

## Supporting Information

Analysis of microplastics in human feces reveals a correlation between fecal microplastics and inflammatory bowel disease status

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Number of pages: 9

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## Exposure Questionnaire

Please provide us with the following information:

<b>Background information</b>	
Admission number	
Age	
Gender	
Gender	<input type="checkbox"/> male <input type="checkbox"/> female
<b>IBD status (for IBD patients only)</b>	
Category	Severity
CD	HBI =
UC	Mayo =
<b>Drinking habits</b>	
Do you usually drink tap water or bottled water?	<input type="checkbox"/> tap water (boiled tap water) account for over 70% water consumption <input type="checkbox"/> bottled water (packaged mineral water, packaged purified drinking water, plastic packaged beverages, etc.) account for over 70% water consumption
<b>Dietary habits</b>	
Do you usually cook at home or buy takeaway?	<input type="checkbox"/> home cooking (including at home or restaurant) account for over 70% food consumption <input type="checkbox"/> takeaway account for over 70% food consumption
<b>Working and living conditions</b>	
Do you usually expose to dust in your working and living conditions?	<input type="checkbox"/> often expose to dust in the working and living environment <input type="checkbox"/> rarely expose to dust in the working and living environment

**Table S1.** Results of exposure questionnaire from healthy participates.

Number <sup>a</sup>	MPs concentration (items/g dw)	Drinking habit <sup>b</sup>	Dietary habit <sup>c</sup>	Working and living conditions <sup>d</sup>
1	45.16	Tap water	Takeaway food	No dust exposure
2	28.19	Bottled water	Home cooking	No dust exposure
3	39.30	Tap water	-	No dust exposure
4	17.05	-	Home cooking	Dust exposure
5	82.88	Bottled water	Takeaway food	Dust exposure
6	37.94	Tap water	Takeaway food	Dust exposure
7	9.56	Tap water	Takeaway food	-
8	20.22	Tap water	Home cooking	No dust exposure
9	22.91	-	-	No dust exposure
10	99.47	Bottled water	Takeaway food	Dust exposure
11	14.33	Tap water	Home cooking	-
12	59.07	Bottled water	-	Dust exposure
13	41.64	Bottled water	Home cooking	No dust exposure
14	22.39	Tap water	Home cooking	Dust exposure
15	15.67	Tap water	Home cooking	-
16	34.76	Bottled water	Home cooking	Dust exposure
17	40.50	Bottled water	Home cooking	No dust exposure
18	40.22	Bottled water	Home cooking	Dust exposure
19	11.53	Tap water	Takeaway food	Dust exposure
20	65.74	Bottled water	Takeaway food	Dust exposure
21	24.22	Bottled water	Takeaway food	Dust exposure
22	13.43	Bottled water	Takeaway food	No dust exposure

23	26.10	Bottled water	Takeaway food	No dust exposure
24	23.05	Bottled water	-	Dust exposure
25	22.58	-	Home cooking	-
26	41.20	Bottled water	-	Dust exposure
27	9.56	Tap water	Home cooking	-
28	8.28	Tap water	Takeaway food	No dust exposure
29	19.47	Bottled water	Takeaway food	-
30	28.13	Bottled water	Takeaway food	Dust exposure
31	4.73	Tap water	Home cooking	No dust exposure
32	12.07	-	Home cooking	No dust exposure
33	16.68	-	Home cooking	No dust exposure
34	28.19	Bottled water	Home cooking	Dust exposure
35	46.98	Tap water	Takeaway food	Dust exposure
36	17.42	-	Home cooking	-
37	17.42	Tap water	Home cooking	No dust exposure
38	12.63	-	Takeaway food	No dust exposure
39	39.98	Bottled water	Takeaway food	Dust exposure
40	20.52	Tap water	-	-
41	40.61	Bottled water	Takeaway food	No dust exposure
42	46.65	Bottled water	Takeaway food	Dust exposure
43	24.83	Tap water	Takeaway food	Dust exposure
44	15.68	Tap water	Takeaway food	No dust exposure
45	12.50	Tap water	Home cooking	No dust exposure
46	7.20	Tap water	Home cooking	Dust exposure
47	12.84	Tap water	Home cooking	No dust exposure
48	22.09	Bottled water	Takeaway food	Dust exposure

49	19.87	Tap water	Takeaway food	Dust exposure
50	15.27	Tap water	Takeaway food	No dust exposure

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Note:

- a. A total of 50 questionnaires with complete information were collected from health participates.
- b. To evaluate the potential exposure to plastics via different drinking habits.
- c. To evaluate the potential exposure to plastics via different dietary habits.
- d. To evaluate the potential exposure to plastics via different working and living conditions.

