

Supplementary Material.

Title: The protective effect of dietary folate intake on gastric cancer is modified by alcohol consumption: a pooled analysis of the StoP Consortium.

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Supplementary Table 1. Sociodemographic and lifestyle characteristics of participants according alcohol consumption in the StoP Consortium.

	Drinks ¹ /day		
	0 (n=3549)	0.1 to 2.0 (n=4930)	>2.0 (n=2491)
Status, n(%)			
Control	2552 (71.9)	3906 (79.2)	1683 (67.6)
Case	997 (28.1)	1024 (20.8)	808 (32.4)
Sex, n(%)			
Male	1317 (37.1)	2755 (55.9)	2204 (88.5)
Female	2232 (62.9)	2175 (44.1)	287 (11.5)
Age in years, n(%)			
<49	684 (19.3)	961 (19.5)	386 (15.5)
50-59	658 (18.5)	980 (19.9)	562 (22.6)
60-69	991 (27.9)	1449 (29.4)	803 (32.2)
≥70	1216 (34.3)	1540 (31.2)	740 (29.7)
Social class, n(%)			
Low	1564 (44.1)	2376 (48.2)	1280 (51.4)
Intermediate	1287 (36.3)	1432 (29.1)	725 (29.1)
High	698 (19.7)	1122 (22.8)	486 (19.5)
Smoking, n(%)			
Never	2392 (67.4)	2339 (47.4)	691 (27.7)
Former	541 (15.2)	1446 (29.3)	1031 (41.4)
Current	616 (17.4)	1145 (23.2)	769 (30.9)
<i>Helicobacter pylori</i> infection, n(%)			
Seronegative	334 (9.4)	420 (8.52)	151 (6.06)
Seropositive	1236 (34.8)	2188 (44.4)	1027 (41.2)
Missing	1979 (55.8)	2322 (47.1)	1313 (52.7)
Fruit and vegetables consumption, n (%)			
Low	974 (27.4)	1433 (29.1)	889 (35.7)
Intermediate	1070 (30.2)	1594 (32.3)	863 (34.6)
High	1181 (33.3)	1554 (31.5)	732 (29.4)
Missing	324 (9.1)	349 (7.1)	7 (0.3)
Energy intake (kcal/day), mean (SD)	2027 (705)	2042 (637)	2363 (655)
Energy-adjusted folate intake (µg/day), mean (SD)	288.1 (99.1)	297.2 (90.8)	256.9 (83.3)
Quartile 1 (70.7-219.5)	181.5 (28.4)	187.9 (25.2)	185.0 (25.9)
Quartile 2 (219.6-273.2)	246.2 (15.7)	247.7 (15.5)	244.7 (15.5)
Quartile 3 (273.3-337.5)	302.4 (18.2)	303.4 (17.8)	301.2 (18.1)
Quartile 4 (337.6-1105.2)	416.2 (77.6)	408.9 (74.5)	412.9 (83.0)

kcal, kilocalories; µg, micrograms; SD, standard deviation.

¹One drink is equivalent to 12 grams of alcohol.

Supplementary table 2. Associations between energy-adjusted folate intake and gastric cancer among men and women in the StoP Consortium (n=10970)¹.

	Controls	Cases	OR (95% CI)
Men			
Q1 (70.7-219.5) ²	1151	670	1
Q2 (219.6-273.2) ²	1187	492	0.86 (0.74-0.99)
Q3 (273.3-337.5) ²	1173	354	0.75 (0.64-0.89)
Q4 (337.6-1105.2) ²	966	283	0.82 (0.68-0.99)
Per one quartile increase			0.92 (0.87-0.98)
Per each 100 µg/day of increment			0.90 (0.83-0.98)
Women			
Q1 (70.7-219.5) ²	666	308	1
Q2 (219.6-273.2) ²	836	252	0.83 (0.67-1.01)
Q3 (273.3-337.5) ²	959	247	0.83 (0.66-1.02)
Q4 (337.6-1105.2) ²	1203	223	0.75 (0.59-0.94)
Per one quartile increase			0.92 (0.85-0.99)
Per each 100 µg/day of increment			0.89 (0.81-0.97)

¹ Analyses were adjusted for age (<49, 50-59, 60-69, ≥70 years), social class (less than high school; high school; more than high school), smoking (never; former; current), alcohol consumption (0; 0.1-2.0, >2.0) and energy intake (kcal/day).

² Folate intake range in µg/day.

Supplementary table 3. Association between energy-adjusted folate intake and gastric cancer by anatomical sub-sites in the StoP Consortium (n=10970)¹.

	Cardia	Non-cardia	Unspecified
	n=290	n=2292	n=247
Q1 (70.7-219.5) ²	1	1	1
Q2 (219.6-273.2) ²	0.82 (0.60-1.11)	0.85 (0.75-0.97)	0.97 (0.56-1.66)
Q3 (273.3-337.5) ²	0.62 (0.43-0.91)	0.81 (0.70-0.93)	0.87 (0.52-1.45)
Q4 (337.6-1105.2) ²	0.77 (0.52-1.13)	0.77 (0.65-0.90)	0.97 (0.58-1.61)
Per one quartile increase	0.88 (0.78-1.00)	0.92 (0.87-0.96)	0.99 (0.85-1.16)
Per each 100 µg/day of increment	0.89 (0.76-1.04)	0.88 (0.82-0.94)	1.06 (0.88-1.29)

¹OR and (95% CI) from multinomial logistic regression analysis adjusted for sex (male; female), age (<49, 50-59, 60-69, ≥70 years), social class (less than high school; high school; more than high school), smoking (never; former; current), alcohol consumption (0; 0.1-2.0, >2.0 drinks/day), energy intake (kcal/day) and study.

² Folate intake range in µg/day.

Supplementary table 4. Association between energy-adjusted folate intake and gastric cancer by histological type in the StoP Consortium (n=10970)¹.

	Intestinal	Diffuse	Other type	Unspecified
	n=1038	n=765	n=288	n=738
Q1 (70.7-219.5) ²	1	1	1	1
Q2 (219.6-273.2) ²	0.78 (0.65-0.94)	0.83 (0.67-1.01)	0.94 (0.70-1.27)	0.92 (0.73-1.16)
Q3 (273.3-337.5) ²	0.75 (0.61-0.92)	0.85 (0.68-1.06)	0.99 (0.70-1.40)	0.73 (0.56-0.93)
Q4 (337.6-1105.2) ²	0.88 (0.71-1.10)	0.74 (0.57-0.96)	0.94 (0.60-1.47)	0.73 (0.56-0.94)
Per one quartile increase	0.94 (0.87-1.01)	0.92 (0.85-0.99)	0.99 (0.87-1.13)	0.89 (0.82-0.97)
Per each 100 µg/day of increment	0.94 (0.86-1.02)	0.87 (0.79-0.97)	0.99 (0.84-1.17)	0.87 (0.78-0.96)

¹OR and (95% CI) from multinomial logistic regression analyses adjusted for sex (male; female), age (<49, 50-59, 60-69, ≥70 years), social class (less than high school; high school; more than high school), smoking (never; former; current), alcohol consumption (0; 0.1-2.0, >2.0 drinks/day), energy intake (kcal/day) and study. ² Folate intake range in µg/day.