What is claimed is:

1. A method of providing a nutritional composition comprising HMOs to a pediatric subject, the method comprising:

(1) determining the composition of HMOs that are present in or would be present in the breast milk of the mother of the pediatric subject as determined by the mother's secretor status and/or Lewis blood group, and

(2) providing to the pediatric subject a nutritional composition comprising an HMO profile most similar to the composition of HMOs as determined in step (1), wherein the HMO profile is selected from the group consisting of:

(a) 60-80% of the HMOs are sialylated, 0-20% are fucosylated, and 10-30% are neither sialylated or fucosylated;

(b) 20-40% of the HMOs are sialylated, 40-60% are fucosylated, and 10-30% are neither sialylated or fucosylated; and

(c) 10-30% of the HMOs are sialylated, 10-30% are fucosylated, and 50-70% are neither sialylated or fucosylated.

2. The method of claim 1, wherein:

when the pediatric subject's mother is determined to have blood type Le(a+ b-) and/or the subject's mother's breast milk is determined to contain HMOs having α1-3 and α1-4-linked fucosyl residues, but determined to lack HMOs having α1-2-linked fucosyl residues, the nutritional composition provided to the pediatric subject comprises an HMO profile wherein 60-80% of the HMOs are sialylated, 0-20% are fucosylated, and 10-30% are neither sialylated or fucosylated.

3. The method of claim 1, wherein:

when the pediatric subject's mother is determined to have blood type Le(a- b+) and/or the subject's mother's breast milk is determined to contain HMOs having α1-2, α1-3 and α1-4-linked fucosyl residues, the nutritional composition provided to the

pediatric subject comprises an HMO profile wherein 20-40% of the HMOs are sialylated, 40-60% are fucosylated, and 10-30% are neither sialylated or fucosylated.

4. The method of claim 1, wherein:

when the pediatric subject's mother is determined to have blood type Le(a- b-) and/or the subject's mother's breast milk is determined to contain HMOs having α1-2 and α1-3-linked fucosyl residues, but determined to lack HMOs having α1-4-linked fucosyl residues, the nutritional composition provided to the pediatric subject comprises an HMO profile wherein 10-30% of the HMOs are sialylated, 10-30% are fucosylated, and 50-70% are neither sialylated or fucosylated.