

Table 1a. Flavonoids^a from food and beverages^b – overall total^c and anthocyanidins

Mean^d daily intake (standard error) per individual, by gender^e and age, in the United States,^f What We Eat in America, NHANES 2007-2010^g

Gender and age (years)	Sample size	Total flavonoids ^c		Anthocyanidins (continued on next page)									
				Total		Cyanidin		Delphinidin		Malvidin		Pelargonidin	
	<i>n</i>	----- <i>mg</i> -----											
Males:													
2 - 5.....	907	61.35	(3.15)	9.83	(1.04)	1.89	(0.20)	0.90	(0.16)	3.86	(0.52)	1.81	(0.51)
6 - 11.....	1,138	89.42	(11.42)	8.82	(1.50)	1.61	(0.24)	0.94	(0.25)	3.60	(0.72)	1.28	(0.31)
12 - 19.....	1,279	171.21	(33.66)	4.98	(0.57)	1.10	(0.15)	0.42	(0.06)	1.82	(0.24)	0.97*	(0.30)
20 - 29.....	859	205.72	(22.43)	6.05	(1.04)	1.02	(0.11)	0.61	(0.12)	1.88	(0.32)	1.04	(0.26)
30 - 39.....	906	237.92	(21.11)	8.59	(0.96)	1.63	(0.24)	1.00	(0.23)	2.98	(0.57)	1.22	(0.32)
40 - 49.....	893	266.10	(28.71)	9.19	(1.16)	1.49	(0.21)	1.05	(0.22)	3.87	(0.61)	1.14*	(0.35)
50 - 59.....	901	324.54	(37.10)	15.23	(1.87)	4.04	(0.79)	1.54	(0.39)	4.99	(0.88)	1.68	(0.32)
60 - 69.....	908	307.33	(28.55)	14.94	(1.89)	2.35	(0.18)	1.83	(0.36)	6.29	(0.98)	1.37	(0.27)
70 and over.....	984	203.80	(13.49)	17.46	(2.77)	2.87	(0.41)	2.18	(0.59)	6.83	(1.12)	2.09	(0.42)
2 - 19.....	3,324	119.04	(17.53)	7.36	(0.60)	1.45	(0.12)	0.70	(0.10)	2.87	(0.31)	1.27	(0.26)
20 and over...	5,451	258.60	(14.25)	11.15	(0.72)	2.15	(0.19)	1.26	(0.14)	4.12	(0.37)	1.36	(0.15)
2 and over...	8,775	221.74	(12.34)	10.15	(0.62)	1.96	(0.13)	1.11	(0.13)	3.79	(0.33)	1.34	(0.16)
Females:													
2 - 5.....	786	57.69	(3.81)	10.30	(1.16)	2.21	(0.34)	0.94	(0.18)	4.12	(0.66)	1.34*	(0.44)
6 - 11.....	1,137	70.21	(6.51)	9.83	(1.11)	1.78	(0.26)	0.82	(0.15)	3.71	(0.69)	2.21	(0.47)
12 - 19.....	1,142	136.08	(12.42)	6.60	(0.73)	1.25	(0.19)	0.57	(0.10)	2.24	(0.23)	1.54	(0.33)
20 - 29.....	933	167.04	(19.30)	9.68	(1.68)	1.91*	(0.62)	0.93	(0.24)	2.74	(0.60)	1.46	(0.23)
30 - 39.....	981	211.98	(19.02)	12.42	(1.44)	2.86	(0.50)	1.47	(0.30)	4.28	(0.60)	1.73	(0.30)
40 - 49.....	1,021	243.64	(21.55)	13.38	(2.01)	2.42	(0.43)	2.99*	(1.80)	4.44	(0.61)	1.67	(0.37)
50 - 59.....	842	279.95	(26.79)	17.92	(2.70)	3.60	(0.57)	2.14*	(0.66)	5.69	(1.17)	2.17	(0.34)
60 - 69.....	918	287.81	(21.73)	18.01	(2.69)	3.88	(0.80)	2.12	(0.50)	6.66	(1.17)	1.75	(0.28)
70 and over.....	1,036	192.77	(10.56)	13.52	(1.13)	2.57	(0.30)	1.62	(0.24)	4.49	(0.54)	2.04	(0.27)
2 - 19.....	3,065	98.00	(7.27)	8.44	(0.68)	1.63	(0.14)	0.73	(0.08)	3.12	(0.35)	1.72	(0.33)
20 and over...	5,731	229.34	(11.58)	13.95	(1.16)	2.82	(0.23)	1.90	(0.42)	4.60	(0.50)	1.79	(0.19)
2 and over...	8,796	197.31	(9.43)	12.61	(0.93)	2.53	(0.19)	1.61	(0.32)	4.24	(0.43)	1.77	(0.21)
Males and females:													
2 - 19.....	6,389	108.59	(11.00)	7.90	(0.49)	1.54	(0.08)	0.71	(0.08)	2.99	(0.29)	1.49	(0.28)
20 and over...	11,182	243.28	(11.08)	12.61	(0.85)	2.50	(0.15)	1.59	(0.26)	4.37	(0.39)	1.59	(0.16)
2 and over...	17,571	209.12	(9.42)	11.42	(0.71)	2.26	(0.12)	1.37	(0.20)	4.02	(0.35)	1.56	(0.18)

*, a-g Notes are on page 9.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>
 SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by gender and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>

Table 1a. Flavonoids^a from food and beverages^b – overall total^c and anthocyanidins – continued

Mean^d daily intake (standard error) per individual, by gender^e and age, in the United States,^f What We Eat in America, NHANES 2007-2010^g

Gender and age (years)	Anthocyanidins – continued			
	Peonidin		Petunidin	
	----- mg -----			
Males:				
2 - 5.....	0.66	(0.10)	0.72	(0.13)
6 - 11.....	0.67	(0.16)	0.72	(0.21)
12 - 19.....	0.37	(0.07)	0.31	(0.05)
20 - 29.....	1.11*	(0.69)	0.40	(0.08)
30 - 39.....	1.15*	(0.37)	0.60	(0.13)
40 - 49.....	0.94	(0.24)	0.70	(0.14)
50 - 59.....	1.76	(0.44)	1.23	(0.32)
60 - 69.....	1.66	(0.43)	1.45	(0.31)
70 and over.....	2.02	(0.43)	1.47	(0.30)
2 - 19.....	0.53	(0.07)	0.54	(0.08)
20 and over...	1.37	(0.21)	0.89	(0.11)
2 and over...	1.15	(0.16)	0.80	(0.10)
Females:				
2 - 5.....	0.93	(0.25)	0.76	(0.16)
6 - 11.....	0.66	(0.11)	0.66	(0.13)
12 - 19.....	0.60	(0.17)	0.40	(0.07)
20 - 29.....	1.92*	(0.74)	0.71	(0.21)
30 - 39.....	1.10	(0.19)	0.99	(0.23)
40 - 49.....	0.96	(0.18)	0.91	(0.15)
50 - 59.....	2.81	(0.68)	1.52*	(0.48)
60 - 69.....	1.88	(0.38)	1.74	(0.47)
70 and over.....	1.60	(0.23)	1.21	(0.18)
2 - 19.....	0.69	(0.10)	0.56	(0.07)
20 and over...	1.70	(0.27)	1.14	(0.18)
2 and over...	1.45	(0.21)	1.00	(0.15)
Males and females:				
2 - 19.....	0.61	(0.07)	0.55	(0.06)
20 and over...	1.54	(0.18)	1.02	(0.14)
2 and over...	1.31	(0.15)	0.90	(0.12)

*, a-g Notes are on page 9.

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Table 1b. Flavonoids^a from food and beverages^b – flavan-3-ols

Mean^d daily intake (standard error) per individual, by gender^e and age, in the United States,^f What We Eat in America, NHANES 2007-2010^g

Gender and age (years)	Flavan-3-ols (continued on next page)															
	Total		Catechins													
			Total		(-)-Epicatechin		(-)-Epicatechin 3-gallate		(-)-Epigallocatechin		(-)-Epigallocatechin 3-gallate		(+)-Catechin		(+)-Gallocatechin	
-----mg-----																
Males:																
2 - 5.....	30.64	(2.65)	21.42	(1.02)	9.91	(0.45)	1.04	(0.18)	1.77	(0.27)	2.83	(0.47)	5.72	(0.25)	0.15	(0.03)
6 - 11.....	57.54	(10.47)	29.69	(3.88)	8.02	(0.37)	3.09	(0.68)	4.79	(0.99)	8.20	(1.66)	5.11	(0.21)	0.47	(0.11)
12 - 19.....	134.86	(32.45)	58.94	(12.43)	9.36	(1.04)	8.29	(2.12)	12.51	(3.13)	21.87	(5.35)	5.61	(0.59)	1.31	(0.34)
20 - 29.....	160.14	(21.23)	68.66	(8.18)	9.37	(0.64)	9.84	(1.40)	14.85	(2.08)	25.76	(3.66)	7.08	(0.45)	1.76	(0.22)
30 - 39.....	185.95	(20.66)	80.12	(7.62)	10.57	(0.58)	11.48	(1.36)	17.44	(1.98)	30.36	(3.31)	8.29	(0.47)	2.00	(0.24)
40 - 49.....	220.22	(27.74)	94.01	(10.72)	12.35	(0.88)	13.62	(1.83)	20.64	(2.71)	35.49	(4.63)	9.56	(0.64)	2.35	(0.30)
50 - 59.....	266.65	(36.05)	111.99	(13.64)	13.36	(1.00)	16.74	(2.38)	25.35	(3.51)	43.67	(5.91)	10.08	(0.61)	2.80	(0.39)
60 - 69.....	249.50	(28.13)	103.91	(10.70)	11.98	(0.77)	15.54	(1.85)	23.57	(2.73)	40.40	(4.67)	9.86	(0.58)	2.56	(0.29)
70 and over.....	151.11	(11.19)	66.31	(4.54)	9.66	(0.60)	8.93	(0.72)	13.85	(1.07)	24.14	(1.83)	8.35	(0.61)	1.38	(0.12)
2 - 19.....	85.45	(16.76)	40.70	(6.37)	9.06	(0.53)	4.91	(1.09)	7.50	(1.61)	12.99	(2.73)	5.48	(0.31)	0.77	(0.18)
20 and over...	207.19	(13.92)	88.16	(5.38)	11.29	(0.43)	12.81	(0.91)	19.45	(1.36)	33.59	(2.36)	8.84	(0.30)	2.18	(0.15)
2 and over...	175.04	(11.94)	75.62	(4.60)	10.70	(0.38)	10.73	(0.78)	16.29	(1.15)	28.15	(1.98)	7.95	(0.27)	1.81	(0.13)
Females:																
2 - 5.....	27.87	(3.30)	19.38	(1.41)	9.11	(0.60)	0.92	(0.21)	1.56	(0.31)	2.53	(0.55)	5.13	(0.30)	0.13	(0.03)
6 - 11.....	41.66	(6.28)	23.56	(2.47)	8.07	(0.44)	1.99	(0.41)	3.15	(0.60)	5.26	(1.06)	4.79	(0.22)	0.30	(0.06)
12 - 19.....	106.54	(11.96)	47.42	(4.92)	7.90	(0.52)	6.47	(0.81)	9.80	(1.20)	17.32	(2.16)	4.94	(0.31)	0.98	(0.13)
20 - 29.....	129.90	(19.04)	56.52	(7.32)	8.37	(0.54)	7.96	(1.27)	12.10	(1.88)	21.05	(3.28)	5.75	(0.35)	1.28	(0.20)
30 - 39.....	168.77	(18.17)	71.13	(6.95)	9.50	(0.59)	10.31	(1.19)	15.62	(1.76)	27.12	(3.05)	6.95	(0.39)	1.63	(0.19)
40 - 49.....	199.42	(20.81)	83.34	(7.92)	10.27	(0.59)	12.31	(1.36)	18.57	(2.01)	32.32	(3.53)	7.92	(0.41)	1.95	(0.21)
50 - 59.....	224.28	(23.90)	94.14	(9.35)	12.06	(0.81)	13.75	(1.50)	20.92	(2.26)	36.34	(4.17)	8.92	(0.62)	2.14	(0.22)
60 - 69.....	235.40	(19.99)	97.78	(7.59)	11.76	(0.75)	14.34	(1.23)	21.79	(1.81)	38.37	(3.16)	9.36	(0.63)	2.17	(0.19)
70 and over.....	147.73	(10.09)	64.34	(3.73)	9.10	(0.34)	8.99	(0.66)	13.79	(0.97)	24.10	(1.59)	7.01	(0.22)	1.36	(0.11)
2 - 19.....	68.72	(6.96)	33.70	(2.81)	8.21	(0.38)	3.84	(0.46)	5.89	(0.68)	10.26	(1.23)	4.93	(0.21)	0.58	(0.07)
20 and over...	183.40	(10.83)	77.51	(4.10)	10.14	(0.32)	11.23	(0.69)	17.05	(1.03)	29.73	(1.81)	7.59	(0.25)	1.75	(0.11)
2 and over...	155.43	(8.80)	66.82	(3.34)	9.67	(0.28)	9.43	(0.56)	14.33	(0.84)	24.98	(1.46)	6.94	(0.22)	1.47	(0.09)
Males and females:																
2 - 19.....	77.14	(10.44)	37.22	(4.03)	8.64	(0.38)	4.38	(0.68)	6.70	(1.01)	11.63	(1.73)	5.20	(0.22)	0.67	(0.11)
20 and over...	194.73	(10.64)	82.58	(4.07)	10.69	(0.32)	11.99	(0.69)	18.19	(1.02)	31.57	(1.78)	8.19	(0.25)	1.96	(0.11)
2 and over...	164.91	(8.94)	71.08	(3.42)	10.17	(0.30)	10.06	(0.57)	15.28	(0.85)	26.51	(1.47)	7.43	(0.23)	1.63	(0.09)

^{a-g} Notes are on page 9.

