**Supplemental Table 1.** Comparison of sociodemographic characteristics in actual 1999, weighted 1999, and actual 2010 adolescent samples from Minneapolis-St. Paul, Minnesota used to examine secular trends in meal and snack patterns<sup>a</sup>

|                                   | 1999 sample |       | Weighted<br>1999 sample |       | 2010 sample |       | P value <sup>b</sup> |
|-----------------------------------|-------------|-------|-------------------------|-------|-------------|-------|----------------------|
|                                   | n           | %     | n                       | %     | n           | %     |                      |
| Sex                               |             |       |                         |       |             |       | 0.75                 |
| Boys                              | 1,261       | 48.5  | 1,181                   | 46.7  | 1,175       | 46.3  |                      |
| Girls                             | 1,337       | 51.5  | 1,348                   | 53.3  | 1,365       | 53.7  |                      |
| Ethnicity/race <sup>c</sup>       |             |       |                         |       |             |       | 0.26                 |
| White                             | 949         | 36.5  | 540                     | 21.3  | 499         | 19.6  |                      |
| Black                             | 519         | 20.0  | 638                     | 25.2  | 706         | 27.8  |                      |
| Hispanic                          | 196         | 7.5   | 414                     | 16.4  | 435         | 17.1  |                      |
| Asian                             | 672         | 25.9  | 546                     | 21.6  | 520         | 20.5  |                      |
| Native American                   | 113         | 4.3   | 98                      | 3.9   | 92          | 3.6   |                      |
| Mixed/other                       | 149         | 5.7   | 293                     | 11.6  | 288         | 11.3  |                      |
| Socioeconomic status <sup>d</sup> |             |       |                         |       |             |       | 0.88                 |
| Low                               | 566         | 22.6  | 936                     | 38.0  | 973         | 39.4  |                      |
| Low-middle                        | 513         | 20.5  | 560                     | 22.7  | 556         | 22.5  |                      |
| Middle                            | 650         | 26.0  | 436                     | 17.7  | 430         | 17.4  |                      |
| High-middle                       | 451         | 18.0  | 335                     | 13.6  | 320         | 12.9  |                      |
| High                              | 322         | 12.9  | 199                     | 8.1   | 193         | 7.8   |                      |
| Age in years: Mean                | 2,598       | 14.6  | 2,598                   | 14.4  | 2,540       | 14.5  | 0.29                 |
| (SD)                              |             | (1.8) |                         | (1.7) |             | (2.0) |                      |

SD=standard deviation

<sup>&</sup>lt;sup>a</sup> The weighted 1999 sample used inverse probability weighting based on the odds of being in the 2010 sample given the demographics. Weighting was done to allow for an examination of secular trends in meal and snack patterns independent of demographic shifts in the population (see text in Statistical Analysis section). Both the unweighted and weighted 1999 demographics are provided for ease of comparison.

<sup>&</sup>lt;sup>b</sup> P values are presented for differences between the weighted 1999 and 2010 samples, based on  $\chi^2$  tests for sex, ethnicity/race, and socioeconomic status and t-tests for age.

<sup>&</sup>lt;sup>c</sup> Adolescents could choose more than one ethnic/racial category; those responses indicating multiple categories were coded as mixed/other. Because there were few participants who identified themselves as Hawaiians or Pacific Islanders these participants were also included in the mixed/other category.

<sup>&</sup>lt;sup>d</sup> The prime determinant of socioeconomic status was the higher education level of either parent with adjustments made for student eligibility for free/reduced-price school meals, family public assistance receipt, and parent employment status.

