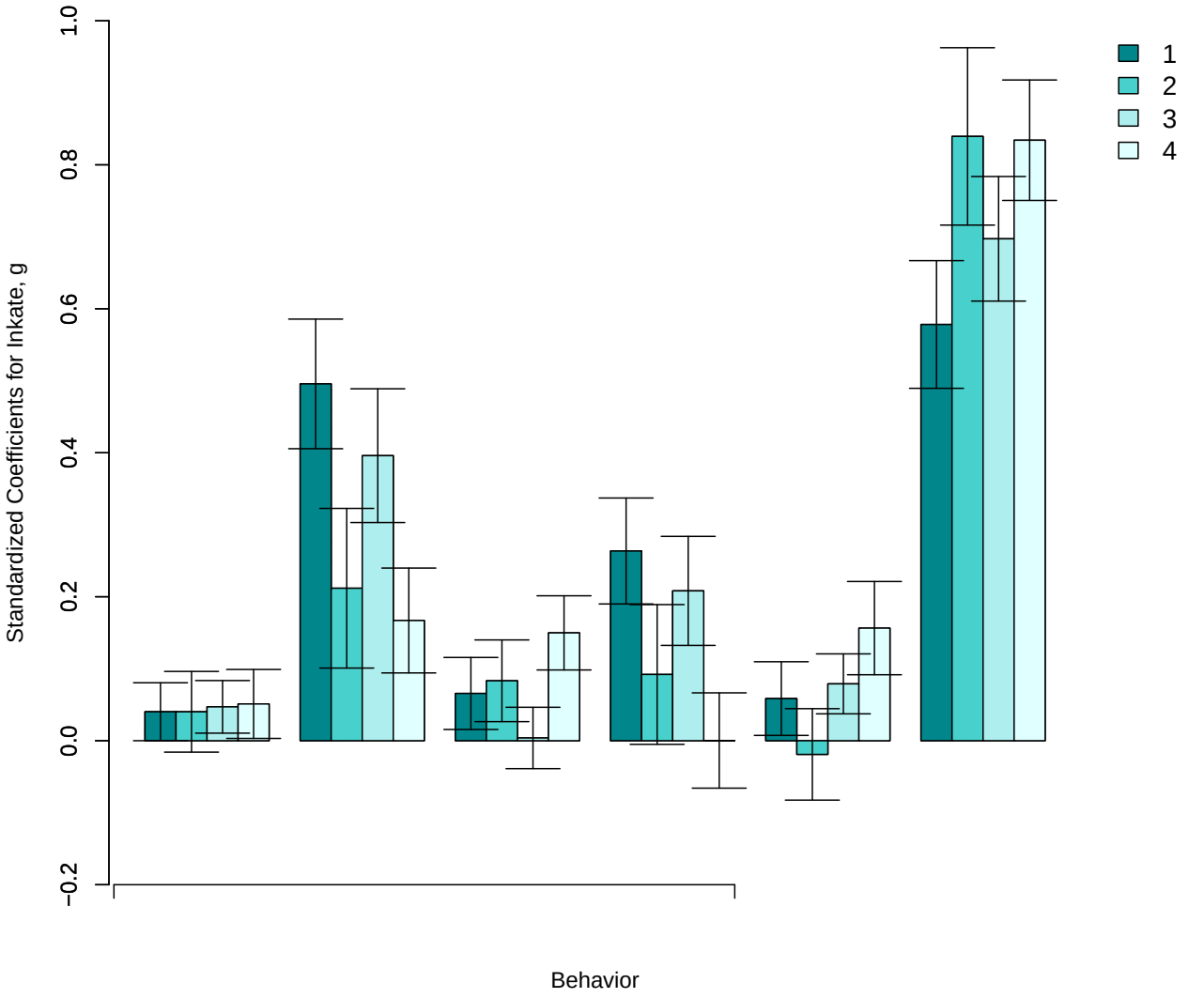
# Overall Microstructure Summary for Portion Size Meals

## Contents


Standardized Coefficients for Inkate, g
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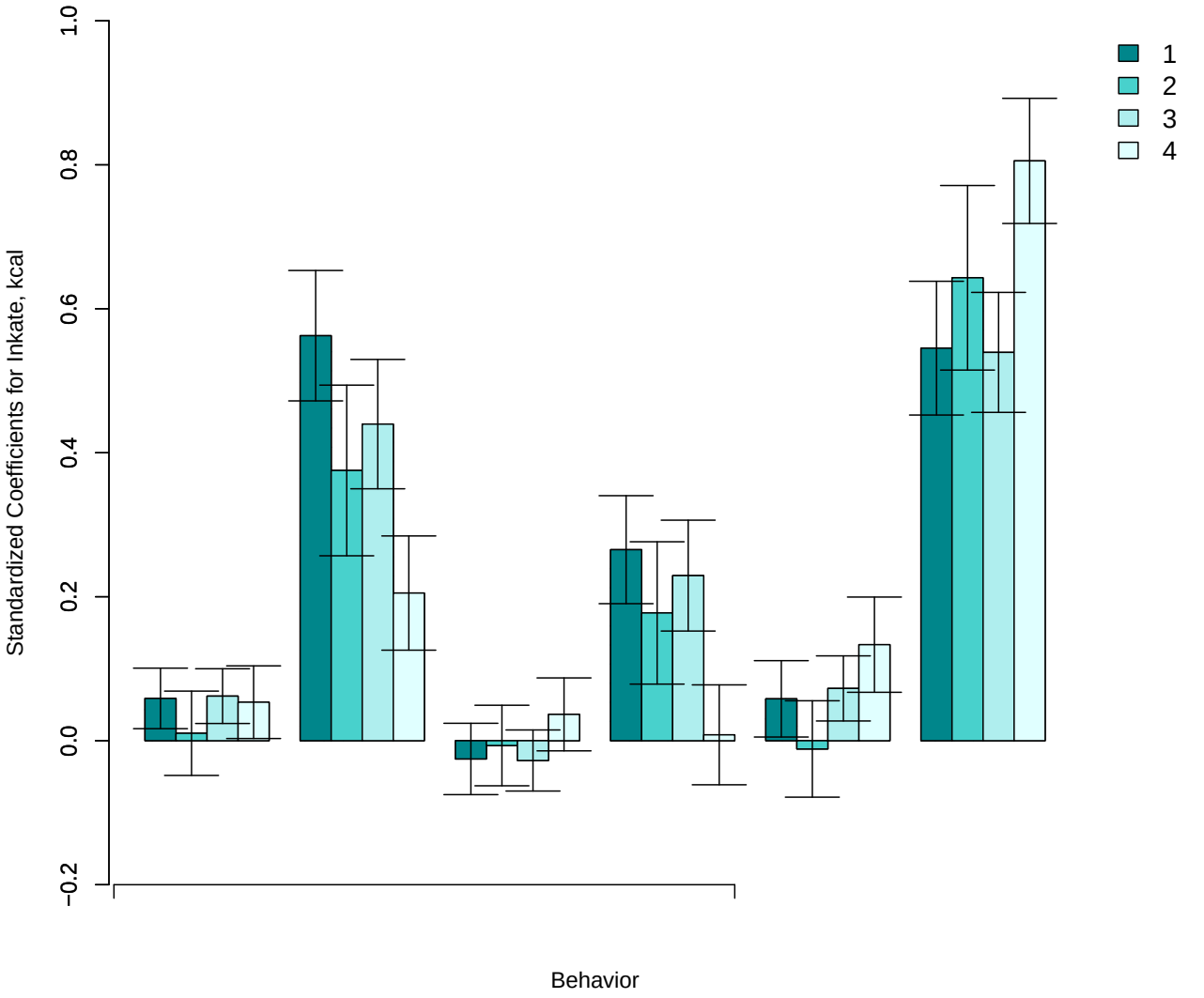
0.6
0.4
0.2
0.0
−0.2
1
2
3
4
Behavior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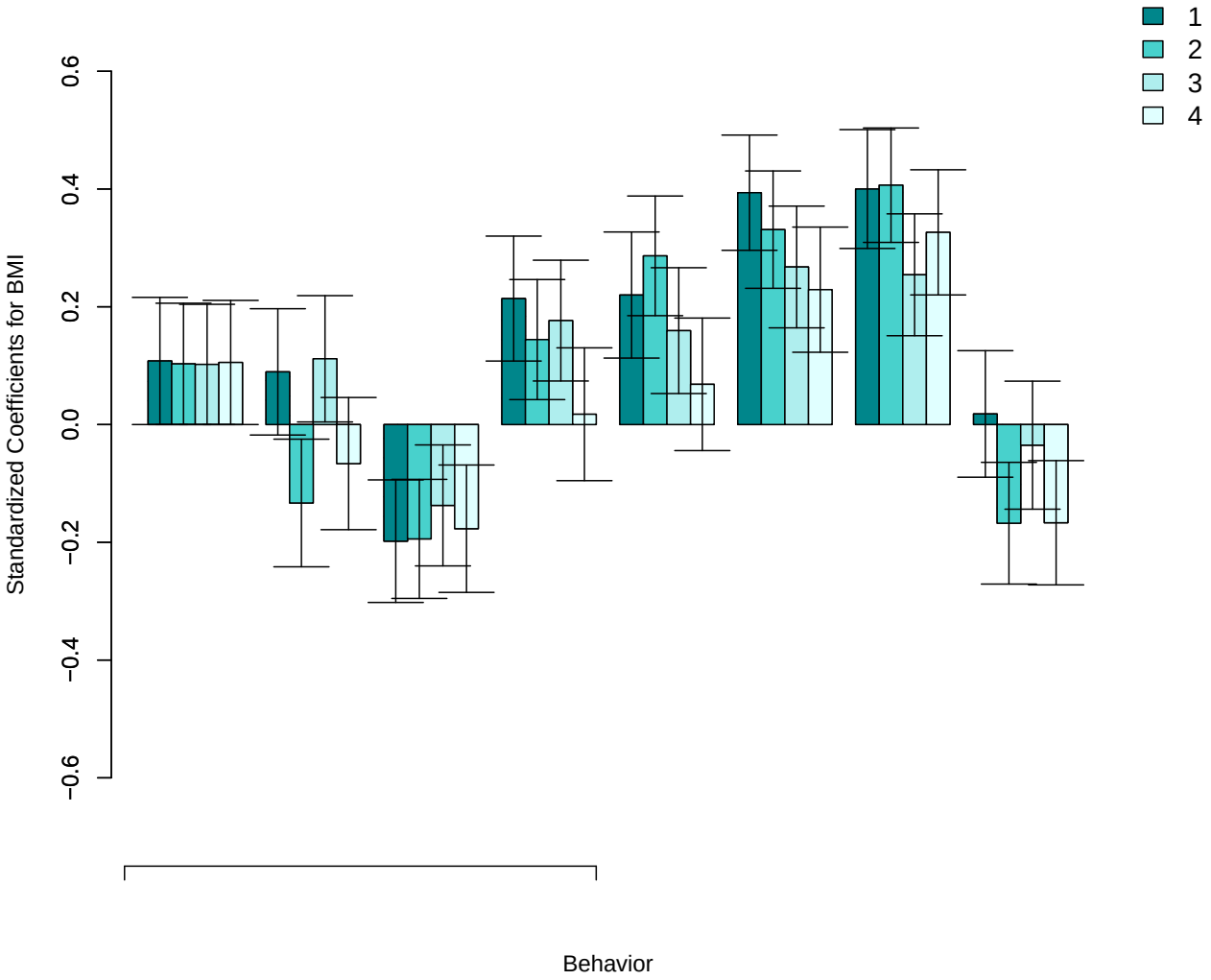
Behavior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3
4
Standardized Coefficients for BMI
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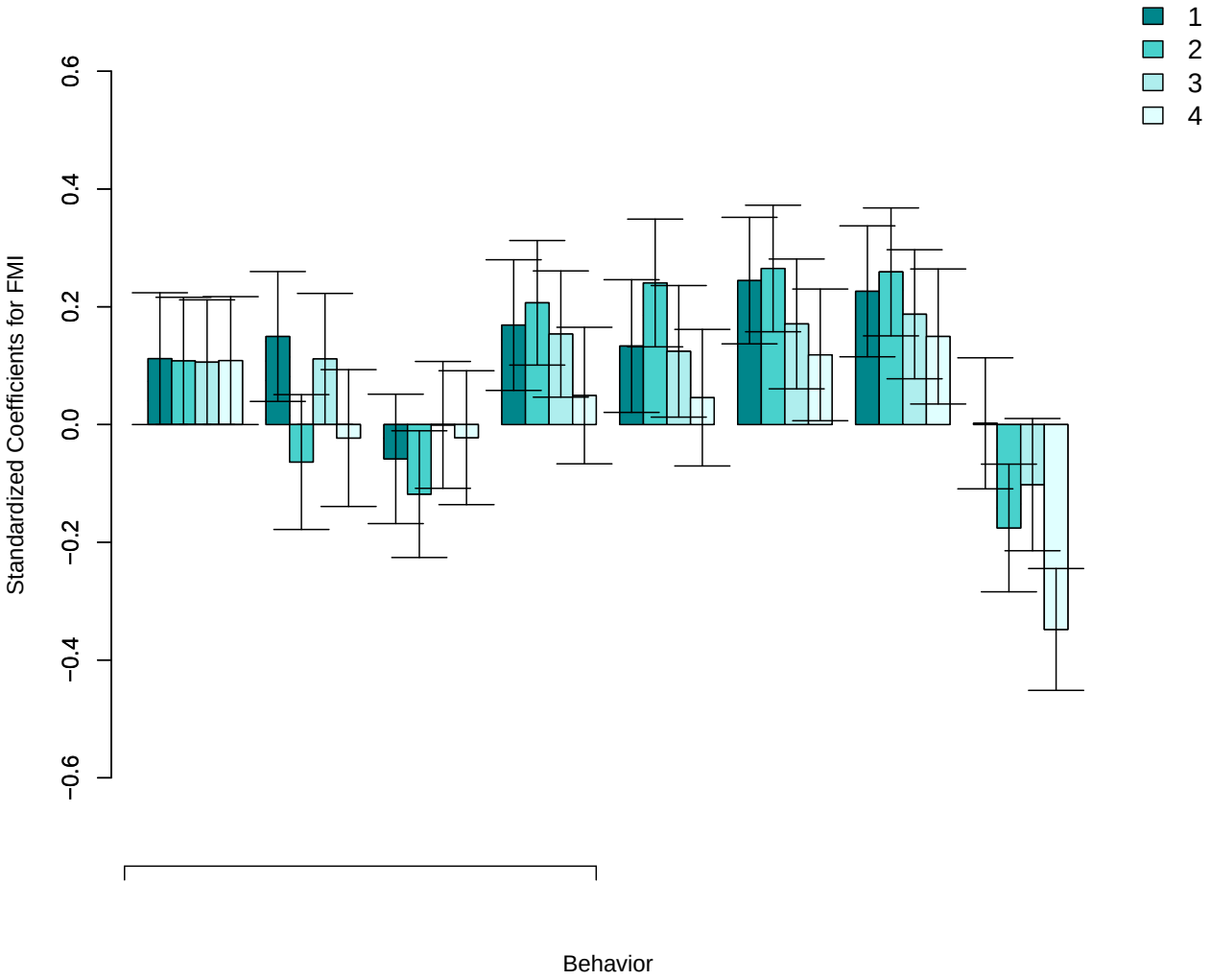
0.4
0.2
0.0
−0.2
−0.4
−0.6
Behavior


