

Table 1. Flavonoid Intakes from Food and Beverages: Mean Amounts Consumed per Individual, by Gender and Age, in the United States, 2017-2018

Gender and age (years)	Sample size	Total flavonoids	Anthocyanidins (continued on next page)							
			Total	Cyanidin	Delphinidin	Malvidin	Pelargonidin	mg (standard error)		
<i>n</i>									<i>mg (standard error)</i>	
Males:										
2 - 5.....	260	78.66 (16.11)	9.41 (1.39)	1.81 (0.40)	0.84 (0.19)	3.22 (0.64)	1.88 (0.34)			
6 - 11.....	383	74.98 (8.88)	12.24 (3.57)	2.25 (0.31)	1.33* (0.52)	3.38* (1.04)	1.20 (0.29)			
12 - 19.....	531	87.76 (9.11)	6.92 (1.21)	1.13 (0.26)	0.72 (0.14)	2.93 (0.66)	0.69 (0.14)			
20 - 29.....	335	178.11 (43.73)	8.61* (2.69)	1.93* (0.69)	1.23* (0.50)	2.31* (1.03)	1.30* (0.55)			
30 - 39.....	329	197.13 (35.05)	10.93* (3.59)	1.99* (0.79)	0.91* (0.39)	3.62* (1.66)	1.08* (0.37)			
40 - 49.....	340	231.74 (37.32)	17.50* (5.56)	3.55* (1.87)	2.06* (0.90)	5.66* (2.05)	1.59* (0.69)			
50 - 59.....	375	255.89 (37.43)	15.59 (2.97)	2.32 (0.58)	2.95* (0.94)	5.29 (1.36)	1.65* (0.50)			
60 - 69.....	500	209.14 (28.17)	11.03 (2.44)	1.80* (0.56)	1.10 (0.30)	4.69 (1.34)	0.63 (0.14)			
70 and over.....	428	207.22 (27.05)	21.22 (3.51)	2.44 (0.37)	2.63 (0.64)	8.49 (1.22)	1.44* (0.45)			
2 - 19.....	1,174	81.61 (8.92)	9.21 (1.51)	1.64 (0.23)	0.95 (0.19)	3.14 (0.50)	1.11 (0.13)			
20 and over...	2,307	213.39 (11.66)	13.81 (1.73)	2.33 (0.44)	1.80 (0.34)	4.81 (0.55)	1.30 (0.26)			
2 and over...	3,481	180.50 (9.51)	12.66 (1.42)	2.16 (0.36)	1.59 (0.26)	4.39 (0.45)	1.25 (0.21)			
Females:										
2 - 5.....	280	63.72 (5.47)	16.30 (2.75)	3.18* (1.01)	1.48 (0.39)	5.44 (1.05)	3.33 (0.48)			
6 - 11.....	412	71.45 (8.13)	15.14 (3.38)	1.74 (0.27)	1.69* (0.52)	4.16 (1.02)	4.36* (1.83)			
12 - 19.....	514	90.21 (9.75)	7.72 (1.32)	1.27 (0.14)	0.98 (0.21)	2.72 (0.66)	1.53 (0.40)			
20 - 29.....	359	165.88 (28.14)	15.77 (3.59)	3.17* (1.74)	1.44 (0.40)	5.48* (1.78)	1.71 (0.49)			
30 - 39.....	407	151.39 (16.20)	13.53 (1.92)	2.13 (0.44)	1.77 (0.32)	4.78 (0.86)	1.33 (0.24)			
40 - 49.....	367	273.69 (69.68)	13.39 (2.00)	1.81 (0.53)	1.27 (0.32)	3.79 (0.67)	1.88* (0.70)			
50 - 59.....	419	199.29 (22.43)	16.54 (3.21)	2.89* (1.00)	2.03 (0.46)	6.29 (1.32)	1.74 (0.41)			
60 - 69.....	479	351.11 (74.41)	15.58 (2.98)	2.95* (0.96)	1.71 (0.38)	5.04 (1.02)	2.59 (0.71)			
70 and over.....	404	208.62 (30.29)	24.07 (4.14)	3.47 (0.71)	3.06 (0.73)	7.58 (1.88)	2.71 (0.64)			
2 - 19.....	1,206	78.18 (5.51)	12.07 (1.97)	1.84 (0.26)	1.33 (0.30)	3.79 (0.71)	2.87 (0.70)			
20 and over...	2,435	221.22 (17.89)	16.36 (1.35)	2.74 (0.44)	1.87 (0.17)	5.50 (0.50)	1.96 (0.27)			
2 and over...	3,641	188.83 (13.80)	15.39 (1.26)	2.54 (0.36)	1.75 (0.16)	5.11 (0.46)	2.17 (0.25)			
Males and females:										
2 - 19.....	2,380	79.94 (5.69)	10.60 (1.47)	1.74 (0.22)	1.13 (0.20)	3.46 (0.45)	1.97 (0.39)			
20 and over...	4,742	217.46 (12.52)	15.14 (1.28)	2.54 (0.34)	1.84 (0.21)	5.17 (0.45)	1.64 (0.20)			
2 and over...	7,122	184.77 (10.15)	14.06 (1.18)	2.35 (0.28)	1.67 (0.18)	4.76 (0.39)	1.72 (0.18)			