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Table 1b. Flavonoids^a from food and beverages^b – flavan-3-ols – continued

Mean^d daily intake (standard error) per individual, by gender^e and age, in the United States,^f What We Eat in America, NHANES 2007-2010^g

Gender and age (years)	Flavan-3-ols – continued									
	Theaflavin		Theaflavin-3,3'- digallate		Theaflavin-3'- gallate		Theaflavin-3- gallate		Thearubigins	
	----- mg -----									
Males:										
2 - 5.....	0.14	(0.03)	0.16	(0.03)	0.13	(0.03)	0.11	(0.02)	8.68	(1.67)
6 - 11.....	0.45	(0.12)	0.50	(0.13)	0.43	(0.11)	0.36	(0.09)	26.10	(6.15)
12 - 19.....	1.25	(0.35)	1.38	(0.39)	1.17	(0.33)	0.99	(0.28)	71.12	(18.70)
20 - 29.....	1.50	(0.22)	1.66	(0.24)	1.42	(0.21)	1.19	(0.17)	85.72	(12.25)
30 - 39.....	1.73	(0.25)	1.91	(0.28)	1.62	(0.24)	1.38	(0.20)	99.18	(12.17)
40 - 49.....	2.10	(0.31)	2.31	(0.34)	1.97	(0.29)	1.66	(0.24)	118.17	(15.90)
50 - 59.....	2.59	(0.41)	2.86	(0.45)	2.43	(0.39)	2.06	(0.32)	144.72	(20.89)
60 - 69.....	2.42	(0.30)	2.67	(0.33)	2.27	(0.29)	1.92	(0.24)	136.31	(16.29)
70 and over.....	1.31	(0.12)	1.45	(0.13)	1.20	(0.12)	1.06	(0.09)	79.78	(6.29)
2 - 19.....	0.73	(0.18)	0.81	(0.20)	0.69	(0.17)	0.58	(0.14)	41.94	(9.70)
20 and over...	1.96	(0.15)	2.17	(0.16)	1.84	(0.14)	1.56	(0.12)	111.50	(8.00)
2 and over...	1.64	(0.13)	1.81	(0.14)	1.54	(0.12)	1.30	(0.10)	93.13	(6.86)
Females:										
2 - 5.....	0.13	(0.03)	0.14	(0.04)	0.12	(0.03)	0.10	(0.03)	8.00	(1.96)
6 - 11.....	0.29	(0.06)	0.32	(0.07)	0.27	(0.06)	0.23	(0.05)	16.99	(3.62)
12 - 19.....	0.95	(0.12)	1.05	(0.14)	0.89	(0.12)	0.76	(0.10)	55.47	(6.62)
20 - 29.....	1.20	(0.20)	1.32	(0.22)	1.13	(0.19)	0.95	(0.16)	68.79	(10.99)
30 - 39.....	1.58	(0.19)	1.75	(0.21)	1.47	(0.18)	1.27	(0.15)	91.58	(10.51)
40 - 49.....	1.89	(0.22)	2.08	(0.24)	1.76	(0.20)	1.51	(0.17)	108.84	(12.09)
50 - 59.....	2.09	(0.22)	2.31	(0.24)	1.95	(0.20)	1.68	(0.18)	122.11	(13.76)
60 - 69.....	2.15	(0.21)	2.39	(0.24)	1.98	(0.19)	1.75	(0.17)	129.36	(11.64)
70 and over.....	1.33	(0.12)	1.47	(0.13)	1.23	(0.12)	1.07	(0.10)	78.27	(5.94)
2 - 19.....	0.56	(0.07)	0.62	(0.08)	0.52	(0.07)	0.45	(0.06)	32.87	(3.91)
20 and over...	1.70	(0.11)	1.88	(0.12)	1.58	(0.10)	1.37	(0.09)	99.35	(6.32)
2 and over...	1.42	(0.09)	1.58	(0.10)	1.33	(0.08)	1.14	(0.07)	83.14	(5.13)
Males and females:										
2 - 19.....	0.65	(0.11)	0.72	(0.12)	0.61	(0.11)	0.52	(0.09)	37.43	(5.99)
20 and over...	1.83	(0.11)	2.02	(0.12)	1.71	(0.10)	1.46	(0.09)	105.14	(6.16)
2 and over...	1.53	(0.09)	1.69	(0.10)	1.43	(0.09)	1.22	(0.08)	87.97	(5.17)

^{a-g} Notes are on page 9.

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Table 1c. Flavonoids^a from food and beverages^b – flavanones

Mean^d daily intake (standard error) per individual, by gender^e and age, in the United States,^f What We Eat in America, NHANES 2007-2010^g

Gender and age (years)	Flavanones							
	Total		Eriodictyol		Hesperetin		Naringenin	
----- mg -----								
Males:								
2 - 5.....	12.93	(1.29)	0.15	(0.01)	10.03	(1.05)	2.76	(0.28)
6 - 11.....	13.97	(1.24)	0.14	(0.01)	11.08	(1.02)	2.75	(0.25)
12 - 19.....	15.91	(1.80)	0.23	(0.02)	12.30	(1.46)	3.37	(0.42)
20 - 29.....	15.74	(1.59)	0.19	(0.02)	12.99	(1.35)	2.56	(0.25)
30 - 39.....	17.83	(2.03)	0.31	(0.04)	13.38	(1.62)	4.14	(0.57)
40 - 49.....	10.90	(1.21)	0.23	(0.03)	7.66	(0.89)	3.01	(0.42)
50 - 59.....	14.43	(1.60)	0.22	(0.05)	10.39	(1.18)	3.82	(0.58)
60 - 69.....	16.34	(1.56)	0.17	(0.02)	12.03	(1.28)	4.13	(0.52)
70 and over.....	16.49	(0.95)	0.17	(0.02)	11.59	(0.73)	4.73	(0.42)
2 - 19.....	14.58	(1.09)	0.18	(0.01)	11.38	(0.89)	3.03	(0.24)
20 and over...	15.08	(0.64)	0.22	(0.02)	11.26	(0.53)	3.60	(0.18)
2 and over...	14.95	(0.62)	0.21	(0.01)	11.29	(0.50)	3.45	(0.16)
Females:								
2 - 5.....	12.02	(1.48)	0.12	(0.02)	9.34	(1.25)	2.56	(0.27)
6 - 11.....	10.14	(0.82)	0.16	(0.01)	7.91	(0.67)	2.07	(0.22)
12 - 19.....	10.96	(1.18)	0.27	(0.05)	8.62	(1.00)	2.08	(0.20)
20 - 29.....	11.39	(1.30)	0.19	(0.02)	8.64	(1.05)	2.55	(0.31)
30 - 39.....	10.83	(0.80)	0.18	(0.02)	7.68	(0.66)	2.97	(0.28)
40 - 49.....	9.95	(1.12)	0.21	(0.04)	6.69	(0.81)	3.05	(0.50)
50 - 59.....	13.85	(1.80)	0.20	(0.02)	9.72	(1.40)	3.93	(0.48)
60 - 69.....	11.90	(0.95)	0.18	(0.03)	8.29	(0.73)	3.43	(0.37)
70 and over.....	14.45	(0.90)	0.09	(0.01)	9.85	(0.63)	4.51	(0.42)
2 - 19.....	10.91	(0.67)	0.20	(0.02)	8.53	(0.57)	2.17	(0.11)
20 and over...	11.92	(0.64)	0.18	(0.01)	8.39	(0.47)	3.34	(0.21)
2 and over...	11.67	(0.53)	0.19	(0.01)	8.43	(0.40)	3.06	(0.16)
Males and females:								
2 - 19.....	12.76	(0.66)	0.19	(0.02)	9.96	(0.55)	2.60	(0.13)
20 and over...	13.42	(0.51)	0.20	(0.01)	9.76	(0.39)	3.46	(0.16)
2 and over...	13.25	(0.46)	0.20	(0.01)	9.81	(0.35)	3.25	(0.14)

^{a-g} Notes are on page 9.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>. SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by gender and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 1d. Flavonoids^a from food and beverages^b – flavones

Mean^d daily intake (standard error) per individual, by gender^e and age, in the United States,^f What We Eat in America, NHANES 2007-2010^g

Gender and age (years)	Flavones					
	Total		Apigenin		Luteolin	
	----- mg -----					
Males:						
2 - 5.....	0.33	(0.03)	0.04	(0.01)	0.29	(0.02)
6 - 11.....	0.35	(0.03)	0.05	(0.01)	0.30	(0.03)
12 - 19.....	0.65	(0.05)	0.13	(0.02)	0.52	(0.05)
20 - 29.....	0.89	(0.08)	0.17	(0.01)	0.73	(0.08)
30 - 39.....	1.02	(0.07)	0.28	(0.03)	0.74	(0.05)
40 - 49.....	1.06	(0.11)	0.22	(0.03)	0.84	(0.09)
50 - 59.....	1.12	(0.09)	0.23	(0.02)	0.88	(0.08)
60 - 69.....	1.00	(0.09)	0.24	(0.02)	0.75	(0.07)
70 and over.....	0.82	(0.08)	0.20	(0.02)	0.63	(0.06)
2 - 19.....	0.48	(0.03)	0.08	(0.01)	0.40	(0.03)
20 and over...	1.00	(0.05)	0.22	(0.01)	0.77	(0.04)
2 and over...	0.86	(0.04)	0.19	(0.01)	0.67	(0.04)
Females:						
2 - 5.....	0.38	(0.05)	0.06*	(0.02)	0.32	(0.04)
6 - 11.....	0.37	(0.03)	0.05	(0.01)	0.32	(0.03)
12 - 19.....	0.55	(0.07)	0.09	(0.01)	0.45	(0.06)
20 - 29.....	0.61	(0.03)	0.15	(0.01)	0.45	(0.03)
30 - 39.....	0.83	(0.08)	0.22	(0.05)	0.61	(0.05)
40 - 49.....	0.80	(0.06)	0.20	(0.02)	0.60	(0.05)
50 - 59.....	1.29	(0.30)	0.54*	(0.26)	0.76	(0.07)
60 - 69.....	0.89	(0.06)	0.22	(0.01)	0.68	(0.05)
70 and over.....	0.69	(0.02)	0.18	(0.01)	0.51	(0.02)
2 - 19.....	0.45	(0.04)	0.07	(0.01)	0.38	(0.04)
20 and over...	0.86	(0.06)	0.26	(0.05)	0.60	(0.03)
2 and over...	0.76	(0.05)	0.21	(0.04)	0.55	(0.03)
Males and females:						
2 - 19.....	0.47	(0.03)	0.08	(0.01)	0.39	(0.03)
20 and over...	0.92	(0.05)	0.24	(0.03)	0.68	(0.03)
2 and over...	0.81	(0.04)	0.20	(0.02)	0.61	(0.03)

*, a-g Notes are on page 9.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>. SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by gender and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 1e. Flavonoids^a from food and beverages^b – flavonols

Mean^d daily intake (standard error) per individual, by gender^e and age, in the United States,^f What We Eat in America, NHANES 2007-2010^g

Gender and age (years)	Flavonols									
	Total		Isorhamnetin		Kaempferol		Myricetin		Quercetin	
----- mg -----										
Males:										
2 - 5.....	6.64	(0.26)	0.22	(0.02)	1.06	(0.06)	0.33	(0.03)	5.04	(0.19)
6 - 11.....	8.05	(0.49)	0.30	(0.02)	1.44	(0.13)	0.53	(0.05)	5.79	(0.31)
12 - 19.....	14.05	(1.41)	0.61	(0.05)	2.99	(0.42)	0.99	(0.17)	9.46	(0.84)
20 - 29.....	19.13	(1.03)	0.83	(0.05)	5.58	(0.38)	1.28	(0.13)	11.43	(0.60)
30 - 39.....	22.48	(0.79)	1.15	(0.08)	6.27	(0.37)	1.57	(0.11)	13.48	(0.45)
40 - 49.....	23.52	(1.47)	1.05	(0.12)	6.47	(0.49)	1.77	(0.16)	14.23	(0.91)
50 - 59.....	25.36	(1.57)	1.11	(0.08)	6.97	(0.46)	2.08	(0.18)	15.20	(0.96)
60 - 69.....	23.78	(1.05)	1.15	(0.10)	6.08	(0.31)	1.99	(0.14)	14.55	(0.63)
70 and over.....	17.21	(0.77)	0.86	(0.07)	3.75	(0.17)	1.50	(0.09)	11.10	(0.53)
2 - 19.....	10.38	(0.76)	0.42	(0.03)	2.03	(0.22)	0.68	(0.09)	7.24	(0.46)
20 and over...	22.19	(0.70)	1.03	(0.04)	6.03	(0.24)	1.69	(0.08)	13.44	(0.41)
2 and over...	19.07	(0.63)	0.87	(0.03)	4.97	(0.20)	1.43	(0.07)	11.80	(0.38)
Females:										
2 - 5.....	6.40	(0.31)	0.23	(0.02)	0.91	(0.06)	0.34	(0.03)	4.93	(0.25)
6 - 11.....	7.60	(0.32)	0.28	(0.02)	1.27	(0.08)	0.42	(0.04)	5.63	(0.23)
12 - 19.....	10.78	(0.63)	0.38	(0.04)	2.34	(0.17)	0.82	(0.07)	7.24	(0.39)
20 - 29.....	14.05	(0.85)	0.62	(0.04)	3.41	(0.27)	1.02	(0.11)	9.00	(0.50)
30 - 39.....	17.29	(0.86)	0.83	(0.06)	3.87	(0.26)	1.39	(0.10)	11.21	(0.52)
40 - 49.....	18.14	(0.92)	0.79	(0.08)	4.43	(0.26)	1.57	(0.13)	11.35	(0.53)
50 - 59.....	21.16	(1.57)	0.99	(0.11)	4.81	(0.35)	1.87	(0.19)	13.49	(1.00)
60 - 69.....	20.17	(1.01)	0.79	(0.06)	4.50	(0.25)	1.96	(0.14)	12.91	(0.62)
70 and over.....	15.80	(0.49)	0.79	(0.06)	3.27	(0.15)	1.31	(0.05)	10.44	(0.32)
2 - 19.....	8.82	(0.40)	0.31	(0.02)	1.69	(0.11)	0.58	(0.05)	6.22	(0.26)
20 and over...	17.73	(0.52)	0.80	(0.03)	4.07	(0.14)	1.50	(0.07)	11.35	(0.31)
2 and over...	15.55	(0.45)	0.68	(0.03)	3.49	(0.12)	1.28	(0.06)	10.10	(0.27)
Males and females:										
2 - 19.....	9.60	(0.51)	0.37	(0.02)	1.86	(0.14)	0.63	(0.06)	6.73	(0.32)
20 and over...	19.85	(0.54)	0.91	(0.03)	5.00	(0.16)	1.59	(0.06)	12.35	(0.32)
2 and over...	17.25	(0.48)	0.77	(0.02)	4.21	(0.14)	1.35	(0.05)	10.92	(0.29)

^{a-g} Notes are on page 9.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>. SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by gender and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 1f. Flavonoids^a from food and beverages^b – isoflavones

Mean^d daily intake (standard error) per individual, by gender^e and age, in the United States,^f What We Eat in America, NHANES 2007-2010^g

