

Supplemental Material

Table S1. Mean consumption* of avocado and other fats in the Health Professionals Follow-Up Study (1986-2014) and Nurse's Health Study (1986-2010).

Avocado			Margarine			Mayonnaise		
Year	HPFS Mean ± SD	NHS Mean ± SD	Year	HPFS Mean ± SD	NHS Mean ± SD	Year	HPFS Mean ± SD	NHS Mean ± SD
1986	17.5 ± 46.2	9.1 ± 32.2	1986	72.1 ± 103.6	103.6 ± 121.1	1986	35.7 ± 46.9	39.2 ± 44.1
1990	--	--	1990	76.3 ± 10.6.4	100.8 ± 119.0	1990	31.5 ± 44.1	37.1 ± 46.2
1994	16.1 ± 45.5	8.4 ± 32.2	1994	69.3 ± 101.5	83.3 ± 109.9	1994	34.3 ± 50.4	37.8 ± 48.3
1998	16.8 ± 51.1	8.4 ± 32.9	1998	59.5 ± 94.5	71.4 ± 105.0	1998	34.3 ± 48.3	35.7 ± 46.2
2002	20.3 ± 62.3	--	2002	47.6 ± 88.2	63.7 ± 100.8	2002	31.5 ± 48.3	34.3 ± 45.5
2006	24.5 ± 63.7	14.0 ± 47.6	2006	44.1 ± 84.7	58.8 ± 96.6	2006	30.8 ± 48.3	32.9 ± 44.1
2010	27.3 ± 74.2	16.1 ± 51.1	2010	40.6 ± 81.2	35.7 ± 84.0	2010	29.4 ± 47.6	32.2 ± 42.0
2014	32.2 ± 81.2	--	2014	39.2 ± 80.5	--	2014	30.1 ± 49.0	--
Butter			Olive Oil			Other Plant Oils		
Year	HPFS Mean ± SD	NHS Mean ± SD	Year	HPFS Mean ± SD	NHS Mean ± SD	Year	HPFS Mean ± SD	NHS Mean ± SD
1986	12.6 ± 25.9	13.3 ± 26.6	1986	0.0 ± 2.8	0.0 ± 1.4	1986	39.9 ± 31.5	38.5 ± 28.7
1990	10.5 ± 23.8	9.1 ± 22.4	1990	7.0 ± 16.1	7.7 ± 16.8	1990	32.9 ± 29.4	32.9 ± 29.4
1994	10.5 ± 23.8	11.2 ± 23.1	1994	14.7 ± 33.6	17.5 ± 37.8	1994	29.4 ± 30.1	23.8 ± 25.9
1998	12.6 ± 25.2	12.6 ± 25.2	1998	14.0 ± 30.8	24.5 ± 48.3	1998	25.9 ± 28.0	23.8 ± 26.6
2002	14.0 ± 26.6	14.0 ± 25.9	2002	23.1 ± 46.9	28.0 ± 52.5	2002	25.9 ± 27.3	28.7 ± 20.3
2006	13.3 ± 25.9	14.0 ± 25.2	2006	27.3 ± 53.9	27.3 ± 53.9	2006	25.2 ± 28.0	23.1 ± 24.5
2010	12.6 ± 24.5	14.7 ± 25.2	2010	28.0 ± 51.8	27.3 ± 53.2	2010	25.2 ± 28.0	24.5 ± 24.5
2014	13.3 ± 24.5	--	2014	28.7 ± 53.2	--	2014	25.2 ± 28.0	--
Dairy Foods			Nuts			Cheese		
Year	HPFS Mean ± SD	NHS Mean ± SD	Year	HPFS Mean ± SD	NHS Mean ± SD	Year	HPFS Mean ± SD	NHS Mean ± SD
1986	101.5 ± 63.7	105.0 ± 58.8	1986	49.0 ± 79.8	29.4 ± 55.3	1986	149.1 ± 155.4	184.8 ± 170.1
1990	84.7 ± 58.8	86.8 ± 51.8	1990	43.3 ± 73.5	23.1 ± 47.6	1990	131.6 ± 144.2	149.8 ± 148.4
1994	77.7 ± 58.1	74.2 ± 51.8	1994	41.3 ± 72.8	21.0 ± 45.5	1994	127.4 ± 144.2	136.5 ± 139.3
1998	74.2 ± 56.7	75.6 ± 53.2	1998	45.5 ± 80.5	24.5 ± 52.5	1998	133.7 ± 155.4	144.2 ± 149.1
2002	79.8 ± 61.6	78.4 ± 55.3	2002	58.1 ± 101.5	37.1 ± 74.2	2002	131.6 ± 162.4	141.4 ± 157.5
2006	82.6 ± 62.3	80.5 ± 56.7	2006	64.4 ± 106.4	51.8 ± 95.2	2006	137.9 ± 169.4	149.1 ± 161.0
2010	84.0 ± 63.0	80.5 ± 56.7	2010	71.4 ± 119.0	50.4 ± 93.8	2010	133.7 ± 162.4	144.2 ± 154.7
2014	86.1 ± 64.4	--	2014	74.9 ± 123.2	72.1 ± 124.6	2014	136.5 ± 165.9	--
Egg			Yogurt†			Processed meats		
Year	HPFS Mean ± SD	NHS Mean ± SD	Year	HPFS Mean ± SD	NHS Mean ± SD	Year	HPFS Mean ± SD	NHS Mean ± SD
1986	116.9 ± 145.6	105.7 ± 99.4	1986	146.3 ± 381.5	208.6 ± 415.8	1986	76.3 ± 86.1	63.0 ± 48.3
1990	88.9 ± 123.2	72.8 ± 84.7	1990	143.5 ± 369.6	218.4 ± 425.6	1990	64.4 ± 80.5	49.7 ± 58.8
1994	82.6 ± 118.3	67.9 ± 81.2	1994	147.7 ± 375.9	257.6 ± 487.9	1994	59.5 ± 77.7	44.1 ± 56.7

1998	94.5 ± 133.0	83.3 ± 98.7	1998	180.6 ± 437.5	298.9 ± 543.2	1998	59.5 ± 76.3	59.5 ± 77.0
2002	101.5 ± 147.0	90.3 ± 107.8	2002	174.3 ± 441.7	277.2 ± 527.1	2002	62.3 ± 84.0	58.1 ± 76.3
2006	103.6 ± 149.8	91.0 ± 104.3	2006	196.7 ± 484.4	319.9 ± 557.2	2006	63.7 ± 85.4	57.4 ± 74.9
2010	102.9 ± 145.6	93.1 ± 107.1	2010	233.1 ± 552.3	388.5 ± 633.5	2010	62.3 ± 84.0	52.5 ± 67.9
2014	112.0 ± 156.8	--	2014	259.0 ± 599.2	--	2014	65.1 ± 87.5	--

* Consumption in grams/week for all foods listed.

† Includes plain, sweetened, and artificially sweetened yogurt.

Table S2. Spearman correlations between avocado intake and other types of fat at the mid-point of follow-up (1998).

	Avocado	Margarine	Butter	Mayonnaise	Olive Oil	Other plant oils	Dairy foods	Cheese	Egg	Yogurt*	Processed Meats	Nuts
Health Professionals Follow-up Study[†]												
Avocado	1.0	-0.04	0.09	0.09	0.10	0.08	0.06	0.08	0.08	0.10	0.01	0.11
Margarine	-0.04	1.0	-0.14	0.20	-0.11	0.18	0.10	0.14	0.10	-0.06	0.18	0.05
Butter	0.09	-0.14	1.0	0.10	0.12	0.08	0.42	0.13	0.22	0.002	0.21	0.08
Mayonnaise	0.09	0.20	0.10	1.0	0.04	0.55	0.17	0.19	0.17	-0.004	0.22	0.10
Olive Oil	0.10	-0.11	0.12	0.04	1.0	-0.17	-0.002	0.02	-0.02	0.12	-0.11	0.16
Other plant oils	0.08	0.18	0.08	0.55	-0.17	1.0	0.23	0.15	0.18	-0.08	0.27	0.13
Dairy foods	0.06	0.10	0.42	0.17	-0.002	0.23	1.0	0.52	0.28	0.05	0.35	0.11
Cheese	0.08	0.14	0.13	0.19	0.02	0.15	0.52	1.0	0.22	0.10	0.22	0.11
Egg	0.08	0.10	0.22	0.17	-0.02	0.18	0.28	0.22	1.0	-0.03	0.40	0.05
Yogurt*	0.10	-0.06	0.002	-0.004	0.12	-0.08	0.05	0.10	-0.03	1.0	-0.15	0.06
Processed meats	0.01	0.18	0.21	0.22	-0.11	0.27	0.35	0.22	0.40	-0.15	1.0	0.06
Nuts	0.11	0.05	0.08	0.10	0.16	0.13	0.11	0.11	0.05	0.06	0.06	1.0
Nurses' Health Study[‡]												
Avocado	1.0	0.03	-0.03	0.01	-0.10	0.11	0.07	0.04	0.06	0.06	-0.03	0.14
Margarine	0.03	1.0	-0.28	0.14	-0.12	0.15	0.02	0.09	0.09	-0.06	0.13	0.02
Butter	-0.03	-0.28	1.0	0.08	0.19	0.10	0.44	0.07	0.15	-0.01	0.16	0.06
Mayonnaise	0.01	0.14	0.08	1.0	0.08	0.51	0.16	0.17	0.18	0.02	0.18	0.10
Olive Oil	-0.10	-0.12	0.19	0.08	1.0	-0.16	-0.02	0.03	-0.001	0.18	-0.10	0.16
Other plant oils	0.11	0.15	0.10	0.51	-0.16	1.0	0.29	0.14	0.19	-0.11	0.27	0.13
Dairy foods	0.07	0.02	0.44	0.16	-0.02	0.29	1.0	0.49	0.26	0.08	0.32	0.12
Cheese	0.04	0.09	0.07	0.17	0.03	0.14	0.49	1.0	0.21	0.14	0.16	0.12
Egg	0.06	0.09	0.15	0.18	-0.001	0.19	0.26	0.21	1.0	-0.09	0.33	0.05
Yogurt*	0.06	-0.06	-0.01	0.02	0.18	-0.11	0.08	0.14	-0.09	1.0	-0.15	0.09
Processed meats	-0.03	0.13	0.16	0.18	-0.10	0.27	0.32	0.16	0.33	-0.15	1.0	0.05
Nuts	0.14	0.02	0.06	0.10	0.16	0.13	0.12	0.12	0.05	0.09	0.05	1.0