DATA SOURCES: What We Eat in America, NHANES 2017-2018, individuals 2 years and over (excluding breast-fed children), day 1. Available: www.ars.usda.gov/nea/bhnrc/fsrg.Flavonoid Intake Data Files 2017-2018¹

Table 1. Flavonoid Intakes from Food and Beverages: Mean Amounts Consumed per Individual,
by Gender and Age, in the United States, 2017-2018 (*continued*)

Gender and age (years)	Anthocyanidins – continued			
	Peonidin	Petunidin		
----- mg (standard error) -----				
Males:				
2 - 5.....	1.03* (0.49)	0.64 (0.16)		
6 - 11.....	3.02* (1.87)	1.07* (0.46)		
12 - 19.....	0.89* (0.31)	0.56 (0.12)		
20 - 29.....	1.11* (0.68)	0.74* (0.36)		
30 - 39.....	2.60* (1.38)	0.73* (0.33)		
40 - 49.....	3.04* (1.43)	1.60* (0.72)		
50 - 59.....	1.90* (0.62)	1.47 (0.41)		
60 - 69.....	1.92* (0.71)	0.89* (0.27)		
70 and over.....	4.14* (1.42)	2.08 (0.57)		
2 - 19.....	1.63* (0.68)	0.75 (0.17)		
20 and over...	2.35 (0.39)	1.22 (0.19)		
2 and over...	2.17 (0.34)	1.10 (0.15)		
Females:				
2 - 5.....	1.70 (0.42)	1.17 (0.34)		
6 - 11.....	1.89* (0.58)	1.31* (0.46)		
12 - 19.....	0.58* (0.20)	0.64 (0.15)		
20 - 29.....	2.83* (0.90)	1.14 (0.32)		
30 - 39.....	2.20* (0.74)	1.32 (0.25)		
40 - 49.....	3.70* (1.68)	0.94* (0.28)		
50 - 59.....	2.18 (0.64)	1.41 (0.40)		
60 - 69.....	1.88 (0.46)	1.41 (0.32)		
70 and over.....	4.78* (1.62)	2.46 (0.68)		
2 - 19.....	1.26 (0.31)	0.98 (0.26)		
20 and over...	2.87 (0.48)	1.43 (0.15)		
2 and over...	2.50 (0.43)	1.33 (0.14)		
Males and females:				
2 - 19.....	1.45 (0.40)	0.86 (0.17)		
20 and over...	2.62 (0.27)	1.33 (0.14)		
2 and over...	2.34 (0.25)	1.22 (0.12)		

Table 1. Flavonoid Intakes from Food and Beverages: Mean Amounts Consumed per Individual,
by Gender and Age, in the United States, 2017-2018 (continued)

