

**ESM Table 2: Age-adjusted baseline characteristics according to 4-year changes in tea consumption**

Variable	Changes in frequency of total tea consumption				
	Moderate to large decrease (>1 cup/day)	Small to moderate decrease (1 cup/week-1 cup/day)	No change ( $\pm 1$ cup/week)	Small to moderate increase (1 cup/week-1 cup/day)	Moderate to large increase (>1 cup/day)
<b>HPFS (1986)</b>					
Number of participants ( <i>n</i> )	1208	3152	18416	3626	1357
Initial tea intake (cups/day)	3.1 $\pm$ 1.1	0.7 $\pm$ 0.3	0.2 $\pm$ 0.7	0.2 $\pm$ 0.2	0.9 $\pm$ 0.9
Age (years)	55.8 $\pm$ 9.1	56.7 $\pm$ 9.3	56.1 $\pm$ 9.2	56.2 $\pm$ 9.4	56.3 $\pm$ 9.0
Initial BMI (kg/m <sup>2</sup> )	25.4 $\pm$ 3.2	25.2 $\pm$ 2.8	25.3 $\pm$ 3.0	25.3 $\pm$ 2.9	25.5 $\pm$ 3.6
Weight change (kg)	0.5 $\pm$ 3.9	0.6 $\pm$ 3.9	0.6 $\pm$ 3.9	0.7 $\pm$ 3.7	0.6 $\pm$ 4.0
Initial physical activity (MET-h/week)	19.1 $\pm$ 24.6	21.9 $\pm$ 30.6	21.6 $\pm$ 29.3	21.8 $\pm$ 29.3	21.9 $\pm$ 42.2
Change in physical activity (MET-h/week)	1.3 $\pm$ 54.0	1.5 $\pm$ 43.0	1.4 $\pm$ 47.0	1.3 $\pm$ 49.0	1.7 $\pm$ 42.0
Initial alcohol intake (g/day)	10.7 $\pm$ 15.4	10.8 $\pm$ 13.9	11.8 $\pm$ 15.5	10.7 $\pm$ 13.9	9.9 $\pm$ 13.7
Change in alcohol intake (g/day)	-1.2 $\pm$ 10.0	-1.3 $\pm$ 9.3	-1.3 $\pm$ 9.7	-1.4 $\pm$ 9.5	-1.2 $\pm$ 8.9
Race (white (%))	96	96	96	95	95
Current smoker (%)	8	6	8	5	7
Hypertension (%)	24	22	23	23	24
High cholesterol (%)	28	27	28	29	28
Family history of diabetes (%)	22	21	21	20	21
Total energy intake (kJ/day)	8612 $\pm$ 2315	8407 $\pm$ 2357	8173 $\pm$ 2303	8177 $\pm$ 2315	1958 $\pm$ 537
Change in energy intake (kJ/day)	-549 $\pm$ 2127	-469 $\pm$ 2043	-297 $\pm$ 1993	-176 $\pm$ 1964	84 $\pm$ 2029
Initial total coffee intake (cups/day)	1.8 $\pm$ 1.8	1.9 $\pm$ 1.6	2.0 $\pm$ 1.9	1.8 $\pm$ 1.6	1.6 $\pm$ 1.7
Change in total coffee intake (cups/day)	0.0 $\pm$ 1.4	0.0 $\pm$ 1.3	0.0 $\pm$ 1.2	-0.1 $\pm$ 1.2	-0.1 $\pm$ 1.4
Initial caffeinated coffee intake (cups/day)	1.3 $\pm$ 1.6	1.4 $\pm$ 1.5	1.4 $\pm$ 1.6	1.2 $\pm$ 1.4	1.0 $\pm$ 1.5
Change in caffeinated coffee intake (cups/day)	0.0 $\pm$ 1.2	0.0 $\pm$ 1.2	0.0 $\pm$ 1.2	-0.1 $\pm$ 1.1	-0.1 $\pm$ 1.2