* Includes plain, sweetened, and artificially sweetened yogurt.

[†]All correlations = 0.02, p-value <0.001; all correlations ≥ 0.03, p-value <0.0001.

[‡]All correlations = 0.01, p-value <0.001; all correlations ≥ 0.02, p-value <0.0001.

Table S3. Risk of Cardiovascular Events According to Categories of Avocado Intake* without adjusting for BMI in Two Large US Cohorts.

	HR (95% CI)				P value for trend	HR (95% CI) for 1/2 serving (1/4 avocado)-Increase in Avocado Intake per day
	Never or less than 1 per month	1-3 per month	1 per week	≥2 per week		
CVD†						
Health Professionals Follow-Up Study						
No. cases/person-years	5,076/702,080	1,117/176,523	282/49,201	186/27,947		
Multivariable Model 3	1.00	0.93 (0.87, 0.99)	0.84 (0.75, 0.95)	0.82 (0.71, 0.95)	0.0005	0.75 (0.63, 0.88)
Multivariable Model 3 without BMI	1.00	0.92 (0.86, 0.99)	0.84 (0.74, 0.95)	0.82 (0.71, 0.95)	0.0004	0.74 (0.63, 0.87)
Nurses' Health Study I						
No. cases/person-years	6,407/1,473,683	831/212,466	257/60,263	118/28,780		
Multivariable Model 3	1.00	0.98 (0.91, 1.06)	1.01 (0.89, 1.15)	0.88 (0.73, 1.06)	0.24	0.89 (0.73, 1.08)
Multivariable Model 3 without BMI	1.00	0.98 (0.91, 1.05)	1.01 (0.89, 1.15)	0.88 (0.73, 1.06)	0.22	0.89 (0.73, 1.07)
Pooled						
Multivariable Model 3	1.00	0.95 (0.90, 1.00)	0.92 (0.84, 1.01)	0.84 (0.75, 0.95)	0.0007	0.80 (0.71, 0.91)
Multivariable Model 3 without BMI	1.00	0.95 (0.90, 1.00)	0.92 (0.84, 1.00)	0.84 (0.75, 0.95)	0.0005	0.80 (0.71, 0.91)
CHD‡						
Health Professionals Follow-Up Study						
No. cases/person-years	3,872/703,191	843/176,758	203/49,258	135/27,993		
Multivariable Model 3	1.00	0.92 (0.85, 0.99)	0.81 (0.70, 0.93)	0.79 (0.66, 0.94)	0.0004	0.70 (0.58, 0.85)
Multivariable Model 3 without BMI	1.00	0.91 (0.85, 0.99)	0.80 (0.70, 0.93)	0.79 (0.66, 0.94)	0.0003	0.70 (0.57, 0.85)
Nurses' Health Study I						
No. cases/person-years	3,530/1,475,581	436/212,727	114/60,357	52/28,818		
Multivariable Model 3	1.00	0.97 (0.88, 1.08)	0.88 (0.72, 1.06)	0.79 (0.60, 1.04)	0.04	0.74 (0.55, 0.98)
Multivariable Model 3 without BMI	1.00	0.97 (0.87, 1.07)	0.87 (0.72, 1.05)	0.78 (0.59, 1.03)	0.03	0.73 (0.55, 0.97)
Pooled						
Multivariable Model 3	1.00	0.94 (0.88, 1.00)	0.83 (0.74, 0.93)	0.79 (0.68, 0.91)	<0.0001	0.71 (0.61, 0.84)
Multivariable Model 3 without BMI	1.00	0.93 (0.88, 0.99)	0.83 (0.74, 0.93)	0.79 (0.68, 0.91)	<0.0001	0.71 (0.60, 0.83)
Stroke§						
Health Professionals Follow-Up Study						
No. cases/person-years	1,204/704,059	274/176,971	79/49,317	51/27,999		
Multivariable Model 3	1.00	0.96 (0.84, 1.10)	0.95 (0.76, 1.21)	0.91 (0.69, 1.22)	0.45	0.89 (0.64, 1.22)
Multivariable Model 3 without BMI	1.00	0.96 (0.83, 1.10)	0.95 (0.75, 1.20)	0.91 (0.68, 1.21)	0.43	0.88 (0.64, 1.21)
Nurses' Health Study I						
No. cases/person-years	3,046/1,475,539	421/212,662	147/60,321	68/28,802		
Multivariable Model 3	1.00	1.00 (0.90, 1.11)	1.13 (0.96, 1.34)	0.97 (0.76, 1.24)	0.81	1.03 (0.80, 1.33)
Multivariable Model 3 without BMI	1.00	1.00 (0.90, 1.11)	1.13 (0.96, 1.34)	0.97 (0.76, 1.24)	0.81	1.03 (0.80, 1.33)
Pooled						
Multivariable Model 3	1.00	0.98 (0.90, 1.07)	1.07 (0.93, 1.23)	0.94 (0.78, 1.14)	0.78	0.97 (0.80, 1.19)
Multivariable Model 3 without BMI	1.00	0.98 (0.90, 1.07)	1.07 (0.93, 1.22)	0.94 (0.78, 1.14)	0.76	0.97 (0.79, 1.18)

* 1 serving avocado = ½ avocado; ½ serving = ¼ avocado. † CVD = cardiovascular disease: Fatal and nonfatal myocardial infarction plus fatal and nonfatal stroke. ‡ CHD = coronary heart disease: Fatal and nonfatal myocardial infarction. § Fatal and nonfatal stroke.

BMI, body mass index.

Model 3 was adjusted for: age (years); race (White or other [Black, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander]); ancestry (Southern European/Mediterranean, other Caucasian/Scandinavian, other); alcohol intake (0, 0.1 to 4.9, 5.0 to 9.9, 10.0 to 14.9, and ≥ 15.0 g/day); smoking status (never, former, current smoker 1 to 14 cigarettes per day, 15 to 24 cigarettes per day; or ≥ 25 cigarettes per day); physical activity (<3.0, 3.0 to 8.9, 9.0 to 17.9, 18.0 to 26.9, ≥ 27.0 MET-h/week); family history of diabetes (yes, no); family history of myocardial infarction (yes, no); family history of cancer (yes, no); baseline diabetes mellitus (yes, no); baseline hypertension or antihypertensive medication use (yes, no); baseline hypercholesterolemia or cholesterol-lowering medication use (yes, no); multivitamin use (yes, no); aspirin use (yes, no); in women, postmenopausal status and menopausal hormone use (premenopausal, postmenopausal [no, past, or current hormone use]); total energy intake (kcal/day); and body mass index (kg/m², continuous), and red and processed meat, fruits and vegetables (excluding avocado), nuts, soda (caloric and low or noncaloric), whole grains, eggs, tortilla (whole and chips), breads, cheese intakes (all in quintiles; tortilla in tertiles in NHS), and trans-fat.

Table S4. Risk of Cardiovascular Events According to Avocado Intake* Mutually Adjusting for Other Fats[†] in Two Large US Cohorts.