1
2
3
4
Standardized Coefficients for FMI
0.6
0.4
0.2
0.0
−0.2
−0.4
−0.6
Behavior

# 1 Demographics

Table 1: Demographics

| | Overall | Sex | | |
|---|---|---|---|---|
| Characteristic | N = 91 | Male, N = 46 | Female, N = 45 | p-value |
| Sex | | | | |
| Male | 46 (51%) | | | |
| Female | 45 (49%) | | | |
| Age, yr | 7.8 (0.6) | 7.7 (0.7) | 7.9 (0.6) | 0.3 |
| BMI %tile | 47.8 (24.6) | 48.3 (23.8) | 47.3 (25.7) | >0.9 |
| VAT, cm3 | 170.7 (57.4) | 212.0 (36.3) | 128.5 (42.1) | <0.001 |
| Fat Mass Index | 4.5 (0.9) | 4.2 (0.8) | 4.7 (1.0) | 0.004 |
| Ethnicity | | | | >0.9 |
| Hispanic/Lantinx | 0 (0%) | 0 (0%) | 0 (0%) | |
| Not Hispanic/Lantinx | 91 (100%) | 46 (100%) | 45 (100%) | |
| Race | | | | 0.2 |
| 0 | 88 (97%) | 43 (93%) | 45 (100%) | |
| 2 | 3 (3.3%) | 3 (6.5%) | 0 (0%) | |
| 3 | 0 (0%) | 0 (0%) | 0 (0%) | |
| Income | | | | 0.2 |
| < $51,000 | 11 (12%) | 6 (13%) | 5 (12%) | |
| >$100,000 | 33 (38%) | 13 (29%) | 20 (47%) | |
| $51,000 - $100,000 | 44 (50%) | 26 (58%) | 18 (42%) | |
| Unknown | 3 | 1 | 2 | |
| Mother's Education | | | | 0.4 |
| > Bachelor Degree | 28 (31%) | 13 (29%) | 15 (33%) | |
| AA/Technical Degree | 9 (10%) | 7 (16%) | 2 (4.4%) | |
| Bachelor Degree | 44 (49%) | 21 (47%) | 23 (51%) | |
| High School/GED | 9 (10%) | 4 (8.9%) | 5 (11%) | |
| Unknown | 1 | 1 | 0 | |
| Father's Education | | | | >0.9 |
| > Bachelor Degree | 32 (37%) | 17 (40%) | 15 (34%) | |
| AA/Technical Degree | 14 (16%) | 6 (14%) | 8 (18%) | |
| Bachelor Degree | 29 (33%) | 15 (35%) | 14 (32%) | |
| High School/GED | 11 (13%) | 5 (12%) | 6 (14%) | |
| Other/NA | 1 (1.1%) | 0 (0%) | 1 (2.3%) | |
| Unknown | 4 | 3 | 1 | |

[1] n (%); Mean (SD)

[2] Mean (SD); n (%)

[3] Wilcoxon rank sum test; Wilcoxon rank sum exact test; Fisher's exact test; Pearson's Chi-squared test

# 2 Meal Intake

Table 2: Meal Intake

| Characteristic | 1, N = 89 | 2, N = 88 | 3, N = 87 | 4, N = 83 |
|---|---|---|---|---|
| Pre-Meal Fullness | 36.7 (34.3) | 35.7 (31.9) | 38.6 (35.5) | 32.9 (34.0) |
| Unknown | 0 | 1 | 0 | 0 |
| Intake, g | 410.4 (161.3) | 440.8 (165.6) | 464.3 (188.5) | 458.2 (181.0) |
| Unknown | 0 | 1 | 1 | 1 |
| Intake, kcal | 487.2 (191.9) | 525.4 (206.9) | 562.5 (256.8) | 586.8 (247.4) |
| Unknown | 0 | 1 | 1 | 1 |
| Liking - Maccaroni | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Unknown | 0 | 1 | 0 | 0 |
| Liking - Chicken | 4.2 (0.9) | 4.3 (0.8) | 4.2 (0.9) | 4.2 (0.9) |
| Unknown | 0 | 1 | 0 | 0 |
| Liking - Grapes | 3.1 (1.4) | 2.9 (1.3) | 3.1 (1.3) | 3.2 (1.4) |
| Unknown | 0 | 1 | 0 | 0 |
| Liking - Broccoli | 4.2 (0.8) | 4.3 (0.9) | 4.3 (0.9) | 4.3 (0.9) |
| Unknown | 0 | 1 | 0 | 0 |
| Avg. Liking | 3.9 (0.6) | 3.8 (0.6) | 3.8 (0.6) | 3.9 (0.6) |
| Unknown | 0 | 1 | 0 | 0 |
| 95% consumed | | | | |
| 0 | 87 (98%) | 87 (100%) | 86 (100%) | 82 (100%) |
| 1 | 2 (2.2%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Unknown | 0 | 1 | 1 | 1 |

[1] Mean (SD); n (%)

Table 3: Boys: Meal Intake

| Characteristic | 1, N = 45 | 2, N = 46 | 3, N = 43 | 4, N = 39 |
|---|---|---|---|---|
| Pre-Meal Fullness | 36.7 (32.8) | 38.5 (32.5) | 40.1 (37.9) | 35.9 (34.6) |
| Intake, g | 423.3 (139.9) | 464.8 (162.2) | 465.2 (177.5) | 461.9 (164.0) |
| Unknown | 0 | 0 | 0 | 1 |
| Intake, kcal | 513.8 (169.1) | 534.8 (191.5) | 572.9 (260.0) | 599.0 (226.8) |
| Unknown | 0 | 0 | 0 | 1 |
| Liking - Maccaroni | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Liking - Chicken | 4.4 (0.8) | 4.3 (0.8) | 4.3 (0.7) | 4.3 (0.8) |
| Liking - Grapes | 3.0 (1.4) | 2.9 (1.3) | 3.0 (1.3) | 3.1 (1.4) |
| Liking - Broccoli | 4.2 (0.8) | 4.2 (1.0) | 4.3 (0.8) | 4.2 (0.9) |
| Avg. Liking | 3.8 (0.6) | 3.8 (0.6) | 3.9 (0.5) | 3.8 (0.6) |
| 95% consumed | | | | |
| 0 | 43 (96%) | 46 (100%) | 43 (100%) | 38 (100%) |
| 1 | 2 (4.4%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Unknown | 0 | 0 | 0 | 1 |

[1] Mean (SD); n (%)

Table 4: Girls: Meal Intake

| Characteristic | 1, N = 44 | 2, N = 42 | 3, N = 44 | 4, N = 44 |
|---|---|---|---|---|
| Pre-Meal Fullness | 36.7 (36.2) | 32.6 (31.4) | 37.0 (33.3) | 30.1 (33.6) |
| Unknown | 0 | 1 | 0 | 0 |
| Intake, g | 397.3 (181.4) | 413.9 (167.3) | 463.4 (201.1) | 455.0 (196.4) |
| Unknown | 0 | 1 | 1 | 0 |
| Intake, kcal | 459.9 (211.2) | 514.9 (224.8) | 552.1 (256.2) | 576.2 (266.0) |
| Unknown | 0 | 1 | 1 | 0 |
| Liking - Maccaroni | 4.1 (0.9) | 4.0 (1.0) | 3.8 (1.0) | 4.0 (1.0) |
| Unknown | 0 | 1 | 0 | 0 |
| Liking - Chicken | 4.1 (1.0) | 4.3 (0.8) | 4.1 (1.0) | 4.2 (0.9) |
| Unknown | 0 | 1 | 0 | 0 |
| Liking - Grapes | 3.2 (1.4) | 3.0 (1.3) | 3.1 (1.4) | 3.2 (1.5) |
| Unknown | 0 | 1 | 0 | 0 |
| Liking - Broccoli | 4.3 (0.8) | 4.3 (0.8) | 4.3 (0.9) | 4.3 (0.9) |
| Unknown | 0 | 1 | 0 | 0 |
| Avg. Liking | 3.9 (0.6) | 3.9 (0.6) | 3.8 (0.7) | 3.9 (0.6) |
| Unknown | 0 | 1 | 0 | 0 |
| 95% consumed | | | | |
| 0 | 44 (100%) | 41 (100%) | 43 (100%) | 44 (100%) |
| Unknown | 0 | 1 | 1 | 0 |

[1] Mean (SD); n (%)

# 3 Microstructure

## 3.1 Behaviors Across Meals

Table 5: Microstructure Behaviors by Portion Size Meal

| Characteristic | 1, N = 89 | 2, N = 88 | 3, N = 87 | 4, N = 83 |
|---|---|---|---|---|
| bites | 72.584 (37.917) | 75.682 (37.838) | 82.322 (45.073) | 79.349 (44.043) |
| sips | 6.562 (6.517) | 7.864 (8.324) | 6.908 (6.596) | 5.578 (5.988) |
| active eating, min | 15.340 (7.254) | 15.941 (6.993) | 17.123 (7.629) | 17.153 (7.954) |
| 1st bite latency, min | 0.403 (0.287) | 0.379 (0.224) | 0.368 (0.238) | 0.401 (0.268) |
| meal duration, min | 18.009 (8.805) | 18.493 (8.385) | 19.395 (8.422) | 19.156 (8.788) |
| bites/min | 4.291 (1.759) | 4.343 (1.769) | 4.459 (1.973) | 4.369 (1.854) |
| bite/min (active) | 4.896 (1.755) | 4.926 (1.834) | 4.970 (2.004) | 4.787 (1.846) |
| sips/min | 0.369 (0.318) | 0.433 (0.460) | 0.367 (0.377) | 0.314 (0.343) |
| sips/min (active) | 0.440 (0.428) | 0.497 (0.522) | 0.417 (0.424) | 0.349 (0.374) |
| g/bite | 6.385 (2.385) | 6.648 (2.824) | 6.406 (2.126) | 6.975 (5.246) |
| Unknown | 0 | 1 | 1 | 1 |
| kcal/bite | 7.710 (3.262) | 7.805 (3.148) | 7.751 (3.137) | 8.884 (6.501) |
| Unknown | 0 | 1 | 1 | 1 |
| g/min | 25.882 (11.252) | 26.495 (10.502) | 26.387 (10.857) | 27.195 (12.451) |
| Unknown | 0 | 1 | 1 | 1 |
| kcal/min | 31.418 (14.781) | 32.117 (14.735) | 32.300 (16.046) | 34.952 (16.388) |
| Unknown | 0 | 1 | 1 | 1 |
| g/min (active) | 29.704 (11.944) | 30.229 (11.449) | 29.552 (11.313) | 30.495 (14.998) |
| Unknown | 0 | 1 | 1 | 1 |
| kcal/min (active) | 35.934 (16.096) | 36.518 (15.665) | 35.899 (16.602) | 39.120 (19.524) |
| Unknown | 0 | 1 | 1 | 1 |
| active eat/meal duration, min | 0.867 (0.123) | 0.879 (0.110) | 0.891 (0.116) | 0.902 (0.110) |

[1] Mean (SD)

Table 6: Boys: Microstructure Behaviors by Portion Size Meal

| Characteristic | 1, N = 45 | 2, N = 46 | 3, N = 43 | 4, N = 39 |
|---|---|---|---|---|
| bites | 71.556 (30.773) | 69.543 (30.716) | 74.535 (33.830) | 72.385 (27.113) |
| sips | 6.222 (5.842) | 8.261 (8.185) | 7.744 (7.728) | 5.769 (6.796) |
| active eating, min | 16.857 (6.964) | 16.743 (7.121) | 17.654 (7.499) | 18.053 (8.021) |
| 1st bite latency, min | 0.356 (0.187) | 0.385 (0.236) | 0.413 (0.284) | 0.409 (0.268) |
| meal duration, min | 19.564 (8.379) | 19.339 (8.341) | 20.190 (8.529) | 20.075 (8.525) |
| bites/min | 3.938 (1.509) | 3.897 (1.543) | 3.940 (1.418) | 3.902 (1.330) |
| bite/min (active) | 4.417 (1.435) | 4.424 (1.567) | 4.392 (1.382) | 4.297 (1.391) |
| sips/min | 0.330 (0.296) | 0.423 (0.385) | 0.396 (0.457) | 0.296 (0.354) |
| sips/min (active) | 0.383 (0.354) | 0.484 (0.427) | 0.461 (0.515) | 0.337 (0.389) |
| g/bite | 6.482 (2.118) | 7.430 (2.766) | 6.837 (2.202) | 6.792 (2.498) |
| Unknown | 0 | 0 | 0 | 1 |
| kcal/bite | 7.955 (2.946) | 8.472 (2.943) | 8.272 (3.391) | 8.859 (3.682) |
| Unknown | 0 | 0 | 0 | 1 |
| g/min | 24.131 (8.903) | 27.155 (11.158) | 26.017 (10.982) | 25.253 (9.881) |
| Unknown | 0 | 0 | 0 | 1 |
| kcal/min | 30.244 (13.454) | 32.151 (15.532) | 32.460 (17.555) | 33.769 (15.456) |
| Unknown | 0 | 0 | 0 | 1 |
| g/min (active) | 27.362 (9.244) | 31.097 (12.416) | 29.254 (11.543) | 28.201 (10.735) |
| Unknown | 0 | 0 | 0 | 1 |
| kcal/min (active) | 34.076 (14.157) | 36.630 (16.574) | 36.003 (18.564) | 37.586 (17.319) |
| Unknown | 0 | 0 | 0 | 1 |
| active eat/meal duration, min | 0.878 (0.116) | 0.880 (0.104) | 0.887 (0.114) | 0.908 (0.121) |

[1] Mean (SD)

Table 7: Girls: Microstructure Behaviors by Portion Size Meal

| Characteristic | 1, N = 44 | 2, N = 42 | 3, N = 44 | 4, N = 44 |
|---|---|---|---|---|
| bites | 73.636 (44.397) | 82.405 (43.749) | 89.932 (53.155) | 85.523 (54.465) |
| sips | 6.909 (7.194) | 7.429 (8.552) | 6.091 (5.224) | 5.409 (5.244) |
| active eating, min | 13.788 (7.293) | 15.062 (6.826) | 16.604 (7.804) | 16.356 (7.900) |
| 1st bite latency, min | 0.451 (0.357) | 0.374 (0.213) | 0.323 (0.175) | 0.394 (0.271) |
| meal duration, min | 16.419 (9.039) | 17.566 (8.435) | 18.618 (8.340) | 18.341 (9.033) |
| bites/min | 4.653 (1.933) | 4.832 (1.886) | 4.967 (2.299) | 4.783 (2.149) |
| bite/min (active) | 5.386 (1.925) | 5.476 (1.961) | 5.535 (2.346) | 5.221 (2.093) |
| sips/min | 0.409 (0.339) | 0.443 (0.536) | 0.337 (0.280) | 0.330 (0.337) |
| sips/min (active) | 0.499 (0.489) | 0.511 (0.614) | 0.375 (0.310) | 0.360 (0.365) |
| g/bite | 6.285 (2.651) | 5.770 (2.656) | 5.975 (1.979) | 7.133 (6.813) |
| Unknown | 0 | 1 | 1 | 0 |
| kcal/bite | 7.459 (3.573) | 7.055 (3.237) | 7.230 (2.803) | 8.906 (8.243) |
| Unknown | 0 | 1 | 1 | 0 |
| g/min | 27.672 (13.095) | 25.755 (9.797) | 26.757 (10.848) | 28.873 (14.206) |
| Unknown | 0 | 1 | 1 | 0 |
| kcal/min | 32.619 (16.094) | 32.079 (13.978) | 32.140 (14.589) | 35.974 (17.264) |
| Unknown | 0 | 1 | 1 | 0 |
| g/min (active) | 32.100 (13.890) | 29.254 (10.323) | 29.851 (11.208) | 32.476 (17.773) |
| Unknown | 0 | 1 | 1 | 0 |
| kcal/min (active) | 37.833 (17.827) | 36.393 (14.781) | 35.795 (14.599) | 40.445 (21.355) |
| Unknown | 0 | 1 | 1 | 0 |
| active eat/meal duration, min | 0.856 (0.130) | 0.879 (0.117) | 0.896 (0.120) | 0.897 (0.100) |

