

**Supplementary Table 1: Questionnaire used and investigations done for donor screening before fecal microbiota transplantation**

<b>Questionnaire</b>		No	Yes
Any history of concurrent acute medical illness?			
Any symptoms pertaining to gastrointestinal disease (nausea/ vomiting/ pain abdomen/ diarrhea/ blood in stool) ?			
Any history of chronic illness (diabetes/ hypertension/ heart disease/ kidney disease/ liver disease/ malignancy)?			
Any history in the past 3 months of intake of antibiotics/ antifungals/ antivirals?			
Any history of high risk sexual behavior?			
Any history of consumption of illicit drugs?			
Any history of tattoo or body piercing within the preceding 6 months?			
Any history of chronic GI diseases (inflammatory bowel disease/ IBS/ chronic constipation/ chronic diarrhea/ abdominal tuberculosis)?			
Any history of GI malignancy or strong family history of colorectal cancer?			
Any history of active GI infection in household members at present?			
Any history of other chronic illnesses such as autoimmune disease (multiple sclerosis/ connective tissue disorders)/ atopic disease (moderate–severe asthma, eczema, eosinophilic disorders of the gastrointestinal tract), metabolic syndrome, obesity or moderate to severe undernutrition/malnutrition			
<b>Investigations required</b>			
<b>Stool</b>		<b>Blood</b>	
C. difficile toxin by ELISA Culture/ sensitivity Atypical parasites Ova/ cysts Antimicrobial resistance gene testing		Complete blood count Biochemistry: Blood sugar, renal and liver function test Serologies for Hepatitis B and C, HIV IgM antibody against Hepatitis A and E VDRL CMV and EBV serology	
The answer should be 'No' for all the questions mentioned above			

ELISA: enzyme linked immunosorbent assay, CMV: cytomegalovirus, EBV: Epstein Barr virus

**Supplementary table 2: Protocol for donor screening for COVID-19**

<b>Questions</b>	<b>Yes/ No</b>
Any history of travel to COVID endemic region in the past 2 weeks ?	
Any history of contact with a patient with COVID-19 ?	
Any symptoms suggestive of COVID-19 such as fever/ cough/ coryza/ chest pain/ loss of smell or taste/ respiratory distress ?	
Any history of being diagnosed with COVID-19 infection ?	
These questions will be asked before every stool donation <b>Answer should be No for every question</b>	
<b>Investigations</b>	
RT-PCR for SARS-CoV-2 before every donation	Positive/ Negative

**Supplementary Table 3a: Dietary items that were allowed and that were not allowed in the anti-inflammatory diet**

<b>Rationale for various diets</b>	<b>Mechanistic rationale</b>	<b>Epidemiologic rationale</b>
<p><b>Cereals and grains</b>  <b>-Avoid:</b> Gluten-based grains: Wheat, refined wheat flour, semolina</p> <p><b>-Recommend:</b> Rice, maize, ragi, buckwheat, water chestnut flour, barnyard, pearl millet, sorghum</p>	Gluten has been shown to increase severity of experimental colitis in animal model[1]	-
<p><b>Nuts, seeds, legumes</b>  <b>-Avoid:</b> Whole seeds and nuts</p> <p><b>-Recommend:</b> Flaxseeds, walnuts, almonds etc. All seeds such as cumin, fenugreek, chia seeds etc in powdered form.  Washed pulses and legumes</p>	<p>-Increase the intake of soluble fibre  limit insoluble fibre intake</p> <p>-High fibre diet (especially soluble fibre intake) is linked to increased short chain fatty acid production which acts on the epithelial as well as immune cells to maintain gut homeostasis and epithelial integrity by increasing mucus production and expansion of tolerogenic T regulatory cells[2],[3]</p>	-
<p><b>Fruits</b>  <b>-Avoid:</b> Fruits with seeds  <b>-Recommend:</b> All fruits with soft texture and strained out seeds can be included</p>		
<p><b>Dairy:</b>  <b>-Avoid:</b> Dairy products of any kind and margarine  <b>-Recommend:</b> Fresh curd</p>	Milk derived fat increased colitis in animal models through dysbiosis and altered bile salt metabolism[4]	Omega six fatty acid in margarine associated with increased risk of UC[5]
<p><b>Non Vegetarian</b>  <b>-Avoid:</b> Processed, canned, irradiated, smoked or red meat  <b>-Recommend:</b> Fresh chicken, Fish and egg</p>	<p>-High protein and/or red meat intake results in an increase in harmful bacterial metabolites such as ammonia, indoles, phenols and sulphide[6].</p> <p>-Dietary heme in meats shown to increase colitis severity in animal models[7]</p>	<p>-Animal protein consumption associated with increased risk of UC[8],[9]  -Omega-6 fatty acid in red meat is associated with increased risk of UC[5]  -Animal protein associated with increased risk of UC relapse[10]</p>
<p><b>Vegetables</b>  <b>-Avoid:</b> Tough texture, with seed and in salad form</p> <p><b>-Recommend:</b> All vegetables with soft texture. Garlic, Onion, Leek, Asparagus. Cruciferous Veg e.g. Cauliflower, cabbage, broccoli, radish, turnip, German turnip.</p>	<p>-Tough texture limited to limit insoluble fibre intake</p> <p>-Soft texture vegetables promoted to increase soluble fibre intake</p> <p>-Cruciferous vegetables are rich in AhR ligands which activate AhR receptor in immune and epithelial cells that decrease intestinal</p>	-Increased vegetable intake associated with decreased risk of UC[8]

