CLAIMS

What is claimed is:

1. A nutritional composition comprising:
    (i) a carbohydrate source,
    (ii) a protein source,
    (iii) a fat source, and
    (iv) magnesium threonate in an amount of from about 4 mg/100 kcal to about 45 mg/100 kcal.

~~2. The nutritional composition of claim 1, wherein magnesium threonate is present in an amount from about 4 mg/100 kcal to about 45 mg/100 kcal.~~

~~3.~~2. The nutritional composition of claim 1, further comprising a prebiotic.

~~4.~~3. The nutritional composition of claim ~~3~~2, wherein the prebiotic is selected from the group consisting of polydextrose and galaco- oligosaccharide ~~oligosacchardie~~.

~~5.~~4. The nutritional composition of claim 1, 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 g and about 10.3 g of a fat source; and
    (iv) between about ~~4~~ 6 mg and about ~~45~~ 34 mg of magnesium threonate.

~~6.~~5. The nutritional composition of claim ~~5~~4, further comprising DHA from about 5 mg to about 75 mg.

~~7.~~6. The nutritional composition of claim ~~5~~4, further comprising a probiotic from about 1 x 10^4 cfu to about 1.5 x 10^{10} cfu.

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

~~9.~~8. A method of promoting GI tolerance in a pediatric subject by providing a nutritional composition comprising a carbohydrate source, a protein source, a fat source, and magnesium threonate in an amount of between 4 mg and 45 mg to a pediatric subject.

~~10.~~9. The method of claim ~~9~~8, wherein the nutritional composition comprises 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 g and about 10.3 g of a fat source;

(iv) between about ~~4~~ 6 mg and about ~~45~~ 34 mg of magnesium threonate;

(iv) between about 0.1 mg and about 1 mg of polydextrose; and

(v) between about 0.1 mg and about 1 mg of galacto-oligosaccharide.

~~11.~~10. The method of claim ~~10~~9, wherein the nutritional composition comprises magnesium threonate from about 6 mg/100 kcal to about 26 mg/100 kcal.

~~12.~~11. The method of claim ~~11~~10, wherein the nutritional composition comprises magnesium threonate from about 15 mg/100 kcal to about 25 mg/100 kcal.

~~13.~~12. The method of claim ~~9~~8, wherein the nutritional composition further comprises DHA.

~~14.~~13. The method of claim ~~9~~8, wherein the nutritional composition is an infant formula.

~~15.~~14. A method of promoting neurological health in a pediatric subject by providing a nutritional composition comprising a carbohydrate source, a protein source, a fat source, and magnesium threonate in an amount of between 4 mg and 45 mg to a pediatric subject.

~~16.~~15. The method of claim ~~15~~14, wherein the nutritional composition comprises 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 g and about 10.3 g of a fat source; and

(iv) between about ~~4~~ 6 mg and about ~~45~~ 34 mg of magnesium threonate.

~~17.~~16. The method of claim ~~16~~15, wherein the nutritional composition comprises magnesium threonate from about 6 mg/100 kcal to about 26 mg/100 kcal.

~~18.~~17. The method of claim ~~17~~16, wherein the nutritional composition comprises magnesium threonate from about 15 mg/100 kcal to about 25 mg/100 kcal.

~~19.~~18. The method of claim ~~15~~14, wherein the nutritional composition further comprises DHA.

~~20.~~19. The method of claim ~~15~~14, wherein the nutritional composition is an infant formula.