Gender and age (years)	Flavan-3-ols (continued on next page) Catechins													
	Total	Total		(-)-Epicatechin		(-)-Epicatechin 3-gallate		(-)-Epigallocatechin 3-gallate		(-)-Epigallocatechin 3-gallate		(+)-Catechin	(+)-Gallocatechin	
<i>mg (standard error)</i>														
Males:														
2 - 5.....	48.37	(13.43)	23.73	(3.71)	10.60	(1.01)	1.64*	(0.63)	2.51*	(0.87)	3.02*	(1.09)	5.64	(0.45)
6 - 11.....	40.35	(7.42)	20.59	(2.09)	9.88	(0.82)	1.20*	(0.37)	2.22	(0.62)	2.29	(0.66)	4.76	(0.29)
12 - 19.....	57.56	(7.41)	23.51	(3.15)	7.12	(0.45)	2.35	(0.45)	4.02	(0.73)	5.60	(1.44)	4.04	(0.31)
20 - 29.....	137.34	(40.31)	69.45*	(29.62)	8.59	(1.70)	9.59*	(4.27)	15.26*	(6.73)	27.95*	(15.87)	6.56	(0.94)
30 - 39.....	150.58	(33.56)	64.89	(15.63)	9.40	(1.15)	9.02	(2.46)	14.21	(3.70)	23.52*	(7.60)	7.16	(0.84)
40 - 49.....	177.48	(35.73)	95.17	(25.35)	12.20	(2.09)	12.78	(3.62)	20.56	(5.73)	38.47*	(13.13)	9.28	(1.19)
50 - 59.....	203.20	(36.95)	77.12	(10.96)	11.53	(1.30)	11.30	(2.02)	18.37	(2.86)	25.52	(4.43)	8.43	(0.72)
60 - 69.....	163.42	(26.18)	67.67	(15.47)	9.26	(1.19)	9.52	(2.22)	14.99	(3.58)	24.81*	(8.03)	7.52	(0.85)
70 and over.....	150.17	(24.39)	52.82	(7.59)	9.82	(0.68)	7.09	(1.25)	10.88	(1.90)	15.85	(3.43)	7.93	(0.68)
2 - 19.....	49.92	(6.26)	22.59	(2.33)	8.77	(0.51)	1.82	(0.34)	3.10	(0.55)	3.96	(0.91)	4.62	(0.27)
20 and over...	164.28	(11.06)	71.94	(9.23)	10.14	(0.61)	10.01	(1.26)	15.94	(2.06)	26.42	(5.04)	7.79	(0.35)
2 and over...	135.73	(8.60)	59.62	(6.84)	9.80	(0.49)	7.97	(0.94)	12.73	(1.52)	20.82	(3.72)	7.00	(0.30)
Females:														
2 - 5.....	28.43	(5.33)	19.61	(1.98)	10.33	(0.84)	0.66*	(0.25)	1.24	(0.34)	1.34*	(0.47)	5.93	(0.55)
6 - 11.....	34.36	(6.34)	18.28	(1.75)	7.58	(0.61)	1.23	(0.31)	2.21	(0.44)	2.44	(0.55)	4.59	(0.33)
12 - 19.....	59.53	(9.59)	29.48	(7.35)	7.15	(0.51)	3.22*	(1.08)	5.19*	(1.70)	9.35*	(3.99)	4.11	(0.33)
20 - 29.....	121.55	(27.24)	60.07	(12.45)	9.49	(0.90)	7.92	(2.04)	12.89	(3.11)	22.34	(6.33)	6.25	(0.51)
30 - 39.....	109.86	(15.27)	56.39	(10.26)	8.07	(0.70)	7.32	(1.47)	11.86	(2.38)	21.56	(5.41)	6.52	(0.40)
40 - 49.....	227.98	(68.25)	114.79*	(51.11)	12.99	(3.41)	16.55*	(7.16)	26.23*	(11.62)	48.22*	(26.78)	8.50	(1.80)
50 - 59.....	154.52	(19.58)	70.18	(11.61)	9.40	(0.95)	9.72	(1.70)	16.09	(2.77)	26.00	(5.64)	7.55	(0.79)
60 - 69.....	300.97	(72.37)	161.86*	(71.13)	15.81	(4.38)	23.49*	(9.60)	37.97*	(15.80)	71.00*	(38.56)	10.61	(2.30)
70 and over.....	154.18	(26.16)	63.36	(16.14)	9.69	(1.42)	8.77	(2.35)	14.16	(3.80)	22.13*	(7.73)	7.33	(0.92)
2 - 19.....	44.36	(5.31)	23.58	(3.47)	7.98	(0.44)	2.00	(0.51)	3.34	(0.79)	5.30*	(1.87)	4.66	(0.20)
20 and over...	174.69	(17.06)	86.01	(13.72)	10.77	(0.93)	12.02	(1.87)	19.44	(3.07)	34.39	(7.34)	7.72	(0.56)
2 and over...	145.17	(12.99)	71.87	(10.55)	10.14	(0.68)	9.75	(1.44)	15.79	(2.36)	27.80	(5.68)	7.03	(0.44)
Males and females:														
2 - 19.....	47.21	(4.17)	23.07	(1.86)	8.38	(0.35)	1.91	(0.27)	3.22	(0.42)	4.62	(0.92)	4.64	(0.20)
20 and over...	169.69	(11.95)	79.26	(7.01)	10.47	(0.43)	11.05	(1.06)	17.76	(1.65)	30.56	(3.63)	7.76	(0.31)
2 and over...	140.57	(9.44)	65.90	(5.41)	9.97	(0.32)	8.88	(0.82)	14.30	(1.28)	24.39	(2.81)	7.01	(0.27)