[1] Mean (SD)

Table 8: Sex differences: t-tests

| beh | ps1_t | ps1_df | ps1_p | ps2_t | ps2_df | ps2_p | ps3_t | ps3_df | ps3_p | ps4_t | ps4_df |
|---|---|---|---|---|---|---|---|---|---|---|---|
| nbites | -0.256 | 76.410 | 0.798 | -1.582 | 72.779 | 0.118 | -1.616 | 73.163 | 0.110 | -1.415 | 64.684 |
| nsips | -0.494 | 82.719 | 0.623 | 0.465 | 84.445 | 0.643 | 1.166 | 73.563 | 0.247 | 0.268 | 71.179 |
| active_eating | 2.030 | 86.591 | 0.045 | 1.130 | 85.788 | 0.262 | 0.640 | 84.977 | 0.524 | 0.969 | 79.499 |
| bite_latency | -1.572 | 64.617 | 0.121 | 0.229 | 85.986 | 0.819 | 1.762 | 69.609 | 0.082 | 0.259 | 80.002 |
| meal_duration | 1.701 | 86.167 | 0.093 | 0.990 | 85.092 | 0.325 | 0.869 | 84.824 | 0.387 | 0.900 | 80.666 |
| bite_rate | -1.941 | 81.294 | 0.056 | -2.533 | 79.407 | 0.013 | -2.514 | 71.845 | 0.014 | -2.272 | 72.817 |
| bite_rate_active | -2.688 | 79.500 | 0.009 | -2.762 | 78.444 | 0.007 | -2.777 | 69.952 | 0.007 | -2.392 | 75.344 |
| sip_rate | -1.166 | 84.887 | 0.247 | -0.199 | 73.832 | 0.843 | 0.724 | 69.395 | 0.471 | -0.450 | 78.733 |
| sip_rate_active | -1.287 | 78.274 | 0.202 | -0.243 | 72.331 | 0.809 | 0.944 | 68.680 | 0.349 | -0.277 | 78.298 |
| bite_size_g | 0.387 | 82.148 | 0.700 | 2.853 | 84.513 | 0.005 | 1.908 | 83.063 | 0.060 | -0.309 | 55.857 |
| bite_size_kcal | 0.714 | 83.230 | 0.477 | 2.127 | 81.383 | 0.036 | 1.553 | 81.123 | 0.124 | -0.034 | 61.353 |
| eat_rate_g | -1.488 | 75.568 | 0.141 | 0.623 | 84.984 | 0.535 | -0.314 | 83.987 | 0.754 | -1.353 | 76.699 |
| eat_rate_kcal | -0.755 | 83.666 | 0.453 | 0.023 | 84.990 | 0.982 | 0.092 | 81.279 | 0.927 | -0.610 | 79.886 |
| eat_rate_active_g | -1.890 | 74.630 | 0.063 | 0.756 | 84.613 | 0.452 | -0.243 | 83.927 | 0.808 | -1.338 | 72.057 |
| eat_rate_active_kcal | -1.099 | 81.933 | 0.275 | 0.071 | 85.000 | 0.944 | 0.058 | 79.577 | 0.954 | -0.669 | 79.708 |
| prop_active | 0.874 | 85.434 | 0.384 | 0.039 | 82.305 | 0.969 | -0.329 | 84.951 | 0.743 | 0.443 | 74.045 |

## 3.2 Coding Reliability

Table 9: Coding Reliability - ICC

| Behavior | Overall | Portion 1 | Portion 2 | Portion 3 | Portion 4 |
|---|---|---|---|---|---|
| bites | 1 | 1 | 1 | 1 | 1 |
| sips | 1 | 0.999 | 1 | 1 | 1 |
| active eating | 0.964 | 0.965 | 0.997 | 0.991 | 0.912 |
| bite latency | 0.944 | 0.994 | 0.865 | 0.958 | 0.925 |
| meal duration | 1 | 1 | 1 | 1 | 0.999 |

## 3.3 Portion Correlation Matrices

Table 10: Portion Size 1: Correlation Matrix

| | nbites | nsips | total_active_eating | bite_latency | meal_duration | bite_rate | bite_rate_active | sip_rate | sip_rate_active | bite_size_g | bite_size_kcal | eat_rate_g | eat_rate_kcal | eat_rate_active_g | eat_rate_active_kcal | prop_active |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| nbites | | | | | | | | | | | | | | | | |
| nsips | 0.32 | | | | | | | | | | | | | | | |
| total_active_eating | 0.7 | 0.39 | | | | | | | | | | | | | | |
| bite_latency | -0.02 | 0.16 | -0.06 | | | | | | | | | | | | | |
| meal_duration | 0.59 | 0.5 | 0.91 | 0.04 | | | | | | | | | | | | |
| bite_rate | 0.52 | -0.12 | -0.14 | -0.15 | -0.31 | | | | | | | | | | | |
| bite_rate_active | 0.5 | -0.01 | -0.2 | 0.01 | -0.25 | 0.94 | | | | | | | | | | |
| sip_rate | 0.01 | 0.73 | -0.07 | 0.01 | -0.03 | 0.07 | 0.13 | | | | | | | | | |
| sip_rate_active | 0 | 0.8 | -0.06 | 0.19 | 0.07 | -0.02 | 0.12 | 0.94 | | | | | | | | |
| bite_size_g | -0.59 | 0.01 | -0.38 | 0.12 | -0.33 | -0.37 | -0.38 | 0.26 | 0.22 | | | | | | | |
| bite_size_kcal | -0.59 | -0.25 | -0.44 | 0.09 | -0.43 | -0.29 | -0.32 | 0.02 | -0.02 | 0.8 | | | | | | |
| eat_rate_g | -0.09 | -0.1 | -0.45 | -0.08 | -0.57 | 0.56 | 0.5 | 0.32 | 0.19 | 0.5 | 0.39 | | | | | |
| eat_rate_kcal | -0.11 | -0.26 | -0.49 | -0.12 | -0.61 | 0.55 | 0.5 | 0.14 | 0.03 | 0.37 | 0.56 | 0.86 | | | | |
| eat_rate_active_g | -0.18 | -0.02 | -0.53 | 0.07 | -0.52 | 0.43 | 0.48 | 0.36 | 0.31 | 0.57 | 0.43 | 0.94 | 0.81 | | | |
| eat_rate_active_kcal | -0.19 | -0.22 | -0.55 | 0 | -0.58 | 0.44 | 0.48 | 0.16 | 0.1 | 0.43 | 0.61 | 0.81 | 0.96 | 0.85 | | |
| prop_active | 0.25 | -0.24 | 0.13 | -0.33 | -0.26 | 0.51 | 0.21 | -0.03 | -0.25 | -0.08 | 0.01 | 0.4 | 0.39 | 0.08 | 0.13 | |

Table 11: Portion Size 2: Correlation Matrix

| | nbites | nsips | total_active_eating | bite_latency | meal_duration | bite_rate | bite_rate_active | sip_rate | sip_rate_active | bite_size_g | bite_size_kcal | eat_rate_g | eat_rate_kcal | eat_rate_active_g | eat_rate_active_kcal | prop_active |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| nbites | | | | | | | | | | | | | | | | |
| nsips | 0.16 | | | | | | | | | | | | | | | |
| total_active_eating | 0.64 | 0.34 | | | | | | | | | | | | | | |
| bite_latency | -0.2 | 0.09 | 0.05 | | | | | | | | | | | | | |
| meal_duration | 0.61 | 0.34 | 0.92 | 0.02 | | | | | | | | | | | | |
| bite_rate | 0.5 | -0.18 | -0.22 | -0.22 | -0.32 | | | | | | | | | | | |
| bite_rate_active | 0.55 | -0.16 | -0.22 | -0.21 | -0.21 | 0.94 | | | | | | | | | | |
| sip_rate | -0.07 | 0.86 | -0.01 | 0.08 | -0.04 | -0.09 | -0.1 | | | | | | | | | |
| sip_rate_active | -0.06 | 0.87 | -0.02 | 0.08 | 0.01 | -0.12 | -0.09 | 0.99 | | | | | | | | |
| bite_size_g | -0.61 | 0.14 | -0.32 | 0.16 | -0.28 | -0.48 | -0.49 | 0.29 | 0.29 | | | | | | | |
| bite_size_kcal | -0.58 | -0.1 | -0.41 | 0.19 | -0.39 | -0.32 | -0.34 | 0.11 | 0.1 | 0.78 | | | | | | |
| eat_rate_g | -0.18 | -0.03 | -0.54 | -0.02 | -0.6 | 0.46 | 0.38 | 0.24 | 0.19 | 0.48 | 0.49 | | | | | |
| eat_rate_kcal | -0.09 | -0.21 | -0.53 | -0.01 | -0.59 | 0.57 | 0.5 | 0.06 | 0.02 | 0.23 | 0.53 | 0.86 | | | | |
| eat_rate_active_g | -0.19 | -0.01 | -0.55 | -0.01 | -0.48 | 0.33 | 0.36 | 0.22 | 0.22 | 0.56 | 0.54 | 0.92 | 0.78 | | | |
| eat_rate_active_kcal | -0.09 | -0.2 | -0.55 | 0 | -0.51 | 0.48 | 0.5 | 0.04 | 0.04 | 0.28 | 0.59 | 0.82 | 0.95 | 0.84 | | |
| prop_active | 0.01 | -0.07 | 0.02 | 0 | -0.35 | 0.37 | 0.06 | 0.05 | -0.07 | -0.09 | -0.04 | 0.3 | 0.29 | -0.06 | 0.02 | |

Table 12: Portion Size 3: Correlation Matrix

| | nbites | nsips | total_active_eating | bite_latency | meal_duration | bite_rate | bite_rate_active | sip_rate | sip_rate_active | bite_size_g | bite_size_kcal | eat_rate_g | eat_rate_kcal | eat_rate_active_g | eat_rate_active_kcal | prop_active |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| nbites | | | | | | | | | | | | | | | | |
| nsips | 0.14 | | | | | | | | | | | | | | | |
| total_active_eating | 0.65 | 0.39 | | | | | | | | | | | | | | |
| bite_latency | -0.02 | -0.16 | 0.04 | | | | | | | | | | | | | |
| meal_duration | 0.55 | 0.42 | 0.93 | 0.07 | | | | | | | | | | | | |
| bite_rate | 0.62 | -0.19 | -0.11 | -0.07 | -0.25 | | | | | | | | | | | |
| bite_rate_active | 0.59 | -0.22 | -0.18 | -0.02 | -0.24 | 0.96 | | | | | | | | | | |
| sip_rate | -0.11 | 0.82 | -0.06 | -0.17 | -0.06 | -0.07 | -0.1 | | | | | | | | | |
| sip_rate_active | -0.15 | 0.84 | -0.07 | -0.18 | -0.02 | -0.13 | -0.13 | 0.98 | | | | | | | | |
| bite_size_g | -0.6 | 0.17 | -0.35 | -0.02 | -0.31 | -0.42 | -0.44 | 0.38 | 0.41 | | | | | | | |
| bite_size_kcal | -0.49 | -0.18 | -0.31 | 0.03 | -0.34 | -0.28 | -0.34 | 0.01 | -0.01 | 0.66 | | | | | | |
| eat_rate_g | -0.02 | -0.01 | -0.42 | -0.09 | -0.54 | 0.55 | 0.49 | 0.32 | 0.25 | 0.46 | 0.35 | | | | | |
| eat_rate_kcal | 0 | -0.22 | -0.36 | -0.06 | -0.49 | 0.52 | 0.44 | 0.05 | -0.02 | 0.28 | 0.61 | 0.82 | | | | |
| eat_rate_active_g | -0.1 | 0 | -0.5 | -0.05 | -0.52 | 0.46 | 0.49 | 0.32 | 0.3 | 0.52 | 0.32 | 0.96 | 0.74 | | | |
| eat_rate_active_kcal | -0.05 | -0.24 | -0.42 | -0.01 | -0.48 | 0.47 | 0.45 | 0.03 | -0.02 | 0.3 | 0.62 | 0.79 | 0.97 | 0.77 | | |
| prop_active | 0.26 | -0.05 | 0.19 | -0.14 | -0.17 | 0.39 | 0.13 | 0.04 | -0.11 | -0.09 | 0.12 | 0.33 | 0.38 | 0.05 | 0.17 | |

Table 13: Portion Size 4: Correlation Matrix

| | nbites | nsips | total_active_eating | bite_latency | meal_duration | bite_rate | bite_rate_active | sip_rate | sip_rate_active | bite_size_g | bite_size_kcal | eat_rate_g | eat_rate_kcal | eat_rate_active_g | eat_rate_active_kcal | prop_active |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| nbites | | | | | | | | | | | | | | | | |
| nsips | 0.32 | | | | | | | | | | | | | | | |
| total_active_eating | 0.7 | 0.39 | | | | | | | | | | | | | | |
| bite_latency | -0.02 | 0.16 | -0.06 | | | | | | | | | | | | | |
| meal_duration | 0.59 | 0.5 | 0.91 | 0.04 | | | | | | | | | | | | |
| bite_rate | 0.52 | -0.12 | -0.14 | -0.15 | -0.31 | | | | | | | | | | | |
| bite_rate_active | 0.5 | -0.01 | -0.2 | 0.01 | -0.25 | 0.94 | | | | | | | | | | |
| sip_rate | 0.01 | 0.73 | -0.07 | 0.01 | -0.03 | 0.07 | 0.13 | | | | | | | | | |
| sip_rate_active | 0 | 0.8 | -0.06 | 0.19 | 0.07 | -0.02 | 0.12 | 0.94 | | | | | | | | |
| bite_size_g | -0.59 | 0.01 | -0.38 | 0.12 | -0.33 | -0.37 | -0.38 | 0.26 | 0.22 | | | | | | | |
| bite_size_kcal | -0.59 | -0.25 | -0.44 | 0.09 | -0.43 | -0.29 | -0.32 | 0.02 | -0.02 | 0.8 | | | | | | |
| eat_rate_g | -0.09 | -0.1 | -0.45 | -0.08 | -0.57 | 0.56 | 0.5 | 0.32 | 0.19 | 0.5 | 0.39 | | | | | |
| eat_rate_kcal | -0.11 | -0.26 | -0.49 | -0.12 | -0.61 | 0.55 | 0.5 | 0.14 | 0.03 | 0.37 | 0.56 | 0.86 | | | | |
| eat_rate_active_g | -0.18 | -0.02 | -0.53 | 0.07 | -0.52 | 0.43 | 0.48 | 0.36 | 0.31 | 0.57 | 0.43 | 0.94 | 0.81 | | | |
| eat_rate_active_kcal | -0.19 | -0.22 | -0.55 | 0 | -0.58 | 0.44 | 0.48 | 0.16 | 0.1 | 0.43 | 0.61 | 0.81 | 0.96 | 0.85 | | |
| prop_active | 0.25 | -0.24 | 0.13 | -0.33 | -0.26 | 0.51 | 0.21 | -0.03 | -0.25 | -0.08 | 0.01 | 0.4 | 0.39 | 0.08 | 0.13 | |

