WHAT IS CLAIMED IS:

~~1. A nutritional composition for use in treating a moderately malnourished individual by improving bone health during a period of catch up growth or weight recovery, the nutritional composition comprising a carbohydrate blend of:~~

~~(i) a source of at least one carbohydrate that provides rapidly available glucose;~~

~~(ii) a source of at least one carbohydrate that provides slowly available glucose; and~~

~~(iii) a source of at least one non-digestible carbohydrate or resistant starch.~~

~~2. The nutritional composition for use according to claim 1, wherein improving bone health is achieved by at least one of increasing bone density, increasing bone content, increasing bone length, improving bone microarchitecture, or combinations thereof.~~

~~3. The nutritional composition for use according to claim 2, wherein improving bone microarchitecture includes at least one of increasing percent bone volume (BV/TV), increasing trabecular bone thickness (TbTh), increasing trabecular bone number (TbN), decreasing trabecular space (TbS), and combinations thereof.~~

~~4. The nutritional composition for use according to claim 1 to 3, wherein the nutritional composition comprises at least one of a protein and a fat.~~

~~5. The nutritional composition for use according to any one of claims 1 to 4, wherein the nutritional composition comprises a protein and a fat.~~

~~6. The nutritional composition for use according to any one of claims 1 to 5, wherein (i) the source of at least one carbohydrate that provides rapidly available glucose comprises at least one of:~~

~~(a) a monosaccharide;~~

~~(b) a glucose unit and a fructose unit joined by an α-1, β-2 glycosidic linkage;~~

~~(c) a glucose unit and a galactose unit joined by a β (1,4) glycosidic linkage;~~

~~(d) glucose units joined by α (1,4) glycosidic linkages;~~

~~(e) glucose units joined by α (1,6) glycosidic linkages; and~~

~~(f) oligosaccharides having a random mixture of α (1,2), α (1,3), α (1,4), and α (1,6) glycosidic linkages.~~

~~7. The nutritional composition for use according to claim 6, wherein (i) the source of at least one carbohydrate that provides rapidly available glucose comprises one or more of glucose, fructose, tagatose, galactose, mannose, ribose, sucrose, maltose, isomaltose, lactose, isomalto-oligosaccharides, maltodextrin, and starch.~~

~~8. The nutritional composition for use according to claim 1 to 7 wherein (ii) the source of at least one carbohydrate that provides slowly available glucose comprises one or more of:~~

~~(a) a glucose unit and a fructose unit joined by an α (1,6) glycosidic linkage;~~

~~(b) two glucose units joined by an α (1,1) glycosidic linkage;~~

~~(c) a glucose unit and a fructose unit joined by an α (1,5) glycosidic linkage; and~~

~~(d) oligosaccharides having alternating α (1,3) and α (1,6) glycosidic linkages.~~

~~9. The nutritional composition according to claim 8, wherein (ii) the source of at least one carbohydrate that provides slowly available glucose comprises at least one of isomaltulose, trehalose, sucromalt, or leucrose.~~

~~10. The nutritional composition for use according claims 1 to 9, wherein (iii) the source of at least one non-digestible carbohydrate or resistant starch comprises at least one of:~~

~~(a) oligosaccharides having a random mixture of α (1,2), α (1,3), α (1,4), and β glycosidic linkages;~~

~~(b) saccharides having linear chains of 2 to 60 fructose units or fructose polymers joined by β (2,1) glycosidic linkages; and~~

~~(c) oligosaccharides having a random mixture of α (1,2), α (1,3), α (1,4), and α (1,6) glycosidic linkages.~~

~~11. The nutritional composition for use according to claim 10, wherein (iii) the source of at least one non-digestible carbohydrate comprises one or more of resistant maltodextrin, fructooligosaccharides, inulin, or isomalto-oligosaccharides.~~

