CLAIMS

What is claimed is:

1. A nutritional composition comprising:
   (i) a carbohydrate source;
   (ii) a fat source; and
   (iii) a protein equivalent source,
   wherein
   a) 20% to 80% of the protein equivalent source includes a peptide component comprising SEQ ID NO 4, SEQ ID NO 13, SEQ ID NO 17, SEQ ID NO 21, SEQ ID NO 24, SEQ ID NO 30, SEQ ID NO 31, SEQ ID NO 32, SEQ ID NO 51, SEQ ID NO 57, SEQ ID NO 60, and SEQ ID NO 63; and
   b) 20% to 80% of the protein equivalent source comprises an intact protein, a partially hydrolyzed protein, or combinations thereof.
2. The nutritional composition of claim 1, wherein the peptide component is present in an amount from about 0.2 g/100 kcals to about 5.6 g/100 kcals.
3. The nutritional composition of claim 1, wherein the peptide component further comprises at least 10 additional peptides selected from Table 1.
4. The nutritional composition of claim 1, wherein the protein equivalent source comprises partially hydrolyzed protein having a degree of hydrolysis of less than 40%.
5. The nutritional composition of claim 1, further comprising at least one long-chain polyunsaturated fatty acid.
6. The nutritional composition of claim 5, wherein the at least one long-chain polyunsaturated fatty acid is selected from the group consisting of docosahexaenoic acid and arachidonic acid.
7. The nutritional composition of claim 1, further comprising a culture supernatant from a late-exponential growth phase of a probiotic batch-cultivation process, for use in the treatment or prevention of infection by a pathogen.
8. The nutritional composition of claim 1, further comprising a probiotic.
9. The nutritional composition of claim 1, further comprising a prebiotic.
10. The nutritional composition of claim 1, wherein when administered to a subject, the nutritional composition reduces the production of a pro-

inflammatory cytokines selected from the group consisting of IL-12, IL17, IL-5, IL-4, IFN-γ, IL-8, TNF-α, IL-6 and IL-1.

11. A nutritional composition, comprising:

(i) a carbohydrate source;

(ii) a fat source; and

(iii) a protein equivalent source;

wherein

a) 20% to 80% of the protein equivalent source includes a peptide component comprising at least 5 peptides selected from Table 1 and at least 3 additional peptides selected from Table 2; and

b) 20% to 80% of the protein equivalent source comprises an intact protein, a partially hydrolyzed protein, or combinations thereof.

12. The nutritional composition of claim 11, comprising at least 10 additional peptides selected from Table 1.

13. The nutritional composition of claim 11, wherein the protein equivalent source comprises casein hydrolysate having a molar mass distribution of greater than 500 Daltons.

14. The nutritional composition of claim 11, wherein the protein equivalent source comprises partially hydrolyzed protein having a degree of hydrolysis of less than 40%.

15. The nutritional composition of claim 11, further comprising a prebiotic.

16. The nutritional composition of claim 11, further comprising a culture supernatant from a late-exponential growth phase of a probiotic batch-cultivation process, for use in the treatment or prevention of infection by a pathogen.

17. A method for reducing an inflammatory response in a subject, comprising providing to the subject, a nutritional composition comprising:

a carbohydrate source,

a fat source, and

a protein equivalent source,

wherein 20% to 80% of the protein equivalent source includes a peptide component comprising SEQ ID NO 4, SEQ ID NO 13, SEQ ID NO 17, SEQ ID NO 21, SEQ ID NO 24, SEQ ID NO 30, SEQ ID NO 31, SEQ ID NO 32, SEQ ID

NO 51, SEQ ID NO 57, SEQ ID NO 60, and SEQ ID NO 63 and wherein 20% to 80% of the protein equivalent source comprises intact protein, partially hydrolyzed protein or combinations thereof.

18. The method of claim 17, wherein the peptide component further comprises at least 10 additional peptides selected from Table 1.

19. The method of claim 17, wherein the protein equivalent source comprises a partially hydrolyzed protein having a degree of hydrolysis of less than 40%.

20. The method of claim 17, wherein the nutritional composition reduces the production of a pro-inflammatory cytokines selected from the group consisting of IL-12, IL17, IL-5, IL-4, IFN-γ, IL-8, TNF-α, IL-6 and IL-1.

CLAIMS

What is claimed is:

1. A nutritional composition comprising:

(i) a carbohydrate source;

(ii) a fat source; and

(iii) a protein equivalent source, wherein a) 20% to 80% of the protein equivalent source includes a peptide component comprising the individual polypeptides of SEQ ID NO: 4, SEQ ID NO: 13, SEQ ID NO: 17, SEQ ID NO: 21, SEQ ID NO: 24, SEQ ID NO: 30, SEQ ID NO: 31, SEQ ID NO: 32, SEQ ID NO: 51, SEQ ID NO: 57, SEQ ID NO: 60, and SEQ ID NO: 63; and b) 20% to 80% of the protein equivalent source comprises an intact protein, a partially hydrolyzed protein, or a combination thereof.

2. The nutritional composition of claim 1, wherein the peptide component is present in an amount from about 0.2 g/100 kcals to about 5.6 g/100 kcals.

3. The nutritional composition of claim 1, wherein the peptide component further comprises at least 10 additional peptides selected from Table 1.

4. The nutritional composition of claim 1, wherein the protein equivalent source comprises partially hydrolyzed protein having a degree of hydrolysis of less than 40%.

5. The nutritional composition of claim 1, further comprising at least one long-chain polyunsaturated fatty acid.

6. The nutritional composition of claim 5, wherein the at least one long-chain polyunsaturated fatty acid is selected from the group consisting of docosahexaenoic acid and arachidonic acid.

7. The nutritional composition of claim 1, further comprising a culture supernatant from a late-exponential growth phase of a probiotic batch-cultivation process, for use in the treatment or prevention of infection by a pathogen.

8. The nutritional composition of claim 1, further comprising a probiotic.

9. The nutritional composition of claim 1, further comprising a prebiotic.

10. The nutritional composition of claim 1, wherein when administered to a subject, the nutritional composition reduces the production of a proinflammatory cytokines selected from the group consisting of IL-12, IL17, IL-5, IL-4, IFN-γ, IL-8, TNF-α, IL-6 and IL-1.