### 3.4 Repeated Measures Correlation

Table 14: Repeated Measures: Correlation Matrix

| | nbites_c1 | nsips_c1 | total_active_eating_c1 | bite_latency_c1 | meal_duration_c1 | bite_rate_c1 | bite_rate_active_c1 | sip_rate_c1 | sip_rate_active_c1 | bite_size_g_c1 | bite_size_kcal_c1 | eat_rate_g_c1 | eat_rate_kcal_c1 | eat_rate_active_g_c1 | eat_rate_active_kcal_c1 | prop_active_c1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| nbites_c1 | | | | | | | | | | | | | | | | |
| nsips_c1 | 0.085 | | | | | | | | | | | | | | | |
| total_active_eating_c1 | 0.664 | 0.173 | | | | | | | | | | | | | | |
| bite_latency_c1 | -0.117 | 0.044 | -0.042 | | | | | | | | | | | | | |
| meal_duration_c1 | 0.538 | 0.213 | 0.811 | -0.006 | | | | | | | | | | | | |
| bite_rate_c1 | 0.501 | -0.102 | -0.076 | -0.167 | -0.338 | | | | | | | | | | | |
| bite_rate_active_c1 | 0.412 | -0.054 | -0.294 | -0.068 | -0.279 | 0.851 | | | | | | | | | | |
| sip_rate_c1 | -0.098 | 0.825 | -0.084 | 0.006 | -0.131 | -0.004 | -0.011 | | | | | | | | | |
| sip_rate_active_c1 | -0.132 | 0.843 | -0.144 | 0.067 | -0.056 | -0.101 | 0.01 | 0.947 | | | | | | | | |
| bite_size_g_c1 | -0.396 | -0.06 | -0.238 | 0.058 | -0.228 | -0.336 | -0.338 | 0.003 | 0.013 | | | | | | | |
| bite_size_kcal_c1 | -0.352 | -0.203 | -0.232 | 0.069 | -0.243 | -0.27 | -0.282 | -0.142 | -0.13 | 0.923 | | | | | | |
| eat_rate_g_c1 | -0.237 | -0.089 | -0.397 | -0.091 | -0.626 | 0.365 | 0.231 | 0.15 | 0.057 | 0.512 | 0.479 | | | | | |
| eat_rate_kcal_c1 | -0.144 | -0.245 | -0.343 | -0.069 | -0.554 | 0.433 | 0.309 | -0.059 | -0.126 | 0.355 | 0.52 | 0.829 | | | | |
| eat_rate_active_g_c1 | -0.353 | -0.086 | -0.554 | 0.018 | -0.53 | 0.114 | 0.216 | 0.086 | 0.103 | 0.717 | 0.665 | 0.855 | 0.689 | | | |
| eat_rate_active_kcal_c1 | -0.258 | -0.244 | -0.496 | 0.029 | -0.506 | 0.225 | 0.302 | -0.1 | -0.086 | 0.55 | 0.697 | 0.738 | 0.893 | 0.838 | | |
| prop_active_c1 | 0.255 | -0.035 | 0.356 | -0.143 | -0.219 | 0.485 | -0.002 | 0.083 | -0.133 | -0.141 | -0.105 | 0.34 | 0.33 | -0.135 | -0.065 | |

### 3.4.1 ICC across portion sizes

Table 15: Coding Reliability - ICC

| behavior | ICC | n |
|---|---|---|
| nbites | 0.697255520928367 | 78 |
| nsips | 0.533593756631635 | 78 |
| active_eating | 0.676128690684917 | 78 |
| bite_latency | 0.160252063491221 | 78 |
| meal_duration | 0.699030916016489 | 78 |
| bite_rate | 0.728956446687484 | 78 |
| bite_rate_active | 0.759583925686453 | 78 |
| sip_rate | 0.524035182600282 | 78 |
| sip_rate_active | 0.52163502920993 | 78 |
| bite_size_g | 0.315971246424332 | 75 |
| bite_size_kcal | 0.393390379170313 | 75 |
| eat_rate_g | 0.657351758334973 | 75 |
| eat_rate_kcal | 0.674100115598524 | 75 |
| eat_rate_active_g | 0.594576059259726 | 75 |
| eat_rate_active_kcal | 0.632566739188135 | 75 |
| prop_active | 0.257546937754249 | 78 |

## 3.5 Univariate Tests of Portion Size

Table 16: Portion Size and Behaviors - FDR adjusted pvalues

| | ps_beh_padj |
|---|---|
| Bites | 0.037 |
| Sips | 0.167 |
| Latency to 1st Bite | 0.934 |
| Meal Duriation | 0.076 |
| Active Eat Time | 0.006 |
| Bite Rate | 0.483 |
| Bite Rate Active | 0.679 |
| Sip Rate | 0.130 |
| Sip Rate Active | 0.055 |
| Bite Size, g | 0.348 |
| Bite Size, kcal | 0.348 |
| Eat Rate, g | 0.348 |
| Eat Rate, kcal | 0.037 |
| Eat Rate Active, g | 0.715 |
| Eat Rate Active, kcal | 0.129 |
| Prop Active | 0.055 |

Table 17: Number of Bites by Portion Size Meal

| | Estimate | Std. Error | df | t value | Pr(>\|t\|) |
|---|---|---|---|---|---|
| (Intercept) | -0.228 | 0.152 | 155.058 | -1.501 | 0.135 |
| scale(avg_vas) | 0.116 | 0.056 | 331.889 | 2.087 | 0.038 |
| scale(freddy_pre_meal) | -0.074 | 0.047 | 332.130 | -1.576 | 0.116 |
| sexFemale | 0.251 | 0.189 | 86.197 | 1.328 | 0.188 |
| scale(age_yr) | -0.137 | 0.090 | 86.443 | -1.524 | 0.131 |
| scale(fmi) | -0.037 | 0.095 | 85.147 | -0.384 | 0.702 |
| ps_order | 0.000 | 0.027 | 252.662 | -0.015 | 0.988 |
| ps_prop | 0.224 | 0.081 | 253.422 | 2.772 | 0.006 |

Table 18: Number of Sips by Portion Size Meal

| | Estimate | Std. Error | df | t value | Pr(>\|t\|) |
|---|---|---|---|---|---|
| (Intercept) | 0.167 | 0.159 | 203.127 | 1.050 | 0.295 |
| scale(avg_vas) | 0.069 | 0.063 | 289.365 | 1.099 | 0.273 |
| scale(freddy_pre_meal) | 0.032 | 0.055 | 335.909 | 0.573 | 0.567 |
| sexFemale | -0.074 | 0.182 | 87.444 | -0.405 | 0.687 |
| scale(age_yr) | -0.109 | 0.087 | 87.729 | -1.254 | 0.213 |
| scale(fmi) | 0.043 | 0.091 | 85.827 | 0.473 | 0.637 |
| ps_order | -0.020 | 0.033 | 255.122 | -0.594 | 0.553 |
| ps_prop | -0.170 | 0.101 | 256.240 | -1.682 | 0.094 |

Table 19: Active Eating Time (min) by Portion Size Meal

| | Estimate | Std. Error | df | t value | Pr(>\|t\|) |
|---|---|---|---|---|---|
| (Intercept) | 0.048 | 0.152 | 157.261 | 0.316 | 0.752 |
| scale(avg_vas) | 0.119 | 0.056 | 329.452 | 2.115 | 0.035 |
| scale(freddy_pre_meal) | -0.050 | 0.048 | 333.478 | -1.040 | 0.299 |
| sexFemale | -0.181 | 0.188 | 85.220 | -0.963 | 0.338 |
| scale(age_yr) | -0.177 | 0.089 | 85.469 | -1.986 | 0.050 |
| scale(fmi) | -0.104 | 0.095 | 84.134 | -1.095 | 0.277 |
| ps_order | -0.035 | 0.027 | 251.783 | -1.277 | 0.203 |
| ps_prop | 0.296 | 0.082 | 252.580 | 3.609 | 0.000 |

Table 20: Meal Duration (min) by Portion Size Meal

| | Estimate | Std. Error | df | t value | Pr(>\|t\|) |
|---|---|---|---|---|---|
| (Intercept) | 0.117 | 0.153 | 152.710 | 0.763 | 0.447 |
| scale(avg_vas) | 0.074 | 0.056 | 332.997 | 1.317 | 0.189 |
| scale(freddy_pre_meal) | -0.014 | 0.047 | 331.234 | -0.299 | 0.765 |
| sexFemale | -0.192 | 0.192 | 85.853 | -1.000 | 0.320 |
| scale(age_yr) | -0.204 | 0.091 | 86.095 | -2.236 | 0.028 |
| scale(fmi) | -0.037 | 0.097 | 84.829 | -0.382 | 0.703 |
| ps_order | -0.039 | 0.027 | 252.265 | -1.455 | 0.147 |
| ps_prop | 0.178 | 0.081 | 253.009 | 2.200 | 0.029 |

Table 21: Latency to First Bite (min) by Portion Size Meal

| | Estimate | Std. Error | df | t value | Pr(>\|t\|) |
|---|---|---|---|---|---|
| (Intercept) | 0.023 | 0.164 | 326.341 | 0.138 | 0.890 |
| scale(avg_vas) | -0.076 | 0.062 | 168.133 | -1.237 | 0.218 |
| scale(freddy_pre_meal) | 0.054 | 0.059 | 233.179 | 0.913 | 0.362 |
| sexFemale | -0.038 | 0.139 | 89.715 | -0.273 | 0.785 |
| scale(age_yr) | -0.026 | 0.066 | 89.676 | -0.395 | 0.693 |
| scale(fmi) | 0.068 | 0.069 | 86.326 | 0.988 | 0.326 |
| ps_order | 0.000 | 0.045 | 261.575 | 0.009 | 0.993 |
| ps_prop | -0.011 | 0.136 | 263.314 | -0.083 | 0.934 |

Table 22: Bites/min by Portion Size Meal

| | Estimate | Std. Error | df | t value | Pr(>\|t\|) |
|---|---|---|---|---|---|
| (Intercept) | -0.334 | 0.153 | 149.009 | -2.189 | 0.030 |
| scale(avg_vas) | 0.099 | 0.055 | 335.557 | 1.805 | 0.072 |
| scale(freddy_pre_meal) | -0.073 | 0.046 | 328.780 | -1.583 | 0.114 |
| sexFemale | 0.391 | 0.193 | 86.855 | 2.028 | 0.046 |
| scale(age_yr) | 0.088 | 0.092 | 87.090 | 0.958 | 0.341 |
| scale(fmi) | 0.007 | 0.097 | 85.887 | 0.077 | 0.939 |
| ps_order | 0.041 | 0.026 | 253.114 | 1.605 | 0.110 |
| ps_prop | 0.067 | 0.078 | 253.807 | 0.857 | 0.392 |

Table 23: Bites/min (active) by Portion Size Meal

| | Estimate | Std. Error | df | t value | Pr(>\|t\|) |
|---|---|---|---|---|---|
| (Intercept) | -0.296 | 0.152 | 142.575 | -1.950 | 0.053 |
| scale(avg_vas) | 0.059 | 0.053 | 337.564 | 1.109 | 0.268 |
| scale(freddy_pre_meal) | -0.043 | 0.045 | 324.787 | -0.965 | 0.335 |
| sexFemale | 0.450 | 0.195 | 86.880 | 2.315 | 0.023 |
| scale(age_yr) | 0.056 | 0.093 | 87.102 | 0.608 | 0.545 |
| scale(fmi) | 0.042 | 0.098 | 85.997 | 0.431 | 0.668 |
| ps_order | 0.033 | 0.025 | 252.948 | 1.353 | 0.177 |
| ps_prop | -0.040 | 0.075 | 253.579 | -0.534 | 0.594 |

Table 24: Sips/min by Portion Size Meal

| | Estimate | Std. Error | df | t value | Pr(>\|t\|) |
|---|---|---|---|---|---|
| (Intercept) | 0.051 | 0.160 | 201.552 | 0.319 | 0.750 |
| scale(avg_vas) | 0.013 | 0.064 | 289.569 | 0.200 | 0.842 |
| scale(freddy_pre_meal) | 0.007 | 0.056 | 336.028 | 0.131 | 0.896 |
| sexFemale | 0.048 | 0.184 | 86.704 | 0.259 | 0.796 |
| scale(age_yr) | 0.041 | 0.087 | 86.987 | 0.473 | 0.637 |
| scale(fmi) | 0.019 | 0.092 | 85.103 | 0.203 | 0.839 |
| ps_order | 0.005 | 0.034 | 254.387 | 0.157 | 0.876 |
| ps_prop | -0.189 | 0.102 | 255.507 | -1.854 | 0.065 |

Table 25: Sips/min (active) by Portion Size Meal

| | Estimate | Std. Error | df | t value | Pr(>\|t\|) |
|---|---|---|---|---|---|
| (Intercept) | 0.046 | 0.160 | 202.051 | 0.288 | 0.774 |
| scale(avg_vas) | -0.003 | 0.063 | 289.141 | -0.047 | 0.962 |
| scale(freddy_pre_meal) | 0.048 | 0.056 | 335.934 | 0.855 | 0.393 |
| sexFemale | 0.046 | 0.183 | 86.754 | 0.251 | 0.803 |
| scale(age_yr) | 0.020 | 0.087 | 87.037 | 0.234 | 0.816 |
| scale(fmi) | 0.038 | 0.092 | 85.148 | 0.415 | 0.679 |
| ps_order | 0.018 | 0.033 | 254.447 | 0.532 | 0.595 |
| ps_prop | -0.243 | 0.101 | 255.570 | -2.397 | 0.017 |

Table 26: g/Bite by Portion Size Meal

| | Estimate | Std. Error | df | t value | Pr(>\|t\|) |
|---|---|---|---|---|---|
| (Intercept) | 0.153 | 0.161 | 275.283 | 0.952 | 0.342 |
| scale(avg_vas) | -0.084 | 0.064 | 213.173 | -1.315 | 0.190 |
| scale(freddy_pre_meal) | 0.084 | 0.059 | 291.091 | 1.421 | 0.156 |
| sexFemale | -0.239 | 0.159 | 85.837 | -1.504 | 0.136 |
| scale(age_yr) | 0.088 | 0.076 | 86.069 | 1.167 | 0.247 |
| scale(fmi) | 0.119 | 0.080 | 83.005 | 1.488 | 0.140 |
| ps_order | -0.040 | 0.040 | 254.168 | -1.013 | 0.312 |
| ps_prop | 0.136 | 0.121 | 255.295 | 1.127 | 0.261 |