	P value for trend	HR (95% CI) for 1/2 serving (1/4 avocado)-Increase in Avocado Intake per day
CVD[‡]		
Health Professionals Follow-Up Study		
Multivariable Model 3	0.0005	0.75 (0.63, 0.88)
Multivariable Model 3, mutually-adjusted for other fat-containing foods [†]	0.01	0.85 (0.74, 0.97)
Nurses' Health Study I		
Multivariable Model 3	0.24	0.89 (0.73, 1.08)
Multivariable Model 3, mutually-adjusted for other fat-containing foods [†]	0.60	0.96 (0.81, 1.13)
Pooled		
Multivariable Model 3	0.0007	0.80 (0.71, 0.91)
Multivariable Model 3, mutually-adjusted for other fat-containing foods [†]	0.02	0.89 (0.80, 0.98)
CHD[§]		
Health Professionals Follow-Up Study		
Multivariable Model 3	0.0004	0.70 (0.58, 0.85)
Multivariable Model 3, mutually-adjusted for other fat-containing foods [†]	0.002	0.78 (0.66, 0.91)
Nurses' Health Study I		
Multivariable Model 3	0.04	0.74 (0.55, 0.98)
Multivariable Model 3, mutually-adjusted for other fat-containing foods [†]	0.13	0.82 (0.63, 1.06)
Pooled		
Multivariable Model 3	<0.0001	0.71 (0.61, 0.84)
Multivariable Model 3, mutually-adjusted for other fat-containing foods [†]	0.0007	0.79 (0.69, 0.90)
Stroke[¶]		
Health Professionals Follow-Up Study		
Multivariable Model 3	0.45	0.89 (0.64, 1.22)
Multivariable Model 3, mutually-adjusted for other fat-containing foods [†]	0.80	1.03 (0.84, 1.25)
Nurses' Health Study I		
Multivariable Model 3	0.81	1.03 (0.80, 1.33)
Multivariable Model 3, mutually-adjusted for other fat-containing foods [†]	0.54	1.07 (0.86, 1.33)
Pooled		
Multivariable Model 3	0.78	0.97 (0.80, 1.19)
Multivariable Model 3, mutually-adjusted for other fat-containing foods [†]	0.55	1.05 (0.90, 1.21)

* 1 serving avocado = 1/2 avocado; 1/2 serving = 1/4 avocado. [†] Mutually-adjusted for other fat-containing foods includes the following variables: margarine, mayonnaise, olive oil, all other plant oils, and dairy foods. [‡] CVD = cardiovascular disease: Fatal and nonfatal myocardial infarction plus fatal and nonfatal stroke. [§] CHD = coronary heart disease: Fatal and nonfatal myocardial infarction. [¶] Fatal and nonfatal stroke.

Model 3 was adjusted for: age (years); race (White or other [Black, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander]); ancestry (Southern European/Mediterranean, other Caucasian/Scandinavian, other); alcohol intake (0, 0.1 to 4.9, 5.0 to 9.9, 10.0 to 14.9, and ≥15.0 g/day); smoking status (never, former, current smoker 1 to 14 cigarettes per day, 15 to 24 cigarettes per day; or ≥25 cigarettes per day); physical activity (<3.0, 3.0 to 8.9, 9.0 to 17.9, 18.0 to 26.9, ≥27.0 MET-h/week); family history of diabetes (yes, no); family history of myocardial infarction (yes, no); family history of cancer (yes, no); baseline diabetes mellitus (yes, no); baseline hypertension or antihypertensive medication use (yes, no); baseline hypercholesterolemia or cholesterol-lowering medication use (yes, no); multivitamin use (yes, no); aspirin use (yes, no); in women, postmenopausal status and menopausal hormone use (premenopausal, postmenopausal [no, past, or current hormone use]); total energy intake (kcal/day); body mass index (kg/m², continuous), red and processed meat, fruits and vegetables (excluding avocado), nuts, soda (caloric and low or noncaloric), whole grains, eggs, tortilla (whole and chips), breads, cheese intakes (all in quintiles; tortilla in tertiles in NHS), and trans-fat.

Table S5. Risk of Stroke Sub-type According to Simple Update Categories of Avocado Intake* in Two Large US Cohorts.

	HR (95% CI)				P value for trend	HR (95% CI) for 1/2 serving (1/4 avocado)-Increase in Avocado Intake per day
	Never or less than 1 per month	1-3 per month	1 per week	≥2 per week		
Ischemic stroke[†]						
Health Professionals Follow-Up Study						
No. cases/person-years	628/704,059	147/176,971	44/49,317	29/27,999		
Age-adjusted Model 1	1.00	1.01 (0.84, 1.21)	1.01 (0.74, 1.37)	1.08 (0.74, 1.58)	0.69	1.09 (0.72, 1.64)
Multivariable Model 2	1.00	1.01 (0.84, 1.21)	1.01 (0.74, 1.38)	1.10 (0.76, 1.61)	0.63	1.11 (0.73, 1.68)
Multivariable Model 3	1.00	0.96 (0.80, 1.16)	0.95 (0.69, 1.31)	1.00 (0.68, 1.47)	0.91	0.98 (0.63, 1.50)
Nurses' Health Study I						
No. cases/person-years	1,385/1,475,539	187/212,662	58/60,321	24/28,802		
Age-adjusted Model 1	1.00	0.97 (0.83, 1.13)	1.02 (0.78, 1.33)	0.84 (0.56, 1.26)	0.43	0.85 (0.57, 1.27)
Multivariable Model 2	1.00	1.00 (0.86, 1.17)	1.07 (0.82, 1.39)	0.90 (0.60, 1.35)	0.81	0.95 (0.63, 1.43)
Multivariable Model 3	1.00	0.97 (0.83, 1.14)	1.03 (0.79, 1.35)	0.87 (0.58, 1.31)	0.56	0.88 (0.58, 1.34)
Pooled						
Age-adjusted Model 1	1.00	0.99 (0.88, 1.11)	1.02 (0.83, 1.24)	0.96 (0.73, 1.27)	0.78	0.96 (0.72, 1.28)
Multivariable Model 2	1.00	1.00 (0.89, 1.13)	1.05 (0.85, 1.28)	1.00 (0.76, 1.32)	0.87	1.03 (0.77, 1.37)
Multivariable Model 3	1.00	0.97 (0.85, 1.09)	1.00 (0.81, 1.23)	0.94 (0.71, 1.24)	0.62	0.93 (0.69, 1.25)
Hemorrhagic stroke[‡]						
Health Professionals Follow-Up Study						
No. cases/person-years	187/704,059	40/176,971	12/49,317	7/27,999		
Age-adjusted Model 1	1.00	0.93 (0.66, 1.32)	0.96 (0.53, 1.73)	0.88 (0.41, 1.89)	0.69	0.85 (0.37, 1.93)
Multivariable Model 2	1.00	0.96 (0.68, 1.36)	1.02 (0.56, 1.84)	0.93 (0.43, 1.98)	0.84	0.92 (0.41, 2.09)
Multivariable Model 3	1.00	0.89 (0.63, 1.28)	0.91 (0.50, 1.67)	0.83 (0.38, 1.79)	0.54	0.77 (0.33, 1.81)
Nurses' Health Study I						
No. cases/person-years	385/1,475,539	58/212,662	18/60,321	9/28,802		
Age-adjusted Model 1	1.00	1.09 (0.82, 1.43)	1.16 (0.72, 1.87)	1.18 (0.61, 2.28)	0.43	1.31 (0.67, 2.57)
Multivariable Model 2	1.00	1.12 (0.84, 1.48)	1.20 (0.75, 1.94)	1.21 (0.62, 2.35)	0.35	1.38 (0.70, 2.72)
Multivariable Model 3	1.00	1.00 (0.75, 1.34)	1.07 (0.66, 1.74)	1.06 (0.54, 2.09)	0.80	1.10 (0.54, 2.24)
Pooled						
Age-adjusted Model 1	1.00	1.02 (0.83, 1.27)	1.08 (0.75, 1.56)	1.04 (0.63, 1.71)	0.72	1.10 (0.65, 1.85)
Multivariable Model 2	1.00	1.05 (0.85, 1.31)	1.13 (0.78, 1.63)	1.08 (0.65, 1.78)	0.55	1.17 (0.70, 1.98)
Multivariable Model 3	1.00	0.96 (0.76, 1.20)	1.01 (0.69, 1.47)	0.95 (0.57, 1.58)	0.85	0.95 (0.55, 1.64)

* 1 serving avocado = 1/2 avocado; 1/2 serving = 1/4 avocado. [†] Thrombotic or embolic occlusion of a cerebral artery. [‡] Subarachnoid and intraparenchymal hemorrhage.

Model 2 was adjusted for: age (years); race (White or other [Black, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander]); ancestry (Southern European/Mediterranean, other Caucasian/Scandinavian, other); alcohol intake (0, 0.1 to 4.9, 5.0 to 9.9, 10.0 to 14.9, and ≥15.0 g/day); smoking status (never, former, current smoker 1 to 14 cigarettes per day, 15 to 24 cigarettes per day; or ≥25 cigarettes per day); physical activity (<3.0, 3.0 to 8.9, 9.0 to 17.9, 18.0 to 26.9, ≥27.0 MET-h/week); family history of diabetes (yes, no); family history of myocardial infarction (yes, no); family history of cancer (yes, no); baseline diabetes mellitus (yes, no); baseline hypertension or antihypertensive medication use (yes, no); baseline hypercholesterolemia or cholesterol-lowering medication use (yes, no); multivitamin use (yes, no); aspirin use (yes, no); in women, postmenopausal status and menopausal hormone use (premenopausal, postmenopausal [no, past, or current hormone use]); total energy intake (kcal/day); and BMI kg/m². Model 3 was additionally

adjusted for red and processed meat, fruits and vegetables (excluding avocado), nuts, soda (caloric and low or noncaloric), whole grains, eggs, tortilla (whole and chips), breads, cheese intakes (in quintiles; tortilla in tertiles in NHS), and trans-fat. Results were pooled with the use of the fixed-effects model.

