**Evidence Table 4d. Intermediate outcomes for diet intervention studies taking place in a school only setting**

| **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 carbonated drink consumption** |  |  |  |  |  |  |  |  |
| James, 200421 | 1 | 14 | 1.6 (0.6) | 52 weeks | NR | 1.8 (0.6) | 0.2  (95% CI: -0.2 to 0.5) | 0.7  95% CI: 0.1 to 1.3  P=0.4 |
| 2 |  |  |  |  |  |  |  |
| **Change in energy intake (% sugar)** |  |  |  |  |  |  |  |  |
| Vandongen, 199554\*  Male | All groups | 423\* | 22.8  (95% CI: 22.1, 23.5) | Reported as “About 9 months”  (but baseline – between Feb-April; follow up – between Oct- Dec) | 423\* | 21.9  (95%CI: 21.2, 22.7) | -0.3 | Among males, there was a decrease in sugar intake significantly different from control in both fitness groups (intervention 1 and 2) and in the school and home nutrition group (intervention 4). No p-values given. |
| 1 | 63 | 21.7  (95% CI: 20.0, 23.3) |  | 63 | 23.3  (95%CI: 21.4, 25.3) | 1.6 |  |
| 2 | 75 | 23.6  (95% CI: 21.8, 25.3) |  | 75 | 21.1  (95%CI: 19.4, 22.8) | -2.5 |  |
| 3 | 72 | 23.3  (95% CI: 21.3, 25.3) |  | 72 | 20.9  (95%CI: 18.9, 22.8) | -2.4 |  |
| 4 | 73 | 21.7  (95%CI: 20.1, 23.2) |  | 73 | 22.5  (95%CI: 20.8, 24.2) | 0.8 |  |
| 5 | 54 | 24.3  (95%CI: 22.5, 26.1) |  | 54 | 21.5  (95%CI: 19.7, 23.3) | -2.8 | From regression models showing interaction terms, significantly greater decrease in sugar intake in males vs. females – 4.2 (95% CI: 2.1, 6.1) |
| 6 | 86 | 22.6  (95%CI: 21.0, 24.1) |  | 86 | 22.4  (95%CI: 20.7, 24.1) | -0.2 | From regression models showing interaction terms, significantly greater decrease in sugar intake in males vs. females – 4.1 (95% CI: 2.2, 5.9) |
| Vandongen, 199554  Female | All groups | \*446 | 23.8  (95%CI: 23.1, 24.5) | Reported as “About 9 months”  (but baseline – between Feb-April; follow up – between Oct- Dec) | \*446 | 21.9  (95%CI: 21.2, 22.6) | -1.9 | Among females, there was no significant decrease in sugar intake from control; all groups except for the two home nutrition groups (intervention 4 and 5) decreased in sugar intake. In the 2 home nutrition groups, sugar intake tended to increase. No p-values given. |
| 1 | 63 | 22.6  (95%CI: 21.0, 24.4) |  | 63 | 21.1  (95%CI: 19.5, 22.6) | -1.5 |  |
| 2 | 75 | 23.1  (95%CI: 21.6, 23.6) |  | 75 | 20.4  (95%CI: 18.8, 22.0) | -3.06 |  |
| 3 | 77 | 24.3  (95%CI: 22.3, 26.2) |  | 77 | 20.9  (95% CI: 18.9, 22.8) | -3.4 |  |
| 4 | 91 | 23.7  (95%CI: 21.9, 25.5) |  | 91 | 21.5  (95% CI: 29.9, 23.1) typo, but what it says in the table (table 2) | -2.2 |  |
| 5 | 65 | 25.2  (95%CI: 23.4, 27.1) |  | 65 | 23.2  (95%CI: 19.7, 23.1) | -2 |  |
| 6 | 75 | 23.9  (95%CI: 22.2, 25.7) |  | 75 | 23.9  (95%CI: 21.6, 25.9) | 0 |  |
| **Change in energy intake (% total fat)** |  |  |  |  |  |  |  |  |
