

## Supplementary material

**Table S1.** Sociodemographic, clinical, and nutritional characteristics of cases and controls by Energy-adjusted Dietary Inflammatory Index (E-DII) score quartiles

Variables	E-DII quartiles §															
	Cases (n=492)				Control I (n=377)				Control II (n=776)							
	Q1 n=123 (-4.35, -1.47)	Q2 n=124 (-1.46, -0.45)	Q3 n=122 (-0.44, 0.52)	Q4 n=123 (>0.53)	P-value <sup>1‡</sup>	Q1 n=94 (-5.55, -2.01)	Q2 n=94 (-2.00, -0.74)	Q3 n=95 (-0.73, 0.56)	Q4 n=94 (>0.56)	P-value <sup>1‡</sup>	Q1 n=194 (-5.09, -2.04)	Q2 n=194 (-2.03, -0.83)	Q3 n=194 (-0.82, 0.25)	Q4 n=194 (>0.25)	P-value <sup>1‡</sup>	
	median (P <sub>25</sub> , P <sub>75</sub> ) or n (%)															
Sex					0.01					0.23				<0.001		
	Female	66 (53.7)	49 (39.5)	42 (34.4)	42 (34.1)		57 (60.6)	45 (47.9)	45 (47.4)	48 (51.1)		119 (61.3)	99 (51.0)	80 (41.2)	80 (41.2)	
	Male	57 (46.3)	75 (60.5)	80 (65.6)	81 (65.9)		37 (39.4)	49 (52.1)	50 (52.6)	46 (48.9)		75 (38.7)	95 (49.0)	114 (58.8)	114 (58.8)	
Age (years)		61 (51, 67) <sup>a</sup>	58 (49, 67) <sup>ab</sup>	57 (48, 64) <sup>ab</sup>	56 (45, 62) <sup>c</sup>	<0.001	60 (54, 68) <sup>a</sup>	56 (46, 63) <sup>bcd</sup>	54 (43, 64) <sup>bcd</sup>	48 (37, 61) <sup>d</sup>	<0.001	56 (45, 67) <sup>a</sup>	59 (51, 66) <sup>a</sup>	53 (42, 64) <sup>b</sup>	49 (38, 60) <sup>b</sup>	<0.001
Self-reported ethnicity					0.01 <sup>2</sup>					0.39 <sup>2</sup>					<0.001	
	White	60 (48.8)	39 (31.5)	34 (27.9)	48 (39.0)		52 (55.3)	45 (47.9)	40 (42.1)	43 (45.7)		89 (45.9)	72 (37.1)	63 (32.6)	63 (32.5)	
	Brown	50 (40.7)	67 (54.0)	71 (58.2)	61 (49.6)		28 (29.8)	33 (35.1)	37 (38.9)	36 (33.4)		64 (33.0)	76 (39.2)	93 (48.2)	87 (44.8)	
	Black	5 (4.1) (10.5)	13 (10.7)	13 (10.7)	13 (10.6)		8 (8.5)	9 (9.6)	16 (16.8)	10 (10.6)		19 (9.8) (11.9)	23 (15.5)	30 (15.5)	38 (19.6)	
	Others	8 (6.5)	5 (4.0)	4 (3.3)	1 (0.8)		6 (6.4)	7 (7.4)	2 (2.1)	5 (5.3)		22 (11.3)	23 (11.9)	7 (3.6)	6 (3.1)	
Schooling (years)					0.56					0.001				0.18		
	≤8	50 (40.7)	56 (45.2)	65 (53.3)	61 (49.6)		24 (25.5)	29 (30.9)	20 (21.1)	23 (24.5)		46 (23.7)	54 (27.8)	38 (19.6)	34 (17.5)	
	9 a 12	43 (35.0)	43 (34.7)	36 (29.5)	37 (30.1)		28 (29.8)	36 (38.3)	57 (60.0)	42 (44.7)		95 (49.0)	95 (49.0)	108 (55.7)	114 (58.8)	
	≥13	30 (24.4)	25 (20.2)	21 (17.2)	25 (20.3)		42 (44.7)	29 (30.9)	18 (18.9)	29 (30.9)		53 (27.3)	45 (23.2)	48 (24.7)	46 (23.7)	
Marital status					0.91					0.04				0.20		
	Married	91 (74.0)	89 (71.8)	88 (72.1)	85 (69.1)		64 (68.1)	64 (68.1)	64 (67.4)	55 (58.5)		136 (70.1)	134 (69.1)	130 (67.0)	123 (63.4)	

