

CLAIMS

1. A concentrated liquid nutritional composition, preferably a liquid human milk fortifier, comprising from 5% to 50% by weight protein, preferably from 20% to 40%, on a dry weight basis,
wherein at least a portion of the protein is extensively hydrolyzed casein, preferably wherein the casein is hypoallergenic protein, more preferably wherein the protein is 100% by weight extensively hydrolyzed casein, and
wherein the concentrated liquid nutritional composition comprises a solids content of greater than 50% by weight, preferably from 50% by weight to 65% by weight, and
wherein the concentrated liquid nutritional composition has a water activity of less than 0.90, preferably less than 0.875, more preferably less than 0.86.
2. The concentrated liquid nutritional composition of claim 1, additionally comprising a probiotic.
3. The concentrated liquid nutritional composition of either one of claims 1 or 2, wherein the composition is an adult liquid nutritional composition.
4. The concentrated liquid nutritional composition of claim 2, comprising from 10^3 to 10^{11} CFU/mL probiotic, preferably from 10^7 to 10^{10} CFU/mL probiotic.
5. The concentrated liquid nutritional composition of any one of the preceding claims, wherein the fortifier has a pH of from 4.6 to 6.5, preferably from 4.6 to 5.2.
6. The concentrated liquid nutritional composition of any one of the preceding claims, further comprising carbohydrate, fat, vitamins, and minerals.

7. The concentrated liquid nutritional composition of any one of the preceding claims, wherein the concentrated liquid nutritional composition comprises from 20% to 40% by weight protein, on a dry weight basis.
8. The concentrated liquid nutritional composition of any one of the preceding claims, further comprising a stabilizer system comprising an octenyl succinic anhydride modified corn starch and a low acyl gellan gum, preferably wherein the octenyl succinic anhydride modified corn starch is present in an amount of from 0.6% to 2.0% by weight of the concentrated liquid human milk fortifier; preferably wherein the low acyl gellan gum is present in an amount of from greater than 125 ppm to 800 ppm; preferably wherein the concentrated liquid nutritional composition is aseptically-sterilized.
9. The concentrated liquid nutritional composition of claim 8, further comprising an octenyl succinic anhydride modified potato starch.
10. A method of fortifying breast milk comprising mixing a liquid human milk fortifier with breast milk in a volume to volume ratio of less than or equal to 1:10, preferably from 1:11 to 1:14, more preferably from 1:11 to 1:12, the liquid human milk fortifier comprising from 5% to 50% by weight protein, on a dry weight basis, wherein at least a portion of the protein is extensively hydrolyzed casein, preferably wherein the casein is hypoallergenic protein, more preferably wherein the protein is 100% by weight extensively hydrolyzed casein, and wherein the liquid human milk fortifier comprises a solids content of greater than 50% by weight, preferably from 50% by weight to 65% by weight, and wherein the liquid human milk fortifier has a water activity of less than 0.90, preferably less than 0.86.

11. The method of claim 10, wherein the liquid human milk fortifier further comprises a probiotic.
12. The method of claim 11, wherein the liquid human milk fortifier comprises from 10^3 to 10^{11} CFU/mL probiotic, preferably from 10^7 to 10^{10} CFU/mL probiotic.
13. The method of either one of claims 11 or 12, wherein the probiotic is present in the liquid human milk fortifier in a form selected from the group consisting of freeze-dried, an oil droplet, a bacterial suspension solution, and encapsulated.
14. The method of any one of claims 10 to 13, wherein the liquid human milk fortifier has a pH of from 4.6 to 5.2.
15. The method of any one of claims 10 to 14, wherein the liquid human milk fortifier further comprises a stabilizer system comprising an octenyl succinic anhydride modified corn starch and a low acyl gellan gum.

CLAIMS:

1. A concentrated liquid nutritional composition comprising:
from 5% to 50% by weight protein, on a dry weight basis, wherein at least a portion of the protein is extensively hydrolyzed casein;
wherein the concentrated liquid nutritional composition has a solids content of greater than 50% by weight; and
wherein the concentrated liquid nutritional composition has a water activity of less than 0.90.
2. The concentrated liquid nutritional composition of claim 1, further comprising a probiotic.
3. The concentrated liquid nutritional composition of claim 2, comprising from 10^3 to 10^{11} CFU/mL probiotic.
4. The concentrated liquid nutritional composition according to any one of claims 1-3, wherein the composition is an adult liquid nutritional composition.
5. The concentrated liquid nutritional composition according to any one of claims 1-3, wherein the composition is a liquid human milk fortifier.
6. The concentrated liquid nutritional composition according to any one of claims 1-3, wherein the composition has a pH of from 4.6 to 6.5.
7. The concentrated liquid nutritional composition according to any one of claims 1-3, further comprising carbohydrate, fat, vitamins, and minerals.
8. The concentrated liquid nutritional composition according to any one of claims 1-3, wherein the concentrated liquid nutritional composition comprises from 20% to 40% by weight protein, on a dry weight basis.

9. The concentrated liquid nutritional composition according to any one of claims 1-3, further comprising a stabilizer system comprising an octenyl succinic anhydride modified corn starch and a low acyl gellan gum, wherein the octenyl succinic anhydride modified corn starch is present in an amount of from 0.6% to 2.0% by weight of the composition, and wherein the low acyl gellan gum is present in an amount of from greater than 125 ppm to 800 ppm.
10. The concentrated liquid nutritional composition according to any one of claims 1-3, wherein the composition includes a stabilizer system comprising an octenyl succinic anhydride modified potato starch.
11. The concentrated liquid nutritional composition according to any one of claims 1-3, wherein the protein is 100% by weight extensively hydrolyzed casein.
12. The concentrated liquid nutritional composition according to any one of claims 1-3, wherein the composition has a caloric density of from 1.25 kcal/mL to 5 kcal/mL.
13. A method of fortifying breast milk, the method comprising:
 - mixing a liquid human milk fortifier with breast milk in a volume to volume ratio of less than or equal to 1:10;
 - wherein the liquid human milk fortifier comprises from 5% to 50% by weight protein, on a dry weight basis, and wherein at least a portion of the protein is extensively hydrolyzed casein;
 - wherein the liquid human milk fortifier has a solids content of greater than 50% by weight; and
 - wherein the liquid human milk fortifier has a water activity of less than 0.90.
14. The method of claim 13, wherein the liquid human milk fortifier further comprises a probiotic.
15. The method of claim 14, wherein the liquid human milk fortifier comprises from 10^3 to 10^{11} CFU/mL probiotic.

16. The method of either one of claims 14 or 15, wherein the probiotic is present in the liquid human milk fortifier in a form selected from the group consisting of freeze-dried, an oil droplet, a bacterial suspension solution, and encapsulated.

17. The method according to any one of claims 13-15, wherein the liquid human milk fortifier is mixed with breast milk in a volume to volume ratio of from 1:14 to 1:11.

18. The method according to any one of claims 13-15, wherein the liquid human milk fortifier has a pH of from 4.6 to 5.2.

19. The method according to any one of claims 13-15, wherein the liquid human milk fortifier further comprises a stabilizer system comprising an octenyl succinic anhydride modified corn starch and a low acyl gellan gum.

20. The method according to any one of claims 13-15, wherein the fortified breast milk has a caloric density of from 1.4 kcal/mL to 2.7 kcal/mL.