Supplementary Materials for

Human Consumption of Microplastics

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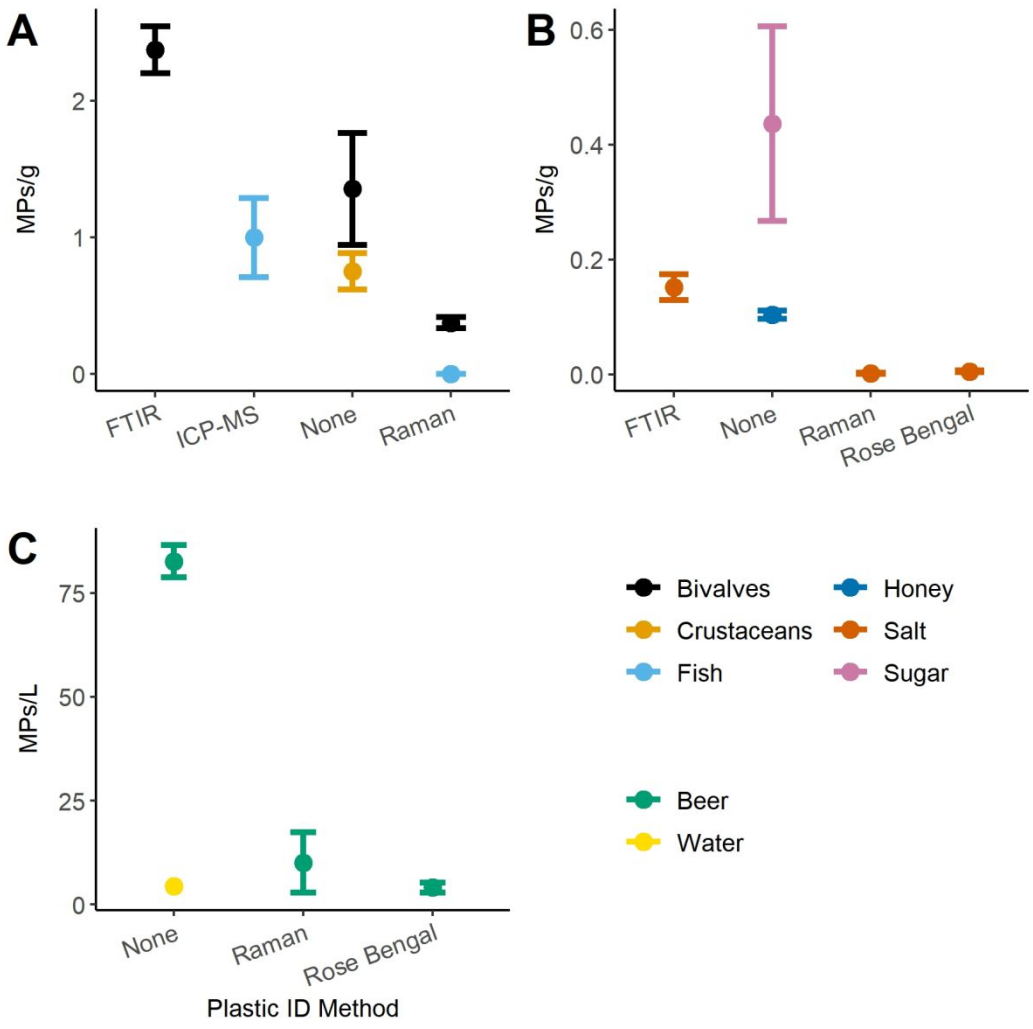

Fig. S1. Polymer identification methods including Fourier-transform infrared spectroscopy (FTIR), inductively coupled plasma mass spectrometry (ICP-MS), Raman spectroscopy, and Rose Bengal stain used to verify microplastic particle (MP) concentrations in (**A**) seafood including bivalves, crustaceans and fishes, (**B**) honey, salt and sugar, and (**C**) liquids including beer and water. Error bars represent the standard deviation.

Table S1: List of the lead author(s) and year of publication, origin country of consumption item, consumption item, concentration of microplastic particles (MPs), sample size, and whether blanks included for each of the 25 studies included in the analysis.

Food Type	Study	Country	Item	MPs per g/L/m^3	n	Blank included
Seafood	Van Cauwenberghe and Janssen 2014	France, Germany	Bivalves	0.36	93	Yes
	Li et al. 2015	China	Bivalves	4.20	45	Yes
	Van Cauwenberghe et al. 2015	North Sea Coast	Bivalves	0.20	5	Yes
	Davidson and Dudas 2016	Canada	Bivalves	1.33	54	Yes
	De Witte et al. 2014	Belgium	Bivalves	0.37	10	Yes
	Li et al. 2016	China	Bivalves	2.22	396	Yes
	Mathalon and Hill 2014	Canada	Bivalves	4.35	45	Yes
	Naji et al. 2018	Persian Gulf	Bivalves	1.34	93	Yes
	Qu et al. 2018	China	Bivalves	2.80	450	Yes
	Su et al. 2018	China	Bivalves	1.38	630	Yes
	Thushari et al. 2017	Thailand	Bivalves	0.46	45	Yes
	Devriese et al. 2015	International, 4 countries	Crustacean	0.75	170	Yes
	Karami et al. 2018	International, 13 countries	Canned Fish	0	84	Yes
	Akhbarizadeh et al. 2018	Persian Gulf	Fish	1.00	71	Yes
Salt	Yang et al. 2015	China	Lake Salt	0.20	15	Yes
	Karami et al. 2017	Iran, Malaysia	Lake Salt	0.00	8	No
	Kosuth et al. 2018	Himalayan	Rock Salt	0.01	1	Yes
	Iñiguez et al. 2017	Spain	Sea Salt	0.12	48	Yes
	Yang et al. 2015	China	Sea Salt	0.62	15	Yes
	Karami et al. 2017	International, 6 countries	Sea Salt	0.00	56	No
	Kosuth et al. 2018	International, 9 countries/oceans	Sea Salt	0.00	11	Yes
	Iñiguez et al. 2017	Spain	Well Salt	0.14	15	Yes
	Karami et al. 2017	New Zealand	Unidentified Salt	0.00	4	No
Honey	Liebezeit and Liebezeit 2013	International, 4 countries	Liquid Honey	0.10	8	No
	Liebezeit and Liebezeit 2015	International, 6 countries	Liquid Honey	0.11	32	Yes

