

ESM Table 1: Age-adjusted baseline characteristics according to 4-year changes in coffee consumption

Variable	Changes in frequency of total coffee consumption				
	Moderate to large decrease (>1 cup/day)	Small to moderate decrease (1 cup/week-1 cup/day)	No change (± 1 cup/week)	Small to moderate increase (1 cup/week-1 cup/day)	Moderate to large increase (>1 cup/day)
HPFS (1986)					
Number of participants (<i>n</i>)	4189	3537	12483	3752	3798
Initial total coffee intake (cups/day)	4.0 \pm 1.6	2.0 \pm 1.5	1.4 \pm 1.6	1.4 \pm 1.4	1.7 \pm 1.4
Age (years)	56.9 \pm 9.0	57.3 \pm 9.5	55.7 \pm 9.2	56.2 \pm 9.3	56.0 \pm 9.0
Initial BMI (kg/m ²)	25.6 \pm 3.0	25.2 \pm 2.9	25.1 \pm 3.1	25.2 \pm 3.1	25.4 \pm 3.1
Weight change (kg)	0.8 \pm 4.2	0.5 \pm 3.6	0.6 \pm 3.7	0.6 \pm 3.6	0.6 \pm 4.4
Initial physical activity (MET-h/week)	20.7 \pm 26.9	22.4 \pm 33.8	21.1 \pm 30.0	22.5 \pm 28.7	21.7 \pm 29.6
Change in physical activity (MET-h/week)	1.2 \pm 5.1	1.2 \pm 4.4	1.5 \pm 4.3	1.3 \pm 4.7	1.3 \pm 5.7
Initial alcohol intake (g/day)	13.5 \pm 16.1	11.5 \pm 14.4	10.5 \pm 15.1	10.9 \pm 13.9	12.5 \pm 15.3
Change in alcohol intake (g/day)	-2.1 \pm 11.0	-1.4 \pm 9.3	-1.1 \pm 8.7	-1.0 \pm 9.0	-1.2 \pm 11.3
Race, white (%)	96	96	96	96	96
Current smoker (%)	9	6	7	6	10
Hypertension (%)	23	25	22	23	24
High cholesterol (%)	30	30	26	29	28
Family history of diabetes (%)	22	22	20	22	21
Total energy intake (kJ/day)	8378 \pm 2349	8206 \pm 2303	8231 \pm 2300	8076 \pm 2257	8173 \pm 2361
Change in energy intake (kJ/day)	-574 \pm 2010	-473 \pm 1951	-289 \pm 1980	-96 \pm 1980	-25 \pm 2098
Initial caffeinated coffee intake (cups/day)	2.7 \pm 1.9	1.2 \pm 1.3	1.1 \pm 1.5	0.9 \pm 1.3	1.2 \pm 1.2
Change in caffeinated coffee intake (cups/day)	-1.4 \pm 1.3	-0.2 \pm 0.9	0.0 \pm 0.5	0.2 \pm 0.9	1.4 \pm 1.3
Initial decaffeinated coffee intake (cups/day)	1.3 \pm 1.7	0.9 \pm 1.0	0.3 \pm 0.8	0.5 \pm 0.9	0.6 \pm 0.9
Change in decaffeinated coffee intake (cups/day)	-0.7 \pm 1.3	-0.3 \pm 0.9	0.0 \pm 0.5	0.3 \pm 0.9	0.7 \pm 1.3

Initial tea intake (cups/day)	0.4±0.9	0.4±0.8	0.5±0.9	0.4±0.8	0.4±0.9
Change in tea intake (cups/day)	0.0±0.8	0.0±0.7	0.0±0.7	0.0±0.7	0.0±0.8
Initial SSB intake (servings/day)	0.2±0.4	0.3±0.5	0.3±0.6	0.2±0.4	0.2±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)	0.4±0.9	0.4±0.7	0.3±0.8	0.3±0.7	0.3±0.7
Change in ASB intake (servings/day)	0.2±0.8	0.2±0.7	0.1±0.6	0.2±0.6	0.2±0.7
Initial punch intake (servings/day)	0.1±0.2	0.1±0.2	0.1±0.3	0.1±0.3	0.1±0.2
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	49.3 ±10.2	50.3 ±10.0	48.6 ±10.4	50.5±10.2	49.6±10.2
Change in AHEI score	0.5±8.5	0.1±8.3	0.2±8.2	0.2±8.3	0.1±8.4

