CLAIMS

What is claimed is:

1. A method for promoting healthy weight in a subject by administering a composition comprising a casein hydrolysate to the subject, wherein the hydrolysate consists of peptides with a molecular weight of more than 500 Da.

2.The method according to claim 1 wherein plasma concentration of adiponectin is increased.

3.The method according to claim 2 wherein the plasma concentration of adiponectin is adjusted to between 5-15 µg/ml

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

9. The method 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 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 docosahexaenoic acid.

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

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

13. The method 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.

CLAIMS

What is claimed is:

1. A method for promoting healthy weight in a subject by administering a composition comprising a casein hydrolysate to the subject, wherein the hydrolysate consists of peptides with a molecular weight of more than 500 Da, wherein the peptides comprise at least 10 peptides selected from the following: SEQ ID NO: 1-3, SEQ ID NO: 5-12, SEQ ID NO: 14-16, SEQ ID NO: 18-20, SEQ ID NO: 22-23, SEQ ID NO: 25-29, SEQ ID NO: 33-45, SEQ ID NO: 47-56, SEQ ID NO: 58-59, SEQ ID NO: 61-62 and SEQ ID NO: 64-68, further wherein healthy weight is promoted by an increase in the concentration of adiponectin in the subject.

2. The method according to claim 1, wherein the plasma concentration of adiponectin is adjusted to between 5-15 µg/ml

3. The method according to claim 1, wherein the hydrolysate comprises at least three additional peptides selected from the group consisting of SEQ ID NO: 1-29, SEQ ID NO: 33-45 and SEQ ID NO: 47-68.

4. The method according to claim 3, wherein the hydrolysate comprises at least three additional peptides selected from the group consisting of SEQ ID NO: 1-24.

5. The method according to claim 4, wherein the hydrolysate comprises at least three additional peptides selected from the group consisting of SEQ ID NO: 1-15.

6. The method according to claim 3, wherein the hydrolysate comprises a peptide with SEQ ID NO: 1 and at least three additional peptides selected from the group consisting of SEQ ID NO: 2-29, SEQ ID NO: 33-45 and SEQ ID NO: 47-68.

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

8. The method according to claim 7, 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.

9. The method according to claim 7, 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 docosahexaenoic acid.

10. The method according to claim 9, wherein the nutritional composition further comprises arachidonic acid.

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

12. The method 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.