		17 (13.8)	15 (12.1)	19 (15.6)	20 (16.3)		9 (9.6)	20 (21.3)	13 (13.7)	24 (25.5)		35 (18.0)	27 (13.9)	38 (19.6)	
	Others	15 (12.2)	20 (16.1)	15 (12.3)	18 (14.6)		21 (22.3)	10 (10.6)	18 (18.9)	15 (16.0)		23 (11.9)	33 (17.0)	26 (13.4)	
Family history of cancer in first-degree relatives					0.12						<0.001			0.06	
	No	38 (30.9)	56 (45.2)	44 (36.4)	50 (41.0)		24 (25.8)	45 (47.9)	51 (53.7)	39 (41.5)		84 (43.5)	94 (48.5)	108 (56.0)	105 (54.1)
	Yes	85 (69.1)	68 (54.8)	77 (63.6)	72 (59.0)		69 (74.2)	49 (52.1)	44 (46.3)	55 (58.5)		109 (56.5)	100 (51.5)	85 (44.0)	89 (45.9)
Tobacco smoking					0.27						0.29			0.052	
	No	52 (42.3)	52 (42.3)	55 (45.5)	39 (32.0)		59 (64.1)	53 (56.4)	54 (56.8)	61 (64.9)		126 (65.3)	110 (57.0)	127 (66.1)	132 (68.0)
	Low	24 (19.5)	19 (15.4)	18 (14.9)	19 (15.6)		16 (17.4)	22 (23.4)	13 (13.7)	16 (17.0)		33 (17.1)	26 (13.5)	27 (14.1)	30 (10.3)
	Intermediate/High	47 (38.2)	52 (42.3)	48 (39.7)	64 (52.5)		17 (18.5)	19 (20.2)	28 (29.5)	17 (18.1)		34 (17.6)	57 (29.5)	38 (19.8)	42 (21.6)
Alcohol consumption					0.056						<0.001			0.008	
	No	71 (57.1)	59 (47.6)	54 (46.2)	46 (37.4)		58 (64.4)	37 (39.8)	37 (39.4)	48 (51.1)		145 (75.9)	134 (69.8)	117 (61.6)	112 (59.3)
	Low	16 (13.0)	21 (16.9)	14 (12.0)	24 (19.5)		16 (17.8)	20 (21.5)	11 (11.7)	8 (8.5)		13 (6.8)	15 (7.8)	21 (11.1)	15 (7.9)
	Intermediate/High	36 (29.3)	44 (35.5)	49 (41.9)	53 (43.1)		16 (17.8)	36 (38.7)	46 (48.9)	38 (40.4)		33 (17.3)	43 (22.4)	52 (27.4)	62 (32.8)
Diabetes					<0.001						0.38			0.11	
	No	97 (78.9)	117 (94.4)	115 (94.3)	118 (95.9)		81 (86.2)	83 (88.3)	78 (82.1)	85 (90.4)		176 (90.7)	176 (90.7)	183 (94.3)	186 (95.9)
	Yes	26 (21.1)	7 (5.6)	7 (5.7)	5 (4.1)		13 (13.8)	11 (11.7)	17 (17.9)	9 (9.6)		18 (9.3)	18 (9.3)	11 (5.7)	8 (4.1)
Peptic ulcer					0.81						0.16 <sup>2</sup>			-	
	No	115 (93.5)	113 (91.1)	110 (90.2)	113 (91.9)		91 (96.8)	85 (90.4)	92 (96.8)	91 (96.8)		-	-	-	-
	Yes	8 (6.5)	11 (8.9)	12 (9.8)	10 (8.1)		3 (3.2)	9 (9.6)	3 (3.2)	3 (3.2)		-	-	-	-
H. pylori status					0.33						0.96			-	
	Negative	69 (84.1)	49 (72.1)	52 (75.4)	60 (76.9)		63 (71.6)	58 (69.9)	53 (67.9)	53 (70.7)		-	-	-	-
	Positive	13 (15.9)	19 (27.9)	17 (24.6)	18 (23.1)		25 (28.4)	25 (30.1)	25 (32.1)	22 (29.3)		-	-	-	-
PPIs/H2RAs					0.22						0.44			0.049	