	Liebezeit and Liebezeit 2013	Germany, Italy, Mexico	Solid Honey	0.09	11	No
	Liebezeit and Liebezeit 2015	International, 4 countries	Solid Honey	0.11	27	Yes
Sugar	Liebezeit and Liebezeit 2013	Germany	Sugar	0.44	5	No
Alcohol	Kosuth et al. 2018	Canada	Beer	4.05	11	Yes
	Wiesheu et al. 2016	Germany	Beer	10.10	3	Yes
	Liebezeit and Liebezeit 2014	Germany	Beer	82.67	30	Yes
Water	Wiesheu et al. 2016	Germany	Bottled Water	0.33	3	Yes
	Mason et al. 2018	International, 9 countries	Bottled Water	325.33	518	Yes
	Schymanski et al. 2018	Germany	Bottled Water	48.25	38	Yes
	Kosuth et al. 2018	Not specified	Bottled Water	3.57	3	Yes
	Kosuth et al. 2018	International, 14 countries	Tap Water	4.24	159	Yes
Air	Dris et al. 2017	France	Apartment Air	1.64	24	No
	Dris et al. 2017	France	Office Air	4.80	12	No
	Dris et al. 2017	France	Outdoor Air	0.30	12	No
	Kaya et al. 2018	Turkey	Campus Air	14.27	NA	Yes
	Kaya et al. 2018	Turkey	Bus Terminal	23.95	NA	Yes

Table S2. List of the lead author(s) and year of publication, concentration of microplastic particles (MPs) for each of the 25 studies included in the analysis, and the total microplastic particles for each consumption item group in respective units (R.U.).

Food Type	Study	MPs per g/L/m^3	Average (R.U.)
Seafood	Van Cauwenberghe and Janssen 2014	0.36	1.48
	Li et al. 2015	4.20	
	Van Cauwenberghe et al. 2015	0.20	
	Davidson and Dudas 2016	1.33	
	De Witte et al. 2014	0.37	
	Li et al. 2016	2.22	
	Mathalon and Hill 2014	4.35	
	Naji et al. 2018	1.34	
	Qu et al. 2018	2.80	
	Su et al. 2018	1.38	
	Thushari et al. 2017	0.46	
	Devriese et al. 2015	0.75	
	Karami et al. 2018	0.00	
	Akhbarizadeh et al. 2017	1.00	
Salt	Yang et al. 2015	0.32	0.11
	Karami et al. 2017	0.00	
	Kosuth et al. 2018	0.01	
	Iñiguez et al. 2017	0.13	
Honey	Liebezeit and Liebezeit 2013	0.09	0.10
	Liebezeit and Liebezeit 2015	0.11	
Sugar	Liebezeit and Liebezeit 2013	0.44	0.44
Alcohol	Kosuth et al. 2018	4.05	32.27
	Wiesheu et al. 2016	10.10	
	Liebezeit and Liebezeit 2014	82.67	
Bottled Water	Wiesheu et al. 2016	0.33	94.37
	Mason et al. 2018	325.33	
	Schymanski et al. 2018	48.25	
	Kosuth et al. 2018	3.57	
Tap Water	Kosuth et al. 2018	4.24	4.24
Air	Dris et al. 2017	2.09	9.80
	Kaya et al. 2018	17.75	

Table S3. Source information on the dietary recommended intake of each food group used to determine human microplastic consumption of various age groups and sexes including male adults 19-71 years (MA), female adults 19-71 years (FA), male children 1-18 years (MC) and female children 1-18 years (FC). All values are reported as daily intake.

Document	Food group	Sex	Daily intake (g)
Dietary guidelines for Americans 2015-2020 Eighth Edition	Seafood	MC	28.89
		MA	37.82
		FC	27.40
		FA	34.90
	Honey	MC	2.00
		MA	2.00
		FC	2.00
		FA	2.00
	Sugar	MC	47.60
		MA	66.81
		FC	40.83
		FA	51.81
	Sodium	MC	1.98
		MA	2.30
		FC	1.98
		FA	2.31
World Health Organization: Global Status Report on Alcohol and Health 2014	Beer	MA	0.04
		FA	0.01
Dietary Reference Intakes: Electrolytes and Water	Bottled Water	MC	0.44
		MA	0.44
		FC	0.44
		FA	0.44
	Tap water	MC	1.74
		MA	3.26
		FC	1.41
		FA	2.26
Exposure Factors Handbook 2011 Edition	Air	MC	11.25
		MA	17.32
		FC	9.88
		FA	13.50

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