under the conditions of that glucose concentration; and

30 (B) adding, before step (3), glucose oxidase to the heat-pasteurized fermented milk mix having a glucose concentration of 0.003 to 0.05 wt%.

9. The method according to Claim 8 wherein operation (A) is carried out in step (1), and the heat-pasteurizing in step (2) is carried out at a temperature of 65°C or above.

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10. The method according to Claim 8 or 9 wherein the starter is a combination of *Lactobacillus bulgaricus* and *Streptococcus thermophilus*.

5 11. The method according to any one of Claims 8 to 10 that suppresses a change in physical properties caused by coagulation of milk protein, compared with a fermented milk produced without adding glucose oxidase and/or a fermented milk produced by adding glucose oxidase under the conditions of a
10 glucose concentration of 1 wt% or more.

12. The method according any one of Claims 8 to 11 wherein the change in physical properties caused by coagulation of milk protein is at least one selected from the group
15 consisting of occurrence of syneresis, an increase in particle size of milk protein and/or fat, and development of grainy texture of the fermented milk.

13. The method according to any one of Claims 8 to 12
20 wherein the at least one starting milk material is unpasteurized milk.

14. The method according to any one of Claims 8 to 13 wherein the fermented milk is yogurt.

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15. The method according to any one of Claims 1 to 7, the method including no operation of adding, as a component other than the at least one staring milk material, a substrate for glucose oxidase or a substance that can serve as a substrate for
30 glucose oxidase over the entire process including steps (1) to (3).

16. The method according to any one of Claims 8 to 14, the method including no operation of adding, as a component
35 other than the at least one staring milk material, a substrate

for glucose oxidase or a substance that can serve as a substrate for glucose oxidase over the entire process including steps (1) to (3).