~~12. The nutritional composition for use according to any one of claims 1 to 11, wherein (i) the source of at least one carbohydrate that provides rapidly available glucose provides from 4% to 71% of the total calories supplied by carbohydrates in the nutritional composition, (ii) the source of at least one carbohydrate that provides slowly available glucose provides from 25% to 86% of the total calories supplied by carbohydrates in the nutritional composition, and (iii) the source of at least one non-digestible carbohydrate or resistant starch provides from 3% to 20% of the total~~

~~calories supplied by carbohydrates in the nutritional composition.~~

~~13. The nutritional composition for use according to any one of claims 1 to 12, wherein the nutritional composition has a caloric density of 1 kcal/mL to 2 kcal/mL.~~

~~14. The nutritional composition for use according to any one of claims 1 to 13, wherein the moderately malnourished individual suffers from poor bone health that includes at least one of decreased bone density, decreased bone content, decreased bone length, decreased bone microarchitecture, and combinations thereof.~~

~~15. The nutritional composition for use according to claim 14, wherein the moderately malnourished individual is a preterm infant, infant, toddler, or child who suffers from poor bone health, and the poor bone health is caused by at least one of malnutrition, undernutrition, poor gut health, infectious disease, and compromised immune function.~~

~~16. A method of promoting bone health in a moderately malnourished individual, the method comprising:~~

~~administering to the moderately malnourished individual a nutritional composition comprising a carbohydrate blend of:~~

~~(i) a source of at least one carbohydrate that provides rapidly available glucose;~~

~~(ii) a source of at least one carbohydrate that provides slowly available glucose; and~~

~~(iii) a source of at least one non-digestible carbohydrate or resistant starch.~~

~~17. The method of claim 16, wherein (i) the source of at least one carbohydrate that provides rapidly available glucose comprises at least one of:~~

~~(a) a monosaccharide;~~

~~(b) a glucose unit and a fructose unit joined by an α-1, β-2 glycosidic linkage;~~

~~(c) a glucose unit and a galactose unit joined by a β (1,4) glycosidic linkage;~~

~~(d) glucose units joined by α (1,4) glycosidic linkages;~~

~~(e) glucose units joined by α (1,6) glycosidic linkages; and~~

~~(f) oligosaccharides having a random mixture of α (1,2), α (1,3), α (1,4), and α (1,6) glycosidic linkages.~~

~~18. The method according to claim 17, wherein improving bone health is achieved by at least one of increasing bone density, increasing bone content, increasing bone length, improving bone microarchitecture, and combinations thereof.~~

~~19. The method according to claim 18, wherein improving bone microarchitecture includes at least one of increasing percent bone volume (BV/TV), increasing trabecular bone thickness (TbTh), increasing trabecular bone number (TbN), decreasing trabecular space (TbS), and combinations thereof.~~

~~20. The method of claim 19, wherein (i) the source of at least one carbohydrate that provides rapidly available glucose comprises at least one of glucose, fructose, tagatose, galactose, mannose, ribose, sucrose, maltose, isomaltose, lactose, isomalto-oligosaccharides, maltodextrin,~~

~~and starch.~~

~~21. The method of any one of claims 16 to 20, wherein (i) the source of at least one carbohydrate that provides slowly available glucose comprises at least one of:~~

~~(i) a glucose unit and a fructose unit joined by an α (1,6) glycosidic linkage;~~

~~(ii) two glucose units joined by an α (1,1) glycosidic linkage;~~

~~(iii) a glucose unit and a fructose unit joined by an α (1,5) glycosidic linkage; and~~

~~(iv) oligosaccharides having alternating α (1,3) and α (1,6) glycosidic linkages.~~

~~22. The method of claim 21, wherein (ii) the source of at least one carbohydrate that provides slowly available glucose comprises at least one of isomaltulose, trehalose, sucromalt, and leucrose.~~

~~23. The method of any one of claims 16 to 22, wherein (ii) the source of at least one carbohydrate that provides slowly available glucose comprises at least one of:~~