DATA SOURCES: What We Eat in America, NHANES 2017-2018, individuals 2 years and over (excluding breast-fed children), day 1. Available: www.ars.usda.gov/nea/bhnrc/fsrg.Flavonoid Intake Data Files 2017-2018¹

Table 1. Flavonoid Intakes from Food and Beverages: Mean Amounts Consumed per Individual,
by Gender and Age, in the United States, 2017-2018 (continued)

Gender and age (years)	Flavan-3-ols – continued				
	Theaflavin	Theaflavin-3,3'- digallate	Theaflavin-3'- gallate	Theaflavin-3- gallate	Thearubigins
----- mg (standard error) -----					
Males:					
2 - 5.....	0.39* (0.16)	0.43* (0.18)	0.37* (0.15)	0.30* (0.13)	23.14* (9.41)
6 - 11.....	0.30* (0.09)	0.32* (0.10)	0.28* (0.09)	0.23* (0.07)	18.64 (5.28)
12 - 19.....	0.44 (0.09)	0.47 (0.10)	0.40 (0.08)	0.33 (0.07)	32.40 (5.87)
20 - 29.....	1.16* (0.39)	1.27* (0.43)	1.09* (0.37)	0.90* (0.31)	63.47* (20.08)
30 - 39.....	1.39 (0.39)	1.53 (0.43)	1.31 (0.37)	1.08 (0.31)	80.38 (20.90)
40 - 49.....	1.40 (0.27)	1.52 (0.30)	1.31 (0.26)	1.09 (0.21)	77.00 (14.89)
50 - 59.....	2.12 (0.54)	2.33 (0.60)	1.99 (0.52)	1.64 (0.43)	118.01 (26.94)
60 - 69.....	1.48 (0.29)	1.63 (0.32)	1.38 (0.28)	1.16 (0.22)	90.09 (16.31)
70 and over.....	1.45 (0.28)	1.61 (0.31)	1.32 (0.25)	1.18 (0.23)	91.79 (19.25)
2 - 19.....	0.38 (0.06)	0.42 (0.07)	0.35 (0.06)	0.29 (0.05)	25.89 (4.39)
20 and over...	1.51 (0.14)	1.65 (0.16)	1.41 (0.14)	1.18 (0.11)	86.59 (6.64)
2 and over...	1.23 (0.11)	1.34 (0.12)	1.14 (0.11)	0.96 (0.09)	71.44 (5.09)
Females:					
2 - 5.....	0.13* (0.06)	0.15* (0.07)	0.12* (0.06)	0.10* (0.05)	8.32* (3.43)
6 - 11.....	0.27* (0.09)	0.30* (0.09)	0.25* (0.08)	0.21* (0.07)	15.05* (4.56)
12 - 19.....	0.39 (0.09)	0.42 (0.10)	0.36 (0.08)	0.29 (0.07)	28.60 (4.41)
20 - 29.....	1.02* (0.34)	1.11* (0.37)	0.95* (0.32)	0.78* (0.27)	57.62 (16.96)
30 - 39.....	0.85 (0.12)	0.92 (0.13)	0.79 (0.11)	0.65 (0.09)	50.27 (7.75)
40 - 49.....	1.94* (0.60)	2.12* (0.66)	1.82* (0.57)	1.49* (0.47)	105.82 (30.73)
50 - 59.....	1.40 (0.23)	1.54 (0.26)	1.31 (0.22)	1.09 (0.18)	79.00 (11.59)
60 - 69.....	2.43 (0.61)	2.65 (0.68)	2.26 (0.59)	1.88 (0.49)	129.88 (31.93)
70 and over.....	1.41 (0.24)	1.56 (0.26)	1.30 (0.22)	1.11 (0.19)	85.43 (12.11)
2 - 19.....	0.29 (0.06)	0.32 (0.06)	0.27 (0.05)	0.22 (0.04)	19.67 (3.16)
20 and over...	1.48 (0.21)	1.62 (0.23)	1.38 (0.20)	1.14 (0.16)	83.06 (10.26)
2 and over...	1.21 (0.16)	1.32 (0.18)	1.13 (0.16)	0.94 (0.13)	68.70 (8.00)
Males and females:					
2 - 19.....	0.34 (0.05)	0.37 (0.05)	0.31 (0.04)	0.26 (0.04)	22.86 (3.05)
20 and over...	1.49 (0.13)	1.63 (0.15)	1.39 (0.13)	1.16 (0.11)	84.75 (6.48)
2 and over...	1.22 (0.11)	1.33 (0.12)	1.14 (0.10)	0.95 (0.08)	70.04 (5.23)

