Supplementary Table S1. Association between symptoms and micronutrient deficiencies and anemia

Outcome	Symptom	OR (95% CI)	Nagelkerke R^2	p-value
Vitamin B12 deficiency	Abdominal pain	0.58 (0.17 to 2.01)	0.016	0.390
	Diarrhea	0.68 (0.13 to 3.41)	0.005	0.634
	Constipation	1.66 (0.29 to 9.45)	0.006	0.570
	Anorexia	2.55 (0.77 to 8.40)	0.045	0.124
Folate deficiency	Abdominal pain	0.85 (0.26 to 2.75)	0.002	0.782
	Diarrhea	1.22 (0.29 to 5.09)	0.001	0.782
	Constipation	0.63 (0.07 to 5.67)	0.004	0.683
	Anorexia	3.68 (1.13 to 12.00)	0.087	**0.031***
Iron deficiency	Abdominal pain	1.08 (0.42 to 2.73)	0.000	0.876
	Diarrhea	1.70 (0.50 to 5.74)	0.013	0.393
	Constipation	1.33 (0.28 to 6.39)	0.002	0.719
	Anorexia	0.97 (0.34 to 2.77)	0.000	0.951
Ferritin deficiency	Abdominal pain	0.86 (0.34 to 2.18)	0.002	0.750
	Diarrhea	1.17 (0.35 to 3.84)	0.001	0.800
	Constipation	2.64 (0.48 to 14.52)	0.023	0.264
	Anorexia	0.97 (0.34 to 2.77)	0.000	0.951
Anemia	Abdominal pain	0.60 (0.15 to 2.42)	0.012	0.470
	Diarrhea	1.02 (0.20 to 5.30)	0.000	0.983
	Constipation	0.92 (0.10 to 8.44)	0.000	0.944
	Anorexia	1.16 (0.28 to 4.82)	0.001	0.843

Outcomes were coded as 1=deficiency/anemia present. ORs were obtained from univariable binary logistic regression; the reference category was absence of the symptom. CI: Confidence interval, OR: Odds ratio, *: p<0.05

Supplementary Table S2. Association between tissue transglutaminase IgA levels and micronutrient deficiencies and anemia

Outcome	Predictor	OR (95% CI)	Nagelkerke R^2	p-value
Vitamin B12 deficiency	tTGA >10x (vs. <10x)	1.11 (0.31 to 3.91)	0.001	0.873
Folate deficiency	tTGA >10x (vs. <10x)	1.73 (0.44 to 6.82)	0.013	0.431
Iron deficiency	tTGA >10x (vs. <10x)	3.54 (1.20 to 10.44)	0.093	**0.022***
Ferritin deficiency	tTGA >10x (vs. <10x)	2.00 (0.72 to 5.55)	0.030	0.184
Anemia	tTGA >10x (vs. <10x)	1.98 (0.40 to 9.89)	0.017	0.405

Outcomes were coded as 1=deficiency/anemia present. ORs were obtained from univariable binary logistic regression; tTGA <10x was the reference category. CI: Confidence interval, OR: Odds ratio,*: p<0.05, tTGA: Tissue transglutaminase IgA

Supplementary Table S3. Association between endoscopic and histopathological features and micronutrient deficiencies and anemia

Outcome	Endoscopic/histopathological feature	OR (95% CI)	Nagelkerke R^2	p-value
Vitamin B12 deficiency	Marsh type 3B-3C (vs. type 2-3A)	1.76 (0.55 to 5.66)	0.019	0.343
	Gastritis	1.83 (0.59 to 5.66)	0.023	0.292
	Helicobacter pylori infection	0.61 (0.12 to 3.04)	0.008	0.543
Folate deficiency	Marsh type 3B-3C (vs. type 2-3A)	1.76 (0.55 to 5.66)	0.019	0.343
	Gastritis	1.33 (0.44 to 4.00)	0.005	0.615
	Helicobacter pylori infection	1.09 (0.27 to 4.49)	0.000	0.904
Iron deficiency	Marsh type 3B-3C (vs. type 2-3A)	1.76 (0.71 to 4.35)	0.026	0.218
	Gastritis	2.16 (0.88 to 5.30)	0.047	0.094
	Helicobacter pylori infection	0.97 (0.31 to 3.08)	0.000	0.958
Ferritin deficiency	Marsh type 3B-3C (vs. type 2-3A)	2.72 (1.08 to 6.86)	0.076	**0.034***
	Gastritis	2.16 (0.88 to 5.30)	0.047	0.094
	Helicobacter pylori infection	1.97 (0.60 to 6.53)	0.022	0.265
Anemia	Marsh type 3B-3C (vs. type 2-3A)	2.43 (0.60 to 9.79)	0.038	0.211
	Gastritis	3.48 (0.87 to 14.02)	0.076	0.079
	Helicobacter pylori infection	1.70 (0.39 to 7.29)	0.010	0.477

Outcomes were coded as 1=deficiency/anemia present. ORs were obtained from univariable binary logistic regression. Reference categories were Marsh type 2-3A and absence of gastritis or *Helicobacter pylori* infection. CI: Confidence interval, OR: Odds ratio, *: p<0.05