

**Supplementary Table 1 The symptoms in 5 clusters of Gastrointestinal Symptom Rating Scale**

Symptoms clusters	Symptoms	Possible score range
Dyspepsia	borborygmus, abdominal distension, eructation , excess gas production	4~16
Diarrhea	diarrhea, loose stools, tenesmus	3~12
Abdominal pain	abdominal pain, tightness in abdomen feeling	2~8
Reflux	heartburn, sour regurgitation, nausea	3~12
Constipation	constipation, incomplete bowel emptying, dry stool	3~12
Total		15~60

**Supplementary Table 2 The factor loadings for first three factors from principal component analysis with an orthogonal transformation based on food frequency over past half year**

	Factor score		
	Pattern 1	Pattern 2	Pattern 3
cereal	-0.039	-0.140	0.740
tuber	0.069	0.494	-0.105
vegetable	0.076	0.117	0.765
fruit	0.062	0.771	0.059
meat	0.061	0.029	0.400
aquatic products	-0.015	0.394	0.203
eggs	0.022	0.066	0.029
soy products	-0.060	0.566	-0.049
dairy products	-0.004	0.047	-0.075
nuts	-0.016	0.088	0.022
Oil	0.041	0.155	0.085
salt	0.940	0.043	0.010
tea	0.945	0.013	0.039
alcoholic drink	0.046	-0.176	-0.194
eigenvalue	1.806	1.418	1.404
variance explained			
(%)	12.9%	10.1%	10.0%