Initial decaffeinated coffee intake (cups/day)	0.6±1.1	0.6±1.0	0.6±1.1	0.6±1.0	0.6±1.1
Change in decaffeinated coffee intake (cups/day)	0.0±1.1	0.0±1.0	0.0±1.0	0.0±0.9	0.0±1.1
Initial SSB intake (servings/day)	0.3±0.5	0.3±0.4	0.3±0.5	0.3±0.5	0.3±0.5
Change in SSB intake (servings/day)	0.0±0.4	0.0±0.4	0.0±0.4	0.0±0.4	0.0±0.4
Initial ASB intake (servings/day)	0.3±0.7	0.4±0.8	0.4±0.8	0.4±0.7	0.4±0.8
Change in ASB intake (servings/day)	0.2±0.7	0.1±0.7	0.2±0.7	0.1±0.6	0.1±0.7
Initial punch intake (servings/day)	0.1±0.3	0.1±0.2	0.1±0.3	0.1±0.2	0.1±0.3
Change in punch intake (servings/day)	0.0±0.2	0.0±0.2	0.0±0.2	0.0±0.2	0.0±0.2
AHEI score	48.9±10.1	50.1±9.8	49.1±10.4	50.0±10.0	49.0±10.2
Change in AHEI score	0.1±8.6	0.0±8.2	0.2±8.3	0.4±8.2	0.7±8.4
<b>NHS (1986)</b>					
Number of participants ( <i>n</i> )	2645	5586	29172	7094	3967
Initial tea intake (serving/day)	3.1± 1.1	0.8± 0.3	0.4± 0.9	0.2±0.2	0.9±1.0
Age (years)	55.2±7.1	56.0±7.0	55.9±7.1	56.0±7.1	55.5±7.3
Initial body mass index (kg/m <sup>2</sup> )	25.1±4.7	25.1±4.6	24.8±4.5	25.1±4.5	25.1±4.7
Weight change (kg)	1.0±4.9	1.0±4.9	1.2±4.7	1.2±4.6	1.1±4.6
Initial physical activity (MET-h/week)	13.7±18.2	14.5±19.2	14.3±20.9	14.6±19.7	14.3±24.3
Changes in physical activity(MET-h/week)	1.3±15.5	1.2±15.5	1.4±15.7	1.5±16.0	1.1±15.4
Initial alcohol intake (g/day)	6.0±11.1	6.5±10.3	6.7±11.1	5.8±9.6	5.2±9.5
Changes in alcohol intake (g/day)	-1.3±7.1	-1.2±6.6	-1.1±7.1	-1.1±6.5	-1.2±6.8
Race, white (%)	99	98	98	98	98
Current smoker (%)	16	14	17	13	14
Hypertension (%)	27	26	26	28	27
High cholesterol (%)	37	35	35	37	36
Family history of diabetes (%)	29	28	28	29	29
Menopausal status and postmenopausal hormone use					

Premenopausal (%)	35.4	32.2	32.7	32.1	35.7
Postmenopausal + never users (%)	26.4	28.1	27.5	26.6	25.4
Postmenopausal + past users (%)	12.5	14.2	13.7	14.1	14.4
Postmenopausal + current users (%)	25.8	25.4	26.1	27.2	24.5
Total energy intake (kJ/day)	7450±2278	7624±2181	7293±2144	7457±2131	7561±2134
Change in energy intake (kJ/day)	-318±1959	-214±1909	-63±1863	-17±1872	100±1900
Initial total coffee intake (cups/day)	1.9±1.8	2.4±1.6	2.5±1.8	2.4±1.7	2.2±1.8
Change in total coffee intake (cups/day)	0.0±1.4	-0.1±1.3	-0.1±1.3	-0.3±1.3	-0.6±1.5
Initial caffeinated coffee intake (cups/day)	1.5±1.6	1.8±1.6	1.8±1.7	1.5±1.6	1.1±1.4
Change in caffeinated coffee intake (cups/day)	0.0±1.3	-0.1±1.3	-0.1±1.3	-0.1±1.2	-0.1±1.1
Initial decaffeinated coffee intake (cups/day)	0.5±1.0	0.6±1.0	0.7±1.2	0.9±1.3	1.1±1.5
Change in decaffeinated coffee intake (cups/day)	0.0±1.1	0.0±1.1	0.0±1.1	-0.2±1.2	-0.5±1.4
Initial SSB intake (servings/day)	0.1±0.4	0.1±0.3	0.1±0.4	0.1±0.4	0.1±0.3
Change in SSB intake (servings/day)	0.0±0.3	0.0±0.3	0.0±0.3	0.0±0.3	0.0±0.3
Initial ASB intake (servings/day)	0.5±0.9	0.5±0.8	0.5±0.9	0.5±0.8	0.5±0.8
Change in ASB intake (servings/day)	0.2±0.8	0.1±0.7	0.1±0.7	0.1±0.7	0.1±0.7
Initial punch intake (servings/day)	0.1±0.3	0.1±0.3	0.1±0.3	0.1±0.3	0.1±0.3
Change in punch intake (servings/day)	0.0±0.3	0.0±0.3	0.0±0.3	0.0±0.3	0.0±0.3
AHEI score	47.3±9.8	48.0±9.7	47.5±10.1	48.1±9.7	48.0±9.9
Change in AHEI score	0.4±8.5	0.3±8.6	0.3±8.4	0.1±8.3	0.0±8.4
<b>NHS II (1991)</b>					
Number of participants ( <i>n</i> )	4614	8735	24989	6458	2714
Initial tea intake (cups/day)	3.2±1.2	0.7±0.3	0.4±1.0	0.2±0.2	0.9±1.0
Age (years)	41.9±4.0	41.7±4.1	41.9±4.0	41.7±4.1	41.7±4.0
Initial body mass index (kg/m <sup>2</sup> )	25.2±5.7	24.7±5.4	24.6±5.3	24.9±5.5	25.4±5.7
Weight change (kg)	3.4±6.4	3.3±6.1	3.4±6.1	3.6±6.4	3.8±6.6

