WHAT IS CLAIMED IS:

1. A solid composition for reducing ~~at least one of~~ fasting blood glucose, total cholesterol, LDL cholesterol, VLDL cholesterol, cholesterol:HDL ratio, triglycerides, ~~or~~and increasing a healthy microbiome ~~comprising a synergistic amount of a fiber blend, a polyphenol blend, and a multivitamin supplement in an amount sufficient to lower at fasting blood glucose, total cholesterol, LDL cholesterol, VLDL cholesterol, cholesterol:HDL ratio, triglycerides, or increasing the healthy microbiome~~in a human subject consisting essentially of:

100-1,500 milligrams of a fiber blend that consisting essentially of fructooligosaccharides guar gum, gum Arabic, locust beam gum, citrus pectin, and oat fiber,

100-1,500 milligrams of a polyphenol blend consisting essentially of yeast polyphenols, apple extract polyphenols, pomegranate extract polyphenols, and red grape extract polyphenols,

100-1,500 milligrams of a multivitamin supplement consisting essentially of Vitamin A, Vitamin C, Vitamin E, Thiamin, Riboflavin, Niacin, Vitamin B12, Biotin, Calcium, and Zinc; and

Wherein the 300-4,500 milligrams of fiber blend, the polyphenol blend, and the multivitamin supplement synergistically lower fasting blood glucose, total cholesterol, LDL cholesterol, VLDL cholesterol, cholesterol:HDL ratio, triglycerides, and synergistically increases the healthy microbiome comprising an increase in *Lactobacillus*, *Roseburia*, *Prevotella*, *Ruminococcus albus*, *Akkermansia muciniphila*, *Bifidobacterium*, *Oxalobacter formingenes*, *Odoribacter*, *and Anaerotruncus colihominis*, and a decrease in fasting blood glucose, total cholesterol, LDL cholesterol, VLDL cholesterol, cholesterol:HDL ratio, and triglycerides.

~~2. The composition of claim 1, wherein the fiber blend comprises fructooligosaccharides and one or more polysaccharides selected from, guar gum, gum Arabic, locust bean gum, citrus pectin, or oat fiber.~~

~~3. The composition of claim 1, wherein the polyphenol blend comprises two or more polyphenols selected from yeast, apple extract, pomegranate extract, or red grape extract.~~

~~4. The composition of claim 1, wherein the increase in the healthy microbiome comprises an increase in one or more bacteria selected from *Lactobacillus*, *Roseburia*, *Prevotella*, *Ruminococcus albus*, *Akkermansia muciniphila*, *Bifidobacterium*, *Oxalobacter formingenes*, *Odoribacter*, or *Anaerotruncus colihominis*.~~

~~5. The composition of claim 1, wherein the multivitamin supplement is selected from Vitamin A, Vitamin C, Vitamin E, Thiamin, Riboflavin, Niacin, Vitamin B6, Folic acid, Vitamin B12, Biotin, Calcium, and Zinc.~~

~~6. The composition of claim 1, wherein the fiber blend comprises fructooligosaccharides, guar gum, gum Arabic, locust bean gum, citrus pectin, and oat fiber.~~

~~7. The composition of claim 1, wherein the polyphenol blend comprises yeast, apple extract, pomegranate extract, and red grape extract.~~

~~8~~2. The composition of claim 1, further comprising one or more excipients, flavorants, sweeteners, or organoleptic agents.

~~9~~3. The composition of claim 1, wherein the composition has a synergistic effect on the fasting blood glucose, total cholesterol, LDL cholesterol, VLDL cholesterol, cholesterol:HDL ratio, triglycerides, or improving the healthy microbiome when compared to:

a composition ~~without at least one of:~~consisting essentially of Guar gum, phytosterols (beta-sitosterol, campestrol, stigmasterol), gum Arabic, locust bean gum, pectin, oat fiber, national orange flavour, calcium carbonate, ascorbic acid, Vitamin A, beta carotene, beta glucan, sucralose, niacinamide, d-alpha tocophenyl acetate, chrysanthemum morifolium extract, cyanobalamin, policosanol, zinc gluconate, pyridoxine, riboflavin, folic acid, biotin, thiamine, and chromium; or

a composition consisting essentially of Guar gum, gum Arabic, locust bean gum, pectin, oat fiber, natural orange flavour, calcium carbonate, ascorbic acid, Vitamin A, beta glucan, Stevia, beta-carotene, niacinamide, d-alpha tocophenyl acetate, maltodextrin, zinc gluoconate, pyridoxine, riboflavin, biotin, thiamine, cyanobalamin, chromium, selenium, and folic acid.