**Table S2.** Results of exposure questionnaire from IBD patients.

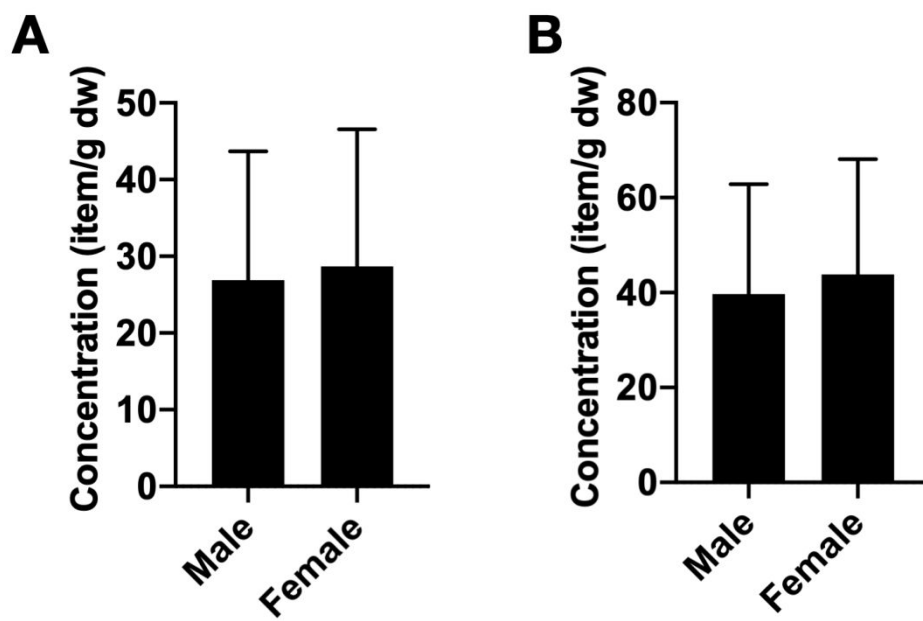
Number <sup>a</sup>	IBD category <sup>b</sup>	HBI index <sup>c</sup>	Mayo score <sup>d</sup>	MPs concentration (items/g dw)	Drinking habit <sup>e</sup>	Dietary habit <sup>f</sup>	Working and living conditions <sup>e</sup>
1	CD	5	-	34.14	Bottled water	Home cooking	No dust exposure
2	CD	8	-	26.38	Bottled water	Home cooking	No dust exposure
3	CD	10	-	64.92	Bottled water	Takeaway food	Dust exposure
4	CD	6	-	67.01	Bottled water	Takeaway food	Dust exposure
5	CD	13	-	98.62	Bottled water	Takeaway food	Dust exposure
6	CD	13	-	40.43	Bottled water	Takeaway food	No dust exposure
7	UC	-	3	69.67	Bottled water	Home cooking	Dust exposure
8	UC	-	2	38.53	Bottled water	Home cooking	No dust exposure
9	UC	-	4	83.95	Bottled water	Takeaway food	Dust exposure
10	CD	1	-	17.05	Tap water	Home cooking	No dust exposure
11	CD	5	-	30.33	Tap water	Home cooking	No dust exposure
12	CD	1	-	17.00	Tap water	Home cooking	No dust exposure
13	CD	0	-	16.32	Tap water	Home cooking	No dust exposure
14	CD	9	-	44.51	Tap water	Home cooking	Dust exposure
15	CD	4	-	32.64	Tap water	Home cooking	No dust exposure
16	CD	1	-	15.20	Tap water	Home cooking	Dust exposure
17	CD	0	-	11.54	Tap water	Home cooking	No dust exposure
18	UC	-	3	35.60	Tap water	Home cooking	No dust exposure
19	UC	-	3	22.87	Tap water	Home cooking	No dust exposure
20	UC	-	2	13.35	Tap water	Home cooking	No dust exposure
21	UC	-	3	38.74	Tap water	Home cooking	Dust exposure
22	UC	-	3	49.61	Tap water	Takeaway food	No dust exposure
23	UC	-	3	50.33	Tap water	Home cooking	No dust exposure

24	UC	-	2	34.45	Tap water	Home cooking	No dust exposure
25	CD	4	-	62.28	Bottled water	Home cooking	Dust exposure
26	CD	4	-	39.27	Tap water	Home cooking	No dust exposure
27	CD	1	-	13.17	Tap water	Home cooking	No dust exposure
28	CD	10	-	38.26	Tap water	Takeaway food	No dust exposure
29	UC	-	2	33.22	Tap water	Home cooking	No dust exposure
30	UC	-	2	38.39	Tap water	Home cooking	No dust exposure
31	UC	-	4	41.13	Tap water	Home cooking	No dust exposure
32	UC	-	3	31.61	Tap water	Home cooking	No dust exposure
33	UC	-	5	116.37	Tap water	Takeaway food	Dust exposure
34	UC	-	3	40.06	Tap water	Takeaway food	Dust exposure
35	UC	-	3	45.67	Tap water	Home cooking	No dust exposure
36	UC	-	2	34.29	Tap water	Home cooking	Dust exposure
37	UC	-	1	35.72	Tap water	Home cooking	No dust exposure

Note:

- a. A total of 37 questionnaires with complete information were collected from 52 IBD patients.
- b. CD: Crohn's disease; UC: ulcerative colitis
- c. The Harvey-bradshaw index (HBI) stratifies severity of Crohn's disease.
- d. The Mayo score is to evaluate ulcerative colitis.
- e. To evaluate the potential exposure to plastics via different drinking habits.
- f. To evaluate the potential exposure to plastics via different dietary habits.
- e. To evaluate the potential exposure to plastics via different working and living conditions.

**Figure S1.** The concentration of MPs in feces of healthy people (A) and IBD patients (B) of different genders.





**Figure S2.** The acquired Raman spectrum of MPs in fecal samples.