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Table 1. Flavonoid Intakes from Food and Beverages: Mean Amounts Consumed per Individual,
by Gender and Age, in the United States, 2017-2018 (*continued*)

Gender and age (years)	Flavanones				
	Total	Eriodictyol	Hesperetin	Naringenin	
<i>mg (standard error)</i>					
Males:					
2 - 5.....	12.54*	(6.38)	0.03* (0.02)	10.01* (5.43)	2.49* (0.96)
6 - 11.....	12.24	(2.86)	0.04* (0.02)	8.70 (1.95)	3.49 (1.02)
12 - 19.....	11.77	(3.43)	0.19* (0.14)	8.75* (2.92)	2.83 (0.60)
20 - 29.....	11.12	(2.86)	0.12* (0.07)	7.97 (1.93)	3.03* (0.93)
30 - 39.....	11.00	(2.27)	0.06 (0.02)	7.67 (1.58)	3.27 (0.77)
40 - 49.....	14.66	(4.23)	0.11 (0.02)	10.67 (3.11)	3.88* (1.25)
50 - 59.....	12.37	(2.05)	0.45* (0.21)	8.78 (1.35)	3.14 (0.78)
60 - 69.....	11.94	(2.15)	0.07 (0.02)	8.23 (1.56)	3.63 (0.78)
70 and over.....	13.67	(2.24)	0.39* (0.19)	9.76 (1.57)	3.53 (0.82)
2 - 19.....	12.09	(2.25)	0.11* (0.06)	9.00 (1.85)	2.98 (0.46)
20 and over...	12.38	(1.03)	0.20 (0.05)	8.79 (0.70)	3.38 (0.36)
2 and over...	12.31	(1.07)	0.18 (0.05)	8.85 (0.76)	3.28 (0.34)
Females:					
2 - 5.....	10.34	(1.42)	0.03* (0.01)	6.95 (0.97)	3.36 (0.48)
6 - 11.....	13.08	(3.15)	0.10* (0.07)	9.44 (2.14)	3.53 (1.03)
12 - 19.....	9.72	(2.07)	0.16* (0.05)	7.16 (1.46)	2.40 (0.65)
20 - 29.....	7.11	(1.17)	0.06* (0.02)	4.83 (0.82)	2.22 (0.37)
30 - 39.....	6.96	(1.06)	0.08 (0.02)	4.34 (0.66)	2.53 (0.57)
40 - 49.....	8.33	(1.38)	0.26* (0.13)	5.27 (1.17)	2.80 (0.68)
50 - 59.....	8.40	(1.05)	0.16 (0.05)	5.43 (0.70)	2.80 (0.60)
60 - 69.....	9.34	(1.62)	0.05 (0.02)	5.36 (1.00)	3.93 (0.76)
70 and over.....	9.75	(1.34)	0.18* (0.07)	6.69 (0.89)	2.89 (0.51)
2 - 19.....	10.98	(1.80)	0.11* (0.04)	7.88 (1.22)	2.98 (0.60)
20 and over...	8.25	(0.58)	0.13 (0.03)	5.28 (0.34)	2.84 (0.29)
2 and over...	8.87	(0.63)	0.13 (0.02)	5.87 (0.41)	2.87 (0.25)
Males and females:					
2 - 19.....	11.55	(1.58)	0.11* (0.04)	8.46 (1.23)	2.98 (0.39)
20 and over...	10.23	(0.69)	0.16 (0.03)	6.97 (0.43)	3.10 (0.29)
2 and over...	10.55	(0.72)	0.15 (0.03)	7.32 (0.48)	3.07 (0.26)

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Table 1. Flavonoid Intakes from Food and Beverages: Mean Amounts Consumed per Individual,
by Gender and Age, in the United States, 2017-2018 (*continued*)

