

Supplementary Table 1 Food questionnaire, *n* (%)

Food Categories	Names	Intake Frequency (t/wk)		
		≤ 1	2-6	≥ 7
Meat	Pork			
	Beef			
	Mutton			
	Chicken			
	Duck			
	Goose			
	Others			
Processed meat	Smoked meat			
	Salted meat			
	Others			
Seafood	Freshwater fish			
	Marine fish			
	Shrimp			
	Shellfish			
	Crab			
	Others			
Egg	Chicken egg			
	Duck egg			
	Goose egg			
	Others			
Soybean and its products	Soybean			
	Tofu			
	Others			
Spicy food	Red pepper			

	Chilli
	Capsicum frutescens
	Onion
	Scallion
	Garlic
	Others
Barbecue	
Dry-fried	Pistachio
nuts	Peanut
	Sunflower seed
	Others
Soft drinks	Milk
	Milky tea
	Soya-bean milk
	Tea
	Yogurt
	Carbonated drinks
	Fruit juice
	Coffee
	Others
Coarse grain	Wholewheat
	Oats
	Brown rice
	Others
Tubers	Sweet potato
	Potato
	Taro
	Chinese yam

	Others
Vegetables	Cauliflower
	Cabbage
	Celery
	Pumpkin
	Cucumber
	Others
Fruits	Apple
	Banana
	Pear
	Watermelon
	Durian
	Mango
	Others

Recall the consumption of all kinds of foods in the past 3 mo to 6 mo. Please tick at the corresponding "intake frequency" column, and fill in the multiple of standard gram (25 g) in "quantity per time" column.

Supplementary Table 2 Dietary factors, *n* (%)

	IBS patients (<i>n</i> = 25)	Non-IBS participants (<i>n</i> = 110)	<i>P</i> value
Quantity per time (g for solid food and ml for liquid food)			
Animal protein			
Meat	150 (100, 275)	150 (50, 250)	0.731
Processed meat	150 (100, 200)	150 (100, 200)	0.726
Seafood ^a	150 (100, 200)	100 (75, 150)	0.004
Egg			0.719
One (about 62.5 g)	18 (72.0)	83 (75.5)	
Two (about 125 g)	7 (28.0)	27 (24.5)	
Vegetable protein			
Soybean and its products ^a	250 (150, 350)	200 (100, 250)	< 0.001
Spicy food, barbecue and dry-fried nuts			
Spicy food ^a	250 (150, 300)	200 (150, 250)	0.036
Barbecue	200 (125, 250)	175 (100, 200)	0.263
Dry-fried nuts ^a	75 (50, 100)	62.5 (50, 75)	0.021
Soft drinks ^a			
0 mL	5 (20.0)	45 (40.9)	< 0.001
250 mL	9 (36.0)	54 (49.1)	
500 mL	11 (44.0)	11 (10.0)	
Staple food			
Coarse grain	150 (100, 200)	150 (100, 200)	0.500
Tubers	200 (150, 250)	200 (150, 250)	0.930
Vegetables and fruits			
Vegetables ^a	350 (300, 400)	250 (200, 300)	< 0.001
Fruits ^a	250 (200, 300)	200 (150, 250)	< 0.001

Intake frequency (times per week)			
Animal protein			
Meat			0.696
≤ 1 t/wk	7 (28.0)	27 (24.5)	
2-6 t/wk	8 (32.0)	35 (31.8)	
≥ 7 t/wk	10 (40.0)	48 (43.6)	
Processed meat			0.399
≤ 1 t/wk	20 (80.0)	77 (70.0)	
2-6 t/wk	3 (12.0)	28 (25.5)	
≥ 7 t/wk	2 (8.0)	5 (4.5)	
Seafood			0.871
≤ 1 t/wk	19 (76.0)	85 (77.3)	
2-6 t/wk	5 (20.0)	22 (20.0)	
≥ 7 t/wk	1 (4.0)	3 (2.7)	
Egg ^a			0.019
≤ 1 t/wk	2 (8.0)	41 (37.3)	
2-6 t/wk	13 (52.0)	38 (34.5)	
≥ 7 t/wk	10 (40.0)	31 (28.2)	
Vegetable protein			
Soybean and its products ^a			< 0.001
≤ 1 t/wk	10 (40.0)	95 (86.4)	
2-6 t/wk	7 (28.0)	12 (10.9)	
≥ 7 t/wk	8 (32.0)	3 (2.7)	
Spicy food, barbecue and dry-fried nuts			
Spicy food ^a			0.001
≤ 1 t/wk	7 (28.0)	63 (57.3)	
2-6 t/wk	7 (28.0)	33 (30.0)	

≥ 7 t/wk	11 (44.0)	14 (12.7)	
Barbecue ^a			< 0.001
≤ 1 t/wk	12 (48.0)	93 (84.5)	
2-6 t/wk	9 (36.0)	14 (12.7)	
≥ 7 t/wk	4 (16.0)	3 (2.7)	
Dry-fried nuts ^a			< 0.001
≤ 1 t/wk	15 (60.0)	102 (92.7)	
2-6 t/wk	4 (16.0)	7 (6.4)	
≥ 7 t/wk	6 (24.0)	1 (0.9)	
Soft drinks			0.598
≤ 1 t/wk	21(84.0)	97 (88.2)	
2-6 t/wk	4 (16.0)	11 (10.0)	
≥ 7 t/wk	0 (0.0)	2 (1.8)	
Staple food			
Coarse grain ^a			0.019
≤ 1 t/wk	9 (36.0)	54 (49.1)	
2-6 t/wk	3 (12.0)	36 (32.7)	
≥ 7 t/wk	13 (52.0)	20 (18.2)	
Tubers			0.130
≤ 1 t/wk	10 (40.0)	41 (37.3)	
2-6 t/wk	3 (12.0)	52 (47.3)	
≥ 7 t/wk	12 (48.0)	17 (15.5)	
Vegetables and fruits			
Vegetables			0.705
2-6 t/wk	8 (32.0)	31 (28.2)	
≥ 7 t/wk	17 (68.0)	79 (71.8)	
Fruits			0.879
≤ 1 t/wk	6 (24.0)	22 (20.0)	

2-6 t/wk	6 (24.0)	31 (28.2)
≥ 7 t/wk	13 (52.0)	57 (51.8)

IBS: Irritable bowel syndrome. The data are presented as the median (Q1, Q3) or number (percentage). ^a*P* < 0.05 *vs* controls.