What is claimed is:

1. A test kit for testing food intolerance in patients diagnosed with or suspected to have irritable bowel syndrome, comprising:

    a plurality of distinct food preparations coupled to individually addressable respective solid carriers;

    wherein the plurality of distinct food preparations 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.

2. The test kit of claim 1, wherein the plurality of food preparations includes at least two food preparations prepared from food items of Table 1 or 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, and optionally from a group consisting of crab, barley, strawberry, pork, rice, beef, cashew, codfish, potato, white Sesame, broccoli, almond, turkey, scallop, and Salmon.

3. The test kit of any of claims 1 and 2, 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.

4. The test kit of any of claims 1-3, wherein FDR multiplicity adjusted p-value is adjusted for at least one of age and gender.

5. The test kit of any of claims 1-4, 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 claims 1-5, wherein the plurality of distinct food preparations is crude aqueous extracts or processed aqueous extracts.

7. A method of making a test kit for testing food intolerance in patients diagnosed with or suspected to have 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 to have 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; and

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

8. The method of claim 7, wherein the plurality of distinct food preparations includes at least two food preparations prepared from food items of Table 1 or 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, and optionally from a group consisting of crab, barley, strawberry, pork, rice, beef, cashew, codfish, potato, white Sesame, broccoli, almond, turkey, scallop, and salmon.

9. The method of any of claims 7 and 8, 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 any of claims 7-9, wherein the predetermined percentile rank is an at least 90^{th} percentile rank.

11. The method of any of claims 7-10, wherein the cutoff value for male and female patients has a difference of at least 10% (abs).

12. The method of any of claims 7-11, further comprising a step of normalizing the result to the patient's total IgG.

13. The method of any of claims 7-12, further comprising a step of normalizing the result to the global mean of the patient's food specific IgG results.

14. The method of any of claims 7-13, 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.

15. The method of any of claims 7-14, 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.