Gender and age (years)	Flavones						
	Total	Apigenin	Luteolin				
----- mg (standard error) -----							
Males:							
2 - 5.....	0.42	(0.06)	0.02	(0.01)	0.40	(0.06)	
6 - 11.....	0.42	(0.06)	0.03	(0.01)	0.39	(0.05)	
12 - 19.....	0.47	(0.07)	0.04	(#)	0.43	(0.06)	
20 - 29.....	0.76	(0.10)	0.16	(0.04)	0.61	(0.08)	
30 - 39.....	1.00	(0.12)	0.13	(0.04)	0.87	(0.11)	
40 - 49.....	0.97	(0.09)	0.18	(0.04)	0.79	(0.08)	
50 - 59.....	1.05	(0.11)	0.18	(0.04)	0.88	(0.11)	
60 - 69.....	1.16	(0.27)	0.30*	(0.16)	0.86	(0.21)	
70 and over.....	1.09	(0.13)	0.22	(0.04)	0.87	(0.11)	
2 - 19.....	0.45	(0.04)	0.03	(#)	0.41	(0.04)	
20 and over...	0.99	(0.05)	0.19	(0.03)	0.80	(0.04)	
2 and over...	0.86	(0.04)	0.15	(0.02)	0.71	(0.04)	
Females:							
2 - 5.....	0.50	(0.08)	0.03	(0.01)	0.47	(0.08)	
6 - 11.....	0.43	(0.06)	0.05	(0.01)	0.39	(0.06)	
12 - 19.....	0.58	(0.05)	0.07	(0.01)	0.51	(0.05)	
20 - 29.....	0.89	(0.06)	0.14	(0.02)	0.75	(0.06)	
30 - 39.....	0.84	(0.09)	0.11	(0.02)	0.73	(0.09)	
40 - 49.....	0.85	(0.15)	0.17*	(0.07)	0.69	(0.10)	
50 - 59.....	0.97	(0.14)	0.19	(0.04)	0.78	(0.12)	
60 - 69.....	1.05	(0.17)	0.26*	(0.09)	0.79	(0.09)	
70 and over.....	0.76	(0.08)	0.11	(0.01)	0.65	(0.08)	
2 - 19.....	0.51	(0.03)	0.05	(0.01)	0.46	(0.03)	
20 and over...	0.90	(0.06)	0.16	(0.02)	0.73	(0.04)	
2 and over...	0.81	(0.04)	0.14	(0.02)	0.67	(0.03)	
Males and females:							
2 - 19.....	0.48	(0.03)	0.04	(#)	0.44	(0.03)	
20 and over...	0.94	(0.04)	0.18	(0.01)	0.77	(0.04)	
2 and over...	0.83	(0.04)	0.14	(0.01)	0.69	(0.03)	

DATA SOURCES: *What We Eat in America, NHANES 2017-2018, individuals 2 years and over (excluding breast-fed children), day 1.* Available: www.ars.usda.gov/nea/bhnrc/fsrg.Flavonoid Intake Data Files 2017-2018¹

Table 1. Flavonoid Intakes from Food and Beverages: Mean Amounts Consumed per Individual,
by Gender and Age, in the United States, 2017-2018 (continued)