Table S6. Subgroup Analyses for Risk of Coronary Heart Disease and Stroke According to Avocado Intake*.

CHD [†]			Stroke [‡]		
	Pooled Adjusted HR (95% CI)	p Value for Interaction		Pooled Adjusted HR (95% CI)	p Value for Interaction
Sex			Sex		
Women, n=4,132 [§]	0.74 (0.55, 0.98)	0.78	Women, n=3,682 [§]	1.03 (0.80, 1.33)	0.46
Men, n=5,053	0.70 (0.58, 0.85)		Men, n=1,608	0.89 (0.64, 1.22)	
Age, years			Age, years		
<65, n=2,484	0.92 (0.66, 1.30)	0.08	<65, n=1,073	1.04 (0.62, 1.74)	0.77
≥65, n=6,701	0.69 (0.57, 0.82)		≥65, n=4,217	0.97 (0.78, 1.21)	
BMI, kg/m²			BMI, kg/m²		
<25, n=4,744	0.76 (0.62, 0.94)	0.55	<25, n=2,685	0.87 (0.66, 1.13)	0.19
≥25, n=4,441	0.67 (0.52, 0.87)		≥25, n=2,605	1.14 (0.85, 1.54)	
Ancestry			Ancestry		
Mediterranean and Other Caucasian, n=8,287	0.74 (0.63, 0.87)	0.03	Mediterranean and Other Caucasian, n=4,597	0.95 (0.77, 1.17)	0.90
All Other, including Hispanic, n=898	0.37 (0.18, 0.76)		All Other, including Hispanic, n=693	1.15 (0.62, 2.11)	
Family history of myocardial infarction			Family history of myocardial infarction		
No, n=5,212	0.69 (0.56, 0.85)	0.73	No, n=3,111	0.85 (0.66, 1.11)	0.28
Yes, n=3,973	0.75 (0.59, 0.97)		Yes, n=2,179	1.20 (0.88, 1.64)	
AHEI			AHEI		
Below median, n=5,032	0.78 (0.60, 1.02)	0.24	Below median, n=2,632	1.04 (0.72, 1.50)	0.82
Above median, n=4,153	0.71 (0.58, 0.88)		Above median, n=2,658	0.96 (0.76, 1.22)	
Total fruit intake			Total fruit intake		
Below median, n=4,117	0.65 (0.49, 0.87)	0.53	Below median, n=2,445	1.00 (0.72, 1.40)	0.91
Above median, n=5,068	0.76 (0.63, 0.92)		Above median, n=2,845	0.98 (0.77, 1.26)	
Total vegetable intake			Total vegetable intake		
Below median, n=4,456	0.79 (0.60, 1.06)	0.39	Below median, n=2,414	0.67 (0.43, 1.02)	0.09
Above median, n=4,729	0.71 (0.58, 0.86)		Above median, n=2,876	1.15 (0.92, 1.44)	
Green vegetable intake			Green vegetable intake		
Below median, n=4,901	0.73 (0.56, 0.95)	0.57	Below median, n=2,857	0.85 (0.60, 1.19)	0.64
Above median, n=4,284	0.73 (0.60, 0.90)		Above median, n=2,433	1.05 (0.82, 1.35)	
Lettuce vegetable intake			Lettuce vegetable intake		
Below median, n=4,909	0.76 (0.59, 0.97)	0.38	Below median, n=2,781	0.86 (0.62, 1.19)	0.79
Above median, n=4,276	0.70 (0.56, 0.86)		Above median, n=2,509	1.07 (0.83, 1.39)	

* 1 serving avocado = ½ avocado; ½ serving = ¼ avocado. [†] CHD = coronary heart disease: Fatal and nonfatal myocardial infarction. [‡] Fatal and nonfatal stroke. [§] n= number of cases per subgroup. HRs for ½ a serving/day (1/4 avocado) increase in avocado intake in each subgroup category. Multivariable model was adjusted for the following: age (years); race (White or other [Black, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander]); ancestry (Southern European/Mediterranean, other Caucasian/Scandinavian, other); alcohol intake (0, 0.1 to 4.9, 5.0 to 9.9, 10.0 to 14.9, and ≥15.0 g/day); smoking status (never, former, current smoker 1 to 14 cigarettes per day, 15 to 24 cigarettes per day; or ≥2 cigarettes per day); physical activity (<3.0, 3.0 to 8.9, 9.0 to 17.9, 18.0 to 26.9, ≥27.0 MET-h/week); family history of diabetes (yes, no); family history of myocardial infarction (yes, no); family history of cancer (yes, no); baseline diabetes mellitus (yes, no); baseline hypertension or antihypertensive medication use (yes, no); baseline hypercholesterolemia or cholesterol-lowering medication use (yes, no); multivitamin use (yes, no); aspirin use (yes, no); postmenopausal status and menopausal hormone use (premenopausal, postmenopausal [no, past, or current hormone use], in women only); total energy intake (kcal/day); body mass index (kg/m², continuous); red and processed meat, fruits and vegetables (excluding avocado), nuts, soda (caloric and low or noncaloric), whole grains, eggs, tortilla (whole and chips), breads, cheese intakes (all in quintiles; tortilla in tertiles in NHS); and trans-fat, except the stratified factor. AHEI = Alternative Healthy Eating Index score.

Table S7. Risk of Cardiovascular Events According to Categories of Avocado Intake* without Stop Updating Diet for Chronic Disease Diagnosis in Two Large US Cohorts.

	HR (95% CI)				P value for trend	HR (95% CI) for 1/2 serving (1/4 avocado)-Increase in Avocado Intake per day
	Never or less than 1 per month	1-3 per month	1 per week	≥2 per week		
CVD†						
Health Professionals Follow-Up Study						
No. cases/person-years	5,076/702,080	1,117/176,523	282/49,201	186/27,947		
Age-adjusted Model 1	1.00	0.91 (0.85, 0.98)	0.84 (0.74, 0.94)	0.81 (0.71, 0.94)	<0.0001	0.73 (0.63, 0.86)
Multivariable Model 2	1.00	0.97 (0.91, 1.04)	0.93 (0.83, 1.05)	0.89 (0.77, 1.02)	0.05	0.86 (0.74, 1.00)
Multivariable Model 3	1.00	0.96 (0.89, 1.03)	0.92 (0.82, 1.04)	0.89 (0.78, 1.03)	0.06	0.86 (0.73, 1.00)
Nurses' Health Study I						
No. cases/person-years	6,407/1,473,683	831/212,466	257/60,263	118/28,780		
Age-adjusted Model 1	1.00	0.89 (0.83, 0.96)	0.96 (0.85, 1.08)	0.89 (0.76, 1.05)	0.03	0.83 (0.70, 0.99)
Multivariable Model 2	1.00	0.99 (0.92, 1.07)	1.08 (0.96, 1.22)	1.03 (0.88, 1.21)	0.47	1.07 (0.90, 1.26)
Multivariable Model 3	1.00	0.97 (0.89, 1.04)	1.05 (0.93, 1.18)	1.01 (0.86, 1.18)	0.87	1.01 (0.85, 1.21)
Pooled						
Age-adjusted Model 1	1.00	0.89 (0.84, 0.94)	0.84 (0.76, 0.92)	0.80 (0.71, 0.90)	<0.0001	0.76 (0.67, 0.86)
Multivariable Model 2	1.00	0.97 (0.92, 1.02)	1.02 (0.93, 1.11)	0.88 (0.79, 0.98)	0.39	0.95 (0.84, 1.07)
Multivariable Model 3	1.00	0.96 (0.91, 1.02)	1.00 (0.91, 1.10)	0.94 (0.83, 1.05)	0.24	0.93 (0.82, 1.05)
CHD‡						
Health Professionals Follow-Up Study						
No. cases/person-years	3,872/703,191	843/176,758	203/49,258	135/27,993		
Age-adjusted Model 1	1.00	0.90 (0.83, 0.97)	0.83 (0.73, 0.95)	0.77 (0.66, 0.91)	<0.0001	0.69 (0.58, 0.83)
Multivariable Model 2	1.00	0.97 (0.90, 1.05)	0.95 (0.83, 1.08)	0.86 (0.73, 1.01)	0.04	0.83 (0.70, 0.99)
Multivariable Model 3	1.00	0.96 (0.88, 1.04)	0.94 (0.82, 1.08)	0.87 (0.74, 1.03)	0.06	0.84 (0.70, 1.01)
Nurses' Health Study I						
No. cases/person-years	3,530/1,475,581	436/212,727	114/60,357	52/28,818		
Age-adjusted Model 1	1.00	0.82 (0.74, 0.91)	0.85 (0.71, 1.01)	0.75 (0.59, 0.95)	0.004	0.63 (0.48, 0.81)
Multivariable Model 2	1.00	0.96 (0.86, 1.06)	1.00 (0.84, 1.19)	0.92 (0.72, 1.17)	0.44	0.91 (0.71, 1.16)
Multivariable Model 3	1.00	0.94 (0.84, 1.04)	0.98 (0.82, 1.17)	0.91 (0.71, 1.15)	0.31	0.87 (0.67, 1.13)
Pooled						
Age-adjusted Model 1	1.00	0.87 (0.82, 0.92)	0.84 (0.75, 0.93)	0.77 (0.67, 0.88)	<0.0001	0.67 (0.58, 0.77)
Multivariable Model 2	1.00	0.96 (0.91, 1.03)	0.97 (0.87, 1.07)	0.88 (0.77, 1.00)	0.04	0.86 (0.74, 0.99)
Multivariable Model 3	1.00	0.95 (0.89, 1.01)	0.96 (0.86, 1.07)	0.88 (0.77, 1.01)	0.03	0.85 (0.73, 0.99)
Stroke§						
Health Professionals Follow-Up Study						
No. cases/person-years	1,204/704,059	274/176,971	79/49,317	51/27,999		
Age-adjusted Model 1	1.00	0.97 (0.85, 1.11)	0.85 (0.67, 1.08)	0.94 (0.72, 1.23)	0.41	0.88 (0.65, 1.19)
Multivariable Model 2	1.00	0.99 (0.87, 1.14)	0.89 (0.70, 1.12)	0.99 (0.75, 1.29)	0.69	0.94 (0.70, 1.27)

