Claims

[Claim 1] An insoluble mineral fortified milk beverage, characterized in that the milk beverage contains a milk component in a proportion of 3weight% or higher on a nonfat milk solids basis, an insoluble mineral containing an insoluble ingredient of calcium or magnesium or iron and a dispersant comprising κ-carrageenan, and an amount of insoluble-mineral precipitate present in the milk beverage after storage for a period of 7 to 10 days is not greater than 240, with the amount of insoluble-mineral precipitate at the completion of the production being taken as 100,

wherein:

the insoluble ingredient of calcium is in a proportion of 0.01 to 0.5 weight% on a calcium basis;

the insoluble ingredient of magnesium is in a proportion of 0.001 to 0.2 weight% on a magnesium basis;

the insoluble ingredient of iron is in a proportion of 0.0001 to 0.005 weight% on an iron basis;

the proportion of κ-carrageenan is from 0.005 to 0.02 weight%; and

the values of the amount of insoluble-mineral precipitate being obtained directly by insoluble-mineral concentration made on a lower layer of the milk beverage according to Inductive Coupled Plasma atomic emission spectroscopy.

[Claim 2] A calcium fortified milk beverage, characterized in that the insoluble mineral in claim 1 is an insoluble ingredient of calcium and an amount of calcium precipitate present in the milk beverage after 10 days' storage is not greater than 120, with the amount of calcium precipitate at the completion of the production being taken as 100.

[Claim 3] A magnesium fortified milk beverage, characterized in that the insoluble material in claim 1 is an insoluble ingredient of magnesium and an amount of magnesium precipitate present in the milk beverage after 7 days' storage is not greater than 149, with the amount of magnesium precipitate at the completion of the production being taken as 100.

[Claim 4] An iron fortified milk beverage, characterized in that the insoluble mineral in claim 1 is an insoluble ingredient of iron and an amount of iron precipitate present in the milk beverage after 7 days' storage is not greater than 240, with the

amount of iron precipitate at the completion of the production being taken as 100.

[Claim 5] The calcium fortified milk beverage as described in claim 2, wherein an amount of calcium precipitate present in the milk beverage after 15 days' storage is not greater than 130, with the amount of calcium precipitate at the completion of the production being taken as 100.

[Claim 6] The magnesium fortified milk beverage as described in claim 3, wherein an amount of magnesium precipitate present in the milk beverage after 15 days' storage is not greater than 205, with the amount of magnesium precipitate at the completion of the production being taken as 100.

[Claim 7] The iron fortified milk beverage as described in claim 4, wherein an amount of iron precipitate present in the milk beverage after 15 days' storage is not greater than 400, with the amount of iron precipitate at the completion of the production being taken as 100.

~~[Claim 8] The calcium fortified milk beverage as described in claim 2 and/or claim 5, characterized in that, to the total amount of calcium fortified milk beverage, (a) a milk component in a proportion of 3 weight% or higher on a nonfat milk solids basis, (b) an insoluble ingredient of calcium in a proportion of 0.01 to 0.5 weight% on a calcium basis and (c) a dispersant comprising κ-carrageenan, wherein the proportion of κ-carrageenan is from 0.005 to 0.02 weight% are compounded.~~

~~[Claim 9] The magnesium fortified milk beverage as described in claim 3 and/or claim 6, characterized in that, to the total amount of magnesium fortified milk beverage, (a) a milk component in a proportion of 3 weight% or higher on a nonfat milk solids basis, (b) an insoluble ingredient of magnesium in a proportion of 0.001 to 0.2 weight% on a magnesium basis and (c) a dispersant comprising κ-carrageenan, wherein the proportion of κ-carrageenan is from 0.005 to 0.02 weight% are compounded.~~

~~[Claim 10] The iron fortified milk beverage as described in claim 4 and/or claim 7, characterized in that, to the total amount of iron fortified milk beverage, (a) a milk component in a proportion of 3 weight% or higher on a nonfat milk solids basis, (b) an insoluble ingredient of iron in a proportion of 0.0001 to 0.005 weight% on an iron basis and (c) a dispersant comprising κ-carrageenan, wherein the proportion of κ-carrageenan is from 0.005 to 0.02 weight% are compounded.~~

[Claim ~~11~~ 8] A method of producing the calcium fortified milk beverage as described in claim 2 and/or claim 5, characterized by incorporating into a milk beverage (a) a milk component, (b) an insoluble ingredient of calcium and (c) a dispersant comprising κ-carrageenan in proportions of 3 weight% or higher on a nonfat milk solids basis, 0.01 to 0.5 weight% on a calcium basis and 0.005 to 0.02 weight%, respectively, to the total amount of milk beverage.

[Claim ~~12~~ 9] A method of producing the magnesium fortified milk beverage as described in claim 3 and/or claim 6, characterized by incorporating into a milk beverage (a) a milk component, (b) an insoluble ingredient of magnesium and (c) a dispersant comprising κ-carrageenan in proportions of 3 weight% or higher on a nonfat milk solids basis, 0.001 to 0.2 weight% on a magnesium basis and 0.005 to 0.02 weight%, respectively, to the total amount of milk beverage.

[Claim ~~13~~ 10] A method of producing the iron fortified milk beverage as described in claim 4 and/or claim 7, characterized by incorporating into a milk beverage (a) a milk component, (b) an insoluble ingredient of iron and (c) a dispersant comprising κ-carrageenan in proportions of 3 weight% or higher on a nonfat milk solids basis, 0.0001 to 0.005 weight% on an iron basis and 0.005 to 0.02 weight%, respectively, to the total amount of milk beverage.

[Claim ~~14~~ 11] The method of production as described in claim ~~11~~ 8 to claim ~~13~~ 10, characterized by including a step of compounding a milk component, an insoluble ingredient of calcium, magnesium or iron and a dispersant comprising κ-carrageenan and a step of performing heat pasteurization treatment or heat sterilization treatment.

[Claim ~~15~~ 12] The method of production as described in any one of claims ~~11~~ 8 to ~~14~~ 11, characterized in that the milk beverage is cow's milk, processed milk, a lactic acid bacteria beverage or a milk component-containing coffee, tea, powdered green tea, cocoa or fruit juice beverage.