**Supplemental Table 2.** Secular trends in adolescent consumption of  $\ge 3$  snacks/week prepared away from home from 1999 to 2010 in a population-based sample by sociodemographic characteristics:

Minneapolis-St. Paul, Minnesota, Project EAT (Eating and Activity among Teens)

|                                   | 1999 n <sup>a</sup> | 2010 n | After-school: $\geq 3$ |      |                      | Late at night: ≥3 |      |                      |
|-----------------------------------|---------------------|--------|------------------------|------|----------------------|-------------------|------|----------------------|
|                                   |                     |        | snacks/week (%)        |      |                      | snacks/week (%)   |      |                      |
| Characteristic                    |                     |        | 1999 <sup>a</sup>      | 2010 | P value <sup>b</sup> | 1999 <sup>a</sup> | 2010 | P value <sup>b</sup> |
| Total sample                      | 2,598               | 2,540  | 36.1                   | 34.9 | 0.37                 | 17.9              | 18.2 | 0.83                 |
| Sex                               |                     |        |                        |      |                      |                   |      |                      |
| Boys                              | 1,181               | 1,175  | 34.4                   | 34.1 | 0.88                 | 18.2              | 18.0 | 0.89                 |
| Girls                             | 1,348               | 1,365  | 37.3                   | 35.7 | 0.38                 | 17.2              | 18.3 | 0.45                 |
| School level <sup>c</sup>         |                     |        |                        |      |                      |                   |      |                      |
| Middle school                     | 1,148               | 1,136  | 34.0                   | 35.3 | 0.52                 | 19.0              | 15.6 | 0.03                 |
| High school                       | 1,335               | 1,404  | 37.6                   | 34.6 | 0.10                 | 16.5              | 20.2 | 0.01                 |
| Ethnicity/race <sup>d</sup>       |                     |        |                        |      |                      |                   |      |                      |
| White                             | 540                 | 499    | 32.3                   | 30.9 | 0.60                 | 12.0              | 13.0 | 0.60                 |
| Black                             | 638                 | 706    | 43.4                   | 42.9 | 0.85                 | 24.7              | 27.9 | 0.23                 |
| Hispanic                          | 414                 | 435    | 32.9                   | 29.0 | 0.33                 | 18.8              | 11.5 | 0.01                 |
| Asian                             | 546                 | 520    | 29.6                   | 25.6 | 0.12                 | 13.2              | 10.7 | 0.19                 |
| Native American                   | 98                  | 92     | 29.8                   | 36.8 | 0.30                 | 17.2              | 20.2 | 0.59                 |
| Mixed/other                       | 293                 | 288    | 45.3                   | 47.7 | 0.64                 | 20.1              | 26.4 | 0.16                 |
| Socioeconomic status <sup>e</sup> |                     |        |                        |      |                      |                   |      |                      |
| Low                               | 936                 | 973    | 35.4                   | 38.1 | 0.30                 | 18.1              | 22.1 | 0.07                 |
| Low-middle                        | 560                 | 556    | 43.1                   | 35.0 | 0.008                | 20.7              | 17.5 | 0.19                 |
| Middle                            | 436                 | 430    | 33.4                   | 30.2 | 0.27                 | 15.4              | 14.0 | 0.54                 |
| High-middle                       | 335                 | 320    | 30.7                   | 36.7 | 0.09                 | 17.5              | 16.9 | 0.81                 |
| High                              | 199                 | 193    | 34.0                   | 28.0 | 0.16                 | 10.3              | 11.4 | 0.69                 |

<sup>&</sup>lt;sup>a</sup> The 1999 sample was weighted to allow for an examination of secular trends in eating snacks prepared away from home independent of demographic shifts in the population. For example, estimates for after-school snack consumption within the low socioeconomic status group in 1999 and 2010 are mutually controlled so that sex, school level, and ethnicity/race makeup are the same in the low socioeconomic status group in the 1999 sample as in the 2010 sample.

 $<sup>^{</sup>b}P$  values represent testing of weighted differences in the proportion of the population consuming  $\geq 3$  snacks/week that were prepared away from home between 1999 and 2010.

<sup>&</sup>lt;sup>c</sup>Middle school represents students enrolled in 6th-8th grades and high school represents students enrolled in 9th-12th grades.

<sup>&</sup>lt;sup>d</sup>Adolescents could choose more than one ethnic/racial category; those responses indicating multiple categories were coded as mixed/other. Because there were few participants who identified themselves as Hawaiians or Pacific Islanders these participants were also included in the mixed/other category.

<sup>&</sup>lt;sup>e</sup> The prime determinant of socioeconomic status was the higher education level of either parent with adjustments made for student eligibility for free/reduced-price school meals, family public assistance receipt, and parent employment status.