Multivariable Model 3	1.00	0.97 (0.84, 1.12)	0.87 (0.68, 1.10)	0.96 (0.73, 1.25)	0.52	0.90 (0.66, 1.23)
Nurses' Health Study I						
No. cases/person-years	3,046/1,475,539	421/212,662	147/60,321	68/28,802		
Age-adjusted Model 1	1.00	0.99 (0.89, 1.10)	1.05 (0.89, 1.24)	1.05 (0.85, 1.30)	0.59	1.07 (0.85, 1.33)
Multivariable Model 2	1.00	1.04 (0.94, 1.16)	1.12 (0.95, 1.32)	1.14 (0.92, 1.40)	0.11	1.21 (0.96, 1.51)
Multivariable Model 3	1.00	1.01 (0.91, 1.12)	1.08 (0.91, 1.28)	1.09 (0.88, 1.36)	0.31	1.13 (0.89, 1.43)
Pooled						
Age-adjusted Model 1	1.00	0.98 (0.91, 1.07)	0.98 (0.86, 1.12)	1.01 (0.85, 1.19)	0.95	0.99 (0.83, 1.19)
Multivariable Model 2	1.00	1.02 (0.94, 1.11)	1.04 (0.90, 1.19)	1.07 (0.91, 1.27)	0.29	1.10 (0.92, 1.32)
Multivariable Model 3	1.00	0.99 (0.91, 1.08)	1.01 (0.88, 1.15)	1.04 (0.88, 1.23)	0.67	1.04 (0.86, 1.26)

* 1 serving avocado = ½ avocado; ½ serving = ¼ avocado. † CVD = cardiovascular disease: Fatal and nonfatal myocardial infarction plus fatal and nonfatal stroke. ‡ CHD = coronary heart disease: Fatal and nonfatal myocardial infarction. § Fatal and nonfatal stroke. Model 2 was adjusted for: age (years); race (White or other [Black, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander]); ancestry (Southern European/Mediterranean, other Caucasian/Scandinavian, other); alcohol intake (0, 0.1 to 4.9, 5.0 to 9.9, 10.0 to 14.9, and ≥15.0 g/day); smoking status (never, former, current smoker 1 to 14 cigarettes per day, 15 to 24 cigarettes per day; or ≥25 cigarettes per day); physical activity (<3.0, 3.0 to 8.9, 9.0 to 17.9, 18.0 to 26.9, ≥27.0 MET-h/week); family history of diabetes (yes, no); family history of myocardial infarction (yes, no); family history of cancer (yes, no); baseline diabetes mellitus (yes, no); baseline hypertension or antihypertensive medication use (yes, no); baseline hypercholesterolemia or cholesterol-lowering medication use (yes, no); multivitamin use (yes, no); aspirin use (yes, no); in women, postmenopausal status and menopausal hormone use (premenopausal, postmenopausal [no, past, or current hormone use]); total energy intake (kcal/day); and BMI kg/m². Model 3 was additionally adjusted for red and processed meat, fruits and vegetables (excluding avocado), nuts, soda (caloric and low or noncaloric), whole grains, eggs, tortilla (whole and chips), breads, cheese intakes (in quintiles; tortilla in tertiles in NHS), and trans-fat. Results were pooled with the use of the fixed-effects model.

Table S8. Risk of Cardiovascular Events According to Categories of the Average Intake* of the Last Two Dietary Measurements of Avocado in Two Large US Cohorts.

	HR (95% CI)				P value for trend	HR (95% CI) for 1/2 serving (1/4 avocado)-Increase in Avocado Intake per day
	Never or less than 1 per month	1-3 times per month	1 per week	≥2 per week		
CVD[†]						
Health Professionals Follow-Up Study						
No. cases/person-years	4,827/657,003	1,277/205,874	328/58,796	229/34,077		
Age-adjusted Model 1	1.00	0.92 (0.86, 0.97)	0.80 (0.72, 0.90)	0.82 (0.72, 0.94)	<0.0001	0.73 (0.63, 0.85)
Multivariable Model 2	1.00	0.98 (0.92, 1.04)	0.89 (0.80, 1.00)	0.90 (0.78, 1.02)	0.03	0.85 (0.73, 0.99)
Multivariable Model 3	1.00	0.93 (0.87, 0.99)	0.84 (0.75, 0.94)	0.84 (0.74, 0.97)	0.0008	0.77 (0.66, 0.90)
Nurses' Health Study I						
No. cases/person-years	6,245/1,429,788	974/251,487	252/57,717	142/36,200		
Age-adjusted Model 1	1.00	0.88 (0.82, 0.94)	0.95 (0.84, 1.08)	0.74 (0.63, 0.87)	<0.0001	0.64 (0.53, 0.78)
Multivariable Model 2	1.00	0.98 (0.91, 1.05)	1.08 (0.95, 1.22)	0.86 (0.72, 1.01)	0.12	0.86 (0.71, 1.04)
Multivariable Model 3	1.00	0.94 (0.88, 1.01)	1.03 (0.91, 1.17)	0.83 (0.70, 0.98)	0.02	0.79 (0.65, 0.97)
Pooled						
Age-adjusted Model 1	1.00	0.90 (0.86, 0.94)	0.87 (0.80, 0.94)	0.79 (0.71, 0.87)	<0.0001	0.70 (0.62, 0.78)
Multivariable Model 2	1.00	0.98 (0.93, 1.02)	0.97 (0.89, 1.06)	0.88 (0.79, 0.98)	0.009	0.85 (0.76, 0.96)
Multivariable Model 3	1.00	0.93 (0.89, 0.98)	0.92 (0.84, 1.00)	0.84 (0.75, 0.93)	<0.0001	0.75 (0.66, 0.86)
CHD[‡]						
Health Professionals Follow-Up Study						
No. cases/person-years	3,694/658,045	956/206,151	240/58,865	163/34,139		
Age-adjusted Model 1	1.00	0.90 (0.84, 0.96)	0.77 (0.68, 0.88)	0.77 (0.66, 0.90)	<0.0001	0.66 (0.55, 0.79)
Multivariable Model 2	1.00	0.97 (0.90, 1.04)	0.88 (0.77, 1.00)	0.85 (0.72, 0.99)	0.01	0.80 (0.67, 0.95)
Multivariable Model 3	1.00	0.92 (0.86, 0.99)	0.82 (0.72, 0.94)	0.80 (0.68, 0.94)	0.0004	0.72 (0.60, 0.87)
Nurses' Health Study I						
No. cases/person-years	3,448/1,431,618	505/251,810	113/57,811	66/36,244		
Age-adjusted Model 1	1.00	0.83 (0.76, 0.91)	0.78 (0.64, 0.94)	0.64 (0.50, 0.82)	<0.0001	0.48 (0.35, 0.64)
Multivariable Model 2	1.00	0.97 (0.88, 1.07)	0.93 (0.77, 1.13)	0.79 (0.62, 1.01)	0.04	0.74 (0.56, 0.98)
Multivariable Model 3	1.00	0.93 (0.85, 1.03)	0.90 (0.74, 1.08)	0.77 (0.60, 0.98)	0.01	0.69 (0.52, 0.93)
Pooled						
Age-adjusted Model 1	1.00	0.87 (0.82, 0.92)	0.77 (0.70, 0.86)	0.73 (0.64, 0.83)	<0.0001	0.61 (0.52, 0.71)
Multivariable Model 2	1.00	0.97 (0.92, 1.03)	0.89 (0.80, 1.00)	0.83 (0.73, 0.95)	0.001	0.78 (0.68, 0.91)
Multivariable Model 3	1.00	0.92 (0.87, 0.98)	0.85 (0.76, 0.94)	0.79 (0.69, 0.91)	<0.0001	0.71 (0.61, 0.83)
Stroke[§]						
Health Professionals Follow-Up Study						
No. cases/person-years	1,133/658,877	321/206,398	88/58,929	66/34,142		
Age-adjusted Model 1	1.00	0.98 (0.86, 1.11)	0.90 (0.73, 1.12)	0.99 (0.77, 1.27)	0.71	0.95 (0.72, 1.25)

