

Rice intake and risk of type 2 diabetes: The Singapore Chinese Health Study

Seah JYH, Koh W-P, Yuan J-M, van Dam RM

(Supplementary Material)

Supplementary Table 1. Partial correlations between rice and noodle intake and other food and nutrient intakes¹

	Rice			Noodles		
	Males	Females	All	Males	Females	All
Foods						
Rice	1.00	1.00	1.00	-0.30	-0.27	-0.29
Noodles	-0.30	-0.27	-0.29	1.00	1.00	1.00
Bread	-0.23	-0.20	-0.22	-0.22	-0.26	-0.24
White bread	-	-	-	-0.18	-0.20	-0.19
Wholemeal bread	-	-	-	-	-	-
Red meat	-0.29	-0.22	-0.24	0.24	0.25	0.24
Poultry	-0.23	-0.19	-0.21	-	-	-
Fish	-0.30	-0.28	-0.30	0.23	0.24	0.24
Soy	-0.33	-0.35	-0.36	-	-	-
Vegetables	-0.33	-0.37	-0.37	-	-	-
Fruits	-0.30	-0.35	-0.34	-	-	-
Nutrients / Food components						

Carbohydrate	0.75	0.70	0.73	-0.31	-0.32	-0.32
Starch	0.94	0.93	0.93	-0.19	-0.17	-0.18
Dietary fibre	-0.45	-0.50	-0.50	-	-	-
Protein	-0.51	-0.53	-0.54	0.31	0.30	0.31
Total fat	-0.75	-0.79	-0.78	0.29	0.27	0.28
Saturated fat	-0.62	-0.61	-0.63	0.28	0.25	0.27
Monounsaturated fat	-0.69	-0.70	-0.71	0.28	0.26	0.28
Polyunsaturated fat	-0.49	-0.47	-0.50	-	-	-
Marine n-3 fatty acids	-0.31	-0.29	-0.31	0.25	0.28	0.27
α -linolenic acid	-0.38	-0.37	-0.39	-	-	-
Calcium	-0.48	-0.43	-0.47	-	-	-
Magnesium	-0.46	-0.48	-0.49	-	-	-
Iron	-0.67	-0.71	-0.70	0.41	0.39	0.40
PS Ratio ²	-	-	-	-	-	-
AHEI ³	-0.16	-0.21	-0.20	-	-	-

¹ Only correlations with an absolute $r \geq 0.15$ are shown for the purpose of simplicity. All displayed correlations were significant at $P \leq 0.05$. Partial correlations were adjusted for total energy intake.

² Ratio of polyunsaturated fatty acid intake : saturated fat intake.

³ Alternative Healthy Eating Index score - 2010 (31).

Supplementary Table 2. Baseline characteristics according to quintiles of noodles intake in men and women¹

	Men			Women		
	Quintile 1 (low)	Quintile 3	Quintile 5 (high)	Quintile 1 (low)	Quintile 3	Quintile 5 (high)
n	4922	3389	3972	4161	5693	5110
Median noodles intake (g/d)	10.5	46.8	108.2	14.8	46.6	106.9
Age at interview (y)	55.8 ± 7.7	55.6 ± 7.6	54.4 ± 7.3	55.7 ± 7.6	55.1 ± 7.7	54.1 ± 7.3
Cantonese [n (%)]	2348 (47.7)	1530 (45.2)	1952 (49.2)	2101 (50.5)	2653 (46.6)	2650 (51.9)
Higher education level [n (%)] ²	2088 (42.4)	1355 (40.0)	1558 (39.2)	1099 (26.4)	1283 (22.5)	1109 (21.7)
Current smokers [n (%)]	1632 (33.2)	1227 (36.2)	1488 (37.5)	220 (5.3)	332 (5.8)	304 (6.0)
Alcohol consumption [n (%)] ³	1102 (22.4)	737 (21.8)	922 (23.2)	249 (6.0)	266 (4.7)	247 (4.8)
Higher physical activity [n (%)] ⁴	2458 (49.9)	1500 (44.3)	1714 (43.2)	1209 (29.1)	1456 (25.6)	1211 (23.7)
Body mass index (kg/m ²)	22.8 ± 3.1	22.8 ± 3.1	23.2 ± 3.3	22.7 ± 3.1	23.1 ± 3.2	23.5 ± 3.4
History of hypertension [n (%)]	902 (18.3)	633 (18.7)	786 (19.8)	703 (16.9)	1119 (19.7)	1089 (21.3)
Energy intake (kcal)	1967.6 ± 507.3	1604.7 ± 530.2	1903.0 ± 579.7	1646.4 ± 406.5	1288.5 ± 398.6	1500.6 ± 451.0
Food intake (g/d)						
Rice	525.2 ± 198.3	445.4 ± 147.2	381.1 ± 165.4	432.6 ± 176.8	398.3 ± 117.0	330.8 ± 123.9
Bread	38.9 ± 29.5	32.7 ± 23.5	23.2 ± 23.5	42.1 ± 25.7	34.3 ± 20.3	24.7 ± 19.4
White bread	37.4 ± 35.4	32.8 ± 34.7	21.2 ± 25.3	44.5 ± 38.6	37.9 ± 37.5	23.8 ± 26.8
Wholemeal bread	9.1 ± 22.8	7.4 ± 21.0	4.5 ± 14.6	12.0 ± 25.8	9.6 ± 23.9	5.2 ± 15.5
Red meat	23.7 ± 23.3	31.1 ± 17.3	37.8 ± 21.6	22.9 ± 18.9	30.0 ± 13.7	35.5 ± 15.9

Poultry	16.4 ± 19.6	21.3 ± 15.4	22.2 ± 19.3	16.9 ± 17.1	21.6 ± 12.5	23.4 ± 15.8
Fish	45.5 ± 31.1	52.7 ± 25.1	62.8 ± 29.3	49.3 ± 28.4	55.0 ± 22.0	66.6 ± 25.8
Soy	87.3 ± 95.4	102.3 ± 71.8	105.7 ± 90.1	112.4 ± 94.7	121.5 ± 70.0	131.3 ± 82.1
Vegetables	96.1 ± 65.5	100.4 ± 48.1	105.4 ± 55.6	123.2 ± 69.1	117.6 ± 46.8	125.2 ± 50.2
Fruits	201.3 ± 191.7	192.6 ± 141.8	165.3 ± 149.2	247.4 ± 194.9	215.0 ± 129.4	193.6 ± 133.4

¹ Mean ± SD (all such values).

² Secondary school and above.

³ At least once weekly.

⁴ At least 0.5 hours per week of moderate or strenuous physical activity.