What is claimed is:

1. A test kit for testing food intolerance in a patient diagnosed with or suspected of having irritable bowel syndrome, comprising:

    a plurality of distinct food preparations coupled to an individually addressable solid carrier;

    wherein the plurality of distinct food preparations consists essentially of food preparations that each have a discriminatory p-value of ≤ 0.07 as determined by raw p-value or a discriminatory p-value of ≤ 0.10 as determined by FDR multiplicity adjusted p-value.

2. The test kit of claim 1, wherein the plurality of food preparations includes at least two food preparations prepared from food items selected from a group consisting of cocoa, tea, oat, cabbage, cow milk, onion, honey, rye, corn, yeast, wheat, soybean, egg, tuna, lemon, pineapple, cucumber, orange, halibut, walnut, grapefruit, cane sugar, chicken, blueberry, and shrimp.

3. The test kit of claim 1, wherein the plurality of distinct food preparations consists essentially of food preparations that each has a discriminatory p-value of ≤ 0.05 as determined by raw p-value or a discriminatory p-value of ≤ 0.08 as determined by FDR multiplicity adjusted p-value.

4. The test kit of claim 1, wherein FDR multiplicity adjusted p-value is adjusted for at least one of age or gender.

5. The test kit of any of claim 1, wherein at least 50% of the plurality of distinct food preparations, when adjusted for a single gender, has an average discriminatory p-value of ≤ 0.07 as determined by raw p-value or an average discriminatory p-value of ≤ 0.10 as determined by FDR multiplicity adjusted p-value.

6. The test kit of any of claim 1, wherein the plurality of distinct food preparations is crude aqueous extracts or processed aqueous extracts.

7. A method of testing food intolerance in a patient diagnosed with or suspected of having irritable bowel syndrome, comprising:

contacting the test kit of claim 1 with a bodily fluid of a patient that is diagnosed with or suspected of having irritable bowel syndrome;

wherein the step of contacting is performed under conditions that allow IgG from the bodily fluid to bind to at least one component of the food preparation;

measuring IgG bound to the at least one component of the food preparation to obtain a signal;

updating or generating a report using the signal.

8. The method of claim 7, wherein the plurality of distinct food preparations is prepared from food items selected from the group consisting essentially of cocoa, tea, oat, cabbage, cow milk, onion, honey, rye, corn, yeast, wheat, soybean, egg, tuna, lemon, pineapple, cucumber, orange, halibut, walnut, grapefruit, cane sugar, chicken, blueberry, and shrimp.

9. The method of claim 7, wherein the plurality of distinct food preparations has an average discriminatory p-value of ≤ 0.07 as determined by raw p-value or an average discriminatory p-value of ≤ 0.10 as determined by FDR multiplicity adjusted p-value.

10. The method of claim 7, wherein the food preparation is immobilized on a solid surface.

11. The method of claim 10, wherein the food preparation is immobilized on a solid surface in an individually addressable manner.

12. A method of generating a test for food intolerance in a patient diagnosed with or suspected of having irritable bowel syndrome, comprising:

obtaining test results for a plurality of distinct food preparations, wherein the test results are based on bodily fluids of patients diagnosed with or suspected of having irritable bowel syndrome and bodily fluids of a control group not diagnosed with or not suspected to have irritable bowel syndrome;

stratifying the test results by gender for each of the distinct food preparations;

assigning for a predetermined percentile rank a different cutoff value for male and female patients for each of the distinct food preparations;

selecting a plurality of distinct food preparations that each have a discriminatory p-value of ≤ 0.07 as determined by raw p-value or a discriminatory p-value of ≤ 0.10 as determined by FDR multiplicity adjusted p-value; and

generating a test consisting essentially of the selected food preparations for food intolerance in a patient diagnosed with or suspected of having irritable bowel syndrome.

13. The method of claim 12, wherein the plurality of distinct food preparations includes at least two food preparations selected from a group consisting of cocoa, tea, oat, cabbage, cow milk, onion, honey, rye, corn, yeast, wheat, soybean, egg, tuna, lemon, pineapple, cucumber, orange, halibut, walnut, grapefruit, cane sugar, chicken, blueberry, and shrimp.

