

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>.

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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>.

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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.

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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.

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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) |

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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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