| Vandongen, 199554  Male | All groups | 423 | 33.2  (95%CI: 32.7, 33.7) | Reported as “About 9 months”  (but baseline – between Feb-April; follow up – between Oct- Dec) | 423 | 33.7  (95%CI: 33.1, 34.3) | 0.5 | Among males, following the intervention, the %fat, controlling for baseline, increased in each group relative to controls but changes were not significantly different from controls.  ANOVA showed significant differences (P<0.05) between treatment groups at baseline for total fat (% energy) |
| 1 | 63 | 33.2  (95%CI: 32.7, 33.7) |  | 63 | 33.2  (95%CI: 31.5, 34.9) | 0 |  |
| 2 | 75 | 32.5  (95%CI: 31.3, 33.7) |  | 75 | 33.6  (95%CI: 32.3, 35.0) | 1.1 |  |
| 3 | 72 | 33.8  (95%CI: 32.4, 35.2) |  | 72 | 34.3  (95%CI: 32.8, 35.8) | 0.5 |  |
| 4 | 73 | 34.8  (95%CI: 33.6, 35.9) |  | 73 | 33.6  (95%CI: 32.3, 34.9) | -1.2 |  |
| 5 | 54 | 31.7  (95%CI: 30.4, 32. 9) |  | 54 | 34.2  (95%CI: 32.3, 36.1) | 2.5 |  |
| 6 | 86 | 33.4  (95%CI: 32.2, 34.5) |  | 86 | 33.4  (95%CI: 31.9, 34.9) | 0 |  |
| Vandongen, 199554  Female | All groups | 446 | 33.1  (95%CI: 32.6, 33.6) | Reported as “About 9 months”  (but baseline – between Feb-April; follow up – between Oct- Dec) | 446 | 34.0  (95%CI: 33.5, 34.6) | 0.9 | Among females, total fat intake adjusted for baseline decreased relative to controls in all except the school nutrition group. However, the fall was significant from controls in only the home nutrition group. |
| 1 | 63 | 33.8  (95%CI: 32.5, 35.1) |  | 63 | 35.0  (95%CI: 33.5, 34.6) | 1.2 |  |
| 2 | 75 | 33.5  (95%CI: 32.7, 34.7) |  | 75 | 34.6  (95%CI: 33.4, 35.8) | 1.1 |  |
| 3 | 77 | 33.2  (95%CI: 32.0, 34.3) |  | 77 | 34.2  (95%CI: 32.8, 35.6) | 1 |  |
| 4 | 91 | 33.6  (95%CI: 32.3, 34.9) |  | 91 | 34.8  (95%CI: 33.3, 36.3) | 1.2 |  |
| 5 | 65 | 31.4  (95%CI: 30.0, 32.7) |  | 65 | 33.7  (95%CI: 32.4, 35.0) | 2.3 | From regression models showing interaction terms, significantly greater decrease in total fat in females vs. males – 2.9 (95% CI: 1.5, 4.3) |
| 6 | 75 | 33.0  (95%CI: 31.6, 34.3) |  | 75 | 31.8  (95%CI: 30.2, 33.4) | -1.2 | From regression models showing interaction terms, significantly greater decrease in total fat in females vs. males – 3.6 (95% CI: 2.1, 5.1) |
| **Change in energy intake (% saturated fat)** |  |  |  |  |  |  |  |  |
| Vandongen, 199554  Male | All groups | 423 | 13.6  (95%CI: 13.4, 13.9) | Reported as “About 9 months”  (but baseline – between Feb-April; follow up – between Oct- Dec) | 423 | 14.1  (95%CI: 13.9, 14.5) | 0.5 | Among boys, no significant difference from controls but tended to increase intake of saturated fats in all except the school nutrition group. |
| 1 | 63 | 13.6  (95%CI: 12.9, 14.2) |  | 63 | 14.2  (95%CI: 13.3, 15.0) | 0.6 |  |
| 2 | 75 | 13.7  (95%CI: 13.2, 14.3) |  | 75 | 14.2  (95%CI: 13.6, 14.9) | 0.7 |  |
| 3 | 72 | 13.8  (95%CI: 13.1, 14.6) |  | 72 | 14.4  (95%CI: 13.7, 15.2) | 0.6 |  |
| 4 | 73 | 14.0  (95%CI: 13.4, 14.6) |  | 73 | 13.9  (95%CI: 13.3, 14.5) | -0.1 |  |
| 5 | 54 | 12.9  (95%CI: 12.3, 13.6) |  | 54 | 14.2  (95%CI: 13.4, 15.0) | 1.3 |  |
| 6 | 86 | 13.6  (95%CI: 13.0, 14.2) |  | 86 | 14.1  (95%CI: 13.4, 14.8) | 0.5 |  |