	No	57 (47.1)	66 (53.2)	68 (56.2)	74 (60.2)		51 (54.8)	54 (57.4)	50 (52.6)	60 (63.8)		175 (90.7)	159 (82.4)	174 (89.7)	173 (89.2)
	Yes	64 (52.9)	58 (46.8)	53 (43.8)	49 (39.8)		42 (45.2)	40 (42.6)	45 (47.4)	34 (36.2)		18 (9.3)	34 (17.6)	20 (10.3)	21 (10.8)
<i>Antacids</i>					0.057						0.11				0.04 <sup>2</sup>
	No	101 (82.1)	99 (79.8)	110 (90.9)	108 (87.8)		86 (92.5)	77 (81.9)	81 (85.3)	85 (90.4)		191 (99.0)	192 (99.0)	184 (94.8)	188 (96.9)
	Yes	22 (17.9)	25 (20.2)	11 (9.1)	15 (12.2)		7 (7.5)	17 (18.1)	14 (14.7)	9 (9.6)		2 (1.0)	2 (1.0)	10 (5.2)	6 (3.1)
<i>Aspirin</i>					0.02						0.13				0.009
	No	109 (88.6)	117 (94.4)	118 (97.5)	118 (95.9)		83 (89.2)	87 (92.6)	89 (93.7)	92 (97.9)		177 (91.7)	183 (94.3)	188 (96.9)	191 (98.5)
	Yes	14 (11.4)	7 (5.6)	3 (2.5)	5 (4.1)		10 (10.8)	7 (7.4)	6 (6.3)	2 (2.1)		16 (8.3)	11 (5.7)	6 (3.1)	3 (1.5)
<i>Other NSAIDs</i>					0.69						0.55				0.52
	No	106 (86.2)	110 (88.7)	107 (88.4)	112 (91.1)		79 (84.9)	85 (90.4)	82 (21.8)	85 (90.4)		181 (93.8)	188 (96.9)	183 (94.3)	184 (94.8)
	Yes	17 (13.8)	14 (11.3)	14 (11.6)	11 (8.9)		14 (15.1)	9 (9.6)	13 (13.7)	9 (9.6)		12 (6.2)	6 (3.1)	11 (5.7)	10 (5.2)
<i>BMI (categories)</i>					0.59						0.07				0.33
	<i>Normal Weight</i>	49 (39.8)	56 (45.2)	47 (38.5)	56 (45.5)		45 (48.4)	39 (41.5)	39 (41.1)	25 (26.6)		86 (44.3)	81 (42.0)	77 (39.7)	78 (40.2)
	<i>Underweight/Malnutrition</i>	33 (26.8)	40 (32.3)	36 (29.5)	29 (23.6)		4 (4.3)	8 (8.5)	8 (8.4)	4 (4.3)		24 (12.4)	26 (13.5)	18 (9.3)	20 (10.3)
	<i>Overweight</i>	19 (15.4)	17 (13.7)	22 (18.0)	20 (16.3)		23 (24.7)	25 (26.6)	29 (30.5)	41 (43.6)		49 (25.3)	44 (22.8)	67 (34.5)	62 (32.0)
	<i>Obese</i>	22 (17.9)	11 (8.9)	17 (13.9)	18 (14.6)		21 (22.6)	22 (23.4)	19 (20.0)	24 (25.5)		35 (18.0)	42 (21.8)	32 (16.5)	34 (17.5)
<i>Energy intake (kcal/day)</i>		2122 (1544, 2631)	2320 (1788, 2873)	2142 (1584, 2803)	2193 (1692, 2936)	0.11	1844 (1245, 2770) <sup>c</sup>	1972 (1448, 2519) <sup>bc</sup>	2144 (1642, 2828) <sup>ab</sup>	2328 (1713, 3077) <sup>a</sup>	<0.001	1729 (1362, 2310)	1813 (1460, 2405)	1837 (1242, 2474)	1832 (1360, 2392)
<i>Sodium intake (g/day)</i>		1.7 (1.4, 1.9) <sup>c</sup>	1.7 (1.5, 2.1) <sup>abc</sup>	1.8 (1.6, 2.3) <sup>abc</sup>	6.2 (2.9, 8.1) <sup>a</sup>	0.01	1.6 (1.3, 1.9) <sup>b</sup>	1.7 (1.4, 2.0) <sup>ab</sup>	1.8 (1.5, 2.1) <sup>a</sup>	1.8 (1.6, 2.1) <sup>a</sup>	<0.001	1.7 (1.4, 2.1) <sup>c</sup>	1.8 (1.5, 2.1) <sup>c</sup>	2.0 (1.6, 2.6) <sup>b</sup>	4.8 (2.6, 7.7) <sup>a</sup>
<i>Nutritional supplement</i>					0.18						<0.001				<0.001
	No	94 (77.0)	103 (83.1)	104 (85.2)	107 (87.0)		68 (72.3)	68 (72.3)	88 (92.6)	84 (89.4)		152 (78.4)	164 (84.5)	178 (91.8)	177 (91.2)
	Yes	28 (23.0)	21 (16.9)	18 (14.8)	16 (13.0)		26 (27.7)	26 (27.7)	7 (7.4)	10 (10.6)		42 (21.6)	30 (15.6)	16 (8.2)	17 (8.8)

Numbers may differ because of missing values. Control I individuals (endoscopy); Control II individuals (hospital). PPIs/H2RAs: proton pump inhibitors/H2-receptor antagonists; NSAIDs: non-steroidal anti-inflammatory drugs; BMI: body mass index. § Based on cases, control I and control II scores. <sup>1</sup> Pearson  $\chi^2$  test or <sup>2</sup> Fisher's Exact tests for categorical variables. <sup>1</sup> Kruskal-Wallis test and Dunn-Bonferroni post hoc test for continuous variables. Different letters on the same line mean statistical difference between quartiles. ‡ *P*-value demonstrates difference between Quartile 4 (maximum pro-inflammatory diet) versus Quartile 1 (maximum anti-inflammatory diet) of the E-DII. Significance *p*-value < 0.05.