~~fructooligosaccharides, yeast, apple extract, pomegranate extract, or red grape extract.~~

~~10~~4. The composition of claim 1, wherein the composition is provided in an amount that increases microbiome diversity to reduce the symptoms of Irritable Bowel Syndrome, diarrhea, obesity, Type II Diabetes, Crohn's Disease, ulcerative colitis, kidney stones, Inflammatory Bowel Disease, or constipation.

~~11~~5. The composition of claim 1, wherein the composition lowers at fasting blood glucose, total cholesterol, LDL cholesterol, VLDL cholesterol, cholesterol:HDL ratio, or triglycerides.

~~12~~6. The composition of claim 1, wherein the composition consists ~~essentially~~ of a fiber blend, a polyphenol blend, a multivitamin supplement, and one or more inactive excipients.

~~13~~7. The composition of claim 1, wherein the fiber blend consists ~~essentially~~ of fructooligosaccharides and one or more polysaccharides selected from, guar gum, gum Arabic, locust bean gum, citrus pectin, and oat fiber.

~~14~~8. The composition of claim 1, wherein the polyphenol blend consists ~~essentially~~ of yeast polyphenols, apple extract, polyphenols pomegranate extract polyphenols, and red grape extract.

~~15~~9. The composition of claim 1, wherein the composition consists of ~~a~~the fiber blend, ~~a~~the polyphenol blend, and ~~a~~the multivitamin supplement.

~~16. A method for reducing at least one of fasting blood glucose, total cholesterol, LDL cholesterol, VLDL cholesterol, a cholesterol:HDL ratio, triglycerides, or increasing a healthy microbiome in a human subject comprising:~~

~~identifying a subject in need for reduced fasting blood glucose, total cholesterol, LDL cholesterol, VLDL cholesterol, a cholesterol:HDL ratio, triglycerides, or increased healthy microbiome; and~~

~~providing the subject with a synergistic amount of a fiber blend, a polyphenol blend, and a multivitamin supplement in an amount sufficient to lower at fasting blood glucose, total cholesterol, LDL cholesterol, VLDL cholesterol, cholesterol:HDL ratio, triglycerides, or increasing the healthy microbiome.~~

~~17. The method of claim 16, wherein the fiber blend comprises fructooligosaccharides and one or more polysaccharides selected from, guar gum, gum Arabic, locust bean gum, citrus pectin, or oat fiber, and the polyphenol blend comprises two or more polyphenols selected from yeast, apple extract, pomegranate extract, or red grape extract.~~

~~18. The method of claim 16, wherein the increase in the healthy microbiome comprises an increase in one or more bacteria selected from *Lactobacillus, Roseburia, Prevotella, Ruminococcus albus*, *Akkermansia muciniphila*, *Bifidobacterium, Oxalobacter formingenes, Odoribacter*, *or Anaerotruncus colihominis.*~~

~~19. The method of claim 16, wherein the composition is provided in an amount that increases microbiome diversity to reduce the symptoms of Irritable Bowel Syndrome, diarrhea, obesity, Type II Diabetes, Crohn's Disease, ulcerative colitis, kidney stones, Inflammatory Bowel Disease, or constipation.~~

~~20. The method of claim 16, wherein the multivitamin supplement is selected from Vitamin A, Vitamin C, Vitamin E, Thiamin, Riboflavin, Niacin, Vitamin B6, Folic acid, Vitamin B12, Biotin, Calcium, and Zinc.~~

~~21. The method of claim 16, wherein the fiber blend comprises fructooligosaccharides, guar gum, gum Arabic, locust bean gum, citrus pectin, and oat fiber, the polyphenol blend comprises yeast, apple extract, pomegranate extract, and red grape extract, and the composition further comprises one or more excipients, flavorants, sweeteners, or organoleptic agents.~~

~~22. The method of claim 16, further comprising the step of determining a microbiome of the subject prior to use of the composition and after a predetermined period of time measuring the microbiome to detect changes in the microbiome.~~

~~23. The method of claim 16, wherein the composition has a synergistic effect on the fasting blood glucose, total cholesterol, LDL cholesterol, VLDL cholesterol, cholesterol:HDL ratio, triglycerides, or improving the healthy microbiome when compared to a composition without at least one of:~~

~~fructooligosaccharides, yeast, apple extract, pomegranate extract, or red grape extract.~~

~~24. A method of changing a gastrointestinal microbiome to reduce fasting blood glucose, total cholesterol, LDL cholesterol, VLDL cholesterol, cholesterol:HDL ratio, triglycerides of a human subject comprising:~~

~~administering to the subject a pharmaceutical composition comprising a glycan therapeutic preparation in an amount effective to treat dysbiosis of the gastrointestinal microbiota, comprising a synergistic amount of a fiber blend, a polyphenol blend, and a multivitamin supplement in an amount sufficient to change the microbiome to reduce fasting blood glucose, total cholesterol, LDL cholesterol, VLDL cholesterol, cholesterol:HDL ratio, triglycerides.~~