**Evidence Table 28c. Intermediate outcomes for combination diet and physical activity intervention studies taking place in a school setting with consumer health informatics components and in a school setting with home and consumer health informatics components**

| **Author, Year** | **Arm** | **Baseline N** | **Baseline measure, mean (SD)** | **Final measure timepoint** | **N at final measure** | **Final follow up measure, mean (SD)** | **Mean Change from baseline (SD)** | **Measure of association** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Change in fruit and vegetable consumption** |  |  |  |  |  |  |  |  |
| Spiegel, 20062 | 1 |  |  |  |  |  |  | Post-data analysis showed an increase in fruit and vegetable consumption in both groups, with a notably higher increase in the intervention group. Although this increase was a positive shift, students were still reporting fruit consumption below recommended levels. There was a decrease in both groups in the reported consumption of potatoes and carrots. The comparison group also decreased reported rates of consumption of other vegetables and 100% fruit juices. Intervention teachers reported positive shifts in students’ lunch and snack choices within 2 weeks of beginning the intervention. Students, teachers, and parents reported changes in the students’ eating habits both at school and at home. |
|  | 2 |  |  |  |  |  |  |  |
| **Sugar Sweetend Beverages (usual, %>400 ml/d** |  |  |  |  |  |  |  |  |
| Ezendam, 20125 | 1 | 372 | 78.1 | 104 | 325 | 72.3 |   |  |
|   | 2 | 436 | 74.4 | 104 | 364 | 71.5 |   |  |
| **Snacks, pieces/d** |  |  |  |  |  |  |  |  |
| Ezendam, 20125 | 1 | 363 | 5.2 (3.3) | 104 | 318 | 5.8 (4.8) |  |   |
|   | 2 | 432 | 5.5 (3.8) | 104 | 359 | 5.3 (4.7) |  |   |
| **Fruit, Pieces/d** |  |  |  |  |  |  |  |  |
| Ezendam, 20125 | 1 | 372 | 1.63 (1.24) | 104 | 330 | 1.46 (1.21) |  |   |
|   | 2 | 442 | 1.67 (1.25) | 104 | 371 | 1.48 (1.31) |  |   |
| **Vegetable, g/d** |  |  |  |  |  |  |  |  |
| Ezendam, 20125 | 1 | 378 | 106 (76) | 104 | 330 | 105 (75) |  |   |
|   | 2 | 443 | 107 (79) | 104 | 375 | 106 (76) |  |   |
| **Change in physical activity** |  |  |  |  |  |  |  |  |
| Spiegel, 20062 | 1 |  |  |  |  |  |  | The physical activity levels in the intervention group increased in both school and home settings. Physical activity activity rates were reported at the baseline measure point to be an average of 59 min/wk during the school day (averaging 11.8 min/d, with most of the activity occurring during PE class once a week) and a mean level of 22.34 min/d outside of the school day (*N*:530). At post-data measure, intervention students reported an average of 102.5 min/wk of physical activity during the school day (20.5 min/d) and a mean level of 37.42 min/d outside of the school day (*N* :531). Physical activity levels increased slightly in the comparison group in reported levels of light exercise (baseline level mean:2.74, *N* :472; post-data level mean: 3.09, *N*:473). |
|  | 2 |  |  |  |  |  |  |  |
| **Days with 60min of moderate activity** |  |  |  |  |  |  |  |  |
| Ezendam, 20125 | 1 | 380 | 2.96 (1.90) | 104 | 332 | 2.63 (1.95) |  |   |
|   | 2 | 453 | 2.61 (1.92) | 104 | 383 | 2.46 (1.90) |  |   |
| **Transport to School (min/week)** |  |  |  |  |  |  |  |  |
| Ezendam, 20125 | 1 | 117 | 156 (117) | 104 | 329 | 132 (130) |  |   |
|   | 2 | 137 | 131 (137) | 104 | 382 | 161 (113) |  |   |
| **Sport Outside School, % yes** |  |  |  |  |  |  |  |  |
| Ezendam, 20125 | 1 | 393 | 89.3 | 104 | 394 | 82 |  |   |
|   | 2 | 466 | 81.8 | 104 | 453 | 76.4 |  |   |
| **Step Count, # of steps/week** |  |  |  |  |  |  |  |  |
| Ezendam, 20125 | 1 | 99 | 84679 (21697) | 104 | 68 | 68276 (27862) |  |   |
|   | 2 | 128 | 81046 (28987) | 104 | 105 | 78560 (253489) |  |   |
| **Television + computer time, min/d** |  |  |  |  |  |  |  |  |
| Ezendam, 20125 | 1 | 364 | 312.9 (163.9) | 104 | 316 | 331.3 (161.7) |  |   |
|   | 2 | 423 | 299.7 (163.6) | 104 | 355 | 313.1 (155.6) |  |   |
| **Steps per day** |  |  |  |  |  |  |  |  |
| Gorely, 20113 | 1 | 279 | 10278.5 (3284.3) | 121 | 215 | 13775.0 (3919.8) |  |  |
|   | 2 | 310 | 9579.4 (2735.6) | 130 | 206 | 14213.3 (3998.9) |  |  |
| **MVPA Total** |  |  |  |  |  |  |  |  |
| Gorely, 20113 | 1 | 279 | 120.3 (23.7) | 121 | 215 | 114.1 (31.1) |  |  |
|   | 2 | 310 | 124.7 (26.7) | 130 | 206 | 128.3 (35.7) |  |  |
| **MVPA bouts** |  |  |  |  |  |  |  |  |
| Gorely, 20113 | 1 | 279 | 36.5 (16.4) | 121 | 215 | 46.1 (23.2) |  |  |
|   | 2 | 310 | 40.1 (18.7) | 130 | 206 | 53.7 (28.8) |  |  |

d = Day, ml/d = milliliter per day; MVPA = Moderate to Vigororous Activity; N = Sample Size; PE = Physical Education; SD = Standard Deviation