Table 27: kcal/Bite by Portion Size Meal

| | Estimate | Std. Error | df | t value | Pr(>\|t\|) |
|---|---|---|---|---|---|
| (Intercept) | 0.153 | 0.161 | 275.283 | 0.952 | 0.342 |
| scale(avg_vas) | -0.084 | 0.064 | 213.173 | -1.315 | 0.190 |
| scale(freddy_pre_meal) | 0.084 | 0.059 | 291.091 | 1.421 | 0.156 |
| sexFemale | -0.239 | 0.159 | 85.837 | -1.504 | 0.136 |
| scale(age_yr) | 0.088 | 0.076 | 86.069 | 1.167 | 0.247 |
| scale(fmi) | 0.119 | 0.080 | 83.005 | 1.488 | 0.140 |
| ps_order | -0.040 | 0.040 | 254.168 | -1.013 | 0.312 |
| ps_prop | 0.136 | 0.121 | 255.295 | 1.127 | 0.261 |

Table 28: g/min by Portion Size Meal

| | Estimate | Std. Error | df | t value | Pr(>\|t\|) |
|---|---|---|---|---|---|
| (Intercept) | -0.094 | 0.153 | 172.445 | -0.617 | 0.538 |
| scale(avg_vas) | 0.016 | 0.058 | 318.553 | 0.269 | 0.788 |
| scale(freddy_pre_meal) | -0.053 | 0.050 | 334.848 | -1.064 | 0.288 |
| sexFemale | -0.048 | 0.184 | 86.971 | -0.259 | 0.797 |
| scale(age_yr) | 0.241 | 0.088 | 87.249 | 2.743 | 0.007 |
| scale(fmi) | 0.197 | 0.093 | 85.563 | 2.127 | 0.036 |
| ps_order | 0.028 | 0.029 | 252.086 | 0.965 | 0.336 |
| ps_prop | 0.107 | 0.087 | 252.736 | 1.227 | 0.221 |

Table 29: kcal/min by Portion Size Meal

| | Estimate | Std. Error | df | t value | Pr(>\|t\|) |
|---|---|---|---|---|---|
| (Intercept) | -0.168 | 0.153 | 165.977 | -1.099 | 0.273 |
| scale(avg_vas) | 0.029 | 0.057 | 324.637 | 0.513 | 0.609 |
| scale(freddy_pre_meal) | -0.106 | 0.049 | 333.152 | -2.170 | 0.031 |
| sexFemale | -0.115 | 0.187 | 87.594 | -0.616 | 0.539 |
| scale(age_yr) | 0.155 | 0.089 | 87.864 | 1.740 | 0.085 |
| scale(fmi) | 0.203 | 0.094 | 86.281 | 2.153 | 0.034 |
| ps_order | 0.048 | 0.028 | 252.477 | 1.702 | 0.090 |
| ps_prop | 0.231 | 0.085 | 253.079 | 2.724 | 0.007 |

Table 30: g/min (active) by Portion Size Meal

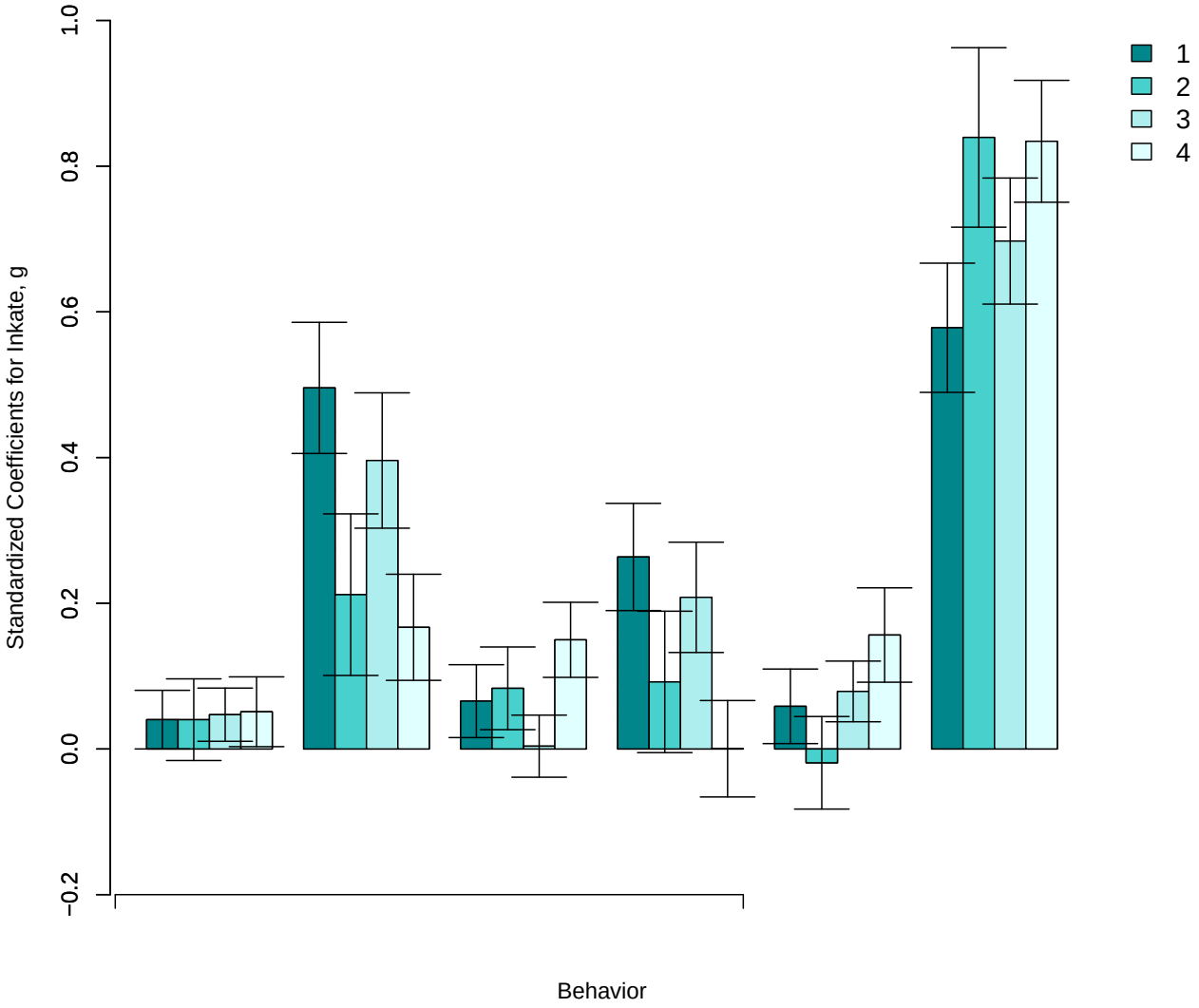
| | Estimate | Std. Error | df | t value | Pr(>\|t\|) |
|---|---|---|---|---|---|
| (Intercept) | -0.029 | 0.154 | 192.421 | -0.192 | 0.848 |
| scale(avg_vas) | -0.057 | 0.060 | 299.376 | -0.944 | 0.346 |
| scale(freddy_pre_meal) | -0.011 | 0.053 | 335.680 | -0.204 | 0.838 |
| sexFemale | -0.028 | 0.179 | 86.978 | -0.159 | 0.874 |
| scale(age_yr) | 0.203 | 0.085 | 87.272 | 2.378 | 0.020 |
| scale(fmi) | 0.226 | 0.090 | 85.299 | 2.505 | 0.014 |
| ps_order | 0.009 | 0.031 | 252.670 | 0.275 | 0.784 |
| ps_prop | 0.040 | 0.095 | 253.435 | 0.426 | 0.670 |

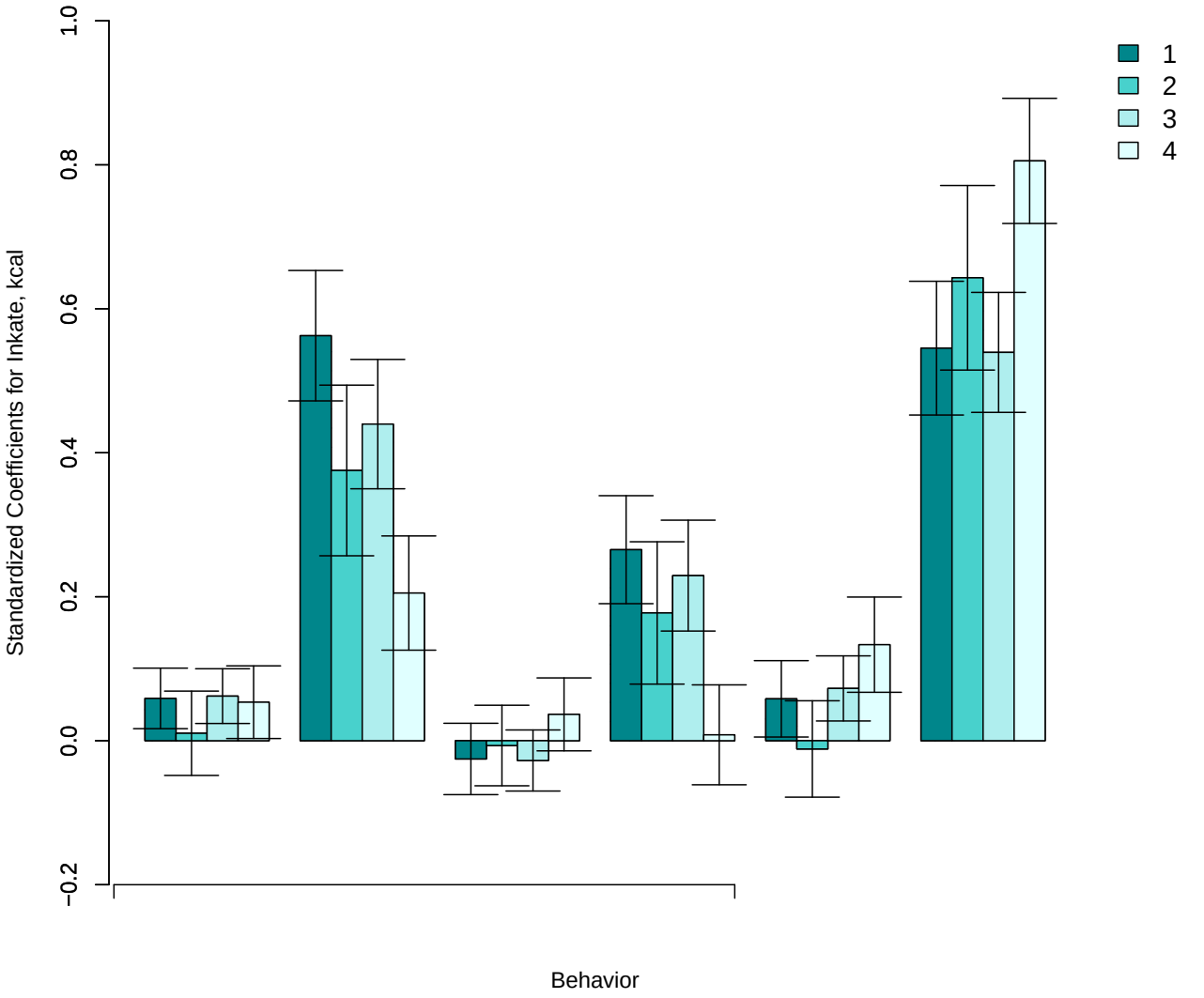
Table 31: kcal/min (active) by Portion Size Meal

| | Estimate | Std. Error | df | t value | Pr(>\|t\|) |
|---|---|---|---|---|---|
| (Intercept) | -0.119 | 0.154 | 181.272 | -0.774 | 0.440 |
| scale(avg_vas) | -0.039 | 0.059 | 311.800 | -0.653 | 0.514 |
| scale(freddy_pre_meal) | -0.074 | 0.051 | 335.819 | -1.440 | 0.151 |
| sexFemale | -0.084 | 0.183 | 87.828 | -0.459 | 0.647 |
| scale(age_yr) | 0.122 | 0.087 | 88.116 | 1.401 | 0.165 |
| scale(fmi) | 0.225 | 0.092 | 86.305 | 2.442 | 0.017 |
| ps_order | 0.031 | 0.030 | 253.141 | 1.030 | 0.304 |
| ps_prop | 0.174 | 0.091 | 253.833 | 1.917 | 0.056 |

# 4 Replication of 'Obesogenic' Style of Eating

### 4.1 Association with Intake






#### 4.1.1 Portion Size 1

Table 32: Portion Size 1 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (g) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.082 | 0.058 | 1.431 | 0.157 |
| scale(ps1_freddy_pre_meal) | -0.006 | 0.041 | -0.144 | 0.886 |
| sexFemale | -0.167 | 0.087 | -1.920 | 0.059 |
| scale(age_yr) | -0.011 | 0.041 | -0.267 | 0.790 |
| scale(fmi) | 0.056 | 0.042 | 1.336 | 0.186 |
| scale(ps1_avg_vas) | 0.040 | 0.040 | 1.001 | 0.320 |
| scale(ps1_nbites) | 0.496 | 0.090 | 5.507 | 0.000 |
| scale(ps1_nsips) | 0.066 | 0.050 | 1.312 | 0.193 |
| scale(ps1_bite_size_g) | 0.264 | 0.074 | 3.581 | 0.001 |
| scale(ps1_prop_active) | 0.059 | 0.051 | 1.144 | 0.256 |
| scale(ps1_meal_duration) | 0.578 | 0.089 | 6.520 | 0.000 |
| scale(ps1_eat_rate_g) | 0.547 | 0.079 | 6.963 | 0.000 |

Table 33: Portion Size 1 - Relative Weighting Analysis, grams

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps1_freddy_pre_meal | 0.006 | 0.694 | - |
| sex_num | 0.012 | 1.360 | - |
| age_yr | 0.003 | 0.326 | + |
| fmi | 0.015 | 1.699 | + |
| ps1_avg_vas | 0.017 | 1.934 | + |
| ps1_nbites | 0.264 | 29.746 | + |
| ps1_nsips | 0.092 | 10.385 | + |
| ps1_bite_size_g | 0.073 | 8.262 | + |
| ps1_prop_active | 0.040 | 4.567 | + |
| ps1_meal_duration | 0.212 | 23.929 | + |
| ps1_eat_rate_g | 0.152 | 17.098 | + |

Table 34: Portion Size 1 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (kcal) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.085 | 0.061 | 1.399 | 0.166 |
| scale(ps1_freddy_pre_meal) | 0.014 | 0.043 | 0.321 | 0.749 |
| sexFemale | -0.173 | 0.092 | -1.882 | 0.064 |
| scale(age_yr) | -0.040 | 0.042 | -0.970 | 0.335 |
| scale(fmi) | 0.015 | 0.044 | 0.329 | 0.743 |
| scale(ps1_avg_vas) | 0.059 | 0.042 | 1.398 | 0.166 |
| scale(ps1_nbites) | 0.563 | 0.091 | 6.212 | 0.000 |
| scale(ps1_nsips) | -0.025 | 0.050 | -0.511 | 0.611 |
| scale(ps1_bite_size_kcal) | 0.265 | 0.075 | 3.538 | 0.001 |
| scale(ps1_prop_active) | 0.058 | 0.053 | 1.097 | 0.276 |
| scale(ps1_meal_duration) | 0.545 | 0.093 | 5.870 | 0.000 |
| scale(ps1_eat_rate_kcal) | 0.600 | 0.083 | 7.206 | 0.000 |

