

**Supplementary Table S1.** Bowel preparation adequacy and colonoscopy indications and findings.

	Complete cases (N=59)	Lost to follow up (N=20)	All cases (N=79)
<b>Bowel preparation adequacy, yes n(%)<sup>a</sup></b>			
Fair	15 (25%)	5 (25%)	20 (25%)
Good	37 (63%)	11 (55%)	48 (61%)
Excellent	7 (12%)	4 (20%)	11 (14%)
<b>Indication for colonoscopy, yes n(%)</b>			
Positive faecal occult blood test	24 (41%)	6 (30%)	30 (38%)
Surveillance colonoscopy <sup>c</sup>	19 (32%)	1 (5%)	20 (25%)
Other symptoms <sup>e</sup>	18 (31%)	8 (40%)	26 (33%)
Change in bowel habits <sup>b</sup>	5 (9%)	7 (35%)	12 (15%)
Iron-deficiency anaemia	5 (9%)	1 (5%)	6 (8%)
Suspected lesions <sup>d</sup>	2 (3%)	0 (0%)	2 (3%)
<b>Colonoscopy outcome, yes n(%)<sup>f</sup></b>			
No abnormalities detected	12 (20%)	7 (35%)	19 (24%)
Diverticular disease	18 (31%)	4 (20%)	22 (28%)
Polyps	37 (63%)	9 (45%)	46 (58%)
Other <sup>g</sup>	16 (27%)	8 (40%)	24 (30%)

*Notes:*

<sup>a</sup> Based on an overall Boston Bowel Preparation Scale score.

<sup>b</sup> Change in bowel habit(s) includes frequent stools, diarrhoea, faecal incontinence.

<sup>c</sup> Surveillance includes for family history, previous polyps, previous gastric surgery.

<sup>d</sup> Clinically or radiologically detected lesions included thickened area on scans and possible rectal mass detected; detected lesions were not associated with a cancer diagnosis.

<sup>e</sup> Other symptoms included abdominal pain, peri-rectal bleeding, haemorrhoids, anorectal pain, weight loss, vomiting, bloating, pain on defecation.

<sup>f</sup> Some participants received more than one diagnosis after colonoscopy, therefore percentages exceed 100%.

<sup>g</sup> Other outcomes included haemorrhoids, granular mucosa, and muscle hypertrophy.

**Supplementary Table S2.** Unadjusted and adjusted models of the change in beta-diversity of faecal samples collected one week before and one month after bowel preparation and colonoscopy using the Aitchison distance metric.

<i>Predictors</i>	<b>Aitchison distance</b>				
	<i>Df</i>	<i>Sum of squares</i>	<i>R<sup>2</sup></i>	<i>F</i>	<i>p-value</i>
<b>Unadjusted model</b>					
Time point	1	1975	0.004	0.441	<b>0.001</b>
Residual	116	519339	0.996		
Total	117	521314	1.000		
<b>Adjusted model</b>					
Age (years)	1	7610	0.015	1.749	0.246
Sex (male)	1	7228	0.014	1.661	0.604
BMI	1	7549	0.015	1.735	0.374
Diet quality	1	8891	0.017	2.043	0.028
IBS (yes)	1	5302	0.010	1.219	0.287
Time point	1	1976	0.004	0.454	0.001
Residual	111	482935	0.926		
Total	117	521314	1.000		
<p><i>Note: Age at time of recruitment; BMI calculated as weight (kilograms)/height(metres)<sup>2</sup> at time of recruitment; Diet quality measured using a Simple Dietary Questionnaire based on previous studies(37).</i></p> <p><i>Abbreviations: BMI, body mass index; CI, confidence interval; Df, degrees of freedom; IBS, irritable bowel syndrome.</i></p>					