CLAIMS

What is claimed is:

1. The use of a nutritional composition comprising:

a) a fat or lipid source;

b) a protein source;

c) lactoferrin produced by a non-human source, wherein the lactoferrin has at least 48% homology with the amino acid sequence AVGEQELRKCNQWSGL at the HLf (349-364) fragment,

wherein the lactoferrin is present at a level of 70 mg/100 kcal to 220 mg/100 kcal,

for the manufacture of a nutritional composition to stimulate at least one type of innate immune cell selected from the group consisting of macrophages, neutrophils, dendritic cells, and combinations thereof.

2. The use according to claim 1, wherein the nutritional composition is to be administered to an infant or a child.

3. The use according to claim 1, wherein the fat or lipid source is present at a level of 3 g/100 kcal to 7 g/100 kcal.

4. The use according to claim 1, wherein protein source is present at a level of 1 g/100 kcal to 5 g/100 kcal.

5. The use according to claim 1, wherein the lactoferrin is selected from the group consisting of non-human lactoferrin, human lactoferrin produced by a genetically modified organism, and combinations thereof.

6. The use according to claim 1, wherein the lactoferrin is stable and remains active at a pH of from 4.6 to 7 and a temperature of from 65°C to 120°C.

7. The use according to claim 6, wherein the nutritional composition has been subject to pasteurization conditions.

8. The use according to claim 1, wherein the nutritional composition comprises 0.5 mg/100 kcal to 5 mg/100 kcal of iron, including iron bound to lactoferrin.

9. The use according to claim 1, wherein the nutritional composition further comprises 5 mg/100 kcal to 100 mg/100 kcal of at least one source of long chain polyunsaturated fatty acids.

10 The use according to claim 1, further comprising the step of administering at least one probiotic.

Claims

What is claimed is:

1. An infant formula comprising:

a) a fat or lipid source;

b) a protein source;

c) lactoferrin produced by a non-human source, wherein the lactoferrin has at least 48% homology with the amino acid sequence AVGEQELRKCNQWSGL at the HLf (349-364) fragment, wherein the lactoferrin is present at a level of 70 mg/100 kcal to 220 mg/100 kcal, and

wherein the infant formula is suitable for stimulating at least one type of innate immune cell selected from the group consisting of macrophages, neutrophils, dendritic cells, and combinations thereof.

2. The formula according to claim 1, wherein the formula further comprises at least one prebiotic selected from the group consisting of polydextrose, galactooligosaccharides, and combinations thereof.

3. The formula according to claim 1, wherein the fat or lipid source is present at a level of 3 g/100 kcal to 7 g/100 kcal.

4. The formula according to claim 1, wherein protein source is present at a level of 1 g/100 kcal to 5 g/100 kcal.

5. The formula according to claim 1, wherein the lactoferrin is selected from the group consisting of non-human lactoferrin, human lactoferrin produced by a genetically modified organism, and combinations thereof.

6. The formula according to claim 1, wherein the lactoferrin is stable and remains active at a pH of from 4.6 to 7 and a temperature of from 65°C to 120°C.

7. The formula according to claim 6, wherein the composition has been subject to pasteurization conditions.

8. The formula according to claim 1, wherein the composition comprises 0.5 mg/100 kcal to 5 mg/100 kcal of iron, including iron bound to lactoferrin.

9. The formula according to claim 1, wherein the composition further comprises 5 mg/100 kcal to 100 mg/100 kcal of at least one source of long chain polyunsaturated fatty acids.

10. The formula according to claim 1, further comprising at least one probiotic.