~~What is claimed is:~~Claims

1. A substantially natural particulate extrusion encapsulated flavor product, comprising:

an oil-soluble flavor encapsulate, emulsified and encapsulated in the form of an emulsion in a glassy matrix comprising

maltodextrin, present in the product in an amount of at least 70% by weight, and at least one component selected from a sugar, a polyol, a corn syrup solid, or mixtures thereof, ~~a natural glassy matrix comprising at least one high molecular weight component, and at least one low molecular weight component,~~

wherein the amount of flavor encapsulate encapsulated in the ~~natural~~ glassy matrix is ~~increased to an amount~~ equal to or greater than 5% by weight;

wherein the flavor encapsulate has a polarity as measured by dielectric constant of from 5 to 20; and

wherein the product contains no emulsifier. ~~by increasing the polarity of the flavor encapsulate.~~

~~2. The product of claim 1 wherein the flavor encapsulate has a polarity as measured by dielectric constant of greater than 5 and the amount of flavor encapsulate encapsulated in the natural glassy matrix is about 5% to about 8% by weight.~~

~~3. The product of claim 1 wherein the flavor encapsulate has a polarity as measured by dielectric constant of greater than 10 and the amount of flavor encapsulate encapsulated in the natural glassy matrix is about 5% to about 12% by weight.~~

~~4. The product of claim 1, wherein the high molecular weight components are present in an amount of up to about 90% by weight.~~

~~5. The product of claim 4, wherein the high molecular weight component comprise maltodextrin, dextrin, fructans, larch gum or mixtures thereof .~~

~~6. The product of claim 1, wherein the low molecular weight components are present in an amount of up to about 50% by weight.~~

~~7. The product of claim 1, wherein the low molecular weight components comprise a sugar, a polyol, corn syrup solid, or mixtures thereof.~~

2. ~~The product of claim 7, wherein the low molecular weight components comprise maltose, trehalose, dextrose, lactose, fructose, xylose, sucrose, erythritol, maltitol, mannitol, xylitol, sorbitol, lactitol or mixtures thereof.~~ The product of claim 1, wherein the maltodextrin is present in the product in an

~~8.~~ amount of at least 74% by weight.

~~9.~~3. The product of claim 1 or claim 2, wherein the glassy matrix additionally contains up to about 15% by weight of at least one insoluble natural fiber and up to about 15% by weight of at least one natural gum.

~~10. The product of claim 9, wherein the natural gum is at least one of xanthan gum, pectin, alginate, konjac gum, locust bean gum, guar gum, hydrolyzed gelatin, whey protein, and carrageenan.~~

~~11. The product of claim 9, wherein the insoluble natural fiber is apple fiber, blueberry fiber, citrus fiber, sugarcane fiber, oat fiber, wood fiber, cellulose fiber, microcrystalline cellulose fiber, cotton fiber, rice fiber, wheat fiber and/or mixtures thereof.~~

~~12.~~4. The product any one of claims 1 to 3, wherein the flavor encapsulate is a natural flavor encapsulate.

~~13. The product of claim 12, wherein the natural flavor is a natural extract, oleoresin, essential oil, protein hydrolyzate, reaction flavor, compounded flavor or mixtures thereof.~~

~~14. The product of claim 1, additionally containing up to about 2% by weight of an emulsifier.~~

~~15. The product of claim 14, wherein the emulsifier is a polysorbate or at least one natural emulsifier selected from the group of Quillaja extract, Yucca extract, soy saponins, and a lecithin.~~

~~16. The product of claim 1, wherein the high molecular weight component contains up to 50% by weight gum Arabic, the flavor encapsulate has a polarity as measured by dielectric constant of less than 5 and the amount of flavor encapsulate encapsulated in the natural glassy matrix is about 5% to about 8% by weight.~~

~~17.~~5. The product of any one of claims 1 to ~~4~~16, wherein ~~the flavor encapsulate has a polarity as measured by dielectric constant of 5 to 10, and~~ the amount of flavor encapsulate encapsulated in the ~~natural~~ glassy matrix is about 5% to about 12% by weight.