Gender and age (years)	Flavonols							
	Total	Isorhamnetin	Kaempferol	Myricetin	Quercetin			
----- mg (standard error) -----								
Males:								
2 - 5.....	7.52	(0.98)	0.19	(0.03)	1.53	(0.29)	0.46	(0.10)
6 - 11.....	8.33	(0.83)	0.24	(0.04)	1.51	(0.25)	0.55	(0.11)
12 - 19.....	9.84	(0.81)	0.40	(0.05)	2.10	(0.27)	0.92	(0.13)
20 - 29.....	16.46	(1.78)	0.78	(0.07)	4.90	(0.51)	1.31	(0.23)
30 - 39.....	20.16	(1.15)	1.10	(0.16)	5.89	(0.48)	1.61	(0.18)
40 - 49.....	20.23	(1.75)	1.06	(0.19)	5.80	(0.68)	1.85	(0.25)
50 - 59.....	21.96	(1.04)	0.91	(0.15)	6.44	(0.58)	2.07	(0.17)
60 - 69.....	18.88	(1.05)	0.97	(0.12)	5.05	(0.50)	1.75	(0.19)
70 and over.....	17.49	(1.59)	0.63	(0.05)	3.91	(0.34)	1.81	(0.31)
2 - 19.....	8.85	(0.63)	0.30	(0.03)	1.79	(0.19)	0.70	(0.09)
20 and over...	19.25	(0.51)	0.91	(0.04)	5.40	(0.16)	1.72	(0.09)
2 and over...	16.65	(0.46)	0.76	(0.03)	4.50	(0.15)	1.47	(0.07)
Females:								
2 - 5.....	7.24	(0.32)	0.22	(0.03)	1.35	(0.23)	0.36	(0.04)
6 - 11.....	7.64	(0.57)	0.25	(0.04)	1.47	(0.15)	0.47	(0.06)
12 - 19.....	10.13	(0.57)	0.49	(0.07)	2.12	(0.20)	0.80	(0.10)
20 - 29.....	16.94	(1.58)	1.01	(0.20)	4.62	(0.51)	1.28	(0.13)
30 - 39.....	16.43	(1.34)	0.97	(0.18)	4.61	(0.68)	1.31	(0.19)
40 - 49.....	20.84	(2.90)	1.10	(0.21)	5.83	(0.93)	1.94	(0.53)
50 - 59.....	17.47	(1.22)	0.98	(0.15)	3.92	(0.38)	1.74	(0.15)
60 - 69.....	21.29	(2.80)	0.75	(0.06)	5.09	(0.82)	2.48	(0.56)
70 and over.....	16.39	(1.54)	0.80	(0.13)	3.83	(0.50)	1.60	(0.21)
2 - 19.....	8.67	(0.40)	0.35	(0.05)	1.74	(0.11)	0.59	(0.06)
20 and over...	18.14	(0.73)	0.94	(0.07)	4.63	(0.25)	1.71	(0.11)
2 and over...	15.99	(0.61)	0.81	(0.06)	3.97	(0.20)	1.45	(0.09)
Males and females:								
2 - 19.....	8.76	(0.38)	0.33	(0.03)	1.76	(0.11)	0.65	(0.06)
20 and over...	18.67	(0.46)	0.93	(0.04)	5.00	(0.15)	1.72	(0.07)
2 and over...	16.32	(0.42)	0.78	(0.04)	4.23	(0.13)	1.46	(0.05)

DATA SOURCES: What We Eat in America, NHANES 2017-2018, individuals 2 years and over (excluding breast-fed children), day 1. Available: www.ars.usda.gov/nea/bhnrc/fsrg.Flavonoid Intake Data Files 2017-2018¹

Table 1. Flavonoid Intakes from Food and Beverages: Mean Amounts Consumed per Individual,
by Gender and Age, in the United States, 2017-2018 (*continued*)

Gender and age (years)	Isoflavones					
	Total	Daidzein	Genistein	Glycitein		
<i>mg (standard error)</i>						
Males:						
2 - 5.....	0.40 (0.11)	0.18* (0.05)	0.20 (0.05)	0.03 (0.01)		
6 - 11.....	1.39* (0.52)	0.51* (0.18)	0.77* (0.29)	0.12* (0.05)		
12 - 19.....	1.20 (0.27)	0.43 (0.10)	0.67 (0.16)	0.09 (0.02)		
20 - 29.....	3.82* (1.74)	1.31* (0.57)	2.17* (1.02)	0.33* (0.15)		
30 - 39.....	3.45* (1.26)	1.22* (0.45)	1.94* (0.71)	0.29* (0.10)		
40 - 49.....	0.90 (0.26)	0.34 (0.09)	0.49* (0.15)	0.07 (0.02)		
50 - 59.....	1.73 (0.46)	0.65 (0.16)	0.94 (0.26)	0.14 (0.04)		
60 - 69.....	2.71* (0.84)	1.08* (0.33)	1.42 (0.42)	0.20* (0.09)		
70 and over.....	3.58* (1.15)	1.39* (0.44)	1.89* (0.60)	0.31* (0.10)		
2 - 19.....	1.09 (0.22)	0.40 (0.07)	0.60 (0.12)	0.09 (0.02)		
20 and over...	2.68 (0.45)	0.99 (0.15)	1.47 (0.26)	0.22 (0.04)		
2 and over...	2.29 (0.32)	0.84 (0.11)	1.26 (0.19)	0.19 (0.03)		
Females:						
2 - 5.....	0.92* (0.45)	0.36* (0.17)	0.49* (0.23)	0.07* (0.04)		
6 - 11.....	0.80 (0.17)	0.31 (0.07)	0.43 (0.09)	0.06 (0.01)		
12 - 19.....	2.53* (1.78)	0.97* (0.69)	1.34* (0.93)	0.22* (0.16)		
20 - 29.....	3.62* (1.72)	1.35* (0.66)	1.96* (0.91)	0.32* (0.15)		
30 - 39.....	3.77 (0.86)	1.39 (0.31)	2.04 (0.47)	0.33 (0.08)		
40 - 49.....	2.30* (1.07)	0.85* (0.40)	1.24* (0.58)	0.21* (0.09)		
50 - 59.....	1.39 (0.38)	0.56 (0.15)	0.74 (0.21)	0.09 (0.02)		
60 - 69.....	2.88* (1.08)	0.99* (0.36)	1.64* (0.62)	0.25* (0.09)		
70 and over.....	3.47* (1.06)	1.32* (0.41)	1.84* (0.55)	0.31* (0.10)		
2 - 19.....	1.60* (0.82)	0.62* (0.32)	0.85* (0.43)	0.13* (0.07)		
20 and over...	2.89 (0.62)	1.07 (0.23)	1.57 (0.33)	0.25 (0.05)		
2 and over...	2.60 (0.52)	0.97 (0.20)	1.40 (0.28)	0.22 (0.05)		
Males and females:						
2 - 19.....	1.34* (0.45)	0.51* (0.17)	0.72* (0.24)	0.11* (0.04)		
20 and over...	2.79 (0.42)	1.03 (0.15)	1.52 (0.23)	0.24 (0.04)		
2 and over...	2.44 (0.33)	0.91 (0.12)	1.33 (0.19)	0.21 (0.03)		

