CLAIMS

What is claimed is:

1. ~~A method for suppressing a proinflammatory response, treating an inflammatory disease, and/or reducing the level of a proinflammatory cytokine in a subject by administering~~Use of ~~a composition comprising~~ a casein hydrolysate ~~to the subject~~, wherein the hydrolysate consists of peptides with a molecular weight of more than 500 Da, in the manufacture of a composition for suppressing a proinflammatory response, treating an inflammatory disease, and/or reducing the level of a proinflammatory cytokine in a subject.

2. The ~~method~~ use according to claim 1, wherein the inflammatory disease is selected from the group consisting of type 1 diabetes, Crohn's disease, Ulcerative colitis, Metabolic syndrome, HLA-DQ8 related diseases, HLA-DQ2 related diseases, and Celiac disease..

3. The ~~method~~ use according to claim 2, wherein the pro-inflammatory cytokine is selected from the group consisting of IL-1, IL-6, IL-8, TNF-α, TNF-β, members of the IL-20 family, IL-33, LIF, IFN-γ, OSM, CNTF, TGF-β, GM-CSF, IL-11, IL-12, IL-17, IL-18, and combinations thereof.

4. The ~~method~~ use according to claim 1, wherein the hydrolysate comprises at least three peptides selected from the group consisting of SEQ ID NO: 1-68.

5. The ~~method~~ use according to claim 4, wherein the hydrolysate comprises at least three peptides selected from the group consisting of SEQ ID NO: 1-24.

6. The ~~method~~ use according to claim 5, wherein the hydrolysate comprises at least three peptide selected from the group consisting of SEQ ID NO: 1-15.

7. The ~~method~~ use according to claim 4, wherein the hydrolysate comprises a peptide with SEQ ID NO: 1 and at least three peptides selected from the group consisting of SEQ ID NO: 2-68.

8. The ~~method~~ use according to claim 1, wherein the hydrolysate is to be administered in a nutritional composition, comprising a lipid or a fat phase, and a protein source.

9. The ~~method~~ use according to claim 8, wherein the nutritional composition comprises about 0.1 to about 1 g/100 kcal of a prebiotic composition, wherein the prebiotic composition comprises at least 20% of an oligosaccharide.

10. The ~~method~~ use according to claim 8, wherein, the nutritional composition further comprises about 5 to about 100 mg/100 kcal of a source of long chain polyunsaturated fatty acids which comprises docosahexanoic acid.

11. The ~~method~~ use according to claim 10, wherein the nutritional composition further comprises arachidonic acid.

12. The ~~method~~ use according to claim 1, wherein the subject is a human child or juvenile.

13. The ~~method~~ use according to claim 1, wherein the nutritional formulation additionally comprises one or more of carbohydrates, nucleic acids, lipids, minerals, anabolic nutrients, vitamins, antioxidants, probiotic bacterial strains and lipotropic agents.