CLAIMS

1. A process for manufacturing a solid fermented soy milk product, comprising: a fermentation step in which a fermentation substrate containing soy milk ~~and with adjusted malic acid and free amino acid concentrations,~~ is fermented with heterofermentative lactic acid bacteria,

wherein malic acid and free amino acid concentrations in the fermentation substrate are adjusted so as to satisfy the relationships specified by inequality (1), inequality (2) and inequality (3),

$0 < x \leq 2000$ (1)

$0 < y \leq 1500$ (2)

$y \geq -27x + 20189$ (3)

[In these inequalities, y represents the malic acid concentration (ppm by mass), and x represents the free amino acid concentration (ppm by mass).] and

wherein the solid includes the concept of gel and sol.

~~2. The process according to claim 1, wherein the malic acid and free amino acid concentrations are adjusted so as to satisfy the relationships specified by inequality (1), inequality (2) and inequality (3).~~

~~$0 < x \leq 2000$ (1)~~

~~$0 < y \leq 1500$ (2)~~

~~$y \geq -27x + 20189$ (3)~~

~~[In these inequalities, y represents the malic acid concentration (ppm by mass), and x represents the free amino acid concentration (ppm by mass).]~~

2. ~~3.~~ The process according to claim 1, wherein the malic acid and

free amino acid concentrations are adjusted so as to satisfy the relationships specified by inequality (1), inequality (2), inequality (3) and inequality (4).

~~$0 < x \leq 2000$ (1)~~

~~$0 < y \leq 1500$ (2)~~

~~$y \geq 27x + 20189$ (3)~~

$y \geq -5.58x + 4431$ (4)

~~[In these inequalities, y represents the malic acid concentration (ppm by mass), and x represents the free amino acid concentration (ppm by mass).]~~

3. ~~4.~~ A process for manufacturing a solid fermented soy milk product, comprising: a fermentation step in which a fermentation substrate containing soy milk ~~and with adjusted malic acid and free amino acid concentrations,~~ is fermented with heterofermentative lactic acid bacteria,

wherein malic acid and free amino acid concentrations in the fermentation substrate are adjusted so as to satisfy the relationships specified by ~~The process according to claim 1, wherein the malic acid and free amino acid concentrations are adjusted so as to satisfy the relationships specified by~~ inequality (3), inequality (4) and inequality (5).

$y \geq -27x + 20189$ (3)

$y \geq -5.58x + 4431$ (4)

$y \leq -1.95x + 2622$ (5)

[In these inequalities, y represents the malic acid concentration (ppm by mass), and x represents the free amino acid concentration (ppm by mass). A proviso here is that $y > 0$.] and

wherein the solid includes the concept of gel and sol.

4. ~~5.~~ The process according to any one of claims 1 to 3 4, wherein the heterofermentative lactic acid bacteria are lactic acid bacteria belonging to *Lactobacillus brevis*.

5. ~~6.~~ The process according to claim 4 ~~5~~, wherein the heterofermentative lactic acid bacteria are one or more strains selected from among *Lactobacillus brevis* SBC8803 (deposit number: FERM BP-10632), *Lactobacillus brevis* SBC8027 (deposit number: FERM BP-10630), *Lactobacillus brevis* SBC8044 (deposit number: FERM BP-10631), *Lactobacillus brevis* JCM1061, *Lactobacillus brevis* JCM1065 and *Lactobacillus brevis* JCM1170.

6. ~~7.~~ The process according to any one of claims 1 to 5 ~~6~~, wherein the heterofermentative lactic acid bacteria is *Lactobacillus brevis* SBC8803 (deposit number: FERM BP-10632).

7. ~~8.~~ The process according to any one of claims 1 to 6 ~~7~~, wherein the free amino acid concentration is adjusted by addition of a product of proteolysis.

8. ~~9.~~ The process according to claim 7 ~~8~~, wherein the product of proteolysis is soybean peptide.

9. ~~10.~~ The process according to any one of claims 1 to8 ~~9~~, wherein the fermentation substrate is fermented by one or more types of lactic acid bacteria selected from the group consisting of *Streptococcus thermophilus*, *Lactobacillus delbrueckii* subspecies *bulgaricus* and *Lactobacillus delbrueckii* subspecies *lactis*, in addition to the heterofermentative lactic acid bacteria.

10. ~~11.~~ A solid fermented soy milk product produced by the process according to any one of claims 1 to 9 ~~10~~.

11. ~~12.~~ A food or beverage containing the solid fermented soy milk product according to claim 10 ~~11~~.

CLAIMS

1. A process for manufacturing a solid fermented soy milk product, comprising: a fermentation step in which a fermentation substrate containing soy milk-is fermented with heterofermentative lactic acid bacteria,

wherein malic acid and free amino acid concentrations in the fermentation substrate are adjusted so as to satisfy the relationships specified by inequality (1), inequality (2) and inequality (3),

$0 < x \leq 2000$ (1)

$0 < y \leq 1500$ (2)

$y \geq -27x + 20189$ (3)

[In these inequalities, y represents the malic acid concentration (ppm by mass), and x represents the free amino acid concentration (ppm by mass).] and

wherein the solid includes the concept of gel and sol.

2. The process according to claim 1, wherein the malic acid and free amino acid concentrations are adjusted so as to satisfy the relationships specified by inequality (1), inequality (2), inequality (3) and inequality (4)

$y \geq -5.58x + 4431$ (4)

3. A process for manufacturing a solid fermented soy milk product, comprising: a fermentation step in which a fermentation substrate containing soy milk-is fermented with heterofermentative lactic acid bacteria,

wherein malic acid and free amino acid concentrations in the fermentation substrate are adjusted so as to satisfy the relationships

specified byinequality (3), inequality (4) and inequality (5).

$y \geq -27x + 20189$ (3)

$y \geq -5.58x + 4431$ (4)

$y \leq -1.95x + 2622$ (5)

[In these inequalities, y represents the malic acid concentration (ppm by mass), and x represents the free amino acid concentration (ppm by mass). A proviso here is that $y > 0$.] and

wherein the solid includes the concept of gel and sol.

4. The process according to any one of claims 1 to 3, wherein the heterofermentative lactic acid bacteria are lactic acid bacteria belonging to *Lactobacillus brevis*.

5. The process according to claim 4, wherein the heterofermentative lactic acid bacteria are one or more strains selected from among *Lactobacillus brevis* SBC8803 (deposit number: FERM BP-10632), *Lactobacillus brevis* SBC8027 (deposit number: FERM BP-10630), *Lactobacillus brevis* SBC8044 (deposit number: FERM BP-10631), *Lactobacillus brevis* JCM1061, *Lactobacillus brevis* JCM1065 and *Lactobacillus brevis* JCM1170.

6. The process according to any one of claims 1 to 5, wherein the heterofermentative lactic acid bacteria is *Lactobacillus brevis* SBC8803 (deposit number: FERM BP-10632).

7. The process according to any one of claims 1 to 6, wherein the free amino acid concentration is adjusted by addition of a product of proteolysis.

8. The process according to claim 7, wherein the product of proteolysis is soybean peptide.

9. The process according to any one of claims 1 to 8, wherein the

fermentation substrate is fermented by one or more types of lactic acid bacteria selected from the group consisting of *Streptococcus thermophilus*, *Lactobacillus delbrueckii* subspecies *bulgaricus* and *Lactobacillus delbrueckii* subspecies *lactis*, in addition to the heterofermentative lactic acid bacteria.

10. A solid fermented soy milk product produced by the process according to any one of claims 1 to 9.

11. A food or beverage containing the solid fermented soy milk product according to claim 10.