

Supplementary Table 1. Food Items Included in the Korean Food Frequency Questionnaire and Their Categorization According to Association With Worsened Irritable Bowel Syndrome Symptoms

Food types	Rarely problematic food items (n = 64)	Problematic food items (n = 55)
Grains	Gimbap, powder of roasted grains, potato	^a Bread, ^a black bean-sauce noodles/Chinese-style noodles with vegetables and seafood, ^a noodle soup, ^a dumplings, ^a instant ramen, ^a pizza/hamburger, ^a pasta, white rice, multigrain rice, rice with beans, brown rice, stir-fried rice cake/rice-cake soup, cereal, rice cake, sweet potato/sweet pumpkin
Meat	Cooked seasoning beef, pork cutlet, braised spicy chicken	^a Pork belly, ^a tripe, ^a beef soup, ^a processed meat, grilled meat, roasted ribs, sweet and sour pork, boiled meat, grilled duck, chicken soup
Eggs	Egg/quail egg (whole egg), egg white, egg yolk	NA
Seafood	White fish, eel, loach soup, sliced raw fish, anchovy, oyster/shellfish, canned fish, salted seafood	External blue colored fish, squid/octopus, shrimp/crab, fish cake
Pulses	Beans, fermented-beans, soybean paste	Tofu, soybean milk
Vegetables	Carrot, paprika, garlic, onions, broccoli, zucchini, eggplant, cabbage, bean sprouts, radish, bracken, burdock/lotus root, balloon flower, mushrooms	Cauliflower/lettuce, sesame leaf, cucumber, chili, green-leaf vegetables
Seaweed	Laver	Sea mustard/kelp
Kimchi	Kimchi stew, radish kimchi, other kimchis	Cabbage kimchi
Fruits	Blueberry, orange, pear, persimmon, banana, grape, peach/plum, tomato	^a Apple, strawberry, watermelon, melon
Dairy products	Low/zero fat milk	^a Whole milk, ^a yogurt, ^a sweetened fermented milk, ^a ice cream, fermented milk, cheese
Monosaccharose	Honey/jam/syrup	Candy, chocolate
Sweet foods	NA	Cookies, sweet bread
Tea and beverages	Coffee with cream, coffee with sugar, mixtures of instant coffee, soda, other teas, fruit juice	Brewed coffee, green tea
Nuts	NA	Nuts
Fat and oils	Oils, mayonnaise, butter/margarine	NA
Liquor	Korean distilled liquor (soju), beer, whiskey, refined rice wine, wine, raw rice wine	NA

Pearson's chi-square or fisher's exact test was used to examine the differences between controls and patients with irritable bowel syndrome; if $P < 0.05$, the food item is classified as problematic ($^aP < 0.001$).

Supplementary Table 2. Food Groups of Korean Food Items According to Potentially-symptom-causing Contents

Food groups	Food items
High-FODMAP foods (36 items)	Rice with beans, tofu, beans, fermented-beans, soybean paste, soybean milk, cauliflower, garlic, onions, mushrooms, apple, pear, persimmon, watermelon, plum, honey, soda, fruit juice, nuts, gluten foods ^a , dairy products ^a
High-fat foods (17 items)	Black bean-sauce noodles/Chinese-style noodles with vegetables and seafood, instant ramen, pizza/hamburger, pasta, grilled meat, roasted ribs, pork belly, tripe, beef soup, pork cutlet, sweet and sour pork, boiled meat, processed meat, roast duck, eel, loach soup, fish cake
Gluten foods ^a (10 items)	Bread, black bean-sauce noodles/Chinese-style noodles with vegetables and seafood, noodle soup, dumplings, instant ramen, pizza/hamburger, pasta, cereal, cookies, sweet bread
Dairy products ^a (7 items)	Whole milk, low/zero fat milk, yogurt, sweetened fermented milk, fermented milk, ice cream, cheese
Caffeine (7 items)	Chocolate, brewed coffee, coffee with cream, coffee with sugar, mixtures of instant coffee, green tea, soda
Alcohol (6 items)	Korean distilled liquor (soju), beer, whiskey, refined rice wine, wine, raw rice wine

^aAll gluten foods and dairy products were included in the high-FODMAP foods group.
FODMAP, fermentable oligo-, di-, mono-saccharides, and polyols.