

Analysis of Average Available Intakes of Calories, Calcium, Vitamin C, and Caffeine

On average, at-home available per person intake of nonalcoholic beverages accounts for, roughly, 195 calories per day, 196 mg of calcium per day, 41 mg of vitamin C per day, and nearly 88 mg of caffeine per day, (table 2). The conversion of available intakes to calories and milligrams was accomplished using the nutritive values of each beverage item found in the USDA publication *Home and Garden Bulletin* (No. 72, October 2002). These

Table 2—Summary statistics for nutrients per person per day for nonalcoholic beverages, 1999

Item	Calories	Calcium	VitC	Caffeine
Mean	194.60	196.16	41.42	87.68
StDev *	138.74	169.28	37.99	108.61
CV **	71.30	86.29	91.72	123.87
Minimum	0.40	0	0	0
Median	165.95	149.42	31.80	52.78
Maximum	3,492.41	2,149.57	443.13	2,571.13
Item	CALcsdfdpd ¹	CALfjuices ²	CALmilk ³	CAFFcsd ⁴
Mean	86.95	35.87	65.92	23.45
StDev	104.41	40.78	62.44	30.63
CV	120.09	113.71	94.72	130.59
Minimum	0	0	0	0
Median	58.49	23.54	48.54	15.16
Maximum	3,441.72	555.39	616.55	1,196.29
Item	CAFFcoff ⁵	CAFFtea ⁶	VITCfjuices ⁷	VITCcsdfdpd ⁸
Mean	59.04	5.09	24.62	14.39
StDev	101.97	10.72	29.62	21.12
CV	172.72	210.62	120.34	146.73
Minimum	0	0	0	0
Median	19.20	1.19	15.01	7.45
Maximum	2570.95	152.77	428.21	383.29
Item	CALCIUMmilk ⁹			
Mean	172.92			
StDev	164.91			
CV	95.37			
Minimum	0			
Median	127.18			
Maximum	2,137.99			

¹ Calories from carbonated soft drinks, fruit drinks, and powdered soft drinks.

² Calories from fruit juices.

³ Calories from milk.

⁴ Caffeine from carbonated soft drinks.

⁵ Caffeine from coffee.

⁶ Caffeine from tea.

⁷ Vitamin C from fruit juices.

⁸ Vitamin C from carbonated soft drinks, fruit drinks, and powdered soft drinks.

⁹ Calcium from milk.

* StDev = Standard deviation.

** CV = Coefficient of variation.

Note: Units of measurement are: calories (kcal); calcium, vitamin C, and caffeine (mg).

Source: ERS analysis of ACNielsen Homescan data.

figures subsequently were divided by 365 and were further divided by household size. Major contributors to available calories from nonalcoholic beverages were carbonated soft drinks; fruit drinks and powdered soft drinks (about 45 percent); fruit juices (about 18 percent); and milk (about 34 percent). Milk also was responsible for roughly 88 percent of the calcium available from the nonalcoholic beverage category. Fruit juices contributed almost 60 percent of the vitamin C available from nonalcoholic beverages, while carbonated soft drinks, fruit drinks, and powdered soft drinks contributed 35 percent of the vitamin C available, on average. Coffee, carbonated soft drinks, and tea accounted for 67 percent, 27 percent, and 6 percent, respectively, of the caffeine available from nonalcoholic beverages.

To give these descriptive findings more perspective, using the same 2,000 calories per day standard as is used for nutrition labeling of food, 10 percent of calories would come from the at-home purchase of nonalcoholic beverages. On average, about 20 percent of the nutrition label daily value (DV) for calcium and close to 70 percent of the daily value for vitamin C come from nonalcoholic beverages. On average, the daily available intake of caffeine from nonalcoholic beverages was equivalent to almost two 12-ounce cans of Coca-Cola, about one 7-ounce cup of coffee, or roughly a 15-ounce glass of iced tea.

Demographic Analysis

Available nutritional intake from nonalcoholic beverages varied by different demographic factors. This section includes a discussion of the factors including race, income, education of female head, employment of female head, age of female head, household size, and the presence of children.

Hispanic/Non-Hispanic

On average, availability of calories, calcium, vitamin C, and caffeine were lower for Hispanics than for non-Hispanics (fig. 3, data table 1). Noteworthy differences in available intakes for Hispanics and non-Hispanics centered on calcium and caffeine. Available calcium intake for Hispanics was lower by roughly 30 mg per day in comparison with non-Hispanics. Available caffeine intake for Hispanics was lower by about 20 mg per day relative to non-Hispanics.

Region

Available caloric intake on a per-person-per-day basis from nonalcoholic beverages was lowest in the West, 178 kcal, and highest in the Central region, 209 kcal (fig. 4, data table 2). Available calcium intakes, on average, ranged from 184 mg per person per day in the East to 218 mg per person per day in the Central region. Available vitamin C intake from nonalcoholic beverages, on average, varied from 37 mg in the West to 45 mg in the East. Available caffeine intakes, on average, were lowest in the West and South (82 mg and 83 mg, respectively) and highest in the Central region and the East (91 mg and 96 mg, respectively).

Race

On a per-person-per-day basis, Asians had the lowest available intake of calories, vitamin C, and caffeine on average, whereas Whites had the

highest available intake of these nutrients, except for vitamin C, on average (fig. 5, data table 3). Blacks had the highest available intake of vitamin C per person per day, and Blacks had the lowest available intake of calcium per person per day.

Poverty Status

In households classified below the 130 percent of poverty threshold, available caloric and caffeine intakes on a per-person-per-day basis were about 4 to 5 kcal higher than in households classified as above the 130 percent of poverty thresholds (fig. 6, data table 4). Available calcium intake and available vitamin C intake, however, were about 20 mg and 6 mg lower for households below the 130 percent of poverty threshold than for households above the 130 percent of poverty threshold.

Education of Female Head

In households where the female head was a college graduate, available caloric, calcium, and caffeine intakes from nonalcoholic beverages on a per-person-per-day basis were lower than in households where the female head was not a college graduate (fig. 7, data table 5). The situation was the reverse in the case of vitamin C availability.

Employment of Female Head

In households where the female head was not employed for pay, average available intakes of calories, calcium, vitamin C, and caffeine from nonalcoholic beverages were higher in comparison with households where the female head was employed (fig. 8, data table 6). These data, however, were associated with at-home consumption of nonalcoholic beverages, and as such, this result was perhaps not too surprising because we suspect that households with an employed female head eat more away-from-home meals than unemployed female headed households.

Age of Female Head

In households where the female head was younger than 25 years of age, available caloric intakes from nonalcoholic beverages, principally for at-home consumption, were highest (fig. 9, data table 7). Available caloric intakes, on average, were lowest for female heads between 25 and 29 years of age. Calcium, vitamin C, and caffeine available intakes from nonalcoholic beverages were highest for female heads at least 55 years of age. Calcium and vitamin C available intakes were lowest for female heads between 25 and 34 years of age. Caffeine available intakes were lowest for female heads younger than 25 years of age.

Household Size

Except for households with eight members, daily per person available intakes of calories, calcium, vitamin C, and caffeine decreased almost monotonically with household size (fig. 10, data table 8).

Presence of Children

Average available calcium, vitamin C, and caffeine intakes from nonalcoholic beverages on a per-person-per-day were higher in households with no

children relative to households with children either younger than 6, 6 to 12, or 13 to 17 years of age (figs. 11a, 11b; data table 9). Households with children 13 to 17 years of age had higher daily available caloric intakes per person than did households with no children, but it was difficult to determine if this result was a scale effect.