	<p>permeability (through IL-22 production) and create an anti-inflammatory state[11],[12].</p> <p>-AhR receptor activation by specific agonists reduced colitis in mice[11]</p> <p>-Polyphenols and flavonoids derived from vegetables of different colours also activate the AhR[13]</p>	
<p><b>Oil</b></p> <p><u>-Avoid:</u> Sunflower, Safflower oil</p> <p><u>-Recommend:</u> Mustard, Soyabean, Olive, Canola and Rice bran oil</p>	<p>-Saturated and omega six fatty acids can influence the microbiome by altering bile salt metabolism and microbiota composition[14,15]</p> <p>-Omega 6 fatty acid rich diet induced intestinal inflammation in mice and caused dysbiosis[16]</p> <p>-Omega 3 fatty acids shown to have anti-inflammatory effects through enhancement of T-regulatory cells[17]</p>	<p>-Omega six fatty acid associated with increased risk of UC[5]</p> <p>-Omega-3 fatty acids associated with decreased risk of UC[18]</p>
<p><b>Sugar</b></p> <p><u>Avoid:</u> Refined sugars</p> <p><u>Recommend:</u> Honey</p>	<p>-High fat/ high sugar diet promoted dysbiosis, increased intestinal permeability, reduced goblet cell numbers, decreased mucus thickening, activated immune pathways in animal models[19,20]</p>	<p>High sugar and soft drink intake combined with low intake of vegetables was associated with increased risk of UC[21]</p>
<p><b>Processed food and food additives</b></p> <p>To be avoided</p>	<p>Maltodextrin, Polysorbate 80 and carboxymethyl cellulose have been shown to increased gut permeability, reduce mucus thickness, increase penetration of intestinal bacteria and dysbiosis[22,23]</p>	
<p><b>Cooking Methods</b></p> <p><u>Avoid:</u> Frying, shallow frying, charred/ burnt, too much tempering/ too much churning or food overcooked at high temperatures.</p> <p><u>Recommend:</u> Sautéed, steamed, boiled, baked, cooked on griddle</p>		

**Supplementary table 3b:** Dietary advise given to patients who received fecal microbiota transplantation and anti-inflammatory diet

**Daily food intake to include:**

<b>FOOD ITEMS</b>	<b>Raw Amount</b>
<p><b><u>Curd</u></b>  <b>Recommended-</b> Fresh curd, salted yogurt/ buttermilk, Lactose free/ Almond/ Soya milk, curd with cut/ pureed fresh fruits  <b>Avoid-</b> Milk, milk pudding, cottage cheese, milkshake or dairy of any kind, packaged yogurts</p>	500 ml
<p><b><u>Cereals and grains</u></b>  <b>Recommended-</b> Rice, pearl millet, Maize, buckwheat, water-chestnut flour, corn, finger millet, barnyard millet, oats, rice flakes.  Dough for flattened bread can be made with curd and water. Any form of fermented regional preparation (fermented rice-pancakes) is encouraged.  <b>Avoid-</b> Gluten-based grains – Wheat, refined wheat flour, semolina, Barley, Rye, Multigrain bread and all other breads and bakery items</p>	200 g (8 exchanges of 25 gm each)
<p><b><u>Pulses</u></b>  <b>Recommended:</b> Washed and whole pulses, legumes in soaked and germinated form (eg. soyabean, black gram, dry peas, red gram, bengal gram).  Pulses can be taken in the form of soup/ fermented pulse-pancake/ sprouted.  <b>Avoid:</b> Semi cooked.</p>	75 gm (3 exchanges of 25 gm each)
<p><b><u>Vegetables</u></b>  <b>Recommended:</b> All vegetables preferably cooked to soft texture.  <ol style="list-style-type: none"> <li><b>Cabbage, cauliflower, radish, turnip, broccoli</b> etc, should be included in cooked/fermented/ pickled form at least in one meal.</li> <li>Include potato, sweet potato, brinjal, broad beans, baby corn, onion (non-fried), colocasia, yam etc</li> <li>Pumpkin, carrot, bottle gourd, ridge gourd etc.</li> </ol> Leafy vegetables should be thoroughly cooked eg. mustard leave, amaranth, wild spinach, spinach, fenugreek leaves etc.  Different colour vegetables are to be included. Vegetables in the form of soup can be taken and salads in grated form is preferred.  <b>Avoid:</b> Tough texture vegetables if not cooked properly.  (Do not use processed, packaged or canned vegetables )</p>	At least 500 gm  <ol style="list-style-type: none"> <li>200 gm</li> <li>150 gm</li> <li>150 gm</li> </ol> (5 exchange of 100 gm each)
<p><b><u>Fruits</u></b>  <b>Recommended:</b> All seasonal ripe, fresh/ stewed fruits can be taken. Fruits and curd combination can be taken. <b>Apple, dates, figs, ripe guava, papaya, banana, sapota, apple, custard apple</b> etc  <b>Avoid:</b> Do not use processed, packaged or canned fruits.  Whole fruits should be preferred over fruit juices.</p>	150 gm
<p><b><u>Ghee/ oil/ butter</u></b>  <b>Recommended:</b> Prefer clarified butter, butter and omega 3 rich oils such as mustard, rice bran, canola, soybean for cooking food.  <b>Avoid:</b> Omega 6 rich oils such as sunflower, safflower oil.</p>	25ml (5 tsp)
<p><b><u>Sugar</u></b>  <b>Recommended:</b> Sugar/ Jaggery/ honey in moderation.  <b>Avoid:</b> Toffees, chocolates, jellies, jams, sweetened yogurts (processed), sweets etc.</p>	10gm (2 tsp)
<p><b><u>Salt-</u></b> Take salt only in cooked pulses and vegetables.</p>	Low