Table 35: Portion Size 1 - Relative Weighting Analysis, kcal

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps1_freddy_pre_meal | 0.006 | 0.683 | - |
| sex_num | 0.018 | 2.026 | - |
| age_yr | 0.009 | 1.076 | - |
| fmi | 0.007 | 0.776 | + |
| ps1_avg_vas | 0.020 | 2.261 | + |
| ps1_nbites | 0.296 | 33.794 | + |
| ps1_nsips | 0.027 | 3.077 | + |
| ps1_bite_size_kcal | 0.081 | 9.196 | + |
| ps1_prop_active | 0.053 | 6.072 | + |
| ps1_meal_duration | 0.177 | 20.267 | + |
| ps1_eat_rate_kcal | 0.182 | 20.772 | + |

### 4.1.2 Portion Size 2

Table 36: Portion Size 2 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (g) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.037 | 0.075 | 0.492 | 0.624 |
| scale(ps2_freddy_pre_meal) | -0.010 | 0.057 | -0.184 | 0.854 |
| sexFemale | -0.107 | 0.121 | -0.882 | 0.381 |
| scale(age_yr) | 0.012 | 0.055 | 0.214 | 0.831 |
| scale(fmi) | 0.040 | 0.056 | 0.717 | 0.476 |
| scale(ps2_avg_vas) | 0.040 | 0.056 | 0.718 | 0.475 |
| scale(ps2_nbites) | 0.212 | 0.111 | 1.910 | 0.060 |
| scale(ps2_nsips) | 0.083 | 0.057 | 1.467 | 0.146 |
| scale(ps2_bite_size_g) | 0.092 | 0.097 | 0.948 | 0.346 |
| scale(ps2_prop_active) | -0.019 | 0.064 | -0.299 | 0.766 |
| scale(ps2_meal_duration) | 0.839 | 0.123 | 6.815 | 0.000 |
| scale(ps2_eat_rate_g) | 0.744 | 0.102 | 7.282 | 0.000 |

Table 37: Portion Size 2 - Relative Weighting Analysis, grams

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps2_freddy_pre_meal | 0.029 | 3.544 | - |
| sex_num | 0.021 | 2.599 | - |
| age_yr | 0.009 | 1.055 | - |
| fmi | 0.008 | 1.036 | + |
| ps2_avg_vas | 0.013 | 1.634 | + |
| ps2_nbites | 0.180 | 22.008 | + |
| ps2_nsips | 0.070 | 8.546 | + |
| ps2_bite_size_g | 0.057 | 6.956 | + |
| ps2_prop_active | 0.018 | 2.265 | - |
| ps2_meal_duration | 0.240 | 29.443 | + |
| ps2_eat_rate_g | 0.171 | 20.913 | + |

Table 38: Portion Size 2 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (kcal) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.037 | 0.078 | 0.468 | 0.641 |
| scale(ps2_freddy_pre_meal) | -0.024 | 0.059 | -0.397 | 0.693 |
| sexFemale | -0.105 | 0.124 | -0.845 | 0.401 |
| scale(age_yr) | 0.005 | 0.056 | 0.084 | 0.933 |
| scale(fmi) | 0.103 | 0.059 | 1.752 | 0.084 |
| scale(ps2_avg_vas) | 0.010 | 0.059 | 0.177 | 0.860 |
| scale(ps2_nbites) | 0.375 | 0.119 | 3.167 | 0.002 |
| scale(ps2_nsips) | -0.007 | 0.056 | -0.119 | 0.905 |
| scale(ps2_bite_size_kcal) | 0.178 | 0.099 | 1.796 | 0.077 |
| scale(ps2_prop_active) | -0.011 | 0.067 | -0.171 | 0.865 |
| scale(ps2_meal_duration) | 0.643 | 0.128 | 5.016 | 0.000 |
| scale(ps2_eat_rate_kcal) | 0.686 | 0.113 | 6.050 | 0.000 |

Table 39: Portion Size 2 - Relative Weighting Analysis, kcal

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps2_freddy_pre_meal | 0.040 | 4.977 | - |
| sex_num | 0.010 | 1.250 | - |
| age_yr | 0.007 | 0.900 | - |
| fmi | 0.025 | 3.118 | + |
| ps2_avg_vas | 0.008 | 1.014 | + |
| ps2_nbites | 0.233 | 29.226 | + |
| ps2_nsips | 0.009 | 1.139 | + |
| ps2_bite_size_kcal | 0.073 | 9.177 | + |
| ps2_prop_active | 0.013 | 1.667 | - |
| ps2_meal_duration | 0.177 | 22.144 | + |
| ps2_eat_rate_kcal | 0.202 | 25.387 | + |

### 4.1.3 Portion Size 3

Table 40: Portion Size 3 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (g) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.015 | 0.054 | 0.271 | 0.787 |
| scale(ps3_freddy_pre_meal) | -0.028 | 0.039 | -0.700 | 0.486 |
| sexFemale | -0.020 | 0.079 | -0.248 | 0.805 |
| scale(age_yr) | -0.020 | 0.038 | -0.521 | 0.604 |
| scale(fmi) | 0.104 | 0.038 | 2.739 | 0.008 |
| scale(ps3_avg_vas) | 0.047 | 0.037 | 1.288 | 0.202 |
| scale(ps3_nbites) | 0.396 | 0.093 | 4.263 | 0.000 |
| scale(ps3_nsips) | 0.004 | 0.043 | 0.090 | 0.929 |
| scale(ps3_bite_size_g) | 0.208 | 0.076 | 2.749 | 0.008 |
| scale(ps3_prop_active) | 0.079 | 0.042 | 1.897 | 0.062 |
| scale(ps3_meal_duration) | 0.697 | 0.087 | 8.058 | 0.000 |
| scale(ps3_eat_rate_g) | 0.570 | 0.081 | 7.086 | 0.000 |

Table 41: Portion Size 3 - Relative Weighting Analysis, grams

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps3_freddy_pre_meal | 0.035 | 3.889 | - |
| sex_num | 0.004 | 0.442 | - |
| age_yr | 0.007 | 0.777 | - |
| fmi | 0.030 | 3.272 | + |
| ps3_avg_vas | 0.010 | 1.125 | + |
| ps3_nbites | 0.257 | 28.419 | + |
| ps3_nsips | 0.059 | 6.535 | + |
| ps3_bite_size_g | 0.065 | 7.193 | + |
| ps3_prop_active | 0.033 | 3.627 | + |
| ps3_meal_duration | 0.251 | 27.669 | + |
| ps3_eat_rate_g | 0.154 | 17.052 | + |

Table 42: Portion Size 3 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (kcal) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.063 | 0.057 | 1.106 | 0.272 |
| scale(ps3_freddy_pre_meal) | 0.005 | 0.042 | 0.126 | 0.900 |
| sexFemale | -0.112 | 0.084 | -1.334 | 0.186 |
| scale(age_yr) | -0.029 | 0.039 | -0.739 | 0.462 |
| scale(fmi) | 0.138 | 0.040 | 3.426 | 0.001 |
| scale(ps3_avg_vas) | 0.062 | 0.038 | 1.629 | 0.107 |
| scale(ps3_nbites) | 0.440 | 0.090 | 4.895 | 0.000 |
| scale(ps3_nsips) | -0.027 | 0.042 | -0.648 | 0.519 |
| scale(ps3_bite_size_kcal) | 0.229 | 0.077 | 2.978 | 0.004 |
| scale(ps3_prop_active) | 0.073 | 0.045 | 1.606 | 0.112 |
| scale(ps3_meal_duration) | 0.539 | 0.083 | 6.472 | 0.000 |
| scale(ps3_eat_rate_kcal) | 0.558 | 0.086 | 6.470 | 0.000 |

Table 43: Portion Size 3 - Relative Weighting Analysis, kcal

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps3_freddy_pre_meal | 0.040 | 4.491 | - |
| sex_num | 0.007 | 0.822 | - |
| fmi | 0.041 | 4.574 | + |
| age_yr | 0.010 | 1.080 | - |
| ps3_avg_vas | 0.010 | 1.070 | + |
| ps3_nbites | 0.250 | 27.890 | + |
| ps3_nsips | 0.012 | 1.361 | + |
| ps3_bite_size_kcal | 0.097 | 10.778 | + |
| ps3_prop_active | 0.049 | 5.510 | + |
| ps3_meal_duration | 0.190 | 21.164 | + |
| ps3_eat_rate_kcal | 0.191 | 21.260 | + |

#### 4.1.4 Portion Size 4

Table 44: Portion Size 4 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (g) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.088 | 0.071 | 1.239 | 0.219 |
| scale(ps4_freddy_pre_meal) | -0.033 | 0.048 | -0.686 | 0.495 |
| sexFemale | -0.181 | 0.102 | -1.775 | 0.080 |
| scale(age_yr) | 0.012 | 0.050 | 0.250 | 0.804 |
| scale(fmi) | 0.082 | 0.052 | 1.569 | 0.121 |
| scale(ps4_avg_vas) | 0.051 | 0.048 | 1.066 | 0.290 |
| scale(ps4_nbites) | 0.167 | 0.073 | 2.293 | 0.025 |
| scale(ps4_nsips) | 0.150 | 0.052 | 2.908 | 0.005 |
| scale(ps4_bite_size_g) | 0.000 | 0.066 | 0.005 | 0.996 |
| scale(ps4_prop_active) | 0.156 | 0.065 | 2.415 | 0.018 |
| scale(ps4_meal_duration) | 0.834 | 0.084 | 9.972 | 0.000 |
| scale(ps4_eat_rate_g) | 0.798 | 0.078 | 10.263 | 0.000 |

Table 45: Portion Size 4 - Relative Weighting Analysis, grams

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps4_freddy_pre_meal | 0.011 | 1.313 | - |
| sex_num | 0.008 | 0.916 | - |
| age_yr | 0.007 | 0.772 | + |
| fmi | 0.009 | 1.079 | + |
| ps4_avg_vas | 0.012 | 1.391 | + |
| ps4_nbites | 0.166 | 19.396 | + |
| ps4_nsips | 0.123 | 14.314 | + |
| ps4_bite_size_g | 0.025 | 2.887 | + |
| ps4_prop_active | 0.031 | 3.675 | + |
| ps4_meal_duration | 0.255 | 29.801 | + |
| ps4_eat_rate_g | 0.210 | 24.455 | + |

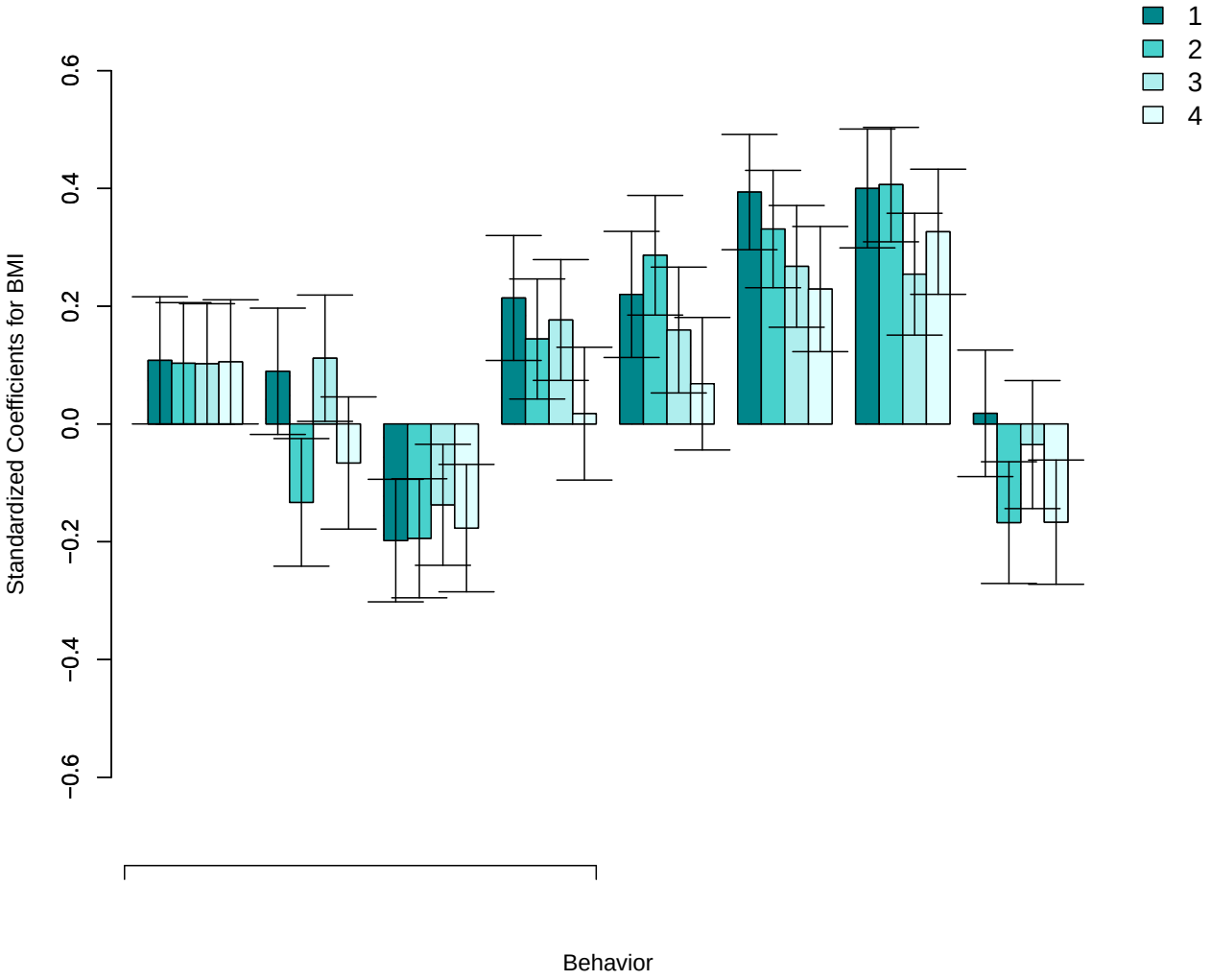
Table 46: Portion Size 4 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (kcal) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.049 | 0.075 | 0.656 | 0.514 |
| scale(ps4_freddy_pre_meal) | -0.023 | 0.050 | -0.461 | 0.646 |
| sexFemale | -0.115 | 0.109 | -1.054 | 0.296 |
| scale(age_yr) | -0.051 | 0.052 | -0.973 | 0.334 |
| scale(fmi) | 0.069 | 0.055 | 1.242 | 0.218 |
| scale(ps4_avg_vas) | 0.054 | 0.050 | 1.060 | 0.293 |
| scale(ps4_nbites) | 0.205 | 0.079 | 2.586 | 0.012 |
| scale(ps4_nsips) | 0.037 | 0.051 | 0.722 | 0.473 |
| scale(ps4_bite_size_kcal) | 0.008 | 0.069 | 0.118 | 0.906 |
| scale(ps4_prop_active) | 0.133 | 0.066 | 2.017 | 0.048 |
| scale(ps4_meal_duration) | 0.805 | 0.087 | 9.267 | 0.000 |
| scale(ps4_eat_rate_kcal) | 0.876 | 0.079 | 11.098 | 0.000 |