Multivariable Model 2	1.00	1.00 (0.88, 1.13)	0.94 (0.76, 1.17)	1.04 (0.81, 1.33)	0.93	1.01 (0.77, 1.34)
Multivariable Model 3	1.00	0.95 (0.84, 1.08)	0.88 (0.71, 1.10)	0.96 (0.75, 1.25)	0.54	0.91 (0.68, 1.22)
Nurses' Health Study I						
No. cases/person-years	2,963/1,431,588	497/251,730	144/57,776	78/36,230		
Age-adjusted Model 1	1.00	0.95 (0.86, 1.04)	1.14 (0.96, 1.35)	0.84 (0.69, 1.05)	0.18	0.84 (0.64, 1.08)
Multivariable Model 2	1.00	1.00 (0.90, 1.10)	1.21 (1.02, 1.43)	0.91 (0.72, 1.14)	0.78	0.96 (0.74, 1.25)
Multivariable Model 3	1.00	0.96 (0.87, 1.06)	1.16 (0.97, 1.37)	0.86 (0.69, 1.09)	0.33	0.87 (0.67, 1.14)
Pooled						
Age-adjusted Model 1	1.00	0.96 (0.89, 1.03)	1.04 (0.91, 1.19)	0.90 (0.76, 1.07)	0.21	0.89 (0.73, 1.07)
Multivariable Model 2	1.00	1.00 (0.92, 1.08)	1.10 (0.96, 1.26)	0.96 (0.81, 1.14)	0.88	0.99 (0.82, 1.19)
Multivariable Model 3	1.00	0.96 (0.89, 1.04)	1.04 (0.91, 1.20)	0.91 (0.76, 1.08)	0.26	0.89 (0.73, 1.09)

* 1 serving avocado = ½ avocado; ½ serving = ¼ avocado. † CVD = cardiovascular disease: Fatal and nonfatal myocardial infarction plus fatal and nonfatal stroke. ‡ CHD = coronary heart disease: Fatal and nonfatal myocardial infarction. § Fatal and nonfatal stroke.

Model 2 was adjusted for: age (years); race (White or other [Black, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander]); ancestry (Southern European/Mediterranean, other Caucasian/Scandinavian, other); alcohol intake (0, 0.1 to 4.9, 5.0 to 9.9, 10.0 to 14.9, and ≥15.0 g/day); smoking status (never, former, current smoker 1 to 14 cigarettes per day, 15 to 24 cigarettes per day; or ≥25 cigarettes per day); physical activity (<3.0, 3.0 to 8.9, 9.0 to 17.9, 18.0 to 26.9, ≥27.0 MET-h/week); family history of diabetes (yes, no); family history of myocardial infarction (yes, no); family history of cancer (yes, no); baseline diabetes mellitus (yes, no); baseline hypertension or antihypertensive medication use (yes, no); baseline hypercholesterolemia or cholesterol-lowering medication use (yes, no); multivitamin use (yes, no); aspirin use (yes, no); in women, postmenopausal status and menopausal hormone use (premenopausal, postmenopausal [no, past, or current hormone use]); total energy intake (kcal/day); and BMI kg/m². Model 3 was additionally adjusted for red and processed meat, fruits and vegetables (excluding avocado), nuts, soda (caloric or low or noncaloric), whole grains, eggs, tortilla (whole and chips), breads, cheese intakes (in quintiles; tortilla in tertiles in NHS), and trans-fat. Results were pooled with the use of the fixed-effects model.

Table S9. Risk of Cardiovascular Events According to Categories of the Average Intake* adjusting for MUFA intake in Two Large US Cohorts.

	HR (95% CI)				P value for trend	HR (95% CI) for 1/2 serving (1/4 avocado)-Increase in Avocado Intake per day
	Never or less than 1 per month	1-3 times per month	1 per week	≥2 per week		
CVD†						
Health Professionals Follow-Up Study						
No. cases/person-years	5,076/702,080	1,117/176,523	282/49,201	186/27,947		
Age-adjusted Model 1	1.00	0.95 (0.89, 1.01)	0.83 (0.74, 0.94)	0.82 (0.71, 0.95)	0.0004	0.75 (0.64, 0.88)
Multivariable Model 2	1.00	1.00 (0.93, 1.07)	0.92 (0.81, 1.04)	0.88 (0.76, 1.03)	0.06	0.86 (0.73, 1.01)
Multivariable Model 3	1.00	0.92 (0.86, 0.99)	0.84 (0.74, 0.95)	0.81 (0.69, 0.94)	0.0003	0.73 (0.62, 0.87)
Nurses' Health Study I						
No. cases/person-years	6,407/1,473,683	831/212,466	257/60,263	118/28,780		
Age-adjusted Model 1	1.00	0.93 (0.86, 1.00)	0.93 (0.82, 1.05)	0.79 (0.66, 0.95)	0.002	0.74 (0.61, 0.89)
Multivariable Model 2	1.00	1.02 (0.95, 1.10)	1.05 (0.93, 1.19)	0.91 (0.76, 1.10)	0.67	0.96 (0.80, 1.16)
Multivariable Model 3	1.00	0.99 (0.92, 1.07)	1.03 (0.91, 1.17)	0.92 (0.76, 1.10)	0.48	0.93 (0.77, 1.13)
Pooled						
Age-adjusted Model 1	1.00	0.94 (0.89, 0.98)	0.88 (0.81, 0.96)	0.81 (0.72, 0.91)	<0.0001	0.74 (0.66, 0.84)
Multivariable Model 2	1.00	1.01 (0.96, 1.06)	0.98 (0.90, 1.07)	0.90 (0.80, 1.00)	0.09	0.90 (0.80, 1.02)
Multivariable Model 3	1.00	0.95 (0.91, 1.00)	0.93 (0.85, 1.01)	0.85 (0.75, 0.95)	0.001	0.81 (0.71, 0.92)
CHD‡						
Health Professionals Follow-Up Study						
No. cases/person-years	3,872/703,245	843/176,760	203/49,258	135/27,995		
Age-adjusted Model 1	1.00	0.93 (0.86, 1.00)	0.79 (0.68, 0.91)	0.78 (0.66, 0.93)	0.0001	0.69 (0.57, 0.83)
Multivariable Model 2	1.00	0.99 (0.92, 1.07)	0.88 (0.76, 1.02)	0.85 (0.71, 1.01)	0.03	0.81 (0.67, 0.97)
Multivariable Model 3	1.00	0.92 (0.85, 0.99)	0.81 (0.70, 0.93)	0.78 (0.65, 0.93)	0.0002	0.69 (0.57, 0.84)
Nurses' Health Study I						
No. cases/person-years	3,530/1,475,581	436/212,727	114/60,357	52/28,818		
Age-adjusted Model 1	1.00	0.88 (0.80, 0.97)	0.76 (0.63, 0.91)	0.65 (0.49, 0.86)	<0.0001	0.53 (0.40, 0.70)
Multivariable Model 2	1.00	1.02 (0.92, 1.13)	0.91 (0.75, 1.09)	0.80 (0.60, 1.05)	0.09	0.79 (0.60, 1.03)
Multivariable Model 3	1.00	0.98 (0.88, 1.09)	0.89 (0.73, 1.07)	0.81 (0.61, 1.06)	0.07	0.76 (0.57, 1.02)
Pooled						
Age-adjusted Model 1	1.00	0.91 (0.86, 0.97)	0.78 (0.69, 0.87)	0.74 (0.64, 0.86)	<0.0001	0.63 (0.54, 0.74)
Multivariable Model 2	1.00	1.00 (0.94, 1.06)	0.89 (0.79, 1.00)	0.83 (0.72, 0.96)	0.005	0.80 (0.69, 0.94)
Multivariable Model 3	1.00	0.94 (0.88, 1.00)	0.83 (0.74, 0.94)	0.79 (0.68, 0.91)	<0.0001	0.71 (0.61, 0.84)
Stroke§						
Health Professionals Follow-Up Study						
No. cases/person-years	1,204/704,059	274/176,971	79/49,317	51/27,999		
Age-adjusted Model 1	1.00	0.99 (0.87, 1.13)	0.99 (0.78, 1.24)	0.96 (0.72, 1.27)	0.73	0.95 (0.70, 1.29)
Multivariable Model 2	1.00	1.01 (0.89, 1.16)	1.03 (0.82, 1.30)	1.00 (0.75, 1.32)	0.94	1.01 (0.75, 1.37)
Multivariable Model 3	1.00	0.96 (0.83, 1.10)	0.95 (0.75, 1.20)	0.90 (0.67, 1.20)	0.38	0.87 (0.63, 1.19)

Nurses' Health Study I	3,046/1,475,539	421/212,662	147/60,321	68/28,802		
No. cases/person-years						
Age-adjusted Model 1	1.00	0.99 (0.89, 1.10)	1.11 (0.94, 1.31)	0.94 (0.74, 1.19)	0.93	0.99 (0.77, 1.26)
Multivariable Model 2	1.00	1.04 (0.93, 1.15)	1.18 (1.00, 1.40)	1.02 (0.80, 1.30)	0.34	1.13 (0.88, 1.44)
Multivariable Model 3	1.00	1.02 (0.91, 1.13)	1.16 (0.98, 1.38)	1.02 (0.80, 1.31)	0.45	1.11 (0.85, 1.43)
Pooled						
Age-adjusted Model 1	1.00	0.99 (0.91, 1.07)	1.06 (0.93, 1.22)	0.94 (0.79, 1.13)	0.78	0.97 (0.80, 1.18)
Multivariable Model 2	1.00	1.03 (0.95, 1.11)	1.13 (0.98, 1.29)	1.01 (0.84, 1.21)	0.43	1.08 (0.89, 1.31)
Multivariable Model 3	1.00	0.99 (0.91, 1.08)	1.08 (0.94, 1.24)	0.97 (0.80, 1.17)	0.97	1.00 (0.82, 1.23)

* 1 serving avocado = ½ avocado; ½ serving = ¼ avocado. † CVD = cardiovascular disease: Fatal and nonfatal myocardial infarction plus fatal and nonfatal stroke. ‡ CHD = coronary heart disease: Fatal and nonfatal myocardial infarction. § Fatal and nonfatal stroke.