<b>Spices and condiments</b> Spices such as fenugreek seeds, carom seeds, cumin seeds, coriander powder, turmeric, cardamom, clove, fennel seeds, black pepper, red chilli, mustard seeds etc. can be used as per tolerance. You can consider taking ½ tsp of turmeric powder with warm water at bedtime. Fresh homemade sauce can be taken.		As per taste																								
<b>Nuts and seeds</b> Walnuts, Almonds, peanuts, flaxseed preferably in soaked form		One handful																								
<b>Non-veg.</b> <b>Egg</b> can be taken <b>Recommended:</b> Fresh fish (preferably soft and well cooked at home) <b>Do not take:</b> Processed, fried, canned, irradiated, smoked, red meat or any other meat.		Once a week																								
<b>Cooking Methods</b> <b>Recommended:</b> Pressure cooking, Sauté, steamed, boiled, baked, cooked on griddle. <b>Avoid:</b> Frying, shallow frying, charred/ burnt, too much tempering/ too much churning or food overcooked at high temperatures.																										
<b>Snacks</b> <b>Recommended:</b> Cereals: puffed rice/ rice flakes or rice pancake. Pulses: Sprouts/ boiled Bengal gram /pulse pancake/ peanuts Vegetables: Baked/ boiled sweet potato/ potato. Fruit: Fruit salad. Misc.: Dates/ roasted foxnut can be taken. <b>Avoid:</b> Savouries, patties, French fries, chips, noodles, burger, pizza, readymade snacks, mayonnaise, sausages, biscuits, deep fried foods, sauces, syrups, jams, potato chips, candies, chocolates, cakes, cookies and gum.																										
<b>Beverages &amp; Water</b> <b>Recommended:</b> Curd: Buttermilk Pulse: pulse- soup Fruit: Fresh juices diluted with water Vegetable: vegetable soups Misc.: lemon water, coconut water, black/green tea can be taken as per individual requirement. <b>Avoid:</b> Packed juices, tea with milk, energy drinks, carbonated drinks, packaged or processed tinned drinks																										
<table border="1"> <thead> <tr> <th colspan="2">Sample menu with timings</th> <th>No. of Exchanges</th> </tr> </thead> <tbody> <tr> <td>7 AM</td> <td>Early Morning</td> <td>One handful of nuts or seeds</td> </tr> <tr> <td>8 AM</td> <td>Breakfast</td> <td>Cereal-2 + *curd -350 ml+ Vegetable-1 + oil - 2tsp *Dough for flattened bread for the day can be made with curd.</td> </tr> <tr> <td>10 30 AM</td> <td>Midmorning snack</td> <td>Curd – 200 ml+Fruit- 1</td> </tr> <tr> <td>1-2 PM</td> <td>Lunch</td> <td>Cereal 2- 3 + curd – 200 + cooked Vegetable-1 + salad-1 + pulse- 1 + oil- 2tsp</td> </tr> <tr> <td>5PM</td> <td>Evening snack</td> <td>Pulses- 1+ Vegetable- 1 + oil - 2tsp (eg. sprouted salad)</td> </tr> <tr> <td>8 PM</td> <td>Dinner</td> <td>Cereals-2+ Pulse-1+ Vegetable-1+ + oil-2tsp</td> </tr> <tr> <td>10 PM or earlier</td> <td>Bed time snack</td> <td>Fruit - 1</td> </tr> </tbody> </table>			Sample menu with timings		No. of Exchanges	7 AM	Early Morning	One handful of nuts or seeds	8 AM	Breakfast	Cereal-2 + *curd -350 ml+ Vegetable-1 + oil - 2tsp *Dough for flattened bread for the day can be made with curd.	10 30 AM	Midmorning snack	Curd – 200 ml+Fruit- 1	1-2 PM	Lunch	Cereal 2- 3 + curd – 200 + cooked Vegetable-1 + salad-1 + pulse- 1 + oil- 2tsp	5PM	Evening snack	Pulses- 1+ Vegetable- 1 + oil - 2tsp (eg. sprouted salad)	8 PM	Dinner	Cereals-2+ Pulse-1+ Vegetable-1+ + oil-2tsp	10 PM or earlier	Bed time snack	Fruit - 1
Sample menu with timings		No. of Exchanges																								
7 AM	Early Morning	One handful of nuts or seeds																								
8 AM	Breakfast	Cereal-2 + *curd -350 ml+ Vegetable-1 + oil - 2tsp *Dough for flattened bread for the day can be made with curd.																								
10 30 AM	Midmorning snack	Curd – 200 ml+Fruit- 1																								
1-2 PM	Lunch	Cereal 2- 3 + curd – 200 + cooked Vegetable-1 + salad-1 + pulse- 1 + oil- 2tsp																								
5PM	Evening snack	Pulses- 1+ Vegetable- 1 + oil - 2tsp (eg. sprouted salad)																								
8 PM	Dinner	Cereals-2+ Pulse-1+ Vegetable-1+ + oil-2tsp																								
10 PM or earlier	Bed time snack	Fruit - 1																								

**Supplementary table 4:** Numbers available for analysis for various outcomes at various time points in patients who received fecal microbiota transplantation & anti-inflammatory diet vs those who received optimized standard medical therapy

		Baseline	8 weeks	24 weeks	48 weeks
Clinical	FMT-AID	35	35 <sup>a</sup>	31 <sup>d</sup>	30 <sup>d</sup>
	SMT	31	31 <sup>a</sup>	31	31
Endoscopic	FMT-AID	35	33 <sup>b</sup> (18 <sup>b1</sup> + 7 <sup>b2</sup> + 8 <sup>b3</sup> ) Excluded 2 <sup>c</sup>	NA	24 <sup>e</sup> (9 + 12 + 3) Excluded 11 (5 + 6)
	SMT	31	23 <sup>b</sup> (11 <sup>b1</sup> + 12 <sup>b2</sup> ) + Excluded 8 <sup>c</sup>	NA	27 <sup>f</sup> (7 + 20) Excluded 4
Fecal calprotectin	FMT-AID	32	20	NA	
	SMT	30	10	NA	

<sup>a</sup> 7 and 12 patients respectively in FMT-AID and SMT arm had treatment failure before 8 weeks, and were considered as clinical non-responders

<sup>b1</sup> 18 and 11 patients respectively in FMT-AID and SMT arm had endoscopy done at 8 weeks.

<sup>b2</sup> 7 and 12 patients respectively in FMT-AID and SMT arm had treatment failure before 8 weeks, so these patients were considered as endoscopic non-responders (Of these 7 patients in FMT-AID arm, 6 discontinued FMT before 7 sessions, of which 1 patient each discontinued at 1, 2, 4 and 5 sessions, and 2 patients discontinued at 3 sessions).

<sup>b3</sup> 8 patients in FMT + diet arm did not undergo endoscopy at 8 weeks due to COVID-19 pandemic, so the endoscopic score at last FMT was carried forward to 8 weeks. Of these in four patients, 7 FMT sessions were complete and endoscopic score at 6 weeks was carried forwards, in 3 patients 6 FMT sessions were complete, and endoscopic score at 5 weeks was carried forwards, and in 1 patient, 4 FMT sessions were complete, and endoscopic score at 3 weeks was carried forwards

<sup>c</sup> 2 and 8 patients in FMT-AID and SMT arm did not undergo endoscopy after baseline due to COVID-19 pandemic, and were excluded from analysis of endoscopic and composite outcomes

<sup>d</sup> 4 and 5 patients, respectively had not completed 24 and 48 weeks follow-up

<sup>e</sup> In the FMT-AID arm, 9 patients had endoscopy done at 48 weeks, 12 were clinical non-responders at 8 weeks and were considered as endoscopic non-responders at 48 weeks, and 3 had treatment failure after 8 weeks, and were considered as endoscopic non-responders at 48 weeks. Five patients were ongoing, and 6 patients did not have endoscopy done at 48 weeks and were excluded from analysis.

<sup>f</sup> In the SMT arm, 7 patients had endoscopy done at 48 weeks, 20 were clinical non-responders at 8 weeks and were considered as endoscopic non-responders at 48 weeks. Four patients did not have endoscopy done at 48 weeks and were excluded.