NHS (1986)

Number of participants (<i>n</i>)	9856	6804	20246	5104	6454
Initial total coffee intake (cups/day)	4.0±1.6	2.3±1.5	2.0±1.7	1.9±1.5	2.0±1.4
Age (years)	56.2±6.9	56.1±7.0	55.9±7.1	55.5±7.1	55.5±7.1
Initial body mass index (kg/m ²)	24.9±4.4	24.9±4.5	25.0±4.6	25.0±4.5	24.9±4.6
Weight change (kg)	1.3±4.8	1.2±4.6	1.1±4.6	1.0±4.7	1.0±4.9
Initial physical activity (MET-h/week)	14.1±22.1	15.0±19.2	14.1±20.0	15.0±22.6	14.1±20.4
Changes in physical activity (MET-h/week)	1.9±16.1	1.1±15.7	1.2±15.3	1.3±15.9	1.4±16.0
Initial alcohol intake (g/day)	6.8±11.2	6.0±9.9	6.3±11.0	6.0±9.9	6.4±10.4
Changes in alcohol intake (g/day)	-1.3±7.3	-1.1±6.7	-1.1±6.8	-1.0±6.7	-1.2±7.2
Race, white (%)	98	98	98	98	98
Current smoker (%)	18	12	17	12	19
Hypertension (%)	27	28	27	26	26
High cholesterol (%)	36	38	35	37	34
Family history of diabetes (%)	29	28	28	28	29
Menopausal status and postmenopausal hormone use					
Premenopausal (%)	30.5	32.2	33.4	34.5	34.7
Postmenopausal + never users (%)	27.9	25.7	27.7	26.0	27.4
Postmenopausal + past users (%)	14.5	14.3	13.6	13.5	13.4

Postmenopausal + current users (%)	27.2	27.9	25.3	26.1	24.6
Total energy intake (kJ/day)	7494±2173	7473±2144	7377±2148	7365±2148	7319±2194
Change in energy intake (kJ/day)	-255±1922	-138±1842	-80±1859	84±1880	159±1897
Initial caffeinated coffee intake (cups/day)	2.4±2.0	1.3±1.3	1.6±1.7	1.3±1.4	1.4±1.3
Change in caffeinated coffee intake (cups/day)	-1.2±1.4	-0.2±1.0	0.0±0.7	0.2±1.1	1.3±1.3
Initial decaffeinated coffee intake (cups/day)	1.5±1.7	1.0±1.0	0.4±1.0	0.6±1.0	0.6±0.9
Change in decaffeinated coffee intake (cups/day)	-0.9±1.5	-0.4±1.0	0.0±0.7	0.4±1.1	0.7±1.3
Initial tea intake (cups/day)	0.4±0.8	0.5±0.9	0.7±1.1	0.6±1.0	0.6±1.0
Change in tea intake (cups/day)	0.3±1.1	0.1±0.9	0.0±0.9	0.1±0.9	0.0±0.9
Initial SSB intake (servings/day)	0.1±0.4	0.1±0.3	0.2±0.5	0.1±0.3	0.1±0.4
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±0.8	0.5±0.8	0.5±0.9	0.5±0.8	0.5±0.8
Change in ASB intake (servings/day)	0.1±0.8	0.1±0.7	0.1±0.7	0.2±0.7	0.1±0.7
Initial punch intake (servings/day)	0.1±0.2	0.1±0.3	0.1±0.3	0.1±0.2	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	48.2±9.9	48.7±10.0	46.8±10.0	48.5±9.6	48.1±10.0
Change in AHEI score	0.3±8.6	-0.2±8.4	0.4±8.3	0.1±8.4	0.3±8.6
NHS II (1991)					
Number of participants (<i>n</i>)	6353	5093	24348	5645	6071
Initial total coffee intake (cups/day)	3.9±1.5	2.0±1.5	1.2±1.6	1.3±1.4	1.7±1.3
Age (years)	42.6±3.8	42.2±4.0	41.7±4.1	41.6±4.1	41.7±4.0
Initial body mass index (kg/m ²)	25.0±5.1	24.9±5.4	24.9±5.6	24.4±5.1	24.3±4.9
Weight change (kg)	3.8±6.7	3.6±6.1	3.5±6.2	3.1±5.8	3.0±6.3
Initial physical activity (MET-h/week)	21.0±30.0	19.7±25.5	20.0±25.9	20.5±26.2	21.3±28.1
Changes in physical activity (MET-h/week)	-3.9±29.1	-2.3±24.9	-2.7±25.6	-2.7±24.6	-3.3±27.6
Initial alcohol intake (g/day)	4.3±7.8	3.2±6.2	2.8±6.0	3.1±5.8	3.8±6.5
Changes in alcohol intake (g/day)	0.3±5.8	0.3±4.6	0.3±4.4	0.3±4.5	0.6±5.5
Race, white (%)	97	97	97	96	98