Model 2 was adjusted for: age (years); race (White or other [Black, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander]); ancestry (Southern European/Mediterranean, other Caucasian/Scandinavian, other); alcohol intake (0, 0.1 to 4.9, 5.0 to 9.9, 10.0 to 14.9, and ≥15.0 g/day); smoking status (never, former, current smoker 1 to 14 cigarettes per day, 15 to 24 cigarettes per day; or ≥25 cigarettes per day); physical activity (<3.0, 3.0 to 8.9, 9.0 to 17.9, 18.0 to 26.9, ≥27.0 MET-h/week); family history of diabetes (yes, no); family history of myocardial infarction (yes, no); family history of cancer (yes, no); baseline diabetes mellitus (yes, no); baseline hypertension or antihypertensive medication use (yes, no); baseline hypercholesterolemia or cholesterol-lowering medication use (yes, no); multivitamin use (yes, no); aspirin use (yes, no); in women, postmenopausal status and menopausal hormone use (premenopausal, postmenopausal [no, past, or current hormone use]); total energy intake (kcal/day); and BMI kg/m². Model 3 was additionally adjusted for red and processed meat, fruits and vegetables (excluding avocado), nuts, soda (caloric and low or noncaloric), whole grains, eggs, tortilla (whole and chips), breads, cheese intakes (in quintiles; tortilla in tertiles in NHS); trans-fat; and monounsaturated fat. Results were pooled with the use of the fixed-effects model.

Table S10. Risk of Cardiovascular Events According to Cumulative Average Intake* of Avocado in Two Large US Cohorts.

	HR (95% CI)				P value for trend	HR (95% CI) for 1/2 serving (1/4 avocado)-Increase in Avocado Intake per day
	Never or less than 1 per month	1-3 times per month	1 per week	≥2 per week		
CVD[†]						
Health Professionals Follow-Up Study						
No. cases/person-years	4,426/607,620	1,636/253,769	378/65,362	221/28,998		
Age-adjusted Model 1	1.00	0.89 (0.84, 0.95)	0.78 (0.70, 0.86)	0.88 (0.76, 1.00)	<0.0001	0.63 (0.50, 0.79)
Multivariable Model 2	1.00	0.96 (0.90, 1.01)	0.85 (0.77, 0.95)	0.94 (0.82, 1.08)	0.03	0.79 (0.63, 0.98)
Multivariable Model 3	1.00	1.00 (0.94, 1.06)	0.90 (0.81, 1.00)	1.00 (0.87, 1.15)	0.51	0.93 (0.74, 1.16)
Nurses' Health Study I						
No. cases/person-years	5,921/1,377,071	1,259/298,057	279/63,575	154/36,490		
Age-adjusted Model 1	1.00	0.89 (0.84, 0.95)	0.91 (0.80, 1.02)	0.77 (0.65, 0.90)	<0.0001	0.58 (0.45, 0.74)
Multivariable Model 2	1.00	1.00 (0.93, 1.06)	1.03 (0.91, 1.16)	0.87 (0.74, 1.02)	0.19	0.85 (0.66, 1.08)
Multivariable Model 3	1.00	0.94 (0.80, 1.10)	0.97 (0.80, 1.17)	0.82 (0.66, 1.03)	0.14	0.77 (0.54, 1.09)
Pooled						
Age-adjusted Model 1	1.00	0.89 (0.86, 0.93)	0.83 (0.77, 0.90)	0.83 (0.75, 0.92)	<0.0001	0.60 (0.51, 0.71)
Multivariable Model 2	1.00	0.97 (0.93, 1.02)	0.93 (0.85, 1.00)	0.91 (0.82, 1.01)	0.01	0.81 (0.69, 0.96)
Multivariable Model 3	1.00	0.99 (0.94, 1.05)	0.91 (0.83, 1.00)	0.95 (0.84, 1.07)	0.18	0.88 (0.73, 1.06)
CHD[‡]						
Health Professionals Follow-Up Study						
No. cases/person-years	3,394/608,581	1,224/254,122	272/65,450	163/29,046		
Age-adjusted Model 1	1.00	0.88 (0.82, 0.94)	0.73 (0.65, 0.83)	0.85 (0.72, 0.99)	<0.0001	0.66 (0.43, 0.73)
Multivariable Model 2	1.00	0.95 (0.89, 1.01)	0.82 (0.72, 0.93)	0.91 (0.78, 1.07)	0.02	0.73 (0.56, 0.94)
Multivariable Model 3	1.00	0.99 (0.93, 1.06)	0.87 (0.76, 0.98)	0.97 (0.83, 1.14)	0.27	0.86 (0.66, 1.12)
Nurses' Health Study I						
No. cases/person-years	3,290/1,378,803	640/298,471	134/63,673	68/36,536		
Age-adjusted Model 1	1.00	0.83 (0.76, 0.90)	0.80 (0.67, 0.95)	0.63 (0.49, 0.80)	<0.0001	0.36 (0.25, 0.52)
Multivariable Model 2	1.00	0.97 (0.89, 1.06)	0.96 (0.81, 1.14)	0.75 (0.59, 0.96)	0.02	0.66 (0.46, 0.94)
Multivariable Model 3	1.00	0.91 (0.74, 1.13)	0.86 (0.66, 1.08)	0.68 (0.50, 0.93)	0.02	0.54 (0.32, 0.91)
Pooled						
Age-adjusted Model 1	1.00	0.86 (0.82, 0.90)	0.75 (0.68, 0.83)	0.77 (0.68, 0.88)	<0.0001	0.48 (0.39, 0.60)
Multivariable Model 2	1.00	0.96 (0.91, 1.01)	0.86 (0.78, 0.96)	0.86 (0.75, 0.98)	0.001	0.70 (0.57, 0.87)
Multivariable Model 3	1.00	0.98 (0.92, 1.05)	0.86 (0.77, 0.97)	0.90 (0.78, 1.04)	0.04	0.79 (0.62, 0.99)
Stroke[§]						
Health Professionals Follow-Up Study						
No. cases/person-years	1,032/609,381	412/254,394	106/65,511	58/29,060		
Age-adjusted Model 1	1.00	0.95 (0.85, 1.07)	0.92 (0.75, 1.13)	0.98 (0.75, 1.27)	0.56	0.88 (0.57, 1.36)
Multivariable Model 2	1.00	0.98 (0.87, 1.10)	0.95 (0.78, 1.17)	1.03 (0.79, 1.34)	0.95	0.99 (0.64, 1.52)
Multivariable Model 3	1.00	1.02 (0.90, 1.14)	1.00 (0.82, 1.23)	1.10 (0.84, 1.44)	0.52	1.16 (0.75, 1.79)