DATA SOURCES: *What We Eat in America, NHANES 2017-2018, individuals 2 years and over (excluding breast-fed children), day 1.* Available: www.ars.usda.gov/nea/bhnrc/fsrg.Flavonoid Intake Data Files 2017-2018¹

Symbol Legend

* Indicates an estimate that may be less statistically reliable than estimates that are not flagged. The rules for flagging estimated means are as follows:

Mean: An estimated mean is flagged when based on a sample size of less than 30 times the variance inflation factor (VIF), where the VIF represents a broadly calculated average design effect, or when the relative standard error is greater than 30 percent. The VIF used in this table is 2.57.

Indicates a non-zero value too small to report.

Footnotes

¹ Flavonoid Intake Data Files reflect the application of the flavonoid composition values included in the Database of Flavonoid Values for USDA Food Codes 2017-2018 to the WWEIA, NHANES 2017-2018 dietary data.

Notes Applicable to All Tables in Series: Flavonoid Intakes, What We Eat in America, NHANES 2017-2018

Sample weights designed for dietary analysis were used to allow estimates representative of the U. S. population for the years of collection.

The statistics in this table are estimated from Day 1 dietary recall interviews conducted in the *What We Eat in America*, National Health and Nutrition Examination Survey (NHANES) 2017-2018. The 24-hour dietary recalls were conducted in-person, by trained interviewers, using the USDA 5-step Automated Multiple-Pass Method. Food intakes were coded using USDA food codes. A database that provided flavonoid values for all food codes in the 2017-2018 WWEIA, NHANES survey cycle was developed (See: https://www.ars.usda.gov/ARSUserFiles/80400530/pdf/fndds/FlavonoidDB_documentation_1718.pdf). The USDA Expanded Flavonoid Database for the Assessment of Dietary Intakes, Release 1.1 https://www.ars.usda.gov/ARSUserFiles/80400525/Data/Flav/FDB-EXP_R01-1_Doc.pdf provided the basis for the flavonoid values included in the 2017-2018 flavonoid database. The flavonoid database was applied to the dietary intake files to generate the flavonoid intake data files, which were analyzed to provide the estimates presented in this table.

Intake of flavonoids are based on the consumption of food and beverages, including water, and do not include intake from supplements or medications.

The table includes data from individuals 2 years and over. Breast-fed children were excluded because breast milk was not quantified in dietary recall interviews.

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, 34.75 mg; M&F 20+ years, 53.10 mg; M&F 2+ years, 46.99 mg.

--Anthocyanidins, total: M&F 2-19 years, 0.41 mg; M&F 20+ years, 0.40 mg; M&F 2+ years, 0.40 mg.

--Flavan-3-ols, total: M&F 2-19 years, 10.56 mg; M&F 20+ years, 12.91 mg; M&F 2+ years, 12.33 mg.

--Flavanones, total: M&F 2-19 years, 0.00 mg; M&F 20+ years, 0.13 mg; M&F 2+ years, 0.10 mg.

--Flavones, total: M&F 2-19 years, 0.15 mg; M&F 20+ years, 0.35 mg; M&F 2+ years, 0.29 mg.

--Flavonols, total: M&F 2-19 years, 5.83 mg; M&F 20+ years, 12.37 mg; M&F 2+ years, 10.47 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.

Suggested Citation

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