~~18. The product of claim 16, wherein the flavor encapsulate has a polarity as measured by dielectric constant of greater than 10, and the amount of flavor encapsulate encapsulated in the natural glassy matrix is about 5% to about 15% by weight.~~

~~19.~~ 6. A method of making substantially natural particulate extrusion encapsulated flavor product comprising:

(i) in an extruder assembly, mixing and melting ~~natural~~ matrix components comprising

maltodextrin,

at least one component selected from a sugar, a polyol, a corn syrup solid, or mixtures thereof, ~~high molecular weight component, and at least one low molecular weight component,~~ and

~~(i)~~ an oil-soluble ~~-~~flavor encapsulate to form a viscous dispersion,

(ii) shaping, extruding, and die-face cutting the viscous dispersion to form particulate extrusion encapsulation products, and

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

wherein the particulate extrusion encapsulated flavor product comprises the flavor encapsulate, emulsified and encapsulated in the form of an emulsion in a glassy matrix;

wherein the amount of flavor encapsulate encapsulated in the ~~natural~~ glassy matrix is ~~increased to an amount~~ equal to or greater than 5% by weight, wherein the flavor encapsulate has a polarity as measured by dielectric constant of from 5 to 20;

wherein the particulate extrusion encapsulated flavor product comprises at least 70% maltodextrin; and

wherein the product contains no emulsifier. ~~by increasing the polarity of the flavor encapsulate.~~

~~20.~~ 7. The method of claim ~~19~~6, wherein the particulate extrusion encapsulated flavor product comprises at least 74% maltodextrin. ~~the flavor encapsulate has a polarity as measured by dielectric constant of greater than 5 and the amount of flavor encapsulate encapsulated in the natural glassy matrix is about 5% to about 8% by weight.~~

~~21.~~ 8. The method of claim 6 or claim 7, ~~19~~ wherein ~~the flavor encapsulate has a polarity as measured by dielectric constant of greater than 10 and~~ the amount of flavor encapsulate encapsulated in the ~~natural~~ glassy matrix is about 5% to about 12% by weight.

~~22. The method of claim 19, wherein the high molecular weight components are present in an amount of up to about 90% by weight.~~

~~23. The method of claim 22, wherein the high molecular weight component comprise maltodextrin, dextrin, fructans, larch gum, gum Arabic or mixtures thereof.~~

~~24. The method of claim 19, wherein the low molecular weight components are present in an amount of up to about 50% by weight.~~

~~25. The method of claim 19, wherein the low molecular weight components comprise a sugar, polyol, corn syrup solid, or mixtures thereof.~~

~~26. The method of claim 25, wherein the low molecular weight components comprise maltose, trehalose, dextrose, lactose, fructose, xylose, sucrose, erythritol, maltitol, mannitol, xylitol, sorbitol, lactitol or mixtures thereof.~~

~~27.~~ 9. The method of any one of claims 6 to 8, ~~claim 19,~~wherein the particulate extrusion encapsulated flavor product further contains ~~additionally containing~~ up to about 15% by weight of at least one natural gum and up to about 15% by weight of at least one insoluble natural fiber.

~~28. The method of claim 27, wherein the natural gum is at least one of xanthan gum, pectin, alginate, konjac gum, locust bean gum, guar gum, hydrolyzed gelatin, whey protein, and carrageenan.~~

~~29. The method of claim 27, wherein the insoluble natural fiber is apple fiber, blueberry fiber, citrus fiber, sugarcane fiber, oat fiber, wood fiber, cellulose fiber, microcrystalline cellulose fiber, cotton fiber, rice fiber, wheat fiber and/or mixtures thereof.~~

~~30.~~ 10. The method of any one of claims 6 to 9 ~~19~~, wherein the flavor encapsulate is a natural flavor encapsulate.

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

~~32. The method of claim 19, wherein the product additionally contains up to about 2% by weight of an emulsifier.~~

~~33. The method claim 32, wherein the emulsifier is a polysorbate or at least one natural emulsifier selected from the group of Quillaja extract, Yucca extract, soy saponins, and a lecithin.~~

~~34. The method of claim 19, wherein the high molecular weight component contains up to 50% by weight gum Arabic, the flavor encapsulate has a polarity as measured by dielectric constant of less than 5 and the amount of flavor encapsulate encapsulated in the natural glassy matrix is about 5% to about 8% by weight.~~

~~35. The method of claim 34, wherein the flavor encapsulate has a polarity as measured by dielectric constant of 5 to 10, and the amount of flavor encapsulate encapsulated in the natural glassy matrix is about 5% to about 12% by weight.~~

~~36.~~ 11. The method of claim 6 or claim 7~~34~~, wherein ~~the flavor encapsulate has a polarity as measured by dielectric constant of greater than 10, and~~ the amount of flavor encapsulate encapsulated in the ~~natural~~ glassy matrix is about 5% to about 15% by weight.

~~37.~~ 12. A food system containing the particulate extrusion encapsulation product of any one of claims 1 to 5.

~~38. The food system of claim 37 wherein the product is topically applied and/or mixed internally into the system.~~

~~39.~~ 13. The food system of claim ~~37~~12 comprising extruded cereal, crackers, cereal bars, snack chips, dough and frozen dough, bakery products ~~such as, for example, bread and muffins~~, seasonings, ice cream, meat products, dairy products, and dry beverage blends.

14. The food system of claim 13, wherein the bakery products are selected from bread and muffins.