~~(i) oligosaccharides having a random mixture of α (1,2), α (1,3), α (1,4), and β glycosidic linkages;~~

~~(ii) saccharides having linear chains of 2 to 60 fructose units or fructose polymers joined by β (2,1) glycosidic linkages; and~~

~~(iii) oligosaccharides having a random mixture of α (1,2), α (1,3), α (1,4), and α (1,6) glycosidic linkages.~~

~~24. The method of claim 23, wherein the source of at least one non-digestible carbohydrate or~~

~~resistant starch comprises at least one of resistant maltodextrin, fructooligosaccharides, inulin, and isomalto-oligosaccharides.~~

~~25. The method of any one of claims 16 to 24, wherein (i) the source of at least one carbohydrate that provides rapidly available glucose provides from 4% to 71% of the total calories supplied by carbohydrates in the nutritional composition, (ii) the source of at least one carbohydrate that provides slowly available glucose provides from 25% to 86% of the total calories supplied by carbohydrates in the nutritional composition, and (iii) the source of at least one non-digestible carbohydrate or resistant starch provides from 3% to 20% of the total calories supplied by carbohydrates in the nutritional composition.~~

~~26. The method of any one of claims 16 to 25, wherein the nutritional composition further comprises at least one of a protein and a fat.~~

~~27. The method of any one of claims 16 to 26, wherein the nutritional composition has a caloric density of 1 kcal/mL to 2 kcal/mL.~~

~~28. The method of any one of claims 16 to 27, wherein the moderately malnourished individual suffers from poor bone health that includes at least one of decreased bone density, decreased bone content, decreased bone length, decreased bone microarchitecture, or combinations thereof.~~

~~29. The method according to claim 28, wherein the moderately malnourished individual is~~

~~preterm infant, infant, toddler, or child who suffers from decreased bone health, and the decreased bone health is caused by at least one of malnutrition, undernutrition, poor gut health, infectious disease, and compromised immune function.~~

~~30.~~ 1. Use of a nutritional composition for the manufacture of a medicament for treating malnourishment in a moderately malnourished individual by improving or promoting bone health in that individual, the nutritional composition comprising a carbohydrate blend comprising:

(i) a source of at least one carbohydrate that provides rapidly available glucose;

(ii) a source of at least one carbohydrate that provides slowly available glucose; and

(iii) a source of at least one non-digestible carbohydrate or resistant starch.

2. The use according to claim 1, wherein improving or promoting bone health in the individual is during a period of catch up growth or weight recovery.

~~31.~~ 3. The u~~U~~se according to claim 1~~30~~, wherein improving or promoting bone health is achieved by at least one of increasing bone density, increasing bone content, increasing bone length, improving bone microarchitecture, or combinations thereof.

~~32.~~ 4. The u~~U~~se according to claim 3~~1~~, wherein improving bone microarchitecture includes at least one of increasing percent bone volume (BV/TV), increasing trabecular bone thickness (TbTh), increasing trabecular bone number (TbN), decreasing trabecular space (TbS), and combinations thereof.

~~33.~~ 5. The u~~U~~se according to claim 1~~30~~, wherein the moderately malnourished individual is a preterm infant, infant, toddler, or child who suffers from decreased or poor bone health, and the decreased or poor bone health is caused by at least one of malnutrition, undernutrition, poor gut health, infectious disease, and compromised immune function.

~~34.~~ 6. The u~~U~~se according to any one of claims 1~~30~~ to 5~~33~~, wherein the nutritional composition further comprises at least one of a protein and a fat.

~~35.~~ 7. The u~~U~~se according to claim 1~~30~~ wherein the nutritional composition comprises a protein and a fat.

