What is claimed is:

1. Use of a synthetic composition comprising 0.001 mg/mL to 20 mg/ mL of the human milk oligosaccharide 2' -fucosyllactose; 0.001 μg/mL to 10 μg/mL of a carotenoid; and 0.025 mg/mL to 0.130 mg/mL of a long chain polyunsaturated fatty acid for the manufacture of a medicament for the treatment and/or prevention of an infection-mediated inflammatory condition or disease in an infant, toddler, or child by reducing said inflammation.

2. The use of claim 1, wherein the long chain polyunsaturated fatty acid is selected from the group consisting of linoleic acid, linolenic acid, arachidonic acid, docosahexaenoic acid, eicosapentaenoic acid, docosapentaenoic acid, and combinations thereof.

3. The use of claim 2, wherein the long chain polyunsaturated fatty acid is docosahexaenoic acid.

4. The use of claim 1, wherein the carotenoid is present in a concentration of 0.001 μg/mL to 5 μg/mL.

5. The use of claim 1, wherein the inflammatory disease or condition is virus-induced.

6. The use of claim 1, wherein the carotenoid is lycopene.

7. The use of claim 1, wherein the composition further comprises a second human milk oligosaccharide.

8. The use of claim 7, wherein the second human milk oligosaccharide is selected from the group consisting of 3'-sialyllactose, 6'-sialyllactose, and lacto-N-neotetraose.

9. The use of claim 5, wherein the inflammatory disease or condition is induced by a respiratory virus.

10. The use of claim 9, wherein the respiratory virus is respiratory syncytial virus.

11. The use of claim 8, wherein the composition comprises at least about 0.1 mg/mL of the 2'-fucosyllactose and 0.001 μg/mL to 5 μg/mL of the carotenoid.

What is claimed is:

1. Use of synthetic composition comprising 0.001 mg/mL to 20mg/mL of the human milk oligosaccharide 2' - fucosyllactose; 0.001 μg/mL to 10 μg/mL of a carotenoid; and 0.025 mg/mL to 0.130 mg/mL of a long chain polyunsaturated fatty acid for the manufacture of a medicament for the treatment and/or prevention of an inflammatory condition or disease in an infant, toddler, or child by reducing said inflammation..

2. The use of claim 1, wherein the the long chain polyunsaturated fatty acid is selected from the group consisting of linoleic acid, linolenic acid, arachidonic acid, docosahexaenoic acid, eicosapentaenoic acid, docosapentaenoic acid, and combinations thereof.

3. The use of claim 2, wherein the long chain polyunsaturated fatty acid is docosahexaenoic acid.

4. The use of claim 1, wherein the carotenoid is present in a concentration of 0.001 μg/mL to 5 μg/mL.

5. The use of claim 1, wherein the inflammatory disease or condition is virus-induced.

6. The use of claim 1, wherein the carotenoid is lycopene.

7. The use of claim 1, wherein the treatment and/or prevention of an inflammatory condition or disease comprises regulation of an inflammatory response to an infection or other injury.

8. The use of claim 1, wherein the composition further comprises a second human milk oligosaccharide.

9. The use of claim 8, wherein the second human milk oligosaccharide is selected from the group consisting of 3'-sialyllactose, 6'-sialyllactose, and lacto-N-neotetraose.

10. The use of claim 5, wherein the inflammatory disease or condition is induced by a respiratory virus.

11. The use of claim 10, wherein the respiratory virus is respiratory syncytial virus.

12. The use of claim 9, wherein the composition comprises at least about 0.1 mg/mL of the 2'-fucosyllactose and 0.001 μg/mL to 5 μg/mL of the carotenoid.