14. The method of claim 12, wherein the predetermined percentile rank is an at least 90^{th} percentile rank.

15. The method of claim 12, wherein the cutoff value for male and female patients has a difference of at least 10% (abs).

16. The method of claim 12, further comprising a step of normalizing the result to the patients' total IgG.

17. The method of claim 12, further comprising a step of normalizing the result to the global mean of the patients' food specific IgG results.

18. The method of claim 12, further comprising a step of identifying a subset of patients, wherein the subset of patients' sensitivities to the food preparations underlies IBS by raw p-value or an average discriminatory p-value of ≤ 0.01.

19. The method of claim 7, further comprising a step of determining numbers of the food preparations, wherein the numbers of the food preparations can be used to confirm IBS by raw p-value or an average discriminatory p-value of ≤ 0.01.

20. A test kit for testing food intolerance in a patient diagnosed with or suspected of having irritable bowel syndrome, comprising:

a plurality of distinct food preparations coupled to an individually addressable solid carrier;

wherein at least 50% of the plurality of distinct food preparations each has a discriminatory p-value of ≤ 0.07 as determined by raw p-value or a discriminatory p-value of ≤ 0.10 as determined by FDR multiplicity adjusted p-value.

21. The test kit of claim 20, wherein at least 70% of distinct food preparations each has a discriminatory p-value of ≤ 0.07 as determined by raw p-value or a discriminatory p-value of ≤ 0.10 as determined by FDR multiplicity adjusted p-value.

22. The test kit of claim 21, wherein the plurality of food preparations includes at least two food preparations prepared from food items selected from a group consisting of cocoa, tea, oat, cabbage, cow milk, onion, honey, rye, corn, yeast, wheat, soybean, egg, tuna, lemon, pineapple, cucumber, orange, halibut, walnut, grapefruit, cane sugar, chicken, blueberry, and shrimp.

23. The test kit of claim 20, wherein the plurality of distinct food preparations has an average discriminatory p-value of ≤ 0.05 as determined by raw p-value or an average discriminatory p-value of ≤ 0.08 as determined by FDR multiplicity adjusted p-value.

24. The test kit of claim 20, wherein FDR multiplicity adjusted p-value is adjusted for at least one of age or gender.

25. The test kit of claim 20, wherein at least 50% of the plurality of distinct food preparations, when adjusted for a single gender, has an average discriminatory p-value of ≤ 0.07 as determined by raw p-value or an average discriminatory p-value of ≤ 0.10 as determined by FDR multiplicity adjusted p-value.

26. The test kit of claim 20, wherein the plurality of distinct food preparations is crude aqueous extracts or processed aqueous extracts.

27. A test kit for testing food intolerance in a patient diagnosed with or suspected of having irritable bowel syndrome, comprising:

a plurality of distinct food preparations coupled to an individually addressable solid carrier;

wherein all of the food preparations in the kit have an average discriminatory p-value of ≤ 0.07 as determined by raw p-value or an average discriminatory p-value of ≤ 0.10 as determined by FDR multiplicity adjusted p-value.

28. The test kit of claim 27, wherein the plurality of food preparations includes at least two food preparations prepared from food items selected from a group consisting of cocoa, tea, oat, cabbage, cow milk, onion, honey, rye, corn, yeast, wheat, soybean, egg, tuna, lemon, pineapple, cucumber, orange, halibut, walnut, grapefruit, cane sugar, chicken, blueberry, and shrimp.

29. The test kit of claim 27, wherein the plurality of distinct food preparations has an average discriminatory p-value of ≤ 0.05 as determined by raw p-value or an average discriminatory p-value of ≤ 0.08 as determined by FDR multiplicity adjusted p-value.

30. The test kit of claim 27, wherein FDR multiplicity adjusted p-value is adjusted for at least one of age or gender.

31. The test kit of claim 27, wherein at least 50% of the plurality of distinct food preparations, when adjusted for a single gender, has an average discriminatory p-value of ≤ 0.07 as determined by raw p-value or an average discriminatory p-value of ≤ 0.10 as determined by FDR multiplicity adjusted p-value.

32. The test kit of claim 27, wherein the plurality of distinct food preparations is crude aqueous extracts or processed aqueous extracts.