**Supplementary table 5:** Comparison of medications at baseline, 8 and 48 weeks in patients who received optimized standard medical therapy (SMT) and fecal microbiota transplantation with anti-inflammatory diet (FMT-AID)

Medication	FMT-AID (Both induction and maintenance)				SMT (Both induction and maintenance)			
	Baseline (n=28)	8 weeks (n=28)	Baseline (n=15)	48 weeks (n=15)	Baseline (n=19)	8 weeks (n=19)	Baseline (n=11)	48 weeks (n=11)
5-ASA oral	28 (100)	28 (100)	15 (100)	15 (100)	18 (100)	19 (100)	11 (100)	11 (100)
Steroid oral	3 (10.7)	0	2 (13.3)	0	0	0	0	0
Azathioprine	9 (32.1)	9 (32.1)	3 (20)	3 (20)	5 (26.3)	5 (26.3)	3 (27.3)	3 (27.3)

5-ASA: amino-salicylic acid

p value > 0.05 for all comparisons.



**Supplementary table 6: Donor details\* at various sessions for patients who underwent fecal microbiota transplantation**

Patient number	Session1	Session2	Session3	Session 4	Session5	Session 6	Session7	Number of donors
1	1	1,2	1,2	1,2	1,2	1,2	1,2	2
2	1	1,2	1,2	1,2	1,3	1,2	1,2	2
3	1,2	1,2	1,2	1,2	1,3	1,2	2,3	3
4	1,2	1,2	1,2	1,2	1,2	2,3	2,3	3
5	1,2	1,2						2
6	1,2	1,2	1,2	2,3	2,3	4,5	5,6	6
7	1,2	2,3	2,3	2,3	4,5	5,6	6,7	7
8	1,2	2,3	2,3	4,5	5,6			6
9	2,3	4,5	5,6	7,8,9	3,7,9	3,6	3,6,7	8
10	2,3	4,5	5,6	6,7	7,8,9	3,9,7	3,6	8
11	6,7	2,6,7	7,8,9	3,7,9	3,6	3,6,7	3,9,10	7
12	6,7	2,6,7	7,8,9					5
13	7,8,9	3,7,9	3,6	3,6,7	3,9,10	3,10,11	3,4,5	9
14	3,7,9	3,6	3,6,7	3,9,10	3,11,12	3,7,11	3,4,5	9
15	3,6,7	3,9,10	3,11,12	3				7
16	3	3	3,4,5	2,3	2,3,7,12	3,6,8,10	3,7,11,12,13	11
17	3,10,11	3,7,11	3,4,5	2,3	2,3,7,12	3,6,8,10	3,7,11,12,13	11
18	3	3	3	3	2,3,7,12	3,6,8,10	3,7,11,12,13	9
19	3	3,7,11	3,4,5	2,3	2,3,7,12	3,6,8,10	3,7,11,12,13	11
20	3,4,5	2,3	2,3,7,12					6
21	3,7,12	2,3	2,3,7,12	3,6,8,10	3,7,11,12,13	2,3,4,7		10
22	3,7,12	2,3	2,3,7,12	3,6,8,10	3,7,11,12,13	2,3,4,7		10
23	3,7,12	3	2,3,7,12	3,6,8,10	3,7,11,12,13	2,3,4,7		10
24	2,3,7,12	3,6,8,10	3,7,11,12,13	2,3,4,7				10
25	2,3,4,7							4
26	2,3,4,7							4
27	2,3,4,7							4
28	3,8	3,8	3,8	3,8	3,8	3,8	3,8	2
29	3,8	3,8	3,8	3,8	3,8	3,8,2	3,8	3
30	3,8	3,8	3,8	2,3,8	3,8	3,8	3,8	3
31	3,8	3,8	3,8	3,8	2,3,8	3,8	3,8	3
32	3,8	2,3,8	3,8	3,8	3,8	3,8	3,8	3
33	3,8	3,8	2,3,8	3,8	3,8	3,8	3,8	3
34	3,8	2,3,8	3,8	3,8	3,8	3,8	3,8	3
35	2,3,8	2,3,8	2,3,8	2,3,8	2,3,8	2,3,8	2,3,8	3

\*Thirteen donors (1 – 13) were used for fecal microbiota transplantation. Numbers indicate a particular donor.

**Supplementary table 7:** Comparison between baseline and 8 week dietary intake among patients who received fecal microbiota transplantation & anti-inflammatory diet vs those who received optimized standard medical therapy

Variables (Median (range))	SMT (n=19)			FMT-AID (n=26)		
	Baseline	8 week	P-value	Baseline	8 weeks	P-value
<b>Food groups</b>						
Wheat (g)	225 (50-385)	205 (26-350)	0.66	157 (0-750)	0 (0-218)	<0.001
Milk and milk products* (g)	410 (0-1250)	133 (0-601)	0.06	233 (20-625)	0 (0-43)	<0.001
Curd (g)	22 (0-650)	80 (0-750)	0.92	86 (0-500)	236 (14-604)	0.002
Total Non-veg foods (g)	0 (0-30)	0 (0-76)	0.30	0 (0-100)	0(0-61)	0.39
Processed foods (g)	62 (0-517)	24 (0-155)	0.04	43 (0-559)	0 (0-33)	<0.001
Total fibre (g)	39.8 (14.5 – 86.5)	39.3 (18 – 69)	0.72	31.8 (7.6 – 112)	30.8 (13 – 60)	0.48
Insoluble fibre (g)	32.8 (9.9 – 73.1)	31.8 (13 – 57)	0.75	24.4 (5.4 – 92)	22.5 (16.3 – 36.3)	0.40
Soluble Fibre (g)	7.9 (3.9-13.3)	7.9 (4-13)	0.83	6.5 (2.1 – 20)	8.3 (2.8 – 21.8)	0.22
Soluble fibre to energy ratio	0.004 (0.0 – 0.01)	0.004 (0 – 0.01)	0.60	0.0035 (0 – 0.01)	0.005 (0 – 0.01)	<0.001
<b>Macronutrients</b>						
Energy (Kcal)	1925 (1420-3145)	1871 (1290-2553)	0.12	1780 (651-4429)	1520 (675-2723)	0.07
Protein (g)	60 (30-91)	51 (34-77)	0.14	50 (24-137)	43.5 (18-83)	0.14
Carbohydrate (g)	238 (155-533)	256 (163-365)	0.05	212 (78-881)	238 (76-499)	0.52
Total Fat (g)	56 (21-121)	56 (32-123)	0.97	50.5 (10-156)	40 (6-78)	0.04
<b>Micronutrients</b>						
Thiamine (mgs)	1.6 (0.4-3.2)	1.5 (0.7-2.2)	0.63	1 (0-4)	1 (0-2)	0.27
Riboflavin (mgs)	0.8 (0.4-2.2)	0.9 (0.3-2.3)	0.91	1 (0-2)	1 (0-2)	0.91
Niacin (mgs)	9.1 (4.4-18.1)	8.8 (4.3-13.9)	0.75	7.5 (2-29)	7 (3-15)	0.88
Pantothenic Acid (mgs)	4.4 (2.5-7.8)	4.7 (2.4-7.1)	0.75	4 (2-11)	3.5 (2-7)	0.21
Biotin (µg)	12.6 (3.9-26.2)	13.4 (3.5-27.1)	0.64	10 (2-24)	10 (3-26)	0.58
Ascorbic Acid (mgs)	38 (4-121)	57 (6-205)	0.09	45.5 (5-186)	85 (38-220)	<0.001
Retinol (µg)	216 (67-725)	215 (67-701)	0.48	215 (34-2420)	240 (46-806)	0.89
Calcium (mgs)	603 (195-1847)	587 (224-1896)	0.60	465 (129-1436)	479 (131-1288)	0.97
Iron (mgs)	14 (7-31)	16 (7-25)	0.90	11 (4-39)	10 (3-23)	0.40
Omega 6 fatty acid (mgs)	6935 (3662-22769)	8497 (3386-23456)	0.53	5841 (686-17914)	6962 (1569-17174)	0.28
Omega 3 fatty acid (mgs)	2356 (1467-4949)	2703 (715-5045)	0.56	2296 (186-11889)	2463 (338-4053)	0.38
Total Polyphenols (mgs)	130 (31-272)	169 (60-478)	0.14	118 (43-249)	228 (56-458)	<0.001
Sulfated amino acids (µg)	1890 (867 – 3292)	1759 (843 – 4237)	0.90	1511 (656 – 5000)	1385 (458 – 2998)	0.02