Initial physical activity (MET-h/week)	19.5±25.2	20.4±27.0	20.4±26.6	20.4±26.5	20.4±28.4
Changes in physical activity(MET-h/week)	-2.7±25.0	-2.9±25.3	-2.7±26.3	-3.3±27.9	-3.5±25.5
Initial alcohol intake (g/day)	2.7±6.1	3.2±6.2	3.3±6.4	3.5±6.8	2.7±5.8
Changes in alcohol intake (g/day)	0.3±4.8	0.4±4.7	0.3±4.8	0.2±5.0	0.3±4.2
Race, white (%)	98	97	97	97	98
Current smoker (%)	11	10	12	12	13
Hypertension (%)	13	11	10	11	11
High cholesterol (%)	25	23	22	24	23
Family history of diabetes (%)	38	36	36	36	38
Menopausal status and postmenopausal hormone use					
Premenopausal (%)	86.2	88.1	88.2	87.9	87.7
Postmenopausal + never users (%)	0.6	0.6	0.7	0.7	0.6
Postmenopausal + past users (%)	1.3	0.8	1.0	1.0	1.2
Postmenopausal + current users (%)	9.1	7.9	7.5	7.8	8.5
Missing information (%)	2.9	2.6	2.7	2.6	2.1
Oral contraceptive use					
Never user (%)	14.2	14.1	14.9	14.3	13.6
Past user (%)	79.0	78.6	78.4	78.2	79.8
Current user (%)	6.9	7.3	6.7	7.5	6.6
Total energy intake (kJ/day)	7645±2278	7440±2206	7239±2181	7293±2173	7464±2280
Change in energy intake (kJ/day)	-54±2089	-42±2035	126±1997	299±2031	331±2067
Initial total coffee intake (cups/day)	1.3±1.6	1.7±1.7	1.7±1.8	1.9±1.7	1.5±1.8
Change in total coffee intake (cups/day)	0.1±1.2	0.0±1.2	0.0±1.1	-0.1±1.2	-0.2±1.2
Initial caffeinated coffee intake (cups/day)	1.0±1.5	1.3±1.5	1.4±1.6	1.6±1.6	1.3±1.6
Change in caffeinated coffee intake (cups/day)	0.1±1.1	0.0±1.2	0.0±1.1	0.0±1.2	-0.1±1.2
Initial decaffeinated coffee intake (cups/day)	0.3±0.8	0.4±0.9	0.3±0.8	0.4±0.8	0.3±0.8

Change in decaffeinated coffee intake (cups/day)	0.0±0.7	0.0±0.8	0.0±0.7	-0.1±0.7	-0.1±0.6
Initial SSB intake (servings/day)	0.3±0.6	0.3±0.6	0.3±0.7	0.3±0.6	0.3±0.8
Change in SSB intake (servings/day)	0.0±0.5	0.0±0.5	0.0±0.5	0.0±0.5	0.0±0.5
Initial ASB intake (servings/day)	1.0±1.3	1.0±1.3	1.1±1.4	1.1±1.5	1.1±1.4
Change in ASB intake (servings/day)	0.0±1.1	-0.1±1.0	-0.1±1.0	-0.1±1.0	-0.1±1.1
Initial punch intake (servings/day)	0.1±0.4	0.2±0.4	0.2±0.4	0.2±0.4	0.2±0.5
Change in punch intake (servings/day)	0.0±0.5	0.0±0.4	0.0±0.4	0.0±0.4	0.0±0.5
AHEI score	44.1±9.2	44.6±9.2	44.3±9.6	44.6±9.4	44.0±9.4
Change in AHEI score	0.2±7.8	0.2±7.9	0.2±7.9	0.3±8.0	0.3±8.2

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Abbreviations: HPFS, Health Professionals Follow-Up Study; NHS, Nurses' Health Study NHS II, Nurses' Health Study II; BMI, Body Mass Index; MET, Metabolic Equivalent of Task ; SSB, Sugar-Sweetened Beverages; ASB, Artificially Sweetened Beverages; AHEI, Alternate Healthy Eating Index

Data are expressed as means±SD unless otherwise noted.