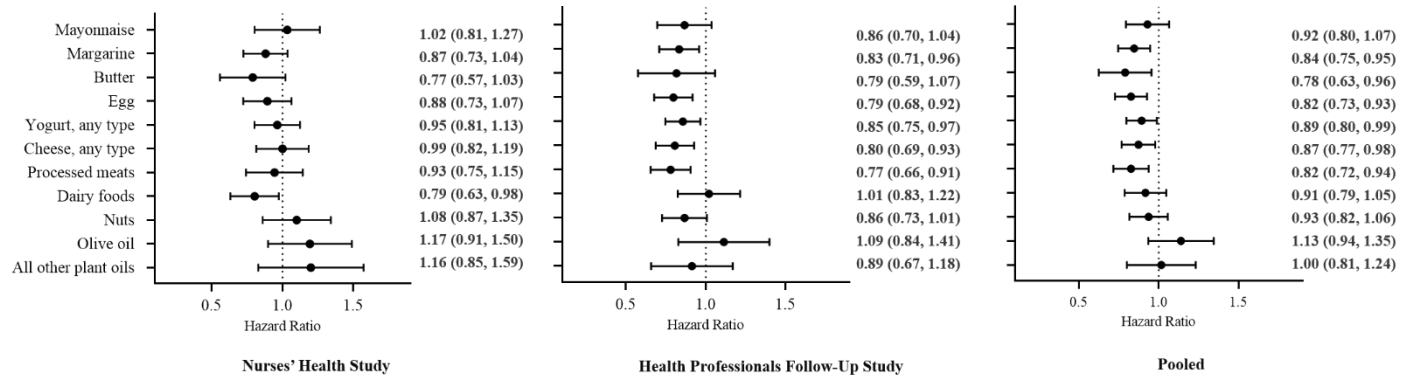
Nurses' Health Study I

No. cases/person-years	2,7941,378,805	64/298,357	149/63,642	90/36,519		
Age-adjusted Model 1	1.00	0.96 (0.88, 1.05)	1.01 (0.86, 1.20)	0.93 (0.75, 1.15)	0.45	0.88 (0.64, 1.22)
Multivariable Model 2	1.00	1.02 (0.93, 1.11)	1.08 (0.91, 1.27)	0.99 (0.80, 1.23)	0.74	1.06 (0.76, 1.47)
Multivariable Model 3	1.00	1.06 (0.84, 1.33)	1.16 (0.88, 1.51)	1.07 (0.79, 1.45)	0.84	1.05 (0.66, 1.68)
Pooled						
Age-adjusted Model 1	1.00	0.96 (0.90, 1.03)	0.97 (0.86, 1.11)	0.95 (0.80, 1.12)	0.34	0.88 (0.68, 1.14)
Multivariable Model 2	1.00	1.00 (0.93, 1.07)	1.03 (0.90, 1.17)	1.01 (0.85, 1.19)	0.82	1.03 (0.79, 1.34)
Multivariable Model 3	1.00	1.02 (0.92, 1.14)	1.06 (0.90, 1.24)	1.09 (0.89, 1.33)	0.54	1.11 (0.80, 1.52)

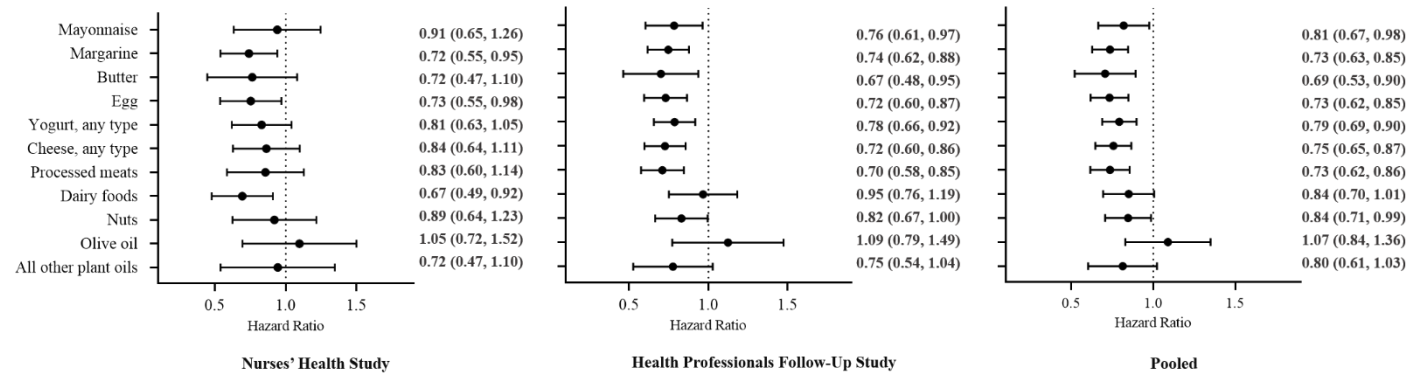
* 1 serving avocado = ½ avocado; ½ serving = ¼ avocado. † CVD = cardiovascular disease: Fatal and nonfatal myocardial infarction plus fatal and nonfatal stroke. ‡ CHD = coronary heart disease: Fatal and nonfatal myocardial infarction. § Fatal and nonfatal stroke.

Model 2 was adjusted for: age (years); race (White or other [Black, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander]); ancestry (Southern European/Mediterranean, other Caucasian/Scandinavian, other); alcohol intake (0, 0.1 to 4.9, 5.0 to 9.9, 10.0 to 14.9, and ≥15.0 g/day); smoking status (never, former, current smoker 1 to 14 cigarettes per day, 15 to 24 cigarettes per day; or ≥25 cigarettes per day); physical activity (<3.0, 3.0 to 8.9, 9.0 to 17.9, 18.0 to 26.9, ≥27.0 MET-h/week); family history of diabetes (yes, no); family history of myocardial infarction (yes, no); family history of cancer (yes, no); baseline diabetes mellitus (yes, no); baseline hypertension or antihypertensive medication use (yes, no); baseline hypercholesterolemia or cholesterol-lowering medication use (yes, no); multivitamin use (yes, no); aspirin use (yes, no); in women, postmenopausal status and menopausal hormone use (premenopausal, postmenopausal [no, past, or current hormone use]); total energy intake (kcal/day); and BMI kg/m². Model 3 was additionally adjusted for red and processed meat, fruits and vegetables (excluding avocado), nuts, soda (caloric or low or noncaloric), whole grains, eggs, tortilla (whole and chips), breads, cheese intakes (in quintiles; tortilla in tertiles in NHS), and trans-fat. Results were pooled with the use of the fixed-effects model.

Cardiovascular Disease



Coronary Heart Disease



Stroke

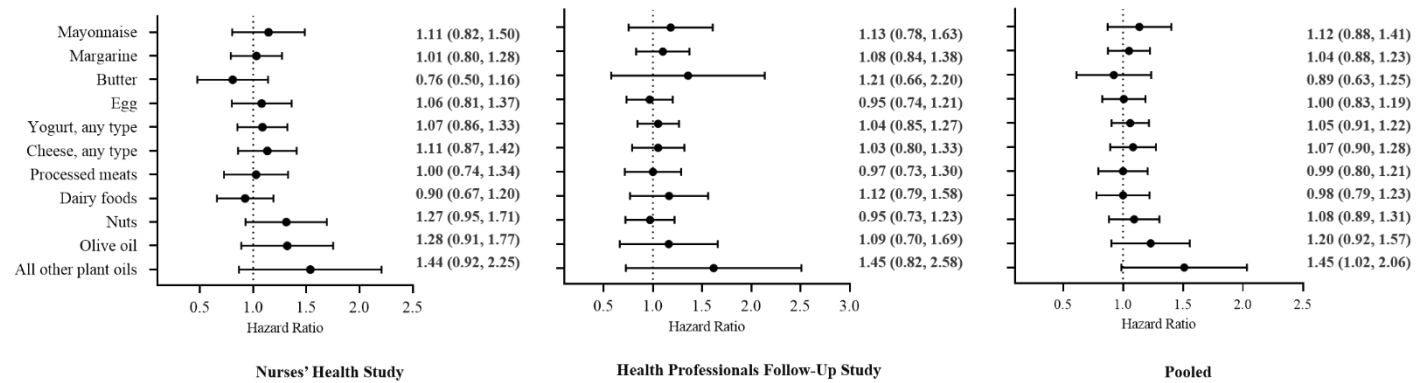


Figure S1. Hazard Ratios for Cardiovascular Events Associated with Substitution of Half A Serving of Avocado for Equivalent Amounts of Other Fat-Containing Food Sources in Two Large US Cohorts. Nurses' Health Study, Health Professional Follow-Up Study, and pooled hazard ratios (HRs) for cardiovascular disease, coronary heart disease, and stroke associated with substitution of ½ serving/day (1/4 avocado) of avocado for equivalent amounts of other fat-containing foods. Multivariate-adjusted models were adjusted for the following: age (years); race (White or other [Black, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander]); ancestry (Southern European/Mediterranean, other Caucasian/Scandinavian, all other); alcohol intake (0, 0.1 to 4.9, 5.0 to 9.9, 10.0 to 14.9, and ≥15.0 g/day); smoking status (never, former, current smoker 1 to 14 cigarettes per day, 15 to 24 cigarettes per day; or ≥2 cigarettes per day); physical activity (<3.0, 3.0 to 8.9, 9.0 to 17.9, 18.0 to 26.9, ≥27.0 MET-h/week); family history of diabetes (yes, no); family history of myocardial infarction (yes, no); family history of cancer (yes, no); baseline diabetes mellitus (yes, no); baseline hypertension or antihypertensive medication use (yes, no); baseline hypercholesterolemia or cholesterol-lowering medication use (yes, no); multivitamin use (yes, no); aspirin use (yes, no); postmenopausal status and menopausal hormone use (premenopausal, postmenopausal [no, past, or current hormone use]), only in women; total energy intake (kcal/day); body mass index (kg/m², continuous), red and processed meat, fruits and vegetables (excluding avocado), nuts, soda (caloric and low or noncaloric), whole grains, eggs, tortilla (whole and chips), breads, cheese intakes (all in quintiles; tortillas in tertiles in NHS); trans-fat, and mutually adjusted for other types of fat-containing foods. Results were pooled with the use of the fixed-effects model. Horizontal lines represent 95% confidence intervals (CIs).