CLAIMS

What is claimed is:

1. A composition comprising a recombinant ovomucoid protein (rOVD), wherein the rOVD comprises at least one glycosylated asparagine residue and the rOVD is substantially devoid of N-linked mannosylation,

wherein the rOVD forms a clear solution at a concentration of from about 26% to about 30% w/v in an aqueous solution, at a pH of from about 2.5 to about 6, and at room temperature; and/or

wherein a solution comprising the rOVD shows substantially higher solution clarity as compared to a whey protein solution at a concentration of 9% (w/v) in an aqueous solution, at a pH of from about 2 to about 6, and at the same temperature.

2. The composition of claim 1, wherein the composition is in powdered form.

3. The composition of claim 2, wherein the composition has a protein content of at least 50% rOVD protein w/w.

4. The composition of claim 1, wherein the composition comprises at least 0.1% rOVD protein w/w.

5. The composition of claim 1, wherein rOVD comprises a polypeptide represented by an amino acid sequence selected from the group consisting of SEQ ID No. 1-44 or an amino acid sequence having at least 97% sequence identity with SEQ ID No. 1-44.

6. The composition of claim 1, wherein rOVD is a chicken, turkey vulture, hummingbird, or goose rOVD.

7. The composition of claim 1, wherein the rOVD is expressed by a microbial organism selected from a *Pichia* species, a *Saccharomyces* species, a *Trichoderma* species, a *Pseudomonas* species, an *Aspergillus* species, and an *E. coli* species.

8. The composition of claim 7, wherein the microbial organism is a *Pichia* species.

9. A beverage composition comprising the composition of claim 1 and at least one consumable liquid, wherein the rOVD forms a clear solution in the beverage composition, and wherein the concentration of rOVD is from about 0.1% w/v to about 30% w/v in an aqueous solution, at a pH of from about 2.5 to about 6, and at room temperature.

10. The beverage composition of claim 9, wherein the concentration of rOVD is about 10% w/v or less or about 20% w/v or less.

11. The beverage composition of claim 10, wherein the beverage composition is substantially optically clear.

12. The beverage composition of claim 9, wherein the beverage composition is selected from a cold beverage, a heated beverage, and a room-temperature beverage.

13. The beverage composition of claim 9, wherein the rOVD in the beverage composition remains substantially soluble after a heat treatment to a temperature between about 72°C and about 121°C.

14. The beverage composition of claim 13, wherein the heat treatment is selected from hot fill, pasteurization, and retort.

15. The beverage composition of claim 9, wherein the beverage composition has a pH of between about 2.0 and about 6.0.

16. The beverage composition of claim 9, wherein the rOVD is substantially a full-length protein.

17. The beverage composition of claim 9, wherein the beverage composition is a beverage selected from a juice, a broth, a soup, a soda, a soft drink, a flavored water, a protein water, a fortified water, a carbonated water, a nutritional drink, an energy drink, a sports drink, a recovery drink, a heated drink, a coffee-based drink, a tea-based drink, a plant-based milk, a milk based drink, a non-dairy drink, plant-based milk drink, an infant formula drink, and a meal replacement drink.

18. The beverage composition of claim 9, further comprising a second protein, wherein the rOVD and the second protein together provide a protein digestibility-corrected amino acid score (PDCAAS) of greater than about 0.85.

19. The beverage composition of claim 18, wherein the second protein is an egg white lysozyme (OVL).

20. The beverage composition of claim 19, wherein the ratio of rOVD to OVL is between about 60% rOVD:40% OVL and about 82% rOVD:18% OVL.