Gender and age (years)	Isoflavones							
	Total		Daidzein		Genistein		Glycitein	
----- mg -----								
Males:								
2 - 5.....	0.96	(0.23)	0.40	(0.10)	0.51	(0.12)	0.05	(0.01)
6 - 11.....	0.68*	(0.25)	0.29*	(0.11)	0.36*	(0.13)	0.03	(0.01)
12 - 19.....	0.76	(0.15)	0.31	(0.06)	0.40	(0.08)	0.06	(0.01)
20 - 29.....	3.76*	(1.17)	1.24	(0.37)	2.18*	(0.69)	0.33*	(0.10)
30 - 39.....	2.07	(0.49)	0.81	(0.19)	1.10	(0.27)	0.15	(0.04)
40 - 49.....	1.22*	(0.40)	0.50*	(0.16)	0.64*	(0.22)	0.08*	(0.03)
50 - 59.....	1.75	(0.39)	0.67	(0.14)	0.95	(0.22)	0.13	(0.03)
60 - 69.....	1.77	(0.40)	0.68	(0.14)	0.96	(0.23)	0.13	(0.03)
70 and over.....	0.71*	(0.25)	0.30*	(0.11)	0.36*	(0.12)	0.04*	(0.02)
2 - 19.....	0.78	(0.14)	0.32	(0.06)	0.41	(0.07)	0.05	(0.01)
20 and over...	2.00	(0.30)	0.74	(0.10)	1.11	(0.17)	0.16	(0.03)
2 and over...	1.68	(0.22)	0.63	(0.08)	0.92	(0.13)	0.13	(0.02)
Females:								
2 - 5.....	0.72	(0.18)	0.30	(0.08)	0.38	(0.09)	0.04	(0.01)
6 - 11.....	0.61*	(0.22)	0.26*	(0.10)	0.31*	(0.11)	0.04*	(0.01)
12 - 19.....	0.66*	(0.21)	0.25*	(0.08)	0.36*	(0.12)	0.05*	(0.02)
20 - 29.....	1.41	(0.18)	0.56	(0.07)	0.75	(0.10)	0.10	(0.02)
30 - 39.....	1.83	(0.47)	0.72	(0.19)	0.96	(0.25)	0.15	(0.04)
40 - 49.....	1.95	(0.45)	0.75	(0.16)	1.05	(0.26)	0.14	(0.04)
50 - 59.....	1.45	(0.27)	0.56	(0.11)	0.78	(0.15)	0.10	(0.02)
60 - 69.....	1.43	(0.33)	0.58	(0.13)	0.75	(0.18)	0.10	(0.03)
70 and over.....	0.57	(0.10)	0.23	(0.04)	0.31	(0.05)	0.04	(0.01)
2 - 19.....	0.66	(0.13)	0.27	(0.06)	0.35	(0.07)	0.04	(0.01)
20 and over...	1.49	(0.16)	0.59	(0.06)	0.80	(0.09)	0.11	(0.01)
2 and over...	1.29	(0.14)	0.51	(0.06)	0.69	(0.07)	0.09	(0.01)
Males and females:								
2 - 19.....	0.72	(0.11)	0.30	(0.05)	0.38	(0.05)	0.04	(0.01)
20 and over...	1.74	(0.17)	0.66	(0.06)	0.94	(0.10)	0.13	(0.01)
2 and over...	1.48	(0.14)	0.57	(0.05)	0.80	(0.08)	0.11	(0.01)

*, a-g Notes are on page 9.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>. SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by gender and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

NOTES

* Estimates flagged with an asterisk may be less statistically reliable than estimates that are not flagged. An estimated mean is flagged when either (a) the relative standard error is greater than 30 percent or (b) the sample size is less than 30 times the variance inflation factor (VIF), a broadly calculated average design effect. The VIF used in this table is 2.10.

^a Detailed information about the flavonoid data files used in creating these tables is provided in reference 1. These tables include 29 individual flavonoids categorized into 6 classes (anthocyanidins, flavan-3-ols, flavanones, flavones, flavonols, and isoflavones), as described in reference 2. The flavan-3-ol class includes derived tannins (theaflavins and thearubigins) but excludes condensed tannins (proanthocyanidins; see reference 3) because sufficient data are not yet available for the full range of survey foods/beverages. Also included with the flavan-3-ols is a subtotal for catechins, which is calculated as the sum of (-)-epicatechin, (-)-epicatechin 3-gallate, (-)-epigallocatechin, (-)-epigallocatechin 3-gallate, (+)-catechin, and (+)-gallocatechin. The anthocyanidins, flavanones, flavones, flavonols, and isoflavones included in the database are presented as their aglycone forms (without sugars); flavan-3-ols are presented as their actual forms (*personal communication, Dr. Xianli Wu, USDA Nutrient Data Laboratory, March 31, 2016*). Procedures for standardizing analytical values of flavonoids that are present in foods/beverages in varying forms are described in reference 4.

^b Estimates are based on intake of food and beverages, including water, and do not include intake from supplements or medications.

^c Sum of dietary flavonoids in the 6 classes presented in tables 1a through 1f.

^d For purposes of comparison with other studies that have reported median intakes, the following information on median intakes is provided:

- Flavonoids, total: males and females (M&F) age 2-19 years, 33.33 mg; M&F 20+ years, 53.08 mg; M&F 2+ years, 45.65 mg.
- Anthocyanidins, total: M&F 2-19 years, 1.03 mg; M&F 20+ years, 1.03 mg; M&F 2+ years, 1.03 mg.
- Flavan-3-ols, total: M&F 2-19 years, 10.28 mg; M&F 20+ years, 12.37 mg; M&F 2+ years, 11.76 mg.
- Flavanones, total: M&F 2-19 years, 0.17 mg; M&F 20+ years, 0.29 mg; M&F 2+ years, 0.27 mg.
- Flavones, total: M&F 2-19 years, 0.17 mg; M&F 20+ years, 0.45 mg; M&F 2+ years, 0.35 mg.
- Flavonols, total: M&F 2-19 years, 5.80 mg; M&F 20+ years, 13.15 mg; M&F 2+ years, 10.76 mg.
- Isoflavones, total: M&F 2-19 years, 0.00 mg; M&F 20+ years, 0.00 mg; M&F 2+ years, 0.00 mg. Note that fewer than 50% of individuals from any sex/age group report any foods/beverages containing isoflavones on any given day.

^e Demographic data used in this table are available at <http://wwwn.cdc.gov/nchs/nhanes/search/DataPage.aspx?Component=Demographics>.

^f To produce estimates that are representative of the U.S. population for the years of data collection, dietary day 1 sample weights (available from <http://wwwn.cdc.gov/nchs/nhanes/search/DataPage.aspx?Component=Dietary>) were used.

^g Estimates in this table are based on 1 day of data collected in What We Eat in America, the dietary intake interview component of the National Health and Nutrition Examination Survey, in 2007 to 2010. <http://www.ars.usda.gov/Services/docs.htm?docid=13793>. Breastfed children were excluded because the amount of breast milk consumed was not quantified.

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Table 2a. Flavonoids^a from food and beverages^b – overall total^c and anthocyanidins

Mean daily intake (standard error) per individual, by race/ethnicity^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Race/ethnicity and age (years)	Sample size	Total flavonoids ^c		Anthocyanidins (continued on next page)									
				Total	Cyanidin	Delphinidin	Malvidin	Pelargonidin					
	<i>n</i>	----- <i>mg</i> -----											
Non-Hispanic White:													
2 - 5.....	600	59.54	(4.08)	11.89	(1.28)	2.49	(0.30)	1.08	(0.20)	4.46	(0.66)	2.01*	(0.75)
6 - 11.....	707	88.80	(12.87)	11.01	(1.58)	1.76	(0.23)	1.12	(0.27)	4.26	(0.96)	2.21	(0.54)
12 - 19.....	785	178.05	(30.86)	6.30	(0.77)	1.26	(0.18)	0.60	(0.11)	2.11	(0.31)	1.43	(0.36)
20 and over...	5,334	266.70	(14.55)	14.85	(1.23)	2.84	(0.23)	1.95	(0.38)	5.10	(0.54)	1.89	(0.21)
2 and over...	7,426	235.04	(12.78)	13.54	(1.06)	2.58	(0.18)	1.71	(0.31)	4.70	(0.50)	1.87	(0.25)
Non-Hispanic Black:													
2 - 5.....	332	55.06	(4.52)	6.17	(0.86)	1.20	(0.14)	0.49	(0.09)	3.30	(0.68)	0.38	(0.08)
6 - 11.....	524	67.14	(5.12)	8.01	(0.92)	1.48	(0.17)	0.57	(0.08)	4.07	(0.63)	0.99*	(0.38)
12 - 19.....	586	103.58	(11.73)	5.69	(0.79)	0.81	(0.09)	0.34	(0.05)	2.44	(0.34)	0.93*	(0.32)
20 and over...	2,161	185.98	(10.46)	6.85	(0.45)	1.52	(0.21)	0.55	(0.09)	2.95	(0.35)	0.71	(0.11)
2 and over...	3,603	154.67	(7.68)	6.75	(0.34)	1.40	(0.14)	0.52	(0.06)	3.01	(0.29)	0.75	(0.11)
Hispanic, all:													
2 - 5.....	640	60.81	(3.17)	7.99	(0.91)	1.67	(0.25)	0.75	(0.11)	3.24	(0.48)	1.19	(0.32)
6 - 11.....	911	65.96	(4.06)	6.00	(0.65)	1.39	(0.22)	0.51	(0.11)	2.34	(0.30)	0.86	(0.18)
12 - 19.....	913	110.06	(14.41)	4.93	(0.65)	1.19	(0.17)	0.35	(0.07)	1.80	(0.36)	0.98	(0.18)
20 and over...	3,172	143.22	(11.61)	7.94	(0.71)	1.79	(0.19)	0.80	(0.09)	2.59	(0.26)	0.95	(0.10)
2 and over...	5,636	122.40	(8.82)	7.30	(0.58)	1.65	(0.14)	0.70	(0.07)	2.50	(0.22)	0.97	(0.09)
Mexican American:													
2 - 5.....	454	57.54	(3.28)	6.12	(0.74)	1.37	(0.19)	0.61	(0.12)	2.40	(0.40)	0.81	(0.19)
6 - 11.....	628	63.01	(4.82)	5.51	(0.83)	1.43	(0.21)	0.50*	(0.15)	2.01	(0.39)	0.74	(0.16)
12 - 19.....	610	108.20	(18.57)	4.87	(0.74)	1.27	(0.24)	0.35	(0.09)	1.63	(0.38)	1.08	(0.24)
20 and over...	1,992	143.89	(15.51)	7.01	(0.70)	1.78	(0.22)	0.68	(0.10)	2.44	(0.33)	0.87	(0.10)
2 and over...	3,684	121.09	(11.67)	6.44	(0.58)	1.63	(0.15)	0.60	(0.08)	2.27	(0.27)	0.88	(0.09)

*, a-f Notes are on page 19.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>.

SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by race/ethnicity and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 2a. Flavonoids^a from food and beverages^b – overall total^c and anthocyanidins – continued

Mean daily intake (standard error) per individual, by race/ethnicity^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Race/ethnicity and age (years)	Anthocyanidins – continued			
	Peonidin		Petunidin	
	----- mg -----			
Non-Hispanic White:				
2 - 5.....	0.98	(0.24)	0.87	(0.17)
6 - 11.....	0.78	(0.17)	0.89	(0.23)
12 - 19.....	0.45	(0.07)	0.44	(0.08)
20 and over...	1.80	(0.25)	1.27	(0.21)
2 and over...	1.55	(0.21)	1.14	(0.18)
Non-Hispanic Black:				
2 - 5.....	0.45	(0.07)	0.35	(0.06)
6 - 11.....	0.53	(0.07)	0.38	(0.05)
12 - 19.....	0.93*	(0.56)	0.24	(0.04)
20 and over...	0.72	(0.09)	0.39	(0.05)
2 and over...	0.71	(0.10)	0.37	(0.04)
Hispanic, all:				
2 - 5.....	0.55	(0.07)	0.59	(0.08)
6 - 11.....	0.50	(0.09)	0.40	(0.09)
12 - 19.....	0.35	(0.04)	0.26	(0.05)
20 and over...	1.28	(0.30)	0.55	(0.05)
2 and over...	0.99	(0.20)	0.49	(0.05)
Mexican American:				
2 - 5.....	0.43	(0.06)	0.50	(0.09)
6 - 11.....	0.44	(0.09)	0.39*	(0.13)
12 - 19.....	0.29	(0.05)	0.25	(0.06)
20 and over...	0.73	(0.13)	0.50	(0.07)
2 and over...	0.60	(0.09)	0.45	(0.06)

*, a-f Notes are on page 19.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>.

SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by race/ethnicity and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 2b. Flavonoids^a from food and beverages^b – flavan-3-ols

Mean daily intake (standard error) per individual, by race/ethnicity^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Race/ethnicity and age (years)	Flavan-3-ols (continued on next page)															
	Total		Catechins													
			Total		(-)-Epicatechin		(-)-Epicatechin 3-gallate		(-)-Epigallocatechin		(-)-Epigallocatechin 3-gallate		(+) -Catechin		(+) -Galocatechin	
----- mg -----																
Non-Hispanic White:																
2 - 5.....	30.04	(3.46)	20.72	(1.48)	9.37	(0.61)	1.02	(0.22)	1.75	(0.32)	2.83	(0.61)	5.60	(0.39)	0.14	(0.03)
6 - 11.....	59.15	(12.30)	30.00	(4.69)	8.11	(0.54)	3.18	(0.79)	4.90	(1.16)	8.25	(1.98)	5.06	(0.27)	0.50	(0.13)
12 - 19.....	148.14	(29.63)	63.73	(11.48)	9.31	(1.06)	9.17	(1.93)	13.81	(2.85)	24.26	(4.90)	5.76	(0.59)	1.42	(0.31)
20 and over...	216.11	(13.82)	91.13	(5.34)	11.37	(0.42)	13.34	(0.90)	20.27	(1.33)	35.18	(2.34)	8.80	(0.35)	2.16	(0.14)
2 and over...	189.10	(11.95)	80.61	(4.64)	10.83	(0.41)	11.60	(0.77)	17.63	(1.14)	30.60	(1.99)	8.07	(0.33)	1.87	(0.12)
Non-Hispanic Black:																
2 - 5.....	28.54	(4.52)	18.68	(1.80)	8.77	(0.51)	1.08	(0.30)	1.72	(0.44)	2.80	(0.76)	4.15	(0.22)	0.17	(0.05)
6 - 11.....	35.81	(5.00)	21.33	(1.99)	8.01	(0.51)	1.62	(0.34)	2.64	(0.52)	4.44	(0.93)	4.38	(0.25)	0.24	(0.05)
12 - 19.....	70.73	(10.80)	34.15	(4.36)	7.34	(0.48)	4.21	(0.74)	6.49	(1.12)	11.72	(2.11)	3.77	(0.20)	0.62	(0.11)
20 and over...	145.82	(10.01)	62.39	(3.92)	8.97	(0.41)	8.95	(0.66)	13.44	(0.97)	23.21	(1.70)	6.31	(0.22)	1.51	(0.11)
2 and over...	117.25	(7.42)	51.70	(2.91)	8.64	(0.31)	7.08	(0.49)	10.68	(0.72)	18.50	(1.26)	5.63	(0.17)	1.18	(0.08)
Hispanic, all:																
2 - 5.....	27.69	(2.85)	20.48	(1.28)	9.99	(0.55)	0.83	(0.19)	1.44	(0.28)	2.33	(0.50)	5.77	(0.33)	0.12	(0.03)
6 - 11.....	35.60	(3.67)	22.00	(1.69)	7.80	(0.45)	1.60	(0.24)	2.61	(0.38)	4.68	(0.74)	5.08	(0.26)	0.22	(0.03)
12 - 19.....	71.65	(12.29)	34.45	(4.82)	7.29	(0.64)	4.14	(0.79)	6.36	(1.16)	11.25	(2.01)	4.76	(0.36)	0.65	(0.13)
20 and over...	99.06	(11.34)	46.06	(4.41)	7.94	(0.37)	5.79	(0.75)	8.95	(1.12)	16.00	(1.98)	6.42	(0.24)	0.96	(0.12)
2 and over...	81.62	(8.49)	39.41	(3.30)	8.01	(0.31)	4.64	(0.56)	7.20	(0.83)	12.83	(1.46)	5.97	(0.22)	0.76	(0.09)
Mexican American:																
2 - 5.....	24.83	(2.51)	18.44	(0.98)	8.85	(0.50)	0.75	(0.18)	1.32	(0.27)	2.16	(0.51)	5.26	(0.26)	0.11	(0.03)
6 - 11.....	33.03	(4.82)	21.33	(2.12)	8.04	(0.48)	1.44	(0.33)	2.42	(0.51)	4.46	(1.03)	4.78	(0.28)	0.18	(0.04)
12 - 19.....	69.06	(15.21)	33.53	(5.97)	7.44	(0.84)	3.94	(0.97)	6.07	(1.43)	10.68	(2.49)	4.77	(0.47)	0.62	(0.16)
20 and over...	101.61	(14.91)	46.87	(5.91)	8.00	(0.55)	5.96	(0.98)	9.22	(1.47)	16.50	(2.60)	6.19	(0.34)	1.00	(0.16)
2 and over...	81.62	(11.06)	39.26	(4.38)	8.00	(0.44)	4.65	(0.73)	7.22	(1.09)	12.90	(1.93)	5.73	(0.28)	0.76	(0.12)