\*Except curd

FMT-AID: Fecal microbiota transplantation & anti-inflammatory diet; SMT: Optimized standard medical therapy

Values in bracket are in range

**Supplementary table 8:** Comparison of dietary intake among patients in FMT-AID arm at baseline and 48 weeks, and between FMT-AID arm and SMT arm at 48 weeks

Variables (Median (range))	FMT-AID baseline (n=15)	FMT-AID 48 weeks (n=15)	p-value	FMT-AID 48 weeks (n=15)	SMT 48weeks (n=11)	p-value
<b>Food groups</b>						
Wheat (g)	200 (25-500)	0 (0-280)	<0.001	0 (0-280)	275 (125-350)	<0.001
Milk products* (g)	229 (20-600)	0 (0-300)	<0.001	0 (0-300)	316 (0-601)	0.001
Curd (g)	64 (0-300)	171 (0-500)	0.05	171 (0-500)	5 (0-750)	0.13
Total Non-veg foods (g)	0 (0-100)	0 (0-86)	0.66	0 (0-86)	0 (0-76)	0.36
Processed foods (g)	55 (14-331)	0 (0-4)	<0.001	0 (0-4)	14 (0-50)	<0.001
AhR Ligand foods (g)	-	-		164 (69-386)	29 (0-107)	<0.001
Fermented foods (g)	-	-		23 (0-63)	0 (0-0)	0.005
Total fibre (g)	33.9 (7.6 – 66)	26 (16.2 – 57.6)	0.78	26 (16.2 – 57.6)	37.7 (30 – 54)	0.10
Insoluble fibre (g)	25.8 (5.4 – 48.8)	20.3 (11.5 – 46.1)	0.53	20.3 (11.5 – 46.1)	31.7 (23 – 44)	0.04
Soluble Fibre (g)	6.7 (2.1 – 12.5)	7.5 (4.7-12.3)	0.48	7.5 (4.7-12.3)	7.4 (5.8-10.8)	1.0
Soluble fibre to energy ratio	0.033 (0 – 0.01)	0.055 (0.0 – 0.01)	0.004	0.055 (0.0 – 0.01)	0.0042 (0 – 0.01)	0.01
<b>Macronutrients</b>						
Energy (Kcal)	1787 (667-3995)	1491 (657-1972)	0.05	1491 (657-1972)	1947 (1403-2564)	0.01
Protein (g)	50 (25-94)	42 (20-62)	0.14	42 (20-62)	47 (34-80)	0.10
Carbohydrate (g)	258 (78-503)	258 (95-313)	0.58	258 (95-313)	258 (185-326)	0.71
Total Fat (g)	50 (28-156)	33 (5-64)	0.001	33 (5-64)	68 (29-123)	<0.001
<b>Micronutrients</b>						
Thiamine (mgs)	1.2 (0.3-2.2)	0.7 (0.5-1.7)	0.08	0.7 (0.5-1.7)	1.5 (0.8-2)	0.001
Riboflavin (mgs)	0.6 (0.2-1.6)	0.6 (0.3-1.6)	0.86	0.6 (0.3-1.6)	0.9 (0.5-2.4)	0.09
Niacin (mgs)	7.9 (1.6-16.1)	7.5 (4.4-14.1)	0.92	7.5 (4.4-14.1)	8.6 (6.8-14.1)	0.21
Pantothenic Acid (mgs)	3.9 (1.7-8.1)	3.8 (2.2-6.6)	0.51	3.8 (2.2-6.6)	4.3 (3.6-7.6)	0.04
Biotin (µg)	10.6 (6.1-23.1)	10.6 (5.9-36.6)	0.81	10.6 (5.9-36.6)	12.6 (8.4-27)	0.24
Ascorbic Acid (mgs)	52 (5-102)	92 (55-271)	0.001	92 (55-271)	74 (30-157)	0.04
Retinol (µg)	220 (45-495)	225 (54-1670)	0.72	225 (54-1670)	219 (14-640)	0.75
Calcium (mgs)	442 (129-1008)	378 (179-984)	0.54	378 (179-984)	617 (169-1942)	0.08
Iron (mgs)	12 (4-23)	8 (6-18)	0.30	8 (6-18)	14 (9-18)	0.01
Omega 6 fatty acid (mgs)	5786 (2354-17914)	5211 (1832-12620)	0.91	5211 (1832-12620)	8837 (6176-23504)	0.02
Omega 3 fatty acid (mgs)	2310 (340-11889)	2341 (339-4052)	0.98	2341 (339-4052)	2657 (1808-5087)	0.24
Total Polyphenols (mgs)	121 (43-198)	211 (102-409)	<0.001	211 (102-409)	173 (70-324)	0.41
Sulfated amino acids (µg)	1449 (1027 – 2894)	1389 (811 – 3509)	0.49	1389 (811 – 3509)	1575 (1248 – 4435)	0.10