Table 47: Portion Size 4 - Relative Weighting Analysis, kcal

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps4_freddy_pre_meal | 0.011 | 1.256 | - |
| sex_num | 0.009 | 1.034 | - |
| age_yr | 0.013 | 1.552 | - |
| fmi | 0.013 | 1.539 | + |
| ps4_avg_vas | 0.014 | 1.722 | + |
| ps4_nbites | 0.193 | 22.968 | + |
| ps4_nsips | 0.018 | 2.111 | + |
| ps4_bite_size_kcal | 0.035 | 4.169 | + |
| ps4_prop_active | 0.030 | 3.603 | + |
| ps4_meal_duration | 0.230 | 27.283 | + |
| ps4_eat_rate_kcal | 0.276 | 32.762 | + |

## 4.2 Associaiton with BMI Percentile




### 4.2.1 Portion Size 1

Table 48: Portion Size 1 - FDR adjusted pvalues

| | ps1_bmi_adj |
|---|---|
| Bites | 0.659 |
| Sips | 0.542 |
| Meal Duration | 0.097 |
| Bite Size, g | 0.094 |
| Bite Size, kcal | 0.094 |
| Eat Rate, g | 0.001 |
| Eat Rate, kcal | 0.001 |
| Prop Active | 0.867 |

Table 49: Portion Size 1 - Standardized Coefficitens for Association Between Bites and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.020 | 0.151 | -0.134 | 0.894 |
| scale(ps1_freddy_pre_meal) | -0.117 | 0.110 | -1.070 | 0.288 |
| sexFemale | 0.037 | 0.215 | 0.173 | 0.863 |
| scale(age_yr) | -0.088 | 0.109 | -0.808 | 0.421 |
| scale(ps1_avg_vas) | 0.152 | 0.109 | 1.395 | 0.167 |
| scale(bmi_percentile) | -0.061 | 0.108 | -0.561 | 0.576 |

Table 50: Portion Size 1 - Standardized Coefficitens for Association Between Sips and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.064 | 0.150 | -0.430 | 0.668 |
| scale(ps1_freddy_pre_meal) | 0.119 | 0.109 | 1.094 | 0.277 |
| sexFemale | 0.124 | 0.214 | 0.582 | 0.562 |
| scale(age_yr) | -0.175 | 0.109 | -1.608 | 0.112 |
| scale(ps1_avg_vas) | 0.066 | 0.108 | 0.615 | 0.540 |
| scale(bmi_percentile) | 0.089 | 0.107 | 0.834 | 0.407 |

Table 51: Portion Size 1 - Standardized Coefficitens for Association Between Bite Size (g) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.058 | 0.148 | 0.388 | 0.699 |
| scale(ps1_freddy_pre_meal) | -0.004 | 0.108 | -0.041 | 0.968 |
| sexFemale | -0.108 | 0.212 | -0.510 | 0.611 |
| scale(age_yr) | 0.197 | 0.107 | 1.834 | 0.070 |
| scale(ps1_avg_vas) | 0.006 | 0.107 | 0.054 | 0.957 |
| scale(bmi_percentile) | 0.214 | 0.106 | 2.016 | 0.047 |

Table 52: Portion Size 1 - Standardized Coefficitens for Association Between Bite Size (kcal) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.075 | 0.149 | 0.505 | 0.615 |
| scale(ps1_freddy_pre_meal) | -0.048 | 0.109 | -0.440 | 0.661 |
| sexFemale | -0.149 | 0.213 | -0.700 | 0.486 |
| scale(age_yr) | 0.059 | 0.108 | 0.546 | 0.587 |
| scale(ps1_avg_vas) | -0.021 | 0.108 | -0.193 | 0.848 |
| scale(bmi_percentile) | 0.220 | 0.107 | 2.054 | 0.043 |

Table 53: Portion Size 1 - Standardized Coefficitens for Association Between Proportion Active Eating and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.115 | 0.150 | 0.764 | 0.447 |
| scale(ps1_freddy_pre_meal) | -0.167 | 0.109 | -1.529 | 0.130 |
| sexFemale | -0.228 | 0.214 | -1.063 | 0.291 |
| scale(age_yr) | 0.107 | 0.109 | 0.983 | 0.329 |
| scale(ps1_avg_vas) | 0.127 | 0.108 | 1.175 | 0.243 |
| scale(bmi_percentile) | 0.018 | 0.107 | 0.167 | 0.867 |

Table 54: Portion Size 1 - Standardized Coefficitens for Association Between Meal Duration and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.180 | 0.145 | 1.236 | 0.220 |
| scale(ps1_freddy_pre_meal) | -0.120 | 0.106 | -1.138 | 0.258 |
| sexFemale | -0.369 | 0.207 | -1.781 | 0.079 |
| scale(age_yr) | -0.138 | 0.105 | -1.313 | 0.193 |
| scale(ps1_avg_vas) | 0.140 | 0.105 | 1.337 | 0.185 |
| scale(bmi_percentile) | -0.198 | 0.104 | -1.903 | 0.060 |

Table 55: Portion Size 1 - Standardized Coefficitens for Association Between Eating Rate (g) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.136 | 0.137 | -0.998 | 0.321 |
| scale(ps1_freddy_pre_meal) | 0.044 | 0.099 | 0.447 | 0.656 |
| sexFemale | 0.286 | 0.195 | 1.468 | 0.146 |
| scale(age_yr) | 0.229 | 0.099 | 2.306 | 0.024 |
| scale(ps1_avg_vas) | 0.029 | 0.099 | 0.295 | 0.769 |
| scale(bmi_percentile) | 0.394 | 0.098 | 4.024 | 0.000 |

Table 56: Portion Size 1 - Standardized Coefficitens for Association Between Eating Rate (kcal) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.078 | 0.141 | -0.551 | 0.583 |
| scale(ps1_freddy_pre_meal) | 0.042 | 0.103 | 0.414 | 0.680 |
| sexFemale | 0.162 | 0.201 | 0.806 | 0.423 |
| scale(age_yr) | 0.080 | 0.102 | 0.781 | 0.437 |
| scale(ps1_avg_vas) | 0.003 | 0.102 | 0.034 | 0.973 |
| scale(bmi_percentile) | 0.400 | 0.101 | 3.964 | 0.000 |

Table 57: Portion Size 1 - FDR Adjusted p-values for the effect of BMI Percentile on Microstructure

| | ps1_bmi_adj |
|---|---|
| Bites | 0.659 |
| Sips | 0.542 |
| Meal Duration | 0.097 |
| Bite Size, g | 0.094 |
| Bite Size, kcal | 0.094 |
| Eat Rate, g | 0.001 |
| Eat Rate, kcal | 0.001 |
| Prop Active | 0.867 |

### 4.2.2 Portion Size 2

Table 58: Portion Size 2 - FDR adjusted pvalues

| | ps2_bmi_adj |
|---|---|
| Bites | 0.538 |
| Sips | 0.254 |
| Meal Duration | 0.116 |
| Bite Size, g | 0.214 |
| Bite Size, kcal | 0.016 |
| Eat Rate, g | 0.005 |
| Eat Rate, kcal | 0.001 |
| Prop Active | 0.174 |

Table 59: Portion Size 2 - Standardized Coefficitens for Association Between Bites and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.141 | 0.142 | -0.993 | 0.324 |
| scale(ps2_freddy_pre_meal) | -0.251 | 0.104 | -2.401 | 0.019 |
| sexFemale | 0.318 | 0.209 | 1.523 | 0.132 |
| scale(age_yr) | -0.194 | 0.104 | -1.863 | 0.066 |
| scale(ps2_avg_vas) | 0.136 | 0.104 | 1.298 | 0.198 |
| scale(bmi_percentile) | -0.064 | 0.103 | -0.619 | 0.538 |

Table 60: Portion Size 2 - Standardized Coefficitens for Association Between Sips and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.033 | 0.149 | 0.223 | 0.824 |
| scale(ps2_freddy_pre_meal) | -0.017 | 0.110 | -0.153 | 0.878 |
| sexFemale | -0.065 | 0.219 | -0.297 | 0.767 |
| scale(age_yr) | -0.226 | 0.110 | -2.055 | 0.043 |
| scale(ps2_avg_vas) | 0.026 | 0.110 | 0.233 | 0.816 |
| scale(bmi_percentile) | -0.133 | 0.108 | -1.229 | 0.223 |

Table 61: Portion Size 2 - Standardized Coefficitens for Association Between Bite Size (g) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.288 | 0.140 | 2.052 | 0.043 |
| scale(ps2_freddy_pre_meal) | 0.149 | 0.103 | 1.443 | 0.153 |
| sexFemale | -0.613 | 0.206 | -2.969 | 0.004 |
| scale(age_yr) | 0.197 | 0.103 | 1.912 | 0.059 |
| scale(ps2_avg_vas) | 0.064 | 0.103 | 0.616 | 0.540 |
| scale(bmi_percentile) | 0.144 | 0.102 | 1.415 | 0.161 |

Table 62: Portion Size 2 - Standardized Coefficitens for Association Between Bite Size (kcal) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.230 | 0.140 | 1.644 | 0.104 |
| scale(ps2_freddy_pre_meal) | 0.041 | 0.103 | 0.395 | 0.694 |
| sexFemale | -0.497 | 0.206 | -2.415 | 0.018 |
| scale(age_yr) | 0.216 | 0.103 | 2.094 | 0.039 |
| scale(ps2_avg_vas) | 0.050 | 0.103 | 0.483 | 0.630 |
| scale(bmi_percentile) | 0.287 | 0.102 | 2.819 | 0.006 |

Table 63: Portion Size 2 - Standardized Coefficitens for Association Between Proportion Active Eating and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.070 | 0.142 | 0.492 | 0.624 |
| scale(ps2_freddy_pre_meal) | -0.177 | 0.105 | -1.690 | 0.095 |
| sexFemale | -0.147 | 0.209 | -0.703 | 0.484 |
| scale(age_yr) | 0.059 | 0.105 | 0.562 | 0.576 |
| scale(ps2_avg_vas) | 0.331 | 0.105 | 3.155 | 0.002 |
| scale(bmi_percentile) | -0.168 | 0.103 | -1.621 | 0.109 |

Table 64: Portion Size 2 - Standardized Coefficitens for Association Between Meal Duration and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.102 | 0.139 | 0.730 | 0.467 |
| scale(ps2_freddy_pre_meal) | -0.238 | 0.102 | -2.326 | 0.023 |
| sexFemale | -0.188 | 0.205 | -0.921 | 0.360 |
| scale(age_yr) | -0.302 | 0.102 | -2.951 | 0.004 |
| scale(ps2_avg_vas) | 0.042 | 0.102 | 0.414 | 0.680 |
| scale(bmi_percentile) | -0.194 | 0.101 | -1.921 | 0.058 |

Table 65: Portion Size 2 - Standardized Coefficitens for Association Between Eating Rate (g) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.105 | 0.137 | 0.762 | 0.448 |
| scale(ps2_freddy_pre_meal) | -0.036 | 0.101 | -0.355 | 0.724 |
| sexFemale | -0.230 | 0.202 | -1.141 | 0.257 |
| scale(age_yr) | 0.304 | 0.101 | 3.015 | 0.003 |
| scale(ps2_avg_vas) | 0.126 | 0.101 | 1.250 | 0.215 |
| scale(bmi_percentile) | 0.331 | 0.100 | 3.322 | 0.001 |

Table 66: Portion Size 2 - Standardized Coefficitens for Association Between Eating Rate (kcal) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.041 | 0.134 | 0.306 | 0.760 |
| scale(ps2_freddy_pre_meal) | -0.077 | 0.098 | -0.786 | 0.434 |
| sexFemale | -0.100 | 0.197 | -0.508 | 0.613 |
| scale(age_yr) | 0.280 | 0.098 | 2.841 | 0.006 |
| scale(ps2_avg_vas) | 0.103 | 0.098 | 1.042 | 0.301 |
| scale(bmi_percentile) | 0.407 | 0.097 | 4.183 | 0.000 |

Table 67: Portion Size 2 - FDR Adjusted p-values for the effect of BMI Percentile on Microstructure

| | ps2_bmi_adj |
|---|---|
| Bites | 0.538 |
| Sips | 0.254 |
| Meal Duration | 0.116 |
| Bite Size, g | 0.214 |
| Bite Size, kcal | 0.016 |
| Eat Rate, g | 0.005 |
| Eat Rate, kcal | 0.001 |
| Prop Active | 0.174 |

#### 4.2.3 Portion Size 3

Table 68: Portion Size 3 - FDR adjusted pvalues

| | ps3_bmi_adj |
|---|---|
| Bites | 0.919 |
| Sips | 0.401 |
| Meal Duration | 0.296 |
| Bite Size, g | 0.238 |
| Bite Size, kcal | 0.279 |
| Eat Rate, g | 0.065 |
| Eat Rate, kcal | 0.065 |
| Prop Active | 0.855 |

Table 69: Portion Size 3 - Standardized Coefficitens for Association Between Bites and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.182 | 0.146 | -1.245 | 0.217 |
| scale(ps3_freddy_pre_meal) | -0.307 | 0.104 | -2.964 | 0.004 |
| sexFemale | 0.348 | 0.206 | 1.689 | 0.095 |
| scale(age_yr) | -0.141 | 0.105 | -1.346 | 0.182 |
| scale(ps3_avg_vas) | -0.005 | 0.103 | -0.049 | 0.961 |
| scale(bmi_percentile) | 0.010 | 0.102 | 0.102 | 0.919 |

Table 70: Portion Size 3 - Standardized Coefficitens for Association Between Sips and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.109 | 0.154 | 0.706 | 0.482 |
| scale(ps3_freddy_pre_meal) | -0.084 | 0.109 | -0.772 | 0.442 |
| sexFemale | -0.225 | 0.217 | -1.040 | 0.301 |
| scale(age_yr) | -0.111 | 0.110 | -1.008 | 0.316 |
| scale(ps3_avg_vas) | 0.057 | 0.108 | 0.525 | 0.601 |
| scale(bmi_percentile) | 0.112 | 0.107 | 1.041 | 0.301 |

Table 71: Portion Size 3 - Standardized Coefficitens for Association Between Bite Size (g) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.204 | 0.147 | 1.387 | 0.169 |
| scale(ps3_freddy_pre_meal) | 0.237 | 0.104 | 2.279 | 0.025 |
| sexFemale | -0.402 | 0.208 | -1.929 | 0.057 |
| scale(age_yr) | 0.111 | 0.105 | 1.053 | 0.296 |
| scale(ps3_avg_vas) | 0.104 | 0.104 | 1.001 | 0.320 |
| scale(bmi_percentile) | 0.177 | 0.103 | 1.721 | 0.089 |

Table 72: Portion Size 3 - Standardized Coefficitens for Association Between Bite Size (kcal) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.170 | 0.153 | 1.109 | 0.271 |
| scale(ps3_freddy_pre_meal) | 0.068 | 0.108 | 0.627 | 0.533 |
| sexFemale | -0.337 | 0.217 | -1.551 | 0.125 |
| scale(age_yr) | 0.073 | 0.110 | 0.662 | 0.510 |
| scale(ps3_avg_vas) | 0.075 | 0.108 | 0.691 | 0.491 |
| scale(bmi_percentile) | 0.159 | 0.107 | 1.493 | 0.139 |

