Nicholson JK. Host-gut microbiota metabolic interactions. Science 2012; 336:1262-67.

Wall R, Marques TM, O'Sullivan O, *et al.* Contrasting effects of Bifidobacterium breve NCIMB 702258 and Bifidobacterium breve DPC 6330 on the composition of murine brain fatty acids and gut microbiota. Am J Clin Nutr 2012, Vol. 95, p. 1278-87.

BRIEF SUMMARY

[0007] A nutritional composition comprising at least one human milk oligosaccharide selected from 6'-sialyllactose, lacto-N-neotetraose, lacto-N-tetraose, disialylated lacto-N-tetraose, 3'-fucosyllactose, and 3'-sialyllactose. The nutritional composition is used in a method of reducing stress in an individual in need thereof.

[0007a] Also provided is the use of a nutritional composition in the manufacture of a medicament for treating stress related to at least one of excess anxiety and painful-stimuli hypersensitivity, the nutritional composition comprising at least one human milk oligosaccharide selected from 6'-sialyllactose and lacto-N-neotetraose.

What is claimed is:

1. Use of a nutritional composition in the manufacture of a medicament for treating stress related to at least one of excess anxiety and painful-stimuli hypersensitivity, the nutritional composition comprising at least one human milk oligosaccharide selected from 6'-sialyllactose and lacto-N-neotetraose.

2. The use of claim 1, wherein the at least one human milk oligosaccharide is lacto-N-neotetraose.

3. The use of any one of claims 1-2, wherein the at least one human milk oligosaccharide is 6'-sialyllactose.

4. The use of any one of the preceding claims, wherein the nutritional composition is a liquid and comprises from about 0.001 mg/mL to about 20 mg/mL of the human milk oligosaccharide.

5. The use of claim 4, wherein the nutritional composition is a liquid and comprises from about 0.001 mg/mL to about 10 mg/mL of the human milk oligosaccharide.

6. The use of claim 5, wherein the nutritional composition is a liquid and comprises from about 0.001 mg/mL to about 5 mg/mL of the human milk oligosaccharide.

7. The use of any one of claims 1-3, wherein the nutritional composition is a powder and comprises from about 0.0005% to about 5% of the human milk oligosaccharide by weight of the powder.

8. The use of claim 7, wherein the nutritional composition is a powder and comprises from about 0.01% to about 1% of the human milk oligosaccharide by weight of the powder.

9. The use of any one of the preceding claims, wherein the nutritional composition further comprises at least one of fat, protein, or carbohydrate.

10. The use of any one of the preceding claims, wherein the nutritional composition further comprises protein.

11. The use of any one of the preceding claims, wherein the nutritional composition is an infant formula.

12. The use of any one claims 1-3 and 9-11, wherein the nutritional composition is a nutritional bar, liquid, or powder.

13. The use of any one of the preceding claims, wherein stress is reduced by improving at least one of mood, relaxation, or calmness in the individual.

14. The use of claim 1, wherein the nutritional composition is an adjunctive therapy.