\*Except curd, FMT-AID: Fecal microbiota transplantation & anti-inflammatory diet; SMT: Optimized standard medical therapy

AhR: Arylhydrocarbon receptor

Values in bracket are in range

**Supplementary table 9:** Comparison of dietary intake in FMT-AID and SMT arm at baseline, 8 and 48 weeks with reference to recommended daily allowance

**9a- Comparison among patients in FMT and anti-inflammatory diet group at baseline, 8 and 48 weeks**

Median (range)	FMT baseline	FMT 8 week	FMT 48 week	P value- FMT baseline vs 8 week	P value- FMT baseline vs 48 week
Percentage protein intake	105 (52 – 254)	90 (39 - 181)	85 (44 – 135)	0.02	0.05
Percentage fat intake	125 (27 – 422)	98 (45 – 212)	89 (52 – 141)	0.04	0.001
Percentage energy intake	89 (39 – 210)	81 (39 – 152)	82 (40 – 109)	0.08	0.02
Percentage vitamin B1 intake	83 (24 – 285)	58 (22 – 135)	53 (33 – 109)	0.01	0.02
Percentage vitamin B2 intake	39 (10 – 84)	43 (16 - 98)	32 (16 – 80)	0.95	0.84
Percentage vitamin B3 intake	70 (14 – 261)	64 (27 – 134)	57 (40 – 128)	0.22	0.90
Percentage vitamin B5 intake	78 (34 – 222)	72 (31 – 139)	76 (45 – 132)	0.07	0.33
Percentage biotin intake	42 (10 – 170)	40 (14 – 105)	42 (24 – 146)	0.57	0.67
Percentage vitamin C intake	63 (8 – 373)	124 (50 – 311)	140 (69 – 416)	0.01	0.01
Percentage calcium intake	50 (13 – 144)	48 (13 – 129)	38 (18 – 98)	0.98	0.39
Percentage iron intake	63 (21 – 204)	54 (16 – 123)	44 (32 – 95)	0.07	0.08

**9b- Comparison among patients in SMT group at baseline, 8 and 48 weeks**

Median (range)	SMT baseline	SMT 8 week	SMT 48 weeks	P value- SMT baseline vs 8 week
Percentage protein intake	117 (65 – 169)	108 (73 – 170)	94 (75 – 149)	0.07
Percentage fat intake	132 (46 – 329)	147 (68 – 262)	145 (78 – 262)	0.94
Percentage energy intake	106 (74 – 189)	96 (61 – 135)	92 (85 – 128)	0.02
Percentage vitamin B1 intake	111 (30 – 228)	106 (47 – 158)	109 (60 – 142)	0.87
Percentage vitamin B2 intake	42 (19 – 110)	44 (18 – 116)	44 (28 – 118)	0.98
Percentage vitamin B3 intake	73 (40 – 129)	72 (39 – 126)	73 (62 – 84)	0.79
Percentage vitamin B5 intake	88 (50 – 156)	93 (48 – 143)	85 (71 – 151)	0.84
Percentage biotin intake	50 (16 – 105)	54 (14 – 108)	51 (42 – 70)	0.36
Percentage vitamin C intake	47 (7 – 186)	88 (9 -315)	114 (46 – 197)	0.07
Percentage calcium intake	60 (20 – 185)	59 (22 – 190)	62 (17 – 194)	0.41
Percentage iron intake	75 (35 – 164)	82 (35 – 134)	75 (47 – 93)	0.95

Values in bracket are in range

**Supplementary table 10:** Quantitative adherence to individual food groups at 8 weeks and 48 weeks in the FMT-AID arm

Food group	Prohibited food groups					Recommended food groups			Overall adherence
	Wheat	Processed food	Non-vegetarian food	Milk and milk products (except curd)	Average adherence	AhR ligand rich foods	Curd	Average adherence	
Adherence at 8 weeks									
-Highly adherent	96.2%	88.5%	92.3%	100%	92.3%	42.3%	15.4%	34.6	65.4%
-Moderately adherent	0	7.7%	0	0	7.7%	15.4%	26.9%	11.5	34.6%
-Poorly adherent	3.8%	3.8%	0	0		23.1%	15.4%	34.6	
-Non-adherent	0	0	7.7%	0		19.2%	42.3%	19.2	
Adherence at 48 weeks									
-Highly adherent	78.6%	100%	71.4%	100%	71.4	57.1%	7.1%	14.3	64.3%
-Moderately adherent	7.1%	0	0	0	28.6	21.4%	7.1%	28.6	35.7%
-Poorly adherent	14.3%	0	0	0		21.4%	35.7%	50	
-Non-adherent	0	0	28.6%	0		0	50%	7.1	

FMT-AID: Fecal microbiota transplantation &amp; anti-inflammatory diet

**Supplementary table 11: Sensitivity analysis for various endoscopic, biomarker and composite outcomes at 8 and 48 weeks**

	FMT-AID (n=35)	SMT (n=31)	P value	OR (95% CI)
<b>Including all patients- considering patients without repeat endoscopy as treatment failures (repeat endoscopy not possible due to pandemic):</b>				
<b>8 weeks Endoscopic</b>				
Endoscopic response 8 weeks	15 (42.8)	4 (12.9)	0.02	5.1 (1.5 – 17.6)
Endoscopic remission 8 weeks	11 (31.4)	4 (12.9)	0.09	3.1 (0.9 – 11.01)
Complete endoscopic remission (UCEIS=0) at 8 weeks	7 (20)	0	0.01	
<b>8 weeks Composite</b>				
Deep remission 8 weeks	11 (31.4)	2 (6.5)	0.01	6.6 (1.3 – 32.9)
Clinical remission and endoscopic response 8 weeks	15 (42.8)	2(6.5)	0.001	10.9 (2.2 – 52.2)
<b>Biomarker</b>				
FCP response, FCP<50 µg/g at 8 weeks, n(%)	17 (48.6)	6 (19.4)	0.03	3.9 (1.3 – 11.9)
<b>Excluding patients without repeat endoscopy (repeat endoscopy not possible due to pandemic):</b>				
<b>8 weeks Endoscopic</b>				
Endoscopic response 8 weeks	15/29 (51.7)	4/23 (17.4)	0.003	5.1 (1.4 – 18.7)
Endoscopic remission 8 weeks	11/29 (37.9)	4/23 (17.4)	0.13	2.9 (0.8 – 10.8)
Complete endoscopic remission (UCEIS=0) at 8 weeks	7/29 (24.1)	0	0.01	
<b>8 weeks composite</b>				
Deep remission 8 weeks	11/29 (37.9)	2/23 (8.7)	0.02	6.4 (1.3 – 32.8)
Clinical remission and endoscopic response 8 weeks	15/29 (51.7)	2/23 (8.7)	0.001	11.3 (2.2 – 57.1)
<b>Biomarker</b>				
FCP response, FCP<50 µg/g at 8 weeks, n(%)*	17/27 (63%)	6/22 (27.3%)	0.03	4.5 (1.3 – 15.4)
<b>48 weeks Endoscopic</b>				
Endoscopic response 48 weeks	6/30 (20)	3 (9.7)	0.3	2.3 (0.5 – 10.3)
Endoscopic remission 48 weeks	6/30 (20)	0 (0)	0.01	
<b>48 weeks Composite</b>				
Deep remission 48 weeks	6/30 (20)	0 (0)	0.01	

