CLAIMS

What is claimed is:

1. ~~A method~~ Use of alpha-lipoic acid in the manufacture of a nutritional composition for promoting neuronal health and/or development, ~~comprising providing a~~ the nutritional composition ~~which comprises~~ comprising a carbohydrate source, a fat source, a protein source, and a neurologic component, wherein the neurologic component comprises lactoferrin, zinc sulfate, and at least one organosulfur compound, ~~and combinations thereof~~ wherein the organosulfur compound comprises alpha-lipoic acid present in an amount from about 0.1 mg/100 kcal to about 35 mg/100 kcal of the nutritional composition.

~~2. The method of claim 1, wherein the organosulfur compound comprises alpha-lipoic acid present in an amount from about 0.1 mg/100 kcal to about 35 mg/100 kcal.~~

~~3~~2. The method of claim 1, wherein zinc sulfate is present in an amount of from about 0.1 mg/100 kcals to about 2 mg/100 kcals of nutritional composition.

~~4~~3. The method of claim 1, wherein the at least one organosulfur compound further comprises at least one compound selected from the group consisting of allyl sulfide, allyl disulfide, and sulforaphane.

~~5~~4. The method of claim 1, wherein the nutritional composition further comprises sialic acid.

~~6~~5. The method of claim 1, wherein the nutritional composition further comprises a prebiotic.

~~7~~6. The method of claim 1, wherein the nutritional composition further comprises docosahexaenoic acid.

~~8~~7. The method of claim 1, wherein the nutritional composition is an infant formula.

~~9~~8. The method of claim 1, wherein the nutritional composition further comprises a probiotic.

~~10~~9. ~~A method~~ Use of alpha-lipoic acid in the manufacture of a nutritional composition for promoting neuronal health and/or development, ~~comprising providing a~~ the nutritional composition ~~which comprises~~ comprising per 100 kcal:

   (i) between about 6 g and about 22 g of a carbohydrate source;

   (ii) between about 1 g and about 7 g of a protein source;

   (iii) between about 1.3 g and about 7.2 g of a fat source; and

   (iv) a neurologic component comprising lactoferrin, zinc sulfate, and at least one organosulfur compound, ~~and combinations thereof~~ wherein the at least one organosulfur compound comprises alpha-lipoic acid in an amount of between about 0.1 mg to about 37 mg per 100 kcals of the nutritional composition.

~~11~~10. The method of claim ~~10~~9, wherein the at least one organosulfur compound is present in an amount of between about 0.1 mg and about 200 mg per 100 kcals nutritional composition.

~~12. The method of claim 10, wherein the at least one organosulfur compound comprises alpha-lipoic acid in an amount of between about 0.1 mg to about 37 mg per 100 kcals of nutritional composition.~~

~~13~~11. The method of claim ~~10~~9, wherein the nutritional composition further comprises per 100 kcal between about 0.3 g and about 1.2 g of prebiotic.

~~14~~12. The method of claim ~~10~~9, wherein the nutritional composition further comprises per 100 kcal between about 0.5 mg and about 45 mg of sialic acid.

~~15~~13. The method of claim ~~10~~9, wherein the nutritional composition further comprises between about 5 mg/100 kcal and 75 mg/100 kcal of docosahexaenoic acid.

~~16~~14. A nutritional composition comprising:

(i) a carbohydrate source;

(ii) a protein source;

(iii) a fat source; and

(iv) a neurologic component comprising lactoferrin, zinc sulfate, and at least one organosulfur compound, wherein the at least one organosulfur compound comprises alpha-lipoic acid in an amount of between about 0.1 mg to about 37 mg per 100 kcals of the nutritional composition.

~~17. The nutritional composition of claim 16, wherein the organosulfur compound is alpha-lipoic acid and is present in an amount from about 0.1 mg/100 kcal to about 37 mg/100 kcal.~~

~~18~~15. The nutritional composition of claim ~~16~~14, further comprising sialic acid.

~~19~~16. The nutritional composition of claim ~~16~~14, further comprising docosahexaenoic acid.

~~20~~17. The nutritional composition of claim ~~16~~14, wherein the nutritional composition is an infant formula.