Current smoker (%)	16	10	10	9	16
Hypertension (%)	12	11	11	10	9
High cholesterol (%)	24	23	23	23	21
Family history of diabetes (%)	37	37	37	36	35
Menopausal status and postmenopausal hormone use					
Premenopausal (%)	85.1	87.5	88.2	88.9	89.0
Postmenopausal + never users (%)	0.7	0.6	0.6	0.6	0.6
Postmenopausal + past users (%)	1.2	1.0	0.9	0.8	1.2
Postmenopausal + current users (%)	9.8	8.4	7.6	7.3	6.5
Missing information (%)	3.2	2.5	2.6	2.4	2.7
Oral contraceptive use					
Never user (%)	12.7	14.7	15.3	14.2	13.5
Past user (%)	81.0	78.1	77.6	78.3	80.7
Current user (%)	6.4	7.2	7.1	7.5	5.8
Total energy intake (kJ/day)	7423±2240	74530±2206	7335±2202	7277±2173	7222±2206
Change in energy intake (kJ/day)	-100±2064	-39±2014	122±2001	183±2026	348±2060
Initial caffeinated coffee intake (cups/day)	3.0±1.7	1.3±1.3	1.0±1.5	0.9±1.3	1.3±1.2
Change in caffeinated coffee intake (cups/day)	-1.6±1.2	-0.2±0.8	0.0±0.4	0.3±0.8	1.6±1.0
Initial decaffeinated coffee intake (cups/day)	0.9±1.4	0.7 ±0.8	0.1±0.5	0.4±0.7	0.4±0.7
Change in decaffeinated coffee intake (cups/day)	-0.5 ±1.1	-0.3±0.8	0.0±0.4	0.2±0.8	0.4±0.9
Initial tea intake (cups/day)	0.6±1.0	0.7±1.1	0.8±1.2	0.7±1.1	0.7±1.1
Change in tea intake (cups/day)	-0.1±1.0	-0.1±0.9	-0.1±1.0	-0.2±1.0	-0.2±1.0
Initial SSB intake (servings/day)	0.2±0.5	0.2±0.5	0.3±0.7	0.2±0.6	0.2±0.6
Change in SSB intake (servings/day)	0.0±0.4	0.0±0.5	0.0±0.5	0.0±0.4	0.0±0.5
Initial ASB intake (servings/day)	1.1±1.4	1.0±1.3	1.1±1.5	0.9±1.3	1.0±1.3
Change in ASB intake (servings/day)	-0.2±1.1	-0.1±1.0	-0.1±1.0	-0.1±0.9	-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	0.1±0.3
Change in punch intake (servings/day)	0.0±0.4	0.0±0.4	0.0±0.4	0.0±0.4	0.0±0.4
AHEI score	45.7±9.4	45.4±9.4	43.4±9.5	45.0±9.2	45.4±9.3
Change in AHEI score	0.3±8.3	0.1±7.9	0.2±7.8	0.4±7.8	0.3±8.2

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.