UCEIS- ulcerative colitis endoscopic index of severity; FCP- fecal calprotectin

FMT-AID: Fecal microbiota transplantation & anti-inflammatory diet; SMT: Optimized standard medical therapy

Numbers in bracket indicate percentage

\*Treatment failures were considered as FCP non-responders. So 7 and 12 patients respectively were added in the denominator in FMT-AID and SMT arm.

**Supplementary table 12:** Comparison of dietary intake between FMT-AID responders and non-responders at baseline and eight weeks

Variables (Median (range))	Baseline			8 weeks		
	FMT-AID Responders (n=21)	FMT-AID non-responders (n=14)	p-value	FMT-AID Responders (n=19)	FMT-AID non-responders (n=7)	p-value
<b>Food groups</b>						
Wheat (g)	170 (0-750)	130 (0-420)	0.57	0 (0-218)	0 (0-4)	0.49
Milk and milk products (g)	100 (0-600)	290 (0-750)	0.18	0 (0-14)	0 (0-21)	0.96
Curd	29 (0-500)	125 (0-500)	0.09	175 (0-604)	300 (107-473)	0.35
Total Non-veg foods (g)	0 (0-114)	0 (0-120)	0.96	1 (0-13)	0 (0-61)	0.64
Processed foods (g)	46 (0-350)	37 (1-359)	0.76	0 (0-33)	0 (0-8)	0.82
Soluble Fibre (g)	7 (2-20)	6 (3-11)	0.23	9 (3-22)	7 (3-11)	0.16
AhR Ligand foods (g)	-	-	-	132 (28-627)	159 (25-226)	0.83
Fermented foods (g)	-	-	-	0 (0-135)	18 (0-82)	0.16
<b>Macronutrients</b>						
Energy (Kcal)	1833 (651-4429)	1778 (1134-2859)	0.55	1596 (711-2723)	1332 (675-2184)	0.27
Protein (g)	53 (24-137)	50 (32-92)	0.72	40 (18-73)	45 (22-83)	0.58
Carbohydrate (g)	284 (78-881)	257 (117-426)	0.91	260 (90-499)	168 (76-379)	0.15
Total Fat (g)	51 (10-156)	61 (21-124)	0.68	44 (26-53)	39 (6-78)	0.90
<b>Micronutrients</b>						
Thiamine (mgs)	1.2 (0.3-4)	1.05 (0.5-2.3)	0.53	0.8 (0.3-1.3)	0.8 (0.4-1.9)	0.51
Riboflavin (mgs)	0.8 (0.2-1.6)	0.65 (0.3-1.6)	0.46	0.9 (0.3-1.9)	0.9 (0.3-1.4)	0.88
Niacin (mgs)	8.1 (1.6-28.7)	6.85 (3.8-13.3)	0.31	7.1 (3.5-14.7)	6.4 (3-12.6)	0.41
Pantothenic Acid (mgs)	3.9 (1.7-11.1)	3.95 (1.6-6.5)	0.30	3.8 (1.9-6.9)	3.1 (1.5-5.7)	0.35
Biotin (µg)	10.6 (6.1-42.5)	9.65 (2.4-24)	0.63	9.2 (4.3-25.5)	10.8 (3.4-26.3)	0.15
Ascorbic Acid (mgs)	29 (11-123)	53 (5-299)	0.07	94 (40-220)	83 (64-138)	0.33
Retinol (µg)	216 (34-2420)	135 (2-491)	0.22	242 (143-439)	248 (46-806)	0.60
Calcium (mgs)	488 (129-1436)	439 (74-1252)	0.85	476 (131-1288)	649 (218-1021)	0.58
Iron (mgs)	13 (4-39)	9.5 (5-24)	0.17	12 (4-23)	8 (3-15)	0.22
Omega 6 fatty acid (mgs)	5897 (686-17914)	6405 (1239-14551)	0.89	6495 (1569-17174)	6615 (4367-8895)	0.54
Omega 3 fatty acid (mgs)	2323 (186-11889)	2551 (294-6304)	0.71	2675 (338-4053)	2315 (1286-3142)	0.53
Total Polyphenols (mgs)	142 (43-828)	105 (46-249)	0.07	236 (56-458)	208 (95-330)	0.22

\*Except curd

FMT-AID: Fecal microbiota transplantation &amp; anti-inflammatory diet; SMT: Optimized standard medical therapy

AhR: Arylhydrocarbon receptor

Values in bracket are in range

**Supplementary table 13:** Clinical remission rates associated with various donors among patients who received fecal microbiota transplantation and anti-inflammatory diet

Donor number	Received FMT		Did not receive FMT		P value
	Number of patients	Clinical remission	Number of patients	No clinical remission	
<b>1</b>	8	3 (37.5%)	27	15 (66.7%)	0.19
<b>2</b>	31	18 (58.1%)	4	3 (75%)	0.64
<b>3</b>	31	21 (67.6%)	4	0	0.019
<b>4</b>	18	12 (66.7%)	17	9 (52.9%)	0.42
<b>5</b>	11	6 (54.5%)	24	11 (62.5%)	0.72
<b>6</b>	18	12 (66.7%)	17	9 (52.9%)	0.5
<b>7</b>	20	14 (70%)	15	7 (46.7%)	0.19
<b>8</b>	21	15 (71.4%)	14	6 (42.9%)	0.16
<b>9</b>	7	3 (42.9%)	28	18 (64.3%)	0.40
<b>10</b>	12	11 (91.7%)	23	10 (43.5%)	0.01
<b>11</b>	11	10 (90.9%)	24	11 (45.8%)	0.02
<b>12</b>	11	9 (81.8%)	24	12 (50%)	0.14
<b>13</b>	8	8 (100%)	27	13 (48.1%)	0.01



