Claims:

1. A particulate extrusion encapsulation product, comprising:

   (A) an encapsulate, encapsulated in

   (B) a glassy matrix comprising at least one modified starch, and at least one low molecular weight carbohydrate,

   wherein the glassy matrix additionally contains 0.5% to 10% by weight of at least one insoluble fiber selected from the group consisting of apple fiber, corn fiber, sugarcane fiber, oat fiber, wood fiber, rice fiber, and mixtures thereof, wherein the average size of the fibers is 20 to 300 microns, and wherein at least 80% of the particles in the particulate product are unbroken after at least two weeks storage of sealed samples at ambient temperature, based on total number of particles in the particulate product, resulting in improved structural integrity of the product as compared to said product which does not contain the at least one insoluble fiber.

2. The product of claim 1, wherein the insoluble fiber comprises 3% to 8% by weight.

3. The product of claim 1, wherein at least 85% of the particles in the particulate product are unbroken, based on total number of particles in the particulate product.

4. The product of claim 1, wherein at least 90% of the particles in the particulate product are unbroken, based on total number of particles in the particulate product.

5. The product of claim 1 wherein the average size of the fibers is 50 to 200 microns.

6. The product of claim 1 wherein the average size of the fibers is 75 to 150 microns.

7. The product of claim 1, wherein the matrix contains 49% to 94% by weight of the modified starch and 5% to 50% of the low molecular weight carbohydrate.

8. The product of claim 1, wherein the low molecular weight carbohydrate has an average molecular weight less than 800 g/mol.

9. The product of claim 1, wherein the low molecular weight carbohydrate comprises a sugar, polyol, corn syrup solid, or mixtures thereof.

10. The product of claim 1, wherein the amount of encapsulate contained in the product is from 0.01% to 20% by weight, based on the total weight of the extrusion encapsulation product.

11. The product of claim 1, wherein the amount of encapsulate contained in the product is from 4% to 12% by weight, based on the total weight of the extrusion encapsulation product.

12. The product of claim 1, wherein the amount of encapsulate contained in the product is from 8% to 10% by weight, based on the total weight of the extrusion encapsulation product.

13. The product of claim 1, wherein the amount of encapsulate contained in the product is at least 8% by weight, based on the total weight of the extrusion encapsulation product.

14. The product of claim 1, wherein the particulate product has an average particle size of 0.1 mm to 7 mm.

15. The product of claim 1, wherein the particulate product has an average particle size of 0.3 mm to 3 mm.

16. The product of claim 1, wherein the particulate product particles have an average particle size of 0.6 mm to 2 mm.

17. The product of claim 1, wherein the particulate product has a glass transition temperature of from 25 °C to 80 °C.

18. The product of claim 1, wherein the modified starch comprises n-octenylsuccinic acid anhydride modified starch.

19. The product of claim 1, wherein the low molecular weight carbohydrate comprises maltose, trehalose, dextrose, lactose, fructose, xylose, sucrose, corn syrup solids, erythritol, maltitol, mannitol, xylitol, sorbitol, lactitol or mixtures thereof.

20. The product of claim 1, wherein the encapsulate comprises a flavor, fragrance, vitamin, dietary supplement, medication or mixtures thereof.

21. The product of claim 1, wherein the encapsulate comprises a flavor.

22. The product of claim 21, wherein the flavor is a natural flavor, natural extract, oleoresin, essential oil, protein hydrolyzate, reaction flavor, artificial flavor, compounded flavor or mixtures thereof.

23. The product of claim 1, additionally containing a plasticizer comprising water, glycerin, propylene glycol, carbohydrate solution or mixtures thereof.

24. The product of claim 1, wherein the glassy matrix contains up to 2% by weight of an anti- sticking agent.

25. The product of claim 24, wherein the anti-sticking agent comprises a calcium, magnesium, sodium, or potassium salt of a fatty acid; beeswax; carnauba wax; candelilla wax; silicon dioxide; titanium dioxide; or mixtures thereof.

26. The product of claim 1, additionally containing up to 70% by weight maltodextrin.

27. The product of claim 1 additionally containing up to 10% by weight of at least one gum.

28. The product of claim 27 wherein the gum comprises xanthan gum, alginate, carrageenan, pectin or mixtures thereof.

29. A method of making a particulate extrusion encapsulation product comprising:
    (i) in an extruder assembly, mixing and melting matrix components comprising a matrix and an encapsulate to form a viscous dispersion,

(ii) shaping, extruding, and die- face cutting the viscous dispersion to obtain a particulate extrusion encapsulation product, and

(iii) drying and cooling the particulate extrusion encapsulation product to a glassy state,

wherein the matrix components additionally contain 0.5% to 10% by weight of at least one insoluble fiber selected from the group consisting of apple fiber, corn fiber, sugarcane fiber, oat fiber, wood fiber, rice fiber, and mixtures thereof, wherein the average size of the fibers is 20 to 300 microns, and wherein at least 80% of the particles in the particulate product are unbroken after at least two weeks storage of sealed samples at ambient temperature, based on total number of particles in the particulate product, resulting in improved structural integrity of the product as compared to said product which does not contain the at least one insoluble fiber.

30. The method of claim 29, wherein the encapsulate comprises a flavor.

31. The method of claim 30, wherein the flavor is a natural flavor, natural extract, oleoresin, essential oil, protein hydrolyzate, reaction flavor, artificial flavor, compounded flavor or mixtures thereof.

32. The method of claim 29, additionally containing up to 70% by weight maltodextrin.

33. The method of claim 29 additionally containing up to 10% by weight of at least one gum.

34. The method of claim 33 wherein the gum comprises xanthan gum, alginate, carrageenan, pectin or mixtures thereof.

35. A food system containing the particulate extrusion encapsulation product of claim 1.

36. The food system of claim 35 wherein the product is topically applied and/or mixed internally into the system.

37. The food system of claim 35 comprising extruded cereal, crackers, cereal bars, snack chips, dough, bakery products, and dry beverage blends.