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,

wherein the amount of flavor encapsulate encapsulated in the glassy matrix is 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.

2. The product of claim 1, wherein the maltodextrin is present in the product in an amount of at least 74% by weight.
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.
4. The product any one of claims 1 to 3, wherein the flavor encapsulate is a natural flavor encapsulate.
5. The product of any one of claims 1 to 4, wherein the amount of flavor encapsulate encapsulated in the glassy matrix is about 5% to about 12% by weight.

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

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

maltodextrin,

at least one component selected from a sugar, a polyol, a corn syrup solid, or mixtures thereof, and

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 glassy matrix is 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.

7. The method of claim 6, wherein the particulate extrusion encapsulated flavor product comprises at least 74% maltodextrin.

8. The method of claim 6 or claim 7, wherein the amount of flavor encapsulate encapsulated in the glassy matrix is about 5% to about 12% by weight.

9. The method of any one of claims 6 to 8, wherein the particulate extrusion encapsulated flavor product further contains 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.

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

11. The method of claim 6 or claim 7, wherein the amount of flavor encapsulate encapsulated in the glassy matrix is about 5% to about 15% by weight.

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

13. The food system of claim 12 comprising extruded cereal, crackers, cereal bars, snack chips, dough and frozen dough, bakery products, 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.