^{a-f} Notes are on page 19.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>

SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by race/ethnicity and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 2b. Flavonoids^a from food and beverages^b – flavan-3-ols – continued

Mean daily intake (standard error) per individual, by race/ethnicity^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Race/ethnicity and age (years)	Flavan-3-ols – continued									
	Theaflavin		Theaflavin-3,3'-digallate		Theaflavin-3'-gallate		Theaflavin-3-gallate		Thearubigins	
	----- mg -----									
Non-Hispanic White:										
2 - 5.....	0.14	(0.03)	0.15	(0.04)	0.12	(0.03)	0.11	(0.03)	8.80	(2.12)
6 - 11.....	0.49	(0.13)	0.54	(0.15)	0.46	(0.13)	0.39	(0.11)	27.28	(7.11)
12 - 19.....	1.38	(0.32)	1.53	(0.35)	1.29	(0.30)	1.10	(0.25)	79.12	(16.96)
20 and over...	2.03	(0.14)	2.24	(0.16)	1.89	(0.13)	1.62	(0.11)	117.20	(7.95)
2 and over...	1.76	(0.12)	1.95	(0.14)	1.65	(0.12)	1.41	(0.10)	101.73	(6.85)
Non-Hispanic Black:										
2 - 5.....	0.17	(0.05)	0.18	(0.05)	0.16	(0.05)	0.13	(0.04)	9.23	(2.61)
6 - 11.....	0.22	(0.05)	0.25	(0.06)	0.21	(0.05)	0.18	(0.04)	13.62	(2.90)
12 - 19.....	0.56	(0.11)	0.62	(0.12)	0.53	(0.10)	0.44	(0.08)	34.43	(6.13)
20 and over...	1.40	(0.11)	1.54	(0.12)	1.31	(0.10)	1.11	(0.08)	78.08	(5.73)
2 and over...	1.09	(0.08)	1.20	(0.09)	1.02	(0.07)	0.86	(0.06)	61.38	(4.24)
Hispanic, all:										
2 - 5.....	0.11	(0.03)	0.12	(0.03)	0.10	(0.03)	0.09	(0.02)	6.80	(1.62)
6 - 11.....	0.19	(0.03)	0.21	(0.04)	0.17	(0.03)	0.15	(0.03)	12.89	(1.98)
12 - 19.....	0.59	(0.13)	0.65	(0.14)	0.55	(0.12)	0.46	(0.10)	34.95	(7.01)
20 and over...	0.80	(0.12)	0.89	(0.13)	0.74	(0.11)	0.65	(0.09)	49.92	(6.51)
2 and over...	0.64	(0.09)	0.71	(0.10)	0.59	(0.09)	0.51	(0.07)	39.76	(4.86)
Mexican American:										
2 - 5.....	0.09	(0.03)	0.10	(0.03)	0.08	(0.03)	0.07	(0.02)	6.04	(1.55)
6 - 11.....	0.14	(0.04)	0.15	(0.05)	0.13	(0.04)	0.11	(0.03)	11.17	(2.63)
12 - 19.....	0.56	(0.16)	0.62	(0.18)	0.53	(0.15)	0.45	(0.13)	33.38	(8.70)
20 and over...	0.82	(0.16)	0.91	(0.17)	0.76	(0.15)	0.66	(0.12)	51.57	(8.46)
2 and over...	0.64	(0.12)	0.70	(0.13)	0.59	(0.11)	0.51	(0.09)	39.91	(6.27)

^{a-f} Notes are on page 19.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>.

SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by race/ethnicity and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 2c. Flavonoids^a from food and beverages^b – flavanones

Mean daily intake (standard error) per individual, by race/ethnicity^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Race/ethnicity and age (years)	Flavanones							
	Total		Eriodictyol		Hesperetin		Naringenin	
----- mg -----								
Non-Hispanic White:								
2 - 5.....	10.39	(1.23)	0.11	(0.01)	8.25	(1.03)	2.03	(0.25)
6 - 11.....	9.57	(1.17)	0.12	(0.01)	7.63	(0.98)	1.81	(0.22)
12 - 19.....	8.50	(1.01)	0.17	(0.05)	6.64	(0.88)	1.69	(0.18)
20 and over...	12.14	(0.60)	0.18	(0.01)	8.81	(0.47)	3.14	(0.18)
2 and over...	11.49	(0.50)	0.17	(0.01)	8.48	(0.39)	2.84	(0.15)
Non-Hispanic Black:								
2 - 5.....	12.90	(1.01)	0.22	(0.06)	9.83	(0.88)	2.85	(0.36)
6 - 11.....	14.63	(1.95)	0.27	(0.04)	11.13	(1.49)	3.23	(0.57)
12 - 19.....	16.92	(2.70)	0.46	(0.07)	13.36	(2.12)	3.11	(0.62)
20 and over...	16.00	(1.04)	0.26	(0.02)	11.69	(0.89)	4.05	(0.25)
2 and over...	15.80	(0.76)	0.29	(0.02)	11.75	(0.64)	3.76	(0.21)
Hispanic, all:								
2 - 5.....	17.42	(1.41)	0.15	(0.03)	13.19	(1.10)	4.08	(0.34)
6 - 11.....	16.18	(1.12)	0.16	(0.03)	12.70	(0.88)	3.31	(0.28)
12 - 19.....	21.65	(2.09)	0.30	(0.04)	16.83	(1.84)	4.52	(0.47)
20 and over...	17.47	(1.13)	0.27	(0.02)	12.94	(0.88)	4.26	(0.38)
2 and over...	17.90	(0.91)	0.25	(0.01)	13.48	(0.73)	4.17	(0.27)
Mexican American:								
2 - 5.....	19.02	(1.35)	0.13	(0.02)	14.38	(1.04)	4.51	(0.38)
6 - 11.....	16.34	(1.23)	0.14	(0.03)	12.69	(0.97)	3.51	(0.33)
12 - 19.....	21.95	(3.37)	0.32	(0.06)	16.85	(2.81)	4.78	(0.77)
20 and over...	16.28	(1.13)	0.27	(0.02)	11.99	(0.84)	4.02	(0.47)
2 and over...	17.37	(0.97)	0.25	(0.02)	13.00	(0.77)	4.12	(0.32)

^{a-f} Notes are on page 19.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>.

SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by race/ethnicity and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 2d. Flavonoids^a from food and beverages^b – flavones

Mean daily intake (standard error) per individual, by race/ethnicity^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Race/ethnicity and age (years)	Flavones					
	Total		Apigenin		Luteolin	
	----- mg -----					
Non-Hispanic White:						
2 - 5.....	0.34	(0.04)	0.03	(0.01)	0.30	(0.04)
6 - 11.....	0.36	(0.03)	0.05	(0.01)	0.31	(0.03)
12 - 19.....	0.67	(0.08)	0.12	(0.01)	0.55	(0.08)
20 and over...	0.97	(0.07)	0.27	(0.04)	0.70	(0.04)
2 and over...	0.86	(0.06)	0.22	(0.03)	0.64	(0.04)
Non-Hispanic Black:						
2 - 5.....	0.25	(0.03)	0.04	(0.01)	0.21	(0.02)
6 - 11.....	0.36	(0.05)	0.06	(0.01)	0.31	(0.04)
12 - 19.....	0.37	(0.03)	0.08	(0.01)	0.29	(0.03)
20 and over...	0.57	(0.03)	0.15	(0.01)	0.42	(0.03)
2 and over...	0.50	(0.02)	0.12	(#)	0.38	(0.02)
Hispanic, all:						
2 - 5.....	0.34	(0.02)	0.04	(0.01)	0.29	(0.02)
6 - 11.....	0.37	(0.03)	0.06	(0.01)	0.31	(0.03)
12 - 19.....	0.53	(0.04)	0.11	(0.02)	0.42	(0.03)
20 and over...	0.89	(0.04)	0.18	(0.01)	0.71	(0.03)
2 and over...	0.73	(0.02)	0.14	(0.01)	0.58	(0.02)
Mexican American:						
2 - 5.....	0.35	(0.03)	0.05	(0.01)	0.30	(0.03)
6 - 11.....	0.37	(0.04)	0.05	(0.01)	0.32	(0.04)
12 - 19.....	0.56	(0.04)	0.09	(0.01)	0.47	(0.03)
20 and over...	0.97	(0.04)	0.17	(0.01)	0.80	(0.04)
2 and over...	0.78	(0.03)	0.13	(0.01)	0.65	(0.03)

#, a-f Notes are on page 19.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>.

SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by race/ethnicity and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 2e. Flavonoids^a from food and beverages^b – flavonols

Mean daily intake (standard error) per individual, by race/ethnicity^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Race/ethnicity and age (years)	Flavonols									
	Total		Isorhamnetin		Kaempferol		Myricetin		Quercetin	
----- mg -----										
Non-Hispanic White:										
2 - 5.....	6.14	(0.36)	0.17	(0.02)	0.95	(0.07)	0.34	(0.04)	4.68	(0.28)
6 - 11.....	7.86	(0.59)	0.27	(0.02)	1.43	(0.16)	0.49	(0.06)	5.67	(0.38)
12 - 19.....	13.65	(1.35)	0.52	(0.05)	3.02	(0.38)	1.05	(0.16)	9.06	(0.83)
20 and over...	20.94	(0.71)	0.93	(0.04)	5.29	(0.20)	1.76	(0.08)	12.95	(0.42)
2 and over...	18.55	(0.66)	0.81	(0.03)	4.58	(0.18)	1.53	(0.07)	11.64	(0.40)
Non-Hispanic Black:										
2 - 5.....	6.15	(0.27)	0.18	(0.02)	0.94	(0.10)	0.33	(0.03)	4.70	(0.25)
6 - 11.....	7.87	(0.30)	0.24	(0.02)	1.38	(0.10)	0.46	(0.04)	5.78	(0.21)
12 - 19.....	9.51	(0.62)	0.34	(0.03)	1.95	(0.21)	0.63	(0.07)	6.59	(0.38)
20 and over...	15.75	(0.46)	0.64	(0.03)	4.32	(0.18)	1.13	(0.05)	9.66	(0.29)
2 and over...	13.50	(0.33)	0.53	(0.02)	3.49	(0.14)	0.94	(0.04)	8.54	(0.21)
Hispanic, all:										
2 - 5.....	7.00	(0.31)	0.29	(0.03)	0.98	(0.06)	0.32	(0.02)	5.41	(0.26)
6 - 11.....	7.51	(0.25)	0.32	(0.02)	1.20	(0.07)	0.44	(0.03)	5.56	(0.21)
12 - 19.....	10.65	(0.70)	0.50	(0.04)	2.12	(0.20)	0.68	(0.08)	7.36	(0.43)
20 and over...	16.23	(0.56)	0.91	(0.04)	3.66	(0.18)	1.09	(0.06)	10.57	(0.34)
2 and over...	13.63	(0.46)	0.73	(0.03)	2.92	(0.14)	0.89	(0.05)	9.08	(0.28)
Mexican American:										
2 - 5.....	6.85	(0.36)	0.32	(0.04)	0.95	(0.06)	0.30	(0.03)	5.29	(0.32)
6 - 11.....	7.55	(0.32)	0.33	(0.03)	1.15	(0.09)	0.44	(0.04)	5.62	(0.25)
12 - 19.....	11.00	(0.83)	0.57	(0.05)	2.15	(0.22)	0.65	(0.10)	7.63	(0.53)
20 and over...	16.73	(0.70)	0.97	(0.04)	3.83	(0.24)	1.10	(0.09)	10.82	(0.42)
2 and over...	13.89	(0.58)	0.78	(0.03)	3.00	(0.18)	0.88	(0.07)	9.22	(0.35)

^{a-f} Notes are on page 19.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>.

SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by race/ethnicity and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 2f. Flavonoids^a from food and beverages^b – isoflavones

Mean daily intake (standard error) per individual, by race/ethnicity^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Race/ethnicity and age (years)	Isoflavones							
	Total		Daidzein		Genistein		Glycitein	
----- mg -----								
Non-Hispanic White:								
2 - 5.....	0.74	(0.18)	0.31	(0.08)	0.40	(0.10)	0.04	(0.01)
6 - 11.....	0.84*	(0.27)	0.37*	(0.12)	0.43*	(0.14)	0.04*	(0.01)
12 - 19.....	0.79	(0.22)	0.31	(0.09)	0.42	(0.12)	0.06	(0.02)
20 and over...	1.69	(0.20)	0.63	(0.07)	0.93	(0.12)	0.13	(0.02)
2 and over...	1.49	(0.17)	0.56	(0.06)	0.82	(0.10)	0.11	(0.01)
Non-Hispanic Black:								
2 - 5.....	1.05*	(0.41)	0.44*	(0.18)	0.55*	(0.22)	0.05*	(0.02)
6 - 11.....	0.46	(0.14)	0.19*	(0.06)	0.25	(0.07)	0.03	(0.01)
12 - 19.....	0.36	(0.05)	0.13	(0.02)	0.20	(0.03)	0.03	(#)
20 and over...	0.99	(0.11)	0.40	(0.04)	0.52	(0.06)	0.07	(0.01)
2 and over...	0.86	(0.07)	0.35	(0.03)	0.45	(0.04)	0.06	(0.01)
Hispanic, all:								
2 - 5.....	0.37	(0.11)	0.16*	(0.05)	0.20	(0.06)	0.02	(#)
6 - 11.....	0.29*	(0.09)	0.12*	(0.04)	0.16*	(0.05)	0.02	(#)
12 - 19.....	0.65*	(0.20)	0.26*	(0.08)	0.35*	(0.10)	0.04	(0.01)
20 and over...	1.64	(0.24)	0.65	(0.09)	0.87	(0.13)	0.12	(0.02)
2 and over...	1.23	(0.17)	0.49	(0.07)	0.65	(0.09)	0.09	(0.01)
Mexican American:								
2 - 5.....	0.37*	(0.15)	0.16*	(0.06)	0.20*	(0.08)	0.02*	(0.01)
6 - 11.....	0.21	(0.04)	0.08	(0.02)	0.11	(0.02)	0.01	(#)
12 - 19.....	0.76*	(0.26)	0.29*	(0.11)	0.41*	(0.14)	0.05*	(0.02)
20 and over...	1.29	(0.27)	0.50	(0.08)	0.69	(0.16)	0.10	(0.02)
2 and over...	1.00	(0.17)	0.39	(0.05)	0.54	(0.10)	0.07	(0.02)

*, #, a-f Notes are on page 19.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>.

SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by race/ethnicity and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

NOTES

* Estimates flagged with an asterisk may be less statistically reliable than estimates that are not flagged. An estimated mean is flagged when either (a) the relative standard error is greater than 30 percent or (b) the sample size is less than 30 times the variance inflation factor (VIF), a broadly calculated average design effect. The VIF used in this table is 2.10.

Indicates a non-zero value too small to report.

^a Detailed information about the flavonoid data files used in creating these tables is provided in reference 1. These tables include 29 individual flavonoids categorized into 6 classes (anthocyanidins, flavan-3-ols, flavanones, flavones, flavonols, and isoflavones), as described in reference 2. The flavan-3-ol class includes derived tannins (theaflavins and thearubigins) but excludes condensed tannins (proanthocyanidins; see reference 3) because sufficient data are not yet available for the full range of survey foods/beverages. Also included with the flavan-3-ols is a subtotal for catechins, which is calculated as the sum of (-)-epicatechin, (-)-epicatechin 3-gallate, (-)-epigallocatechin, (-)-epigallocatechin 3-gallate, (+)-catechin, and (+)-gallocatechin. The anthocyanidins, flavanones, flavones, flavonols, and isoflavones included in the database are presented as their aglycone forms (without sugars); flavan-3-ols are presented as their actual forms (*personal communication, Dr. Xianli Wu, USDA Nutrient Data Laboratory, March 31, 2016*). Procedures for standardizing analytical values of flavonoids that are present in foods/beverages in varying forms are described in reference 4.

^b Estimates are based on intake of food and beverages, including water, and do not include intake from supplements or medications.

^c Sum of dietary flavonoids in the 6 classes presented in tables 2a through 2f.

^d Excludes individuals missing race/ethnicity data and those whose race/ethnicity is not among the categories listed in the table. "Hispanic, all" includes "Mexican American." Demographic data used in this table are available at <http://wwwn.cdc.gov/nchs/nhanes/search/DataPage.aspx?Component=Demographics>.

^e To produce estimates that are representative of the U.S. population for the years of data collection, dietary day 1 sample weights (available from <http://wwwn.cdc.gov/nchs/nhanes/search/DataPage.aspx?Component=Dietary>) were used.

^f Estimates in this table are based on 1 day of data collected in What We Eat in America, the dietary intake interview component of the National Health and Nutrition Examination Survey, in 2007 to 2010. <http://www.ars.usda.gov/Services/docs.htm?docid=13793>. Breastfed children were excluded because the amount of breast milk consumed was not quantified.

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2. Bhagwat S, Haytowitz DB, Wasswa-Kintu S. 2015 (Dec). *USDA's Expanded Flavonoid Database for the Assessment of Dietary Intakes, Release 1.1: Documentation and User Guide* [documentation]. Beltsville, MD: U.S. Department of Agriculture, Nutrient Data Laboratory. https://www.ars.usda.gov/ARSUserFiles/80400525/Data/Flav/FDB-EXP_R01-1_Doc.pdf. Accessed June 14, 2016.
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Table 3a. Flavonoids^a from food and beverages^b – overall total^c and anthocyanidins

Mean daily intake (standard error) per individual, by family income in dollars^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income in dollars and age (years)	Sample size	Total flavonoids ^c		Anthocyanidins (continued on next page)									
				Total		Cyanidin		Delphinidin		Malvidin		Pelargonidin	
	<i>n</i>	----- <i>mg</i> -----											
\$0 - \$24,999:													
2 - 5.....	642	59.64	(4.32)	6.68	(0.76)	1.14	(0.10)	0.60	(0.11)	2.93	(0.41)	0.76	(0.19)
6 - 11.....	751	74.29	(7.85)	6.09	(0.67)	1.39	(0.30)	0.50	(0.07)	2.42	(0.32)	0.97	(0.24)
12 - 19.....	763	155.17	(18.73)	5.27	(0.85)	1.04	(0.15)	0.57*	(0.20)	1.90	(0.39)	0.98	(0.26)
20 and over...	3,714	208.08	(11.63)	8.73	(1.19)	2.09	(0.36)	1.56*	(0.78)	2.59	(0.27)	1.05	(0.11)
2 and over...	5,870	182.05	(8.75)	8.00	(0.88)	1.85	(0.27)	1.30*	(0.56)	2.52	(0.22)	1.02	(0.10)
\$25,000 - \$74,999:													
2 - 5.....	643	64.57	(5.30)	9.44	(1.20)	1.98	(0.32)	0.86	(0.22)	3.81	(0.61)	1.34	(0.37)
6 - 11.....	911	86.16	(11.62)	6.90	(0.83)	1.64	(0.22)	0.61	(0.10)	2.51	(0.42)	1.24	(0.26)
12 - 19.....	938	151.31	(31.23)	4.92	(0.52)	1.09	(0.17)	0.32	(0.04)	1.49	(0.22)	1.24	(0.33)
20 and over...	4,327	261.52	(18.26)	12.15	(1.32)	2.27	(0.22)	1.46	(0.31)	4.32	(0.65)	1.45	(0.26)
2 and over...	6,819	224.44	(15.85)	10.81	(1.06)	2.08	(0.17)	1.24	(0.24)	3.85	(0.53)	1.41	(0.24)
\$75,000 and higher:													
2 - 5.....	302	53.03	(4.04)	14.37	(1.75)	3.11	(0.67)	1.28	(0.29)	5.20	(0.93)	2.91*	(1.17)
6 - 11.....	474	79.65	(10.75)	15.10	(2.40)	2.04	(0.30)	1.60	(0.47)	6.26	(1.53)	2.72	(0.77)
12 - 19.....	526	157.22	(43.12)	6.88	(0.86)	1.32	(0.23)	0.55	(0.08)	2.44	(0.28)	1.70*	(0.59)
20 and over...	2,253	253.36	(14.68)	16.61	(1.30)	3.01	(0.19)	1.87	(0.23)	6.13	(0.60)	2.05	(0.23)
2 and over...	3,555	216.08	(11.94)	15.17	(1.06)	2.72	(0.16)	1.65	(0.21)	5.64	(0.53)	2.11	(0.28)
All individuals:													
2 - 5.....	1,693	59.64	(2.61)	10.05	(0.73)	2.04	(0.18)	0.92	(0.13)	3.98	(0.46)	1.59	(0.45)
6 - 11.....	2,275	79.75	(7.86)	9.33	(1.03)	1.70	(0.14)	0.88	(0.17)	3.66	(0.62)	1.75	(0.32)
12 - 19.....	2,421	153.40	(19.27)	5.80	(0.49)	1.18	(0.12)	0.49	(0.07)	2.03	(0.19)	1.26	(0.24)
20 and over...	11,182	243.28	(11.08)	12.61	(0.85)	2.50	(0.15)	1.59	(0.26)	4.37	(0.39)	1.59	(0.16)
2 and over...	17,571	209.12	(9.42)	11.42	(0.71)	2.26	(0.12)	1.37	(0.20)	4.02	(0.35)	1.56	(0.18)

*, a-f Notes are on page 29.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>. SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by family income in dollars and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 3a. Flavonoids^a from food and beverages^b – overall total^c and anthocyanidins – continued

Mean daily intake (standard error) per individual, by family income in dollars^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income in dollars and age (years)	Anthocyanidins – continued			
	Peonidin		Petunidin	
	----- mg -----			
\$0 - \$24,999:				
2 - 5.....	0.83*	(0.35)	0.43	(0.08)
6 - 11.....	0.42	(0.05)	0.39	(0.07)
12 - 19.....	0.43*	(0.14)	0.35*	(0.12)
20 and over...	0.89	(0.22)	0.55	(0.09)
2 and over...	0.79	(0.16)	0.51	(0.07)
\$25,000 - \$74,999:				
2 - 5.....	0.76	(0.19)	0.70	(0.19)
6 - 11.....	0.47	(0.07)	0.44	(0.07)
12 - 19.....	0.54*	(0.24)	0.23	(0.03)
20 and over...	1.55	(0.26)	1.09	(0.26)
2 and over...	1.31	(0.20)	0.92	(0.20)
\$75,000 and higher:				
2 - 5.....	0.80	(0.14)	1.07	(0.25)
6 - 11.....	1.16	(0.29)	1.32*	(0.40)
12 - 19.....	0.44	(0.05)	0.43	(0.07)
20 and over...	2.19	(0.37)	1.37	(0.17)
2 and over...	1.81	(0.30)	1.24	(0.15)
All individuals:				
2 - 5.....	0.78	(0.13)	0.74	(0.10)
6 - 11.....	0.67	(0.11)	0.69	(0.14)
12 - 19.....	0.48	(0.09)	0.36	(0.05)
20 and over...	1.54	(0.18)	1.02	(0.14)
2 and over...	1.31	(0.15)	0.90	(0.12)

*, a-f Notes are on page 29.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>. SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by family income in dollars and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 3b. Flavonoids^a from food and beverages^b – flavan-3-ols

Mean daily intake (standard error) per individual, by family income in dollars^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income in dollars and age (years)	Flavan-3-ols (continued on next page)															
	Total	Catechins														
		Total	(-)-Epicatechin	(-)-Epicatechin 3-gallate	(-)-Epigallocatechin	(-)-Epigallocatechin 3-gallate	(+)-Catechin	(+)-Gallocatechin								
	----- mg -----															
\$0 - \$24,999:																
2 - 5.....	30.11	(3.68)	19.77	(1.44)	8.95	(0.47)	1.14	(0.25)	1.84	(0.36)	3.04	(0.63)	4.64	(0.21)	0.17	(0.04)
6 - 11.....	44.35	(7.75)	25.10	(3.13)	8.45	(0.50)	2.14	(0.50)	3.39	(0.75)	5.90	(1.36)	4.91	(0.28)	0.31	(0.07)
12 - 19.....	121.27	(18.21)	53.50	(7.30)	8.51	(0.72)	7.42	(1.21)	11.26	(1.81)	19.89	(3.22)	5.25	(0.44)	1.16	(0.19)
20 and over...	167.01	(11.59)	70.53	(4.36)	9.28	(0.34)	10.31	(0.76)	15.57	(1.13)	26.88	(1.96)	6.77	(0.18)	1.72	(0.12)
2 and over...	143.40	(8.69)	61.77	(3.25)	9.10	(0.29)	8.75	(0.57)	13.25	(0.84)	22.91	(1.44)	6.32	(0.17)	1.44	(0.09)
\$25,000 - \$74,999:																
2 - 5.....	35.65	(4.40)	22.91	(1.67)	9.85	(0.66)	1.37	(0.29)	2.22	(0.44)	3.77	(0.82)	5.51	(0.32)	0.19	(0.04)
6 - 11.....	60.43	(11.31)	30.05	(4.33)	7.73	(0.49)	3.30	(0.74)	5.06	(1.08)	8.65	(1.87)	4.81	(0.27)	0.51	(0.12)
12 - 19.....	119.37	(29.49)	52.87	(11.44)	8.81	(1.05)	7.33	(1.94)	11.06	(2.88)	19.39	(4.90)	5.15	(0.54)	1.13	(0.32)
20 and over...	213.44	(17.44)	89.60	(6.62)	10.92	(0.50)	13.21	(1.13)	20.04	(1.67)	35.01	(2.86)	8.30	(0.37)	2.13	(0.18)
2 and over...	180.96	(15.06)	77.09	(5.74)	10.38	(0.45)	11.11	(0.97)	16.86	(1.44)	29.44	(2.47)	7.53	(0.33)	1.78	(0.16)
\$75,000 and higher:																
2 - 5.....	19.63	(2.13)	17.32	(1.29)	9.25	(0.53)	0.34*	(0.11)	0.79	(0.18)	0.94*	(0.30)	5.94	(0.46)	0.05*	(0.02)
6 - 11.....	44.14	(9.39)	24.95	(3.54)	8.08	(0.50)	2.18	(0.60)	3.47	(0.89)	5.74	(1.51)	5.14	(0.27)	0.33	(0.10)
12 - 19.....	126.08*	(41.65)	54.68	(15.81)	8.47	(1.20)	7.69*	(2.74)	11.59*	(4.02)	20.23*	(6.80)	5.51	(0.72)	1.19*	(0.45)
20 and over...	197.75	(14.34)	84.92	(5.55)	11.55	(0.40)	12.10	(0.96)	18.42	(1.42)	31.74	(2.49)	9.11	(0.33)	1.99	(0.15)
2 and over...	166.37	(11.47)	72.49	(4.41)	10.76	(0.34)	10.09	(0.77)	15.37	(1.13)	26.47	(1.95)	8.16	(0.28)	1.64	(0.13)
All individuals:																
2 - 5.....	29.35	(2.25)	20.47	(0.89)	9.53	(0.37)	0.99	(0.15)	1.68	(0.23)	2.69	(0.40)	5.44	(0.22)	0.14	(0.02)
6 - 11.....	49.54	(7.49)	26.60	(2.86)	8.05	(0.36)	2.53	(0.48)	3.97	(0.71)	6.72	(1.20)	4.95	(0.18)	0.39	(0.08)
12 - 19.....	120.50	(18.51)	53.10	(7.24)	8.62	(0.65)	7.37	(1.22)	11.14	(1.80)	19.56	(3.11)	5.27	(0.36)	1.14	(0.20)
20 and over...	194.73	(10.64)	82.58	(4.07)	10.69	(0.32)	11.99	(0.69)	18.19	(1.02)	31.57	(1.78)	8.19	(0.25)	1.96	(0.11)
2 and over...	164.91	(8.94)	71.08	(3.42)	10.17	(0.30)	10.06	(0.57)	15.28	(0.85)	26.51	(1.47)	7.43	(0.23)	1.63	(0.09)

*, a-f Notes are on page 29.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>
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Table 3b. Flavonoids^a from food and beverages^b – flavan-3-ols – continued

