

CLAIMS

1. A process for preparing a powdered nutritional composition, comprising:

 dry blending powders comprising protein, fat, and carbohydrate to form a mixture;

 micronizing the mixture to provide a micronized powder in which 99% of the

powder particles have a size less than about 50 micrometers; and

 agglomerating the micronized powder to form agglomerates.
2. The process of claim 1, wherein greater than 50 wt% of the particles in the micronized powder have a size of less than about 30 micrometers.
3. The process of claim 1 or claim 2, wherein greater than 50 wt% of the particles in the micronized powder have a size of less than about 25 micrometers.
4. The process of any one of claims 1-3, wherein greater than 90 wt% of the particles in the micronized powder have a size of less than about 40 micrometers.
5. The process of any one of claims 1-4, wherein the step of micronizing comprises milling.
6. The process of any one of claims 1-5, wherein the step of agglomerating produces agglomerates having an average size of greater than about 100 micrometers.
7. The process of any one of claims 1-5, wherein the step of agglomerating produces agglomerates having an average size from about 50 μm to about 600 micrometers.

8. The process of any one of claims 1-7, wherein the step of agglomerating comprises spraying the particles with water or lecithin in a fluidized bed agglomerator.

9. The process of any one of claims 1-8, wherein the step of agglomerating comprises spraying the particles with water in a fluidized bed agglomerator.

10. The process of any one of claims 1-9, wherein the protein comprises whole egg powder, egg yolk powder, egg white powder, whey protein, whey protein concentrate, whey protein isolate, whey protein hydrolysate, milk protein concentrate, milk protein isolate, milk protein hydrolysate, nonfat dry milk, soy protein concentrate, soy protein isolate, soy protein hydrolysate, pea protein concentrate, pea protein isolate, pea protein hydrolysate, rice protein concentrate, rice protein isolate, rice protein hydrolysate, collagen protein, collagen protein hydrolysate, beef protein isolate, chicken protein isolate, and/or fish protein.

11. The process of any one of claims 1-10, wherein the carbohydrate comprises maltodextrin, hydrolyzed or modified starch or cornstarch, glucose polymers, corn syrup solids, rice-derived carbohydrates, pea-derived carbohydrates, potato-derived carbohydrates, sucrose, glucose, fructose, lactose, maltitol, erythritol, sorbitol, sucralose, acesulfame potassium, and/or stevia.

12. The process of any one of claims 1-11, wherein the fat comprises vegetable oil powder, fish oil powder, animal fat powder, dairy powder, and/or poultry fat powder.

13. A powdered nutritional composition produced by the process of any one of claims 1-12, comprising agglomerates of particles, wherein 99% of the particles have a size less than about 50 micrometers.

14. The powdered nutritional composition of claim 13, wherein greater than 50 wt% of the particles in the micronized powder have a size of less than about 30 micrometers.

15. The powdered nutritional composition of claim 13 or claim 14, wherein greater than 50 wt% of the particles in the micronized powder have a size of less than about 25 micrometers.

16. The powdered nutritional composition of any one of claims 13-15, wherein greater than 90 wt% of the particles in the micronized powder have a size of less than about 40 micrometers.

17. A powdered nutritional composition, comprising agglomerates of particles comprising protein, fat, and carbohydrate, wherein 99% of the particles have a size less than 50 micrometers.

18. The powdered nutritional composition of claim 17, wherein greater than 50 wt% of the particles in the micronized powder have a size of less than about 30 micrometers.

19. The powdered nutritional composition of claim 17 or claim 18, wherein greater than 50 wt% of the particles in the micronized powder have a size of less than about 25 micrometers.

20. The powdered nutritional composition of any one of claims 17-19, wherein greater than 90 wt% of the particles in the micronized powder have a size of less than about 40 micrometers.