| Vandongen, 199554  Female | All groups | 446 | 13.9  (95%CI: 13.6, 14.2) | Reported as “About 9 months”  (but baseline – between Feb-April; follow up – between Oct- Dec) | 446 | 14.2  (95%CI: 13.9, 14.5) | 0.3 |  |
| 1 | 63 | 14.4  (95%CI: 13.6, 15.1) |  | 63 | 15.0  (95%CI: 14.3, 15.7) | 0.6 |  |
| 2 | 75 | 14.3  (95%CI: 13.6, 14.2) |  | 75 | 14.7  (95%CI: 13.9, 15.4) | 0.4 |  |
| 3 | 77 | 14.1  (95%CI: 13.4, 14.7) |  | 77 | 14.0  (95%CI: 13.3, 14.6) | -0.1 | From regression models showing interaction terms, significantly greater decrease in saturated fat intake in females vs. males– 1.5 (95% CI: 0.8, 2.2) |
| 4 | 91 | 14.0  (95%CI: 13.3, 14.6) |  | 91 | 14.6  (95%CI: 13.9, 15.3) |  |  |
| 5 | 65 | 13.1  (95%CI: 12.3, 13.8) |  | 65 | 13.6  (95%CI: 12.9, 14.3) | 0.5 | From regression models showing interaction terms, significantly greater decrease in saturated fat intake in females vs. males – 1.6 (95% CI: 0.8, 2.4).  Among females, saturated fat intakes decreased in all treatment groups significantly from controls in the school+home nutrition group. |
| 6 | 75 | 13.8  (95%CI: 13.1, 14.5) |  | 75 | 13.3  (95%CI: 12.5, 14.1) | -0.5 | From regression models showing interaction terms, significantly greater decrease in saturated fat intake in females vs. males – 1.6 (95% CI: 0.9, 2.3).  Among females, saturated fat intakes decreased in all treatment groups significantly from controls in the home nutrition group. |
| **Change in energy intake (MJ/d)** |  |  |  |  |  |  |  |  |
| Vandongen, 199554  Male | All groups | 423 | 7.4 (95%CI: 7.2, 7.6) | Reported as “About 9 months”  (but baseline – between Feb-April; follow up – between Oct- Dec) | 423 | 7.7 (95%CI: 7.5, 7.9) | 0.3 | Did not change significantly during the intervention for all groups. |
| 1 | 63 | 7.2 (95%CI: 6.8, 7.7) |  | 63 | 8.0 (95%CI: 7.5, 8.6) | 0.8 |  |
| 2 | 75 | 7.8 (95%CI: 7.4, 8.3) |  | 75 | 7.6 (95%CI: 7.1, 8.1) | -0.2 |  |
| 3 | 72 | 7.1 (95%CI: 6.7, 7.5) |  | 72 | 7.5 (95%CI: 6.9, 8.1) | 0.4 |  |
| 4 | 73 | 7.4 (95%CI: 6.9, 7.8) |  | 73 | 7.5 (95%CI: 7.0, 8.0) | 0.1 |  |
| 5 | 54 | 7.4 (95%CI: 6.9, 8.0) |  | 54 | 7.9 (95%CI: 7.2, 8.6) | 0.5 |  |
| 6 | 86 | 7.6, (95%CI: 7.1, 8.1) |  | 86 | 8.0 (95%CI: 7.5, 8.6) | 0.4 |  |
| Vandongen, 199554  Male | All groups | 446 | 6.7 (95%CI: 6.5, 6.8) | Reported as “About 9 months”  (but baseline – between Feb-April; follow up – between Oct- Dec) | 446 | 6.8 (95%CI: 6.6, 7.0) | 0.1 | Did not change significantly during the intervention for all groups. |
| 1 | 63 | 6.8 (95%CI: 6.4, 7.2) |  | 63 | 6.5 (95%CI: 6.1, 6.9) | -0.3 |  |
| 2 | 75 | 6.8 (95%CI: 6.4, 7.3) |  | 75 | 6.9 (95%CI: 6.4, 7.3) | 0.1 |  |
| 3 | 77 | 6.8 (95%CI: 6.3, 7.3) |  | 77 | 7.0 (95%CI: 6.6, 7.5) | 0.2 |  |
| 4 | 91 | 6.4 (95%CI: 6.0, 6.7) |  | 91 | 6.9 (95%CI: 6.5, 7.3) | 0.5 |  |
| 5 | 65 | 6.4 (95%CI: 5.9, 6.8) |  | 65 | 6.6 (95%CI: 6.2, 7.1) | 0.2 |  |
| 6 | 75 | 6.9 (95%CI: 6.4, 7.3) |  | 75 | 6.8 (95%CI: 6.2, 7.5) | -0.1 |  |

ANOVA = Analysis of Variance; CI = Confidence Interval; PA = Physical Activity; P = p-value; SD = Standard Deviation