Mean daily intake (standard error) per individual, by family income in dollars^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income in dollars and age (years)	Flavan-3-ols – continued									
	Theaflavin		Theaflavin-3,3'-digallate		Theaflavin-3'-gallate		Theaflavin-3-gallate		Thearubigins	
	----- mg -----									
\$0 - \$24,999:										
2 - 5.....	0.16	(0.04)	0.18	(0.04)	0.15	(0.04)	0.13	(0.03)	9.71	(2.18)
6 - 11.....	0.29	(0.07)	0.32	(0.08)	0.27	(0.07)	0.23	(0.06)	18.13	(4.38)
12 - 19.....	1.09	(0.18)	1.20	(0.20)	1.02	(0.17)	0.86	(0.14)	63.60	(10.25)
20 and over...	1.60	(0.12)	1.77	(0.14)	1.50	(0.12)	1.27	(0.10)	90.34	(6.78)
2 and over...	1.35	(0.09)	1.49	(0.10)	1.26	(0.09)	1.07	(0.08)	76.46	(5.09)
\$25,000 - \$74,999:										
2 - 5.....	0.19	(0.04)	0.21	(0.05)	0.17	(0.04)	0.16	(0.03)	12.02	(2.76)
6 - 11.....	0.50	(0.12)	0.55	(0.13)	0.47	(0.11)	0.40	(0.10)	28.47	(6.56)
12 - 19.....	1.10	(0.32)	1.22	(0.36)	1.03	(0.31)	0.88	(0.25)	62.28	(16.88)
20 and over...	1.99	(0.19)	2.20	(0.21)	1.86	(0.18)	1.59	(0.15)	116.20	(10.12)
2 and over...	1.67	(0.16)	1.85	(0.18)	1.56	(0.15)	1.34	(0.13)	97.45	(8.73)
\$75,000 and higher:										
2 - 5.....	0.03*	(0.02)	0.04*	(0.02)	0.03*	(0.02)	0.03*	(0.01)	2.19*	(0.92)
6 - 11.....	0.32*	(0.10)	0.35*	(0.11)	0.30*	(0.10)	0.25*	(0.08)	17.98*	(5.50)
12 - 19.....	1.17*	(0.46)	1.29*	(0.51)	1.09*	(0.44)	0.93*	(0.36)	66.92*	(24.09)
20 and over...	1.85	(0.15)	2.05	(0.17)	1.74	(0.14)	1.48	(0.12)	105.72	(8.24)
2 and over...	1.54	(0.12)	1.70	(0.14)	1.44	(0.12)	1.23	(0.10)	87.96	(6.61)
All individuals:										
2 - 5.....	0.13	(0.02)	0.15	(0.03)	0.12	(0.02)	0.11	(0.02)	8.36	(1.42)
6 - 11.....	0.37	(0.08)	0.41	(0.09)	0.35	(0.08)	0.30	(0.06)	21.51	(4.33)
12 - 19.....	1.10	(0.20)	1.21	(0.22)	1.03	(0.19)	0.87	(0.16)	63.18	(10.54)
20 and over...	1.83	(0.11)	2.02	(0.12)	1.71	(0.10)	1.46	(0.09)	105.14	(6.16)
2 and over...	1.53	(0.09)	1.69	(0.10)	1.43	(0.09)	1.22	(0.08)	87.97	(5.17)

*, a-f Notes are on page 29.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>. SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by family income in dollars and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 3c. Flavonoids^a from food and beverages^b – flavanones

Mean daily intake (standard error) per individual, by family income in dollars^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income in dollars and age (years)	Flavanones							
	Total		Eriodictyol		Hesperetin		Naringenin	
	----- mg -----							
\$0 - \$24,999:								
2 - 5.....	15.71	(1.59)	0.18	(0.03)	11.83	(1.26)	3.70	(0.44)
6 - 11.....	15.32	(1.45)	0.19	(0.03)	12.06	(1.21)	3.07	(0.33)
12 - 19.....	15.15	(2.44)	0.22	(0.03)	11.63	(1.91)	3.30	(0.56)
20 and over...	13.05	(0.91)	0.18	(0.02)	9.66	(0.74)	3.21	(0.24)
2 and over...	13.64	(0.78)	0.18	(0.01)	10.21	(0.62)	3.24	(0.21)
\$25,000 - \$74,999:								
2 - 5.....	11.65	(1.26)	0.13	(0.02)	9.19	(1.01)	2.33	(0.29)
6 - 11.....	10.29	(0.78)	0.15	(0.02)	8.11	(0.64)	2.03	(0.18)
12 - 19.....	14.10	(1.90)	0.31	(0.08)	10.98	(1.60)	2.81	(0.38)
20 and over...	12.89	(0.73)	0.22	(0.02)	9.46	(0.55)	3.20	(0.23)
2 and over...	12.73	(0.63)	0.22	(0.01)	9.50	(0.47)	3.02	(0.19)
\$75,000 and higher:								
2 - 5.....	10.80	(1.34)	0.11	(0.02)	8.51	(1.13)	2.18	(0.26)
6 - 11.....	10.90	(1.64)	0.13	(0.02)	8.52	(1.36)	2.25	(0.36)
12 - 19.....	9.73	(1.24)	0.19	(0.03)	7.60	(1.03)	1.94	(0.31)
20 and over...	14.28	(0.89)	0.20	(0.02)	10.10	(0.70)	3.99	(0.30)
2 and over...	13.25	(0.71)	0.19	(0.01)	9.57	(0.55)	3.49	(0.24)
All individuals:								
2 - 5.....	12.51	(0.93)	0.13	(0.01)	9.71	(0.78)	2.67	(0.18)
6 - 11.....	12.04	(0.77)	0.15	(0.01)	9.48	(0.64)	2.41	(0.17)
12 - 19.....	13.40	(1.13)	0.25	(0.03)	10.44	(0.93)	2.72	(0.25)
20 and over...	13.42	(0.51)	0.20	(0.01)	9.76	(0.39)	3.46	(0.16)
2 and over...	13.25	(0.46)	0.20	(0.01)	9.81	(0.35)	3.25	(0.14)

^{a-f} Notes are on page 29.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>.

SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by family income in dollars and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 3d. Flavonoids^a from food and beverages^b – flavones

Mean daily intake (standard error) per individual, by family income in dollars^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income in dollars and age (years)	Flavones					
	Total		Apigenin		Luteolin	
	----- mg -----					
\$0 - \$24,999:						
2 - 5.....	0.28	(0.03)	0.04	(#)	0.24	(0.03)
6 - 11.....	0.31	(0.03)	0.06	(0.01)	0.26	(0.03)
12 - 19.....	0.53	(0.06)	0.11	(0.02)	0.42	(0.06)
20 and over...	0.74	(0.04)	0.17	(0.01)	0.57	(0.04)
2 and over...	0.65	(0.04)	0.15	(0.01)	0.51	(0.03)
\$25,000 - \$74,999:						
2 - 5.....	0.32	(0.03)	0.03	(#)	0.28	(0.03)
6 - 11.....	0.33	(0.04)	0.05	(0.01)	0.28	(0.03)
12 - 19.....	0.47	(0.06)	0.11	(0.02)	0.36	(0.04)
20 and over...	0.87	(0.05)	0.22	(0.01)	0.65	(0.04)
2 and over...	0.75	(0.04)	0.19	(0.01)	0.57	(0.04)
\$75,000 and higher:						
2 - 5.....	0.48	(0.08)	0.07*	(0.04)	0.41	(0.06)
6 - 11.....	0.44	(0.04)	0.06	(0.01)	0.38	(0.04)
12 - 19.....	0.70	(0.09)	0.12	(0.01)	0.58	(0.10)
20 and over...	1.15	(0.11)	0.33	(0.09)	0.82	(0.04)
2 and over...	1.00	(0.08)	0.27	(0.07)	0.73	(0.03)
All individuals:						
2 - 5.....	0.35	(0.03)	0.05	(0.01)	0.31	(0.03)
6 - 11.....	0.36	(0.02)	0.05	(0.01)	0.31	(0.02)
12 - 19.....	0.59	(0.05)	0.11	(0.01)	0.48	(0.05)
20 and over...	0.92	(0.05)	0.24	(0.03)	0.68	(0.03)
2 and over...	0.81	(0.04)	0.20	(0.02)	0.61	(0.03)

*, #, a-f Notes are on page 29.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>. SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by family income in dollars and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 3e. Flavonoids^a from food and beverages^b – flavonols

Mean daily intake (standard error) per individual, by family income in dollars^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income in dollars and age (years)	Flavonols									
	Total		Isorhamnetin		Kaempferol		Myricetin		Quercetin	
----- mg -----										
\$0 - \$24,999:										
2 - 5.....	6.56	(0.32)	0.24	(0.03)	0.96	(0.07)	0.34	(0.03)	5.01	(0.25)
6 - 11.....	7.96	(0.41)	0.33	(0.02)	1.24	(0.10)	0.45	(0.05)	5.94	(0.28)
12 - 19.....	12.48	(0.92)	0.46	(0.04)	2.84	(0.28)	0.92	(0.10)	8.27	(0.58)
20 and over...	17.28	(0.52)	0.75	(0.03)	4.49	(0.20)	1.35	(0.07)	10.69	(0.31)
2 and over...	15.32	(0.40)	0.65	(0.02)	3.82	(0.15)	1.17	(0.05)	9.68	(0.25)
\$25,000 - \$74,999:										
2 - 5.....	6.87	(0.40)	0.22	(0.02)	1.11	(0.10)	0.38	(0.05)	5.15	(0.27)
6 - 11.....	7.74	(0.52)	0.27	(0.02)	1.48	(0.14)	0.49	(0.06)	5.50	(0.33)
12 - 19.....	11.91	(1.54)	0.45	(0.05)	2.50	(0.40)	0.88	(0.15)	8.06	(0.98)
20 and over...	20.73	(0.85)	0.92	(0.05)	5.26	(0.26)	1.72	(0.10)	12.83	(0.50)
2 and over...	17.96	(0.76)	0.78	(0.04)	4.43	(0.22)	1.45	(0.09)	11.30	(0.45)
\$75,000 and higher:										
2 - 5.....	5.99	(0.47)	0.21	(0.04)	0.86	(0.09)	0.25	(0.03)	4.67	(0.37)
6 - 11.....	7.80	(0.60)	0.29	(0.04)	1.31	(0.13)	0.49	(0.06)	5.72	(0.42)
12 - 19.....	12.63	(1.56)	0.54	(0.06)	2.76	(0.49)	0.91	(0.20)	8.42	(0.88)
20 and over...	21.03	(0.52)	1.04	(0.05)	5.16	(0.19)	1.66	(0.08)	13.17	(0.29)
2 and over...	18.07	(0.50)	0.87	(0.04)	4.31	(0.16)	1.39	(0.06)	11.50	(0.28)
All individuals:										
2 - 5.....	6.53	(0.22)	0.22	(0.02)	0.99	(0.05)	0.33	(0.02)	4.99	(0.16)
6 - 11.....	7.82	(0.37)	0.29	(0.01)	1.35	(0.09)	0.47	(0.04)	5.71	(0.24)
12 - 19.....	12.39	(0.86)	0.50	(0.04)	2.66	(0.24)	0.90	(0.10)	8.33	(0.53)
20 and over...	19.85	(0.54)	0.91	(0.03)	5.00	(0.16)	1.59	(0.06)	12.35	(0.32)
2 and over...	17.25	(0.48)	0.77	(0.02)	4.21	(0.14)	1.35	(0.05)	10.92	(0.29)

^{a-f} Notes are on page 29.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>. SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by family income in dollars and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 3f. Flavonoids^a from food and beverages^b – isoflavones

Mean daily intake (standard error) per individual, by family income in dollars^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income in dollars and age (years)	Isoflavones							
	Total		Daidzein		Genistein		Glycitein	
	----- mg -----							
\$0 - \$24,999:								
2 - 5.....	0.30	(0.07)	0.12	(0.03)	0.16	(0.04)	0.02	(#)
6 - 11.....	0.25	(0.05)	0.10	(0.02)	0.13	(0.02)	0.02	(#)
12 - 19.....	0.47*	(0.16)	0.20*	(0.08)	0.23	(0.06)	0.03*	(0.01)
20 and over...	1.28	(0.29)	0.48	(0.10)	0.70	(0.17)	0.10	(0.02)
2 and over...	1.04	(0.21)	0.40	(0.07)	0.56	(0.12)	0.08	(0.02)
\$25,000 - \$74,999:								
2 - 5.....	0.65	(0.16)	0.27	(0.07)	0.34	(0.08)	0.04	(0.01)
6 - 11.....	0.46*	(0.16)	0.19*	(0.07)	0.25*	(0.08)	0.02	(0.01)
12 - 19.....	0.54	(0.11)	0.21	(0.05)	0.29	(0.06)	0.04	(0.01)
20 and over...	1.44	(0.20)	0.56	(0.07)	0.78	(0.11)	0.10	(0.02)
2 and over...	1.22	(0.15)	0.47	(0.06)	0.66	(0.08)	0.09	(0.01)
\$75,000 and higher:								
2 - 5.....	1.75	(0.39)	0.74	(0.17)	0.93	(0.20)	0.09	(0.02)
6 - 11.....	1.27*	(0.50)	0.56*	(0.22)	0.64*	(0.25)	0.07*	(0.02)
12 - 19.....	1.20*	(0.37)	0.45*	(0.14)	0.66*	(0.21)	0.09*	(0.03)
20 and over...	2.53	(0.41)	0.95	(0.15)	1.38	(0.23)	0.20	(0.03)
2 and over...	2.22	(0.34)	0.84	(0.13)	1.21	(0.19)	0.17	(0.03)
All individuals:								
2 - 5.....	0.85	(0.13)	0.36	(0.06)	0.45	(0.07)	0.04	(0.01)
6 - 11.....	0.65	(0.17)	0.28	(0.07)	0.33	(0.08)	0.03	(0.01)
12 - 19.....	0.71	(0.15)	0.28	(0.06)	0.38	(0.08)	0.05	(0.01)
20 and over...	1.74	(0.17)	0.66	(0.06)	0.94	(0.10)	0.13	(0.01)
2 and over...	1.48	(0.14)	0.57	(0.05)	0.80	(0.08)	0.11	(0.01)

*, #, a-f Notes are on page 29.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>. SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by family income in dollars and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

NOTES

* Estimates flagged with an asterisk may be less statistically reliable than estimates that are not flagged. An estimated mean is flagged when either (a) the relative standard error is greater than 30 percent or (b) the sample size is less than 30 times the variance inflation factor (VIF), a broadly calculated average design effect. The VIF used in this table is 2.10.

Indicates a non-zero value too small to report.