~~36.~~ 8. The u~~U~~se according to any one of claims 1~~30~~ to 7~~35~~, wherein (i) the source of at least one carbohydrate that provides rapidly available glucose comprises at least one of:

(a) a monosaccharide;

(b) a glucose unit and a fructose unit joined by an α-1, β-2 glycosidic linkage;

(c) a glucose unit and a galactose unit joined by a β (1,4) glycosidic linkage;

(d) glucose units joined by α (1,4) glycosidic linkages;

(e) glucose units joined by α (1,6) glycosidic linkages; and

(f) oligosaccharides having a random mixture of α (1,2), α (1,3), α (1,4), and α (1,6) glycosidic linkages.

~~37.~~ 9. The u~~U~~se according to claim 8~~36~~, wherein (i) the source of at least one

carbohydrate that provides rapidly available glucose comprises at least one of glucose, fructose, tagatose, galactose, mannose, ribose, sucrose, maltose, isomaltose, lactose, isomalto-oligosaccharides, maltodextrin, and starch.

~~38.~~ 10. The u~~U~~se according to any one of claims 1~~30~~ to 9~~37~~, wherein (ii) the source of at least one carbohydrate that provides slowly available glucose comprises one or more of:

(i) a glucose unit and a fructose unit joined by an α (1,6) glycosidic linkage;

(ii) two glucose units joined by an α (1,1) glycosidic linkage;

(iii) a glucose unit and a fructose unit joined by an α (1,5) glycosidic linkage; and

(iv) oligosaccharides having alternating α (1,3) and α (1,6) glycosidic linkages.

~~39.~~ 11. The u~~U~~se according to claim 10~~30~~, wherein (ii~~i~~) the source of at least one carbohydrate that provides slowly available glucose comprises one or more of isomaltulose, trehalose, sucromalt, and leucrose.

~~40.~~ 12. The u~~U~~se according to any one of claims 1~~30~~ to 11~~39~~, wherein (iii) the source of at least one non-digestible carbohydrate or resistant starch comprises at least one of:

(i) oligosaccharides having a random mixture of α (1,2), α (1,3), α (1,4), and β glycosidic linkages;

(ii) saccharides having linear chains of 2 to 60 fructose units or fructose polymers joined by β (2,1) glycosidic linkages; and

(iii) oligosaccharides having a random mixture of α (1,2), α (1,3), α (1,4), and α (1,6) glycosidic linkages.

~~41.~~ 13. The u~~U~~se according to claim 12~~40~~, wherein (iii) the source of at least one non-digestible carbohydrate or resistant starch comprises one or more of resistant maltodextrin, fructooligosaccharides, inulin, and isomalto-oligosaccharides.

~~42.~~ 14. The u~~U~~se according to any one of claims 1~~30~~ to 13~~41~~, wherein (i) the source of at least one carbohydrate that provides rapidly available glucose provides from 4% to 71% of the total calories supplied by carbohydrates in the nutritional composition, (ii) the source of at least one carbohydrate that provides slowly available glucose provides from 25% to 86% of the total calories supplied by carbohydrates in the nutritional composition, and (iii) the source of at least one non-digestible carbohydrate or resistant starch provides from 3% to 20% of the total calories supplied by carbohydrates in the nutritional composition.

~~43.~~ 15. The u~~U~~se according to any one of claims 1~~30~~ to 14~~42~~, wherein the nutritional composition has a caloric density of 1 kcal/mL to 2 kcal/mL.

~~44.~~ 16. The u~~U~~se according to any one of claims 1~~30~~ to 15~~43~~, wherein the moderately malnourished individual suffers from poor bone health that includes at least one of decreased bone density, decreased bone content, decreased bone length, decreased bone microarchitecture, or combinations thereof.

~~45.~~ 17. The u~~U~~se according to claim 16~~44~~, wherein the moderately malnourished individual is a preterm infant, infant, toddler, or child who suffers from decreased or poor bone

health, and the decreased or poor bone health is caused by at least one of malnutrition, undernutrition, poor gut health, infectious disease, and compromised immune function.