## References for supplementary table 3.

- 1 Menta PLR, Andrade MER, Leocádio PCL, *et al.* Wheat gluten intake increases the severity of experimental colitis and bacterial translocation by weakening of the proteins of the junctional complex. *Br J Nutr* 2019;**121**:361–73. doi:10.1017/S0007114518003422
- 2 Tan J, McKenzie C, Potamitis M, *et al.* The role of short-chain fatty acids in health and disease. *Adv Immunol* 2014;**121**:91–119. doi:10.1016/B978-0-12-800100-4.00003-9
- 3 Furusawa Y, Obata Y, Fukuda S, *et al.* Commensal microbe-derived butyrate induces the differentiation of colonic regulatory T cells. *Nature* 2013;**504**:446–50. doi:10.1038/nature12721
- 4 Devkota S, Wang Y, Musch MW, *et al.* Dietary-fat-induced taurocholic acid promotes pathobiont expansion and colitis in *Il10<sup>-/-</sup>* mice. *Nature* 2012;**487**:104–8. doi:10.1038/nature11225
- 5 IBD in EPIC Study Investigators, Tjonneland A, Overvad K, *et al.* Linoleic acid, a dietary n-6 polyunsaturated fatty acid, and the aetiology of ulcerative colitis: a nested case-control study within a European prospective cohort study. *Gut* 2009;**58**:1606–11. doi:10.1136/gut.2008.169078
- 6 Yao CK, Muir JG, Gibson PR. Review article: insights into colonic protein fermentation, its modulation and potential health implications. *Aliment Pharmacol Ther* 2016;**43**:181–96. doi:10.1111/apt.13456
- 7 Schepens MAA, Vink C, Schonewille AJ, *et al.* Dietary heme adversely affects experimental colitis in rats, despite heat-shock protein induction. *Nutrition* 2011;**27**:590–7. doi:10.1016/j.nut.2010.05.002
- 8 Hou JK, Abraham B, El-Serag H. Dietary intake and risk of developing inflammatory bowel disease: a systematic review of the literature. *Am J Gastroenterol* 2011;**106**:563–73. doi:10.1038/ajg.2011.44
- 9 Jantchou P, Morois S, Clavel-Chapelon F, *et al.* Animal protein intake and risk of inflammatory bowel disease: The E3N prospective study. *Am J Gastroenterol* 2010;**105**:2195–201. doi:10.1038/ajg.2010.192
- 10 Jowett SL, Seal CJ, Pearce MS, *et al.* Influence of dietary factors on the clinical course of ulcerative colitis: a prospective cohort study. *Gut* 2004;**53**:1479–84. doi:10.1136/gut.2003.024828
- 11 Monteleone I, Rizzo A, Sarra M, *et al.* Aryl hydrocarbon receptor-induced signals up-regulate IL-22 production and inhibit inflammation in the gastrointestinal tract. *Gastroenterology* 2011;**141**:237–48, 248.e1. doi:10.1053/j.gastro.2011.04.007
- 12 Li Y, Innocentin S, Withers DR, *et al.* Exogenous stimuli maintain intraepithelial lymphocytes via aryl hydrocarbon receptor activation. *Cell* 2011;**147**:629–40. doi:10.1016/j.cell.2011.09.025
- 13 Wang H-K, Yeh C-H, Iwamoto T, *et al.* Dietary flavonoid naringenin induces regulatory T cells via an aryl hydrocarbon receptor mediated pathway. *J Agric Food Chem* 2012;**60**:2171–8. doi:10.1021/jf204625y
- 14 Tilg H, Moschen AR. Food, immunity, and the microbiome. *Gastroenterology* 2015;**148**:1107–19. doi:10.1053/j.gastro.2014.12.036
- 15 Zoetendal EG, de Vos WM. Effect of diet on the intestinal microbiota and its activity. *Curr Opin Gastroenterol* 2014;**30**:189–95. doi:10.1097/MOG.0000000000000048

- 16 Ghosh S, Molcan E, DeCoffe D, *et al.* Diets rich in n-6 PUFA induce intestinal microbial dysbiosis in aged mice. *Br J Nutr* 2013;**110**:515–23. doi:10.1017/S0007114512005326
- 17 Onodera T, Fukuhara A, Shin J, *et al.* Eicosapentaenoic acid and 5-HEPE enhance macrophage-mediated Treg induction in mice. *Sci Rep* 2017;**7**:4560. doi:10.1038/s41598-017-04474-2
- 18 Ananthakrishnan AN, Khalili H, Konijeti GG, *et al.* Long-term intake of dietary fat and risk of ulcerative colitis and Crohn's disease. *Gut* 2014;**63**:776–84. doi:10.1136/gutjnl-2013-305304
- 19 Galli C, Calder PC. Effects of fat and fatty acid intake on inflammatory and immune responses: a critical review. *Ann Nutr Metab* 2009;**55**:123–39. doi:10.1159/000228999
- 20 Huang S, Rutkowsky JM, Snodgrass RG, *et al.* Saturated fatty acids activate TLR-mediated proinflammatory signaling pathways. *J Lipid Res* 2012;**53**:2002–13. doi:10.1194/jlr.D029546
- 21 Racine A, Carbonnel F, Chan SSM, *et al.* Dietary Patterns and Risk of Inflammatory Bowel Disease in Europe: Results from the EPIC Study. *Inflamm Bowel Dis* 2016;**22**:345–54. doi:10.1097/MIB.0000000000000638
- 22 Laudisi F, Di Fusco D, Dinallo V, *et al.* The Food Additive Maltodextrin Promotes Endoplasmic Reticulum Stress-Driven Mucus Depletion and Exacerbates Intestinal Inflammation. *Cell Mol Gastroenterol Hepatol* 2019;**7**:457–73. doi:10.1016/j.jcmgh.2018.09.002
- 23 Chassaing B, Van de Wiele T, De Bodt J, *et al.* Dietary emulsifiers directly alter human microbiota composition and gene expression ex vivo potentiating intestinal inflammation. *Gut* 2017;**66**:1414–27. doi:10.1136/gutjnl-2016-313099