^a Detailed information about the flavonoid data files used in creating these tables is provided in reference 1. These tables include 29 individual flavonoids categorized into 6 classes (anthocyanidins, flavan-3-ols, flavanones, flavones, flavonols, and isoflavones), as described in reference 2. The flavan-3-ol class includes derived tannins (theaflavins and thearubigins) but excludes condensed tannins (proanthocyanidins; see reference 3) because sufficient data are not yet available for the full range of survey foods/beverages. Also included with the flavan-3-ols is a subtotal for catechins, which is calculated as the sum of (-)-epicatechin, (-)-epicatechin 3-gallate, (-)-epigallocatechin, (-)-epigallocatechin 3-gallate, (+)-catechin, and (+)-gallocatechin. The anthocyanidins, flavanones, flavones, flavonols, and isoflavones included in the database are presented as their aglycone forms (without sugars); flavan-3-ols are presented as their actual forms (*personal communication, Dr. Xianli Wu, USDA Nutrient Data Laboratory, March 31, 2016*). Procedures for standardizing analytical values of flavonoids that are present in foods/beverages in varying forms are described in reference 4.

^b Estimates are based on intake of food and beverages, including water, and do not include intake from supplements or medications.

^c Sum of dietary flavonoids in the 6 classes presented in tables 3a through 3f.

^d Individuals with missing income data are included only in the "all individuals" category. Demographic data used in this table are available at <http://wwwn.cdc.gov/nchs/nhanes/search/DataPage.aspx?Component=Demographics>.

^e To produce estimates that are representative of the U.S. population for the years of data collection, dietary day 1 sample weights (available from <http://wwwn.cdc.gov/nchs/nhanes/search/DataPage.aspx?Component=Dietary>) were used.

^f Estimates in this table are based on 1 day of data collected in What We Eat in America, the dietary intake interview component of the National Health and Nutrition Examination Survey, in 2007 to 2010. <http://www.ars.usda.gov/Services/docs.htm?docid=13793>. Breastfed children were excluded because the amount of breast milk consumed was not quantified.

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Table 4a. Flavonoids^a from food and beverages^b – overall total^c and anthocyanidins

Mean daily intake (standard error) per individual, by family income as % of Federal poverty threshold^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income as % of Federal poverty threshold and age (years)	Sample size	Total flavonoids ^c		Anthocyanidins (continued on next page)									
				Total	Cyanidin	Delphinidin	Malvidin	Pelargonidin					
	<i>n</i>	----- <i>mg</i> -----											
Under 131% poverty:													
2 - 5.....	817	59.53	(4.03)	6.78	(0.78)	1.22	(0.13)	0.58	(0.09)	2.91	(0.39)	0.90	(0.20)
6 - 11.....	964	75.65	(8.71)	5.79	(0.49)	1.39	(0.26)	0.48	(0.05)	2.36	(0.25)	0.78	(0.13)
12 - 19.....	953	146.60	(16.49)	5.68	(0.90)	1.21	(0.20)	0.53*	(0.17)	1.90	(0.35)	1.02	(0.27)
20 and over...	3,261	214.24	(13.39)	8.58	(1.39)	2.08	(0.44)	1.71*	(0.97)	2.44	(0.25)	0.97	(0.10)
2 and over...	5,995	176.07	(9.16)	7.69	(0.92)	1.80	(0.29)	1.31*	(0.62)	2.39	(0.19)	0.95	(0.10)
131-350% poverty:													
2 - 5.....	500	64.60	(5.77)	10.85	(1.24)	2.25	(0.34)	0.98	(0.22)	4.16	(0.65)	1.82*	(0.83)
6 - 11.....	746	86.44	(12.00)	7.52	(1.02)	1.61	(0.29)	0.68	(0.13)	2.91	(0.54)	1.32	(0.32)
12 - 19.....	775	188.50	(50.63)	4.40	(0.51)	0.90	(0.15)	0.32	(0.06)	1.47	(0.23)	1.16*	(0.36)
20 and over...	3,888	235.77	(17.90)	10.94	(1.51)	2.01	(0.17)	1.30	(0.35)	3.88	(0.71)	1.34	(0.25)
2 and over...	5,909	207.91	(15.79)	9.95	(1.18)	1.87	(0.13)	1.12	(0.27)	3.56	(0.58)	1.35	(0.26)
Over 350% poverty:													
2 - 5.....	247	53.56	(4.42)	13.74	(1.84)	3.01	(0.73)	1.27	(0.32)	5.16	(1.00)	2.44*	(0.88)
6 - 11.....	405	79.92	(12.15)	15.36	(2.54)	2.14	(0.25)	1.65	(0.49)	6.18	(1.54)	2.84	(0.71)
12 - 19.....	471	130.60	(16.68)	7.04	(0.85)	1.35	(0.24)	0.55	(0.08)	2.45	(0.29)	1.82*	(0.56)
20 and over...	3,014	268.11	(16.39)	16.22	(1.02)	3.02	(0.23)	1.85	(0.18)	5.93	(0.53)	2.00	(0.19)
2 and over...	4,137	234.64	(13.43)	15.19	(0.95)	2.80	(0.19)	1.69	(0.18)	5.58	(0.50)	2.05	(0.23)
All individuals:													
2 - 5.....	1,693	59.64	(2.61)	10.05	(0.73)	2.04	(0.18)	0.92	(0.13)	3.98	(0.46)	1.59	(0.45)
6 - 11.....	2,275	79.75	(7.86)	9.33	(1.03)	1.70	(0.14)	0.88	(0.17)	3.66	(0.62)	1.75	(0.32)
12 - 19.....	2,421	153.40	(19.27)	5.80	(0.49)	1.18	(0.12)	0.49	(0.07)	2.03	(0.19)	1.26	(0.24)
20 and over...	11,182	243.28	(11.08)	12.61	(0.85)	2.50	(0.15)	1.59	(0.26)	4.37	(0.39)	1.59	(0.16)
2 and over...	17,571	209.12	(9.42)	11.42	(0.71)	2.26	(0.12)	1.37	(0.20)	4.02	(0.35)	1.56	(0.18)

*, a-f Notes are on page 39.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>.

SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by family income as % of Federal poverty threshold and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 4a. Flavonoids^a from food and beverages^b – overall total^c and anthocyanidins – continued

Mean daily intake (standard error) per individual, by family income as % of Federal poverty threshold^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income as % of Federal poverty threshold and age (years)	Anthocyanidins – continued			
	Peonidin		Petunidin	
	----- mg -----			
Under 131% poverty:				
2 - 5.....	0.75*	(0.28)	0.42	(0.07)
6 - 11.....	0.41	(0.04)	0.37	(0.05)
12 - 19.....	0.69*	(0.29)	0.33*	(0.11)
20 and over...	0.89	(0.25)	0.49	(0.10)
2 and over...	0.79	(0.17)	0.45	(0.07)
131-350% poverty:				
2 - 5.....	0.83	(0.21)	0.80	(0.20)
6 - 11.....	0.52	(0.09)	0.48	(0.10)
12 - 19.....	0.30	(0.03)	0.24	(0.04)
20 and over...	1.37	(0.29)	1.03	(0.30)
2 and over...	1.15	(0.22)	0.89	(0.23)
Over 350% poverty:				
2 - 5.....	0.80	(0.15)	1.06	(0.28)
6 - 11.....	1.18	(0.30)	1.36*	(0.43)
12 - 19.....	0.44	(0.05)	0.43	(0.07)
20 and over...	2.11	(0.30)	1.32	(0.14)
2 and over...	1.84	(0.26)	1.23	(0.14)
All individuals:				
2 - 5.....	0.78	(0.13)	0.74	(0.10)
6 - 11.....	0.67	(0.11)	0.69	(0.14)
12 - 19.....	0.48	(0.09)	0.36	(0.05)
20 and over...	1.54	(0.18)	1.02	(0.14)
2 and over...	1.31	(0.15)	0.90	(0.12)

*, a-f Notes are on page 39.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>.

SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by family income as % of Federal poverty threshold and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 4b. Flavonoids^a from food and beverages^b – flavan-3-ols

Mean daily intake (standard error) per individual, by family income as % of Federal poverty threshold^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income as % of Federal poverty threshold and age (years)	Flavan-3-ols (continued on next page)															
	Total	Catechins														
		Total	(-)-Epicatechin	(-)-Epicatechin 3-gallate	(-)-Epigallocatechin	(-)-Epigallocatechin 3-gallate	(+)-Catechin	(+)-Gallocatechin								
	----- mg -----															
Under 131% poverty:																
2 - 5.....	30.85	(3.50)	19.96	(1.36)	8.81	(0.43)	1.19	(0.23)	1.93	(0.34)	3.16	(0.60)	4.69	(0.18)	0.18	(0.04)
6 - 11.....	47.19	(8.51)	26.11	(3.41)	8.39	(0.54)	2.35	(0.55)	3.70	(0.83)	6.41	(1.44)	4.90	(0.28)	0.35	(0.09)
12 - 19.....	111.37	(15.27)	50.48	(6.33)	8.81	(0.78)	6.75	(1.00)	10.27	(1.51)	18.25	(2.71)	5.35	(0.47)	1.05	(0.16)
20 and over...	173.54	(13.37)	73.06	(4.96)	9.37	(0.38)	10.79	(0.87)	16.27	(1.29)	28.10	(2.21)	6.73	(0.19)	1.80	(0.14)
2 and over...	138.53	(9.16)	60.12	(3.38)	9.13	(0.32)	8.46	(0.59)	12.81	(0.87)	22.18	(1.48)	6.15	(0.17)	1.39	(0.10)
131-350% poverty:																
2 - 5.....	34.51	(4.98)	22.95	(1.94)	10.08	(0.71)	1.25	(0.31)	2.07	(0.47)	3.49	(0.91)	5.89	(0.34)	0.17	(0.04)
6 - 11.....	60.36	(11.98)	29.84	(4.50)	7.60	(0.54)	3.29	(0.79)	5.03	(1.16)	8.60	(2.01)	4.81	(0.28)	0.51	(0.13)
12 - 19.....	157.95*	(48.78)	66.64	(18.56)	9.24	(1.50)	9.91*	(3.19)	14.83*	(4.69)	25.56*	(7.98)	5.53	(0.81)	1.57*	(0.52)
20 and over...	189.84	(17.24)	80.04	(6.52)	10.09	(0.47)	11.68	(1.11)	17.73	(1.65)	30.96	(2.88)	7.68	(0.31)	1.88	(0.17)
2 and over...	166.23	(15.18)	70.96	(5.74)	9.79	(0.42)	10.16	(0.99)	15.42	(1.45)	26.86	(2.54)	7.11	(0.27)	1.63	(0.16)
Over 350% poverty:																
2 - 5.....	20.22	(2.68)	17.29	(1.55)	9.19	(0.63)	0.40*	(0.14)	0.86	(0.23)	1.11*	(0.39)	5.67	(0.46)	0.06*	(0.02)
6 - 11.....	43.79	(10.30)	24.81	(3.87)	8.07	(0.51)	2.16*	(0.66)	3.46	(0.98)	5.72	(1.65)	5.07	(0.26)	0.33*	(0.11)
12 - 19.....	99.93	(15.48)	44.92	(6.08)	7.83	(0.59)	5.95	(1.01)	9.05	(1.49)	16.09	(2.67)	5.11	(0.40)	0.89	(0.16)
20 and over...	213.16	(15.73)	90.75	(6.10)	11.84	(0.45)	13.11	(1.04)	19.93	(1.54)	34.45	(2.68)	9.28	(0.40)	2.14	(0.17)
2 and over...	184.05	(12.79)	79.31	(4.94)	11.11	(0.37)	11.24	(0.84)	17.10	(1.25)	29.57	(2.17)	8.47	(0.35)	1.83	(0.14)
All individuals:																
2 - 5.....	29.35	(2.25)	20.47	(0.89)	9.53	(0.37)	0.99	(0.15)	1.68	(0.23)	2.69	(0.40)	5.44	(0.22)	0.14	(0.02)
6 - 11.....	49.54	(7.49)	26.60	(2.86)	8.05	(0.36)	2.53	(0.48)	3.97	(0.71)	6.72	(1.20)	4.95	(0.18)	0.39	(0.08)
12 - 19.....	120.50	(18.51)	53.10	(7.24)	8.62	(0.65)	7.37	(1.22)	11.14	(1.80)	19.56	(3.11)	5.27	(0.36)	1.14	(0.20)
20 and over...	194.73	(10.64)	82.58	(4.07)	10.69	(0.32)	11.99	(0.69)	18.19	(1.02)	31.57	(1.78)	8.19	(0.25)	1.96	(0.11)
2 and over...	164.91	(8.94)	71.08	(3.42)	10.17	(0.30)	10.06	(0.57)	15.28	(0.85)	26.51	(1.47)	7.43	(0.23)	1.63	(0.09)

*, a-f Notes are on page 39.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>
 SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by family income as % of Federal poverty threshold and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 4b. Flavonoids^a from food and beverages^b – flavan-3-ols – continued

Mean daily intake (standard error) per individual, by family income as % of Federal poverty threshold^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income as % of Federal poverty threshold and age (years)	Flavan-3-ols – continued									
	Theaflavin		Theaflavin-3,3'-digallate		Theaflavin-3'-gallate		Theaflavin-3-gallate		Thearubigins	
	----- mg -----									
Under 131% poverty:										
2 - 5.....	0.18	(0.04)	0.19	(0.04)	0.16	(0.04)	0.14	(0.03)	10.23	(2.08)
6 - 11.....	0.33	(0.09)	0.36	(0.10)	0.31	(0.08)	0.26	(0.07)	19.82	(4.82)
12 - 19.....	0.97	(0.15)	1.07	(0.17)	0.91	(0.14)	0.77	(0.12)	57.18	(8.42)
20 and over...	1.67	(0.15)	1.84	(0.16)	1.57	(0.14)	1.33	(0.12)	94.06	(7.88)
2 and over...	1.29	(0.10)	1.43	(0.11)	1.22	(0.10)	1.03	(0.08)	73.44	(5.42)
131-350% poverty:										
2 - 5.....	0.17	(0.04)	0.19	(0.05)	0.15	(0.04)	0.14	(0.04)	10.92	(3.08)
6 - 11.....	0.50	(0.13)	0.55	(0.14)	0.47	(0.12)	0.40	(0.10)	28.60	(7.03)
12 - 19.....	1.56*	(0.53)	1.72*	(0.59)	1.47*	(0.50)	1.24*	(0.42)	85.32*	(28.21)
20 and over...	1.76	(0.18)	1.95	(0.20)	1.64	(0.17)	1.41	(0.14)	103.03	(10.06)
2 and over...	1.54	(0.16)	1.70	(0.18)	1.44	(0.15)	1.23	(0.13)	89.36	(8.84)
Over 350% poverty:										
2 - 5.....	0.04*	(0.02)	0.05*	(0.02)	0.04*	(0.02)	0.03*	(0.02)	2.77*	(1.17)
6 - 11.....	0.31*	(0.11)	0.34*	(0.13)	0.29*	(0.11)	0.25*	(0.09)	17.79*	(6.04)
12 - 19.....	0.86	(0.16)	0.95	(0.17)	0.79	(0.15)	0.69	(0.12)	51.71	(8.86)
20 and over...	2.00	(0.17)	2.21	(0.18)	1.87	(0.16)	1.60	(0.13)	114.73	(9.02)
2 and over...	1.71	(0.14)	1.89	(0.15)	1.60	(0.13)	1.36	(0.11)	98.18	(7.34)
All individuals:										
2 - 5.....	0.13	(0.02)	0.15	(0.03)	0.12	(0.02)	0.11	(0.02)	8.36	(1.42)
6 - 11.....	0.37	(0.08)	0.41	(0.09)	0.35	(0.08)	0.30	(0.06)	21.51	(4.33)
12 - 19.....	1.10	(0.20)	1.21	(0.22)	1.03	(0.19)	0.87	(0.16)	63.18	(10.54)
20 and over...	1.83	(0.11)	2.02	(0.12)	1.71	(0.10)	1.46	(0.09)	105.14	(6.16)
2 and over...	1.53	(0.09)	1.69	(0.10)	1.43	(0.09)	1.22	(0.08)	87.97	(5.17)

*, a-f Notes are on page 39.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>.

SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by family income as % of Federal poverty threshold and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 4c. Flavonoids^a from food and beverages^b – flavanones

Mean daily intake (standard error) per individual, by family income as % of Federal poverty threshold^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income as % of Federal poverty threshold and age (years)	Flavanones							
	Total		Eriodictyol		Hesperetin		Naringenin	
	----- mg -----							
Under 131% poverty:								
2 - 5.....	14.84	(1.44)	0.17	(0.02)	11.28	(1.15)	3.40	(0.37)
6 - 11.....	13.86	(1.22)	0.19	(0.02)	10.82	(1.00)	2.85	(0.31)
12 - 19.....	16.77	(2.53)	0.24	(0.03)	12.80	(1.96)	3.73	(0.64)
20 and over...	12.71	(0.78)	0.16	(0.01)	9.43	(0.65)	3.11	(0.21)
2 and over...	13.61	(0.74)	0.18	(0.01)	10.23	(0.58)	3.20	(0.20)
131-350% poverty:								
2 - 5.....	11.25	(1.44)	0.13	(0.02)	8.85	(1.14)	2.28	(0.34)
6 - 11.....	10.35	(0.91)	0.14	(0.02)	8.23	(0.74)	1.98	(0.19)
12 - 19.....	11.81	(1.59)	0.31	(0.08)	9.35	(1.37)	2.16	(0.27)
20 and over...	13.74	(0.92)	0.20	(0.02)	10.10	(0.73)	3.43	(0.26)
2 and over...	13.10	(0.76)	0.21	(0.02)	9.79	(0.60)	3.11	(0.21)
Over 350% poverty:								
2 - 5.....	11.25	(1.35)	0.11	(0.02)	8.92	(1.16)	2.23	(0.26)
6 - 11.....	11.09	(1.92)	0.12	(0.02)	8.72	(1.58)	2.25	(0.41)
12 - 19.....	9.89	(1.24)	0.19	(0.03)	7.69	(1.03)	2.02	(0.33)
20 and over...	13.45	(0.76)	0.22	(0.01)	9.56	(0.58)	3.67	(0.26)
2 and over...	12.88	(0.66)	0.21	(0.01)	9.30	(0.49)	3.37	(0.23)
All individuals:								
2 - 5.....	12.51	(0.93)	0.13	(0.01)	9.71	(0.78)	2.67	(0.18)
6 - 11.....	12.04	(0.77)	0.15	(0.01)	9.48	(0.64)	2.41	(0.17)
12 - 19.....	13.40	(1.13)	0.25	(0.03)	10.44	(0.93)	2.72	(0.25)
20 and over...	13.42	(0.51)	0.20	(0.01)	9.76	(0.39)	3.46	(0.16)
2 and over...	13.25	(0.46)	0.20	(0.01)	9.81	(0.35)	3.25	(0.14)

^{a-f} Notes are on page 39.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>.

SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by family income as % of Federal poverty threshold and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 4d. Flavonoids^a from food and beverages^b – flavones

Mean daily intake (standard error) per individual, by family income as % of Federal poverty threshold^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income as % of Federal poverty threshold and age (years)	Flavones					
	Total		Apigenin		Luteolin	
	----- mg -----					
Under 131% poverty:						
2 - 5.....	0.28	(0.03)	0.04	(#)	0.25	(0.03)
6 - 11.....	0.33	(0.04)	0.06	(0.01)	0.28	(0.04)
12 - 19.....	0.51	(0.05)	0.11	(0.01)	0.40	(0.05)
20 and over...	0.73	(0.04)	0.16	(0.01)	0.56	(0.03)
2 and over...	0.62	(0.03)	0.13	(0.01)	0.48	(0.03)
131-350% poverty:						
2 - 5.....	0.31	(0.04)	0.03	(#)	0.28	(0.04)
6 - 11.....	0.33	(0.03)	0.05	(0.01)	0.28	(0.03)
12 - 19.....	0.50	(0.06)	0.13	(0.02)	0.37	(0.04)
20 and over...	0.78	(0.04)	0.21	(0.01)	0.57	(0.03)
2 and over...	0.68	(0.03)	0.17	(0.01)	0.51	(0.03)
Over 350% poverty:						
2 - 5.....	0.50	(0.08)	0.08*	(0.04)	0.42	(0.06)
6 - 11.....	0.42	(0.04)	0.05	(0.01)	0.37	(0.04)
12 - 19.....	0.69	(0.09)	0.11	(0.01)	0.58	(0.10)
20 and over...	1.15	(0.09)	0.32	(0.07)	0.83	(0.05)
2 and over...	1.03	(0.08)	0.27	(0.05)	0.76	(0.04)
All individuals:						
2 - 5.....	0.35	(0.03)	0.05	(0.01)	0.31	(0.03)
6 - 11.....	0.36	(0.02)	0.05	(0.01)	0.31	(0.02)
12 - 19.....	0.59	(0.05)	0.11	(0.01)	0.48	(0.05)
20 and over...	0.92	(0.05)	0.24	(0.03)	0.68	(0.03)
2 and over...	0.81	(0.04)	0.20	(0.02)	0.61	(0.03)

*, #, a-f Notes are on page 39.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>.

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Table 4e. Flavonoids^a from food and beverages^b – flavonols

Mean daily intake (standard error) per individual, by family income as % of Federal poverty threshold^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income as % of Federal poverty threshold and age (years)	Flavonols									
	Total		Isorhamnetin		Kaempferol		Myricetin		Quercetin	
----- mg -----										
Under 131% poverty:										
2 - 5.....	6.43	(0.25)	0.24	(0.03)	0.98	(0.06)	0.34	(0.03)	4.88	(0.20)
6 - 11.....	8.05	(0.45)	0.32	(0.02)	1.34	(0.11)	0.46	(0.05)	5.93	(0.31)
12 - 19.....	11.94	(0.84)	0.43	(0.03)	2.64	(0.27)	0.87	(0.09)	8.00	(0.53)
20 and over...	17.54	(0.52)	0.78	(0.03)	4.58	(0.21)	1.37	(0.07)	10.81	(0.30)
2 and over...	14.74	(0.38)	0.63	(0.02)	3.64	(0.14)	1.11	(0.05)	9.36	(0.23)
131-350% poverty:										
2 - 5.....	6.99	(0.44)	0.23	(0.02)	1.08	(0.11)	0.39	(0.06)	5.29	(0.31)
6 - 11.....	7.58	(0.51)	0.25	(0.03)	1.40	(0.15)	0.49	(0.07)	5.43	(0.32)
12 - 19.....	13.11	(2.07)	0.47	(0.05)	2.99	(0.59)	1.04	(0.25)	8.62	(1.25)
20 and over...	18.94	(0.75)	0.83	(0.05)	4.80	(0.22)	1.55	(0.10)	11.76	(0.45)
2 and over...	16.65	(0.65)	0.71	(0.04)	4.10	(0.19)	1.34	(0.09)	10.51	(0.38)
Over 350% poverty:										
2 - 5.....	5.94	(0.41)	0.21	(0.03)	0.88	(0.08)	0.25	(0.03)	4.60	(0.33)
6 - 11.....	7.89	(0.67)	0.30	(0.04)	1.35	(0.14)	0.49	(0.07)	5.74	(0.47)
12 - 19.....	11.85	(0.73)	0.53	(0.07)	2.47	(0.21)	0.81	(0.10)	8.04	(0.45)
20 and over...	21.90	(0.73)	1.05	(0.05)	5.44	(0.23)	1.76	(0.09)	13.65	(0.42)
2 and over...	19.42	(0.64)	0.92	(0.05)	4.72	(0.20)	1.53	(0.07)	12.26	(0.37)
All individuals:										
2 - 5.....	6.53	(0.22)	0.22	(0.02)	0.99	(0.05)	0.33	(0.02)	4.99	(0.16)
6 - 11.....	7.82	(0.37)	0.29	(0.01)	1.35	(0.09)	0.47	(0.04)	5.71	(0.24)
12 - 19.....	12.39	(0.86)	0.50	(0.04)	2.66	(0.24)	0.90	(0.10)	8.33	(0.53)
20 and over...	19.85	(0.54)	0.91	(0.03)	5.00	(0.16)	1.59	(0.06)	12.35	(0.32)
2 and over...	17.25	(0.48)	0.77	(0.02)	4.21	(0.14)	1.35	(0.05)	10.92	(0.29)

^{a-f} Notes are on page 39.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>.

SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by family income as % of Federal poverty threshold and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

Table 4f. Flavonoids^a from food and beverages^b – isoflavones

Mean daily intake (standard error) per individual, by family income as % of Federal poverty threshold^d and age, in the United States,^e What We Eat in America, NHANES 2007-2010^f

Family income as % of Federal poverty threshold and age (years)	Isoflavones							
	Total		Daidzein		Genistein		Glycitein	
	----- mg -----							
Under 131% poverty:								
2 - 5.....	0.33	(0.09)	0.14	(0.04)	0.18	(0.05)	0.02	(#)
6 - 11.....	0.43*	(0.18)	0.18*	(0.08)	0.23*	(0.09)	0.02	(0.01)
12 - 19.....	0.33	(0.06)	0.13	(0.02)	0.18	(0.03)	0.02	(#)
20 and over...	1.15	(0.33)	0.43	(0.11)	0.63*	(0.19)	0.09*	(0.03)
2 and over...	0.88	(0.21)	0.34	(0.07)	0.48	(0.12)	0.07	(0.02)
131-350% poverty:								
2 - 5.....	0.68*	(0.21)	0.28*	(0.09)	0.36*	(0.11)	0.04*	(0.01)
6 - 11.....	0.30	(0.06)	0.11	(0.02)	0.16	(0.03)	0.02	(#)
12 - 19.....	0.72	(0.17)	0.30	(0.08)	0.37	(0.08)	0.05	(0.01)
20 and over...	1.53	(0.23)	0.58	(0.08)	0.84	(0.13)	0.11	(0.02)
2 and over...	1.29	(0.18)	0.49	(0.06)	0.70	(0.10)	0.09	(0.01)
Over 350% poverty:								
2 - 5.....	1.91	(0.43)	0.81	(0.18)	1.01	(0.22)	0.09	(0.02)
6 - 11.....	1.38*	(0.53)	0.61*	(0.24)	0.70*	(0.27)	0.07*	(0.03)
12 - 19.....	1.20*	(0.39)	0.45*	(0.15)	0.65*	(0.22)	0.09*	(0.03)
20 and over...	2.23	(0.31)	0.85	(0.11)	1.21	(0.18)	0.17	(0.03)
2 and over...	2.07	(0.28)	0.79	(0.10)	1.12	(0.15)	0.16	(0.02)
All individuals:								
2 - 5.....	0.85	(0.13)	0.36	(0.06)	0.45	(0.07)	0.04	(0.01)
6 - 11.....	0.65	(0.17)	0.28	(0.07)	0.33	(0.08)	0.03	(0.01)
12 - 19.....	0.71	(0.15)	0.28	(0.06)	0.38	(0.08)	0.05	(0.01)
20 and over...	1.74	(0.17)	0.66	(0.06)	0.94	(0.10)	0.13	(0.01)
2 and over...	1.48	(0.14)	0.57	(0.05)	0.80	(0.08)	0.11	(0.01)

*, #, a-f Notes are on page 39.

DATA SOURCE: Flavonoid Intake Data Files 2007-2010, individuals age 2 years and over (excluding breastfed children), day 1, weighted. <http://www.ars.usda.gov/Services/docs.htm?docid=25102>. SUGGESTED CITATION: U.S. Department of Agriculture, Agricultural Research Service. 2016. Flavonoids from food and beverages: Mean intake (standard error) per individual, by family income as % of Federal poverty threshold and age, in the United States, What We Eat in America, NHANES 2007-2010. <http://www.ars.usda.gov/nea/bhnrc/fsrg>.

NOTES

* Estimates flagged with an asterisk may be less statistically reliable than estimates that are not flagged. An estimated mean is flagged when either (a) the relative standard error is greater than 30 percent or (b) the sample size is less than 30 times the variance inflation factor (VIF), a broadly calculated average design effect. The VIF used in this table is 2.10.

Indicates a non-zero value too small to report.

^a Detailed information about the flavonoid data files used in creating these tables is provided in reference 1. These tables include 29 individual flavonoids categorized into 6 classes (anthocyanidins, flavan-3-ols, flavanones, flavones, flavonols, and isoflavones), as described in reference 2. The flavan-3-ol class includes derived tannins (theaflavins and thearubigins) but excludes condensed tannins (proanthocyanidins; see reference 3) because sufficient data are not yet available for the full range of survey foods/beverages. Also included with the flavan-3-ols is a subtotal for catechins, which is calculated as the sum of (-)-epicatechin, (-)-epicatechin 3-gallate, (-)-epigallocatechin, (-)-epigallocatechin 3-gallate, (+)-catechin, and (+)-gallocatechin. The anthocyanidins, flavanones, flavones, flavonols, and isoflavones included in the database are presented as their aglycone forms (without sugars); flavan-3-ols are presented as their actual forms (*personal communication, Dr. Xianli Wu, USDA Nutrient Data Laboratory, March 31, 2016*). Procedures for standardizing analytical values of flavonoids that are present in foods/beverages in varying forms are described in reference 4.

^b Estimates are based on intake of food and beverages, including water, and do not include intake from supplements or medications.

^c Sum of dietary flavonoids in the 6 classes presented in tables 4a through 4f.

^d Percent of poverty level is based on family income, family size and composition using the U.S. Census Bureau's annual poverty thresholds that are documented in reference 5. The lowest poverty threshold category is related to Federal nutrition assistance programs (<http://www.fns.usda.gov>). Individuals with missing income data are included only in the "all individuals" category. Demographic data used in this table are available at <http://www.nchs.gov/nhanes/search/DataPage.aspx?Component=Demographics>.

^e To produce estimates that are representative of the U.S. population for the years of data collection, dietary day 1 sample weights (available from <http://www.nchs.gov/nhanes/search/DataPage.aspx?Component=Dietary>) were used.

^f Estimates in this table are based on 1 day of data collected in What We Eat in America, the dietary intake interview component of the National Health and Nutrition Examination Survey, in 2007 to 2010. <http://www.ars.usda.gov/Services/docs.htm?docid=13793>. Breastfed children were excluded because the amount of breast milk consumed was not quantified.

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