Table 73: Portion Size 3 - Standardized Coefficitens for Association Between Proportion Active Eating and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.012 | 0.156 | -0.074 | 0.941 |
| scale(ps3_freddy_pre_meal) | -0.034 | 0.110 | -0.310 | 0.757 |
| sexFemale | 0.036 | 0.220 | 0.164 | 0.870 |
| scale(age_yr) | 0.150 | 0.111 | 1.343 | 0.183 |
| scale(ps3_avg_vas) | 0.064 | 0.110 | 0.579 | 0.564 |
| scale(bmi_percentile) | -0.035 | 0.109 | -0.322 | 0.748 |

Table 74: Portion Size 3 - Standardized Coefficitens for Association Between Meal Duration and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.064 | 0.147 | 0.431 | 0.667 |
| scale(ps3_freddy_pre_meal) | -0.223 | 0.104 | -2.137 | 0.036 |
| sexFemale | -0.145 | 0.207 | -0.697 | 0.488 |
| scale(age_yr) | -0.240 | 0.105 | -2.278 | 0.025 |
| scale(ps3_avg_vas) | 0.094 | 0.104 | 0.902 | 0.370 |
| scale(bmi_percentile) | -0.137 | 0.103 | -1.337 | 0.185 |

Table 75: Portion Size 3 - Standardized Coefficitens for Association Between Eating Rate (g) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.004 | 0.148 | 0.024 | 0.981 |
| scale(ps3_freddy_pre_meal) | -0.053 | 0.105 | -0.508 | 0.613 |
| sexFemale | 0.005 | 0.210 | 0.026 | 0.980 |
| scale(age_yr) | 0.233 | 0.106 | 2.191 | 0.031 |
| scale(ps3_avg_vas) | -0.029 | 0.104 | -0.277 | 0.783 |
| scale(bmi_percentile) | 0.268 | 0.103 | 2.588 | 0.011 |

Table 76: Portion Size 3 - Standardized Coefficitens for Association Between Eating Rate (kcal) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.041 | 0.148 | 0.279 | 0.781 |
| scale(ps3_freddy_pre_meal) | -0.163 | 0.105 | -1.555 | 0.124 |
| sexFemale | -0.076 | 0.210 | -0.360 | 0.720 |
| scale(age_yr) | 0.160 | 0.106 | 1.506 | 0.136 |
| scale(ps3_avg_vas) | -0.049 | 0.104 | -0.470 | 0.639 |
| scale(bmi_percentile) | 0.254 | 0.103 | 2.458 | 0.016 |

Table 77: Portion Size 3 - FDR Adjusted p-values for the effect of BMI Percentile on Microstructure

| | ps3_bmi_adj |
|---|---|
| Bites | 0.919 |
| Sips | 0.401 |
| Meal Duration | 0.296 |
| Bite Size, g | 0.238 |
| Bite Size, kcal | 0.279 |
| Eat Rate, g | 0.065 |
| Eat Rate, kcal | 0.065 |
| Prop Active | 0.855 |

#### 4.2.4 Portion Size 4

Table 78: Portion Size 4 - FDR adjusted pvalues

| | ps4_bmi_adj |
|---|---|
| Bites | 0.636 |
| Sips | 0.636 |
| Meal Duration | 0.236 |
| Bite Size, g | 0.877 |
| Bite Size, kcal | 0.636 |
| Eat Rate, g | 0.137 |
| Eat Rate, kcal | 0.024 |
| Prop Active | 0.236 |

Table 79: Portion Size 4 - Standardized Coefficitens for Association Between Bites and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.147 | 0.155 | -0.953 | 0.344 |
| scale(ps4_freddy_pre_meal) | -0.118 | 0.107 | -1.103 | 0.273 |
| sexFemale | 0.276 | 0.214 | 1.289 | 0.201 |
| scale(age_yr) | -0.164 | 0.108 | -1.520 | 0.133 |
| scale(ps4_avg_vas) | 0.276 | 0.107 | 2.589 | 0.012 |
| scale(bmi_percentile) | -0.065 | 0.105 | -0.616 | 0.539 |

Table 80: Portion Size 4 - Standardized Coefficitens for Association Between Sips and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.034 | 0.165 | 0.205 | 0.838 |
| scale(ps4_freddy_pre_meal) | 0.075 | 0.114 | 0.663 | 0.509 |
| sexFemale | -0.064 | 0.228 | -0.280 | 0.780 |
| scale(age_yr) | 0.097 | 0.115 | 0.846 | 0.400 |
| scale(ps4_avg_vas) | -0.050 | 0.114 | -0.440 | 0.661 |
| scale(bmi_percentile) | -0.066 | 0.112 | -0.591 | 0.556 |

Table 81: Portion Size 4 - Standardized Coefficitens for Association Between Bite Size (g) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.049 | 0.168 | -0.293 | 0.770 |
| scale(ps4_freddy_pre_meal) | 0.033 | 0.114 | 0.288 | 0.774 |
| sexFemale | 0.095 | 0.230 | 0.412 | 0.682 |
| scale(age_yr) | -0.010 | 0.117 | -0.087 | 0.931 |
| scale(ps4_avg_vas) | -0.152 | 0.114 | -1.335 | 0.186 |
| scale(bmi_percentile) | 0.017 | 0.113 | 0.155 | 0.877 |

Table 82: Portion Size 4 - Standardized Coefficitens for Association Between Bite Size (kcal) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.024 | 0.167 | -0.142 | 0.888 |
| scale(ps4_freddy_pre_meal) | 0.002 | 0.114 | 0.016 | 0.987 |
| sexFemale | 0.046 | 0.230 | 0.202 | 0.840 |
| scale(age_yr) | -0.073 | 0.117 | -0.626 | 0.533 |
| scale(ps4_avg_vas) | -0.136 | 0.114 | -1.190 | 0.238 |
| scale(bmi_percentile) | 0.068 | 0.113 | 0.607 | 0.546 |

Table 83: Portion Size 4 - Standardized Coefficitens for Association Between Proportion Active Eating and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.111 | 0.155 | 0.717 | 0.476 |
| scale(ps4_freddy_pre_meal) | -0.251 | 0.107 | -2.351 | 0.021 |
| sexFemale | -0.210 | 0.214 | -0.981 | 0.330 |
| scale(age_yr) | 0.190 | 0.108 | 1.750 | 0.084 |
| scale(ps4_avg_vas) | 0.126 | 0.107 | 1.183 | 0.241 |
| scale(bmi_percentile) | -0.167 | 0.106 | -1.580 | 0.118 |

Table 84: Portion Size 4 - Standardized Coefficitens for Association Between Meal Duration and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.076 | 0.159 | 0.481 | 0.632 |
| scale(ps4_freddy_pre_meal) | -0.001 | 0.109 | -0.010 | 0.992 |
| sexFemale | -0.148 | 0.220 | -0.673 | 0.503 |
| scale(age_yr) | -0.236 | 0.111 | -2.126 | 0.037 |
| scale(ps4_avg_vas) | 0.079 | 0.109 | 0.724 | 0.471 |
| scale(bmi_percentile) | -0.177 | 0.108 | -1.635 | 0.106 |

Table 85: Portion Size 4 - Standardized Coefficitens for Association Between Eating Rate (g) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.091 | 0.158 | -0.579 | 0.564 |
| scale(ps4_freddy_pre_meal) | -0.105 | 0.107 | -0.974 | 0.333 |
| sexFemale | 0.188 | 0.217 | 0.865 | 0.389 |
| scale(age_yr) | 0.261 | 0.110 | 2.365 | 0.021 |
| scale(ps4_avg_vas) | -0.005 | 0.108 | -0.044 | 0.965 |
| scale(bmi_percentile) | 0.229 | 0.106 | 2.155 | 0.034 |

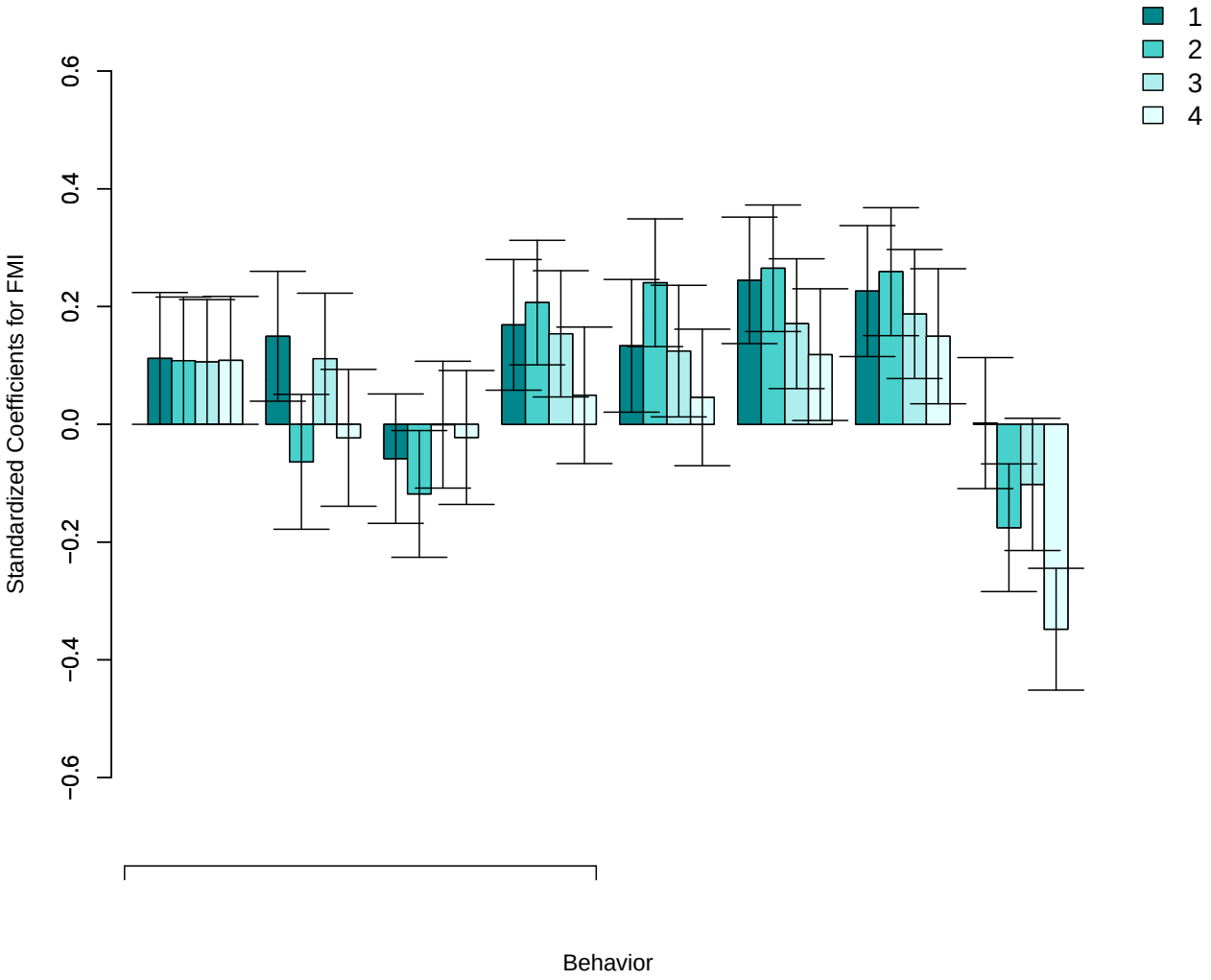
Table 86: Portion Size 4 - Standardized Coefficitens for Association Between Eating Rate (kcal) and BMI Percentile (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.024 | 0.158 | -0.152 | 0.880 |
| scale(ps4_freddy_pre_meal) | -0.104 | 0.107 | -0.971 | 0.335 |
| sexFemale | 0.061 | 0.217 | 0.279 | 0.781 |
| scale(age_yr) | 0.153 | 0.110 | 1.388 | 0.169 |
| scale(ps4_avg_vas) | 0.004 | 0.108 | 0.036 | 0.971 |
| scale(bmi_percentile) | 0.326 | 0.106 | 3.071 | 0.003 |

Table 87: Portion Size 4 - FDR Adjusted p-values for the effect of BMI Percentile on Microstructure

| | ps4_bmi_adj |
|---|---|
| Bites | 0.636 |
| Sips | 0.636 |
| Meal Duration | 0.236 |
| Bite Size, g | 0.877 |
| Bite Size, kcal | 0.636 |
| Eat Rate, g | 0.137 |
| Eat Rate, kcal | 0.024 |
| Prop Active | 0.236 |

## 4.3 Associaiton with Fat Mass Index




### 4.3.1 Portion Size 1

Table 88: Portion Size 1 - FDR adjusted pvalues

| | ps1_fmi_adj |
|---|---|
| Bites | 0.834 |
| Sips | 0.357 |
| Meal Duration | 0.796 |
| Bite Size, g | 0.351 |
| Bite Size, kcal | 0.384 |
| Eat Rate, g | 0.180 |
| Eat Rate, kcal | 0.180 |
| Prop Active | 0.985 |

Table 89: Portion Size 1 - Standardized Coefficitens for Association Between Bites and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.032 | 0.154 | -0.208 | 0.836 |
| scale(ps1_freddy_pre_meal) | -0.107 | 0.108 | -0.983 | 0.329 |
| sexFemale | 0.062 | 0.225 | 0.274 | 0.784 |
| scale(age_yr) | -0.087 | 0.109 | -0.791 | 0.431 |
| scale(ps1_avg_vas) | 0.151 | 0.109 | 1.386 | 0.170 |
| scale(fmi) | -0.039 | 0.112 | -0.347 | 0.729 |

Table 90: Portion Size 1 - Standardized Coefficitens for Association Between Sips and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.020 | 0.152 | -0.134 | 0.894 |
| scale(ps1_freddy_pre_meal) | 0.101 | 0.107 | 0.946 | 0.347 |
| sexFemale | 0.035 | 0.222 | 0.158 | 0.875 |
| scale(age_yr) | -0.171 | 0.108 | -1.585 | 0.117 |
| scale(ps1_avg_vas) | 0.064 | 0.107 | 0.593 | 0.555 |
| scale(fmi) | 0.150 | 0.110 | 1.356 | 0.179 |

Table 91: Portion Size 1 - Standardized Coefficitens for Association Between Bite Size (g) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.109 | 0.153 | 0.711 | 0.479 |
| scale(ps1_freddy_pre_meal) | -0.043 | 0.107 | -0.404 | 0.687 |
| sexFemale | -0.213 | 0.223 | -0.954 | 0.343 |
| scale(age_yr) | 0.193 | 0.109 | 1.775 | 0.080 |
| scale(ps1_avg_vas) | 0.007 | 0.108 | 0.067 | 0.947 |
| scale(fmi) | 0.169 | 0.111 | 1.522 | 0.132 |

Table 92: Portion Size 1 - Standardized Coefficitens for Association Between Bite Size (kcal) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.117 | 0.155 | 0.750 | 0.455 |
| scale(ps1_freddy_pre_meal) | -0.087 | 0.109 | -0.798 | 0.427 |
| sexFemale | -0.234 | 0.227 | -1.032 | 0.305 |
| scale(age_yr) | 0.052 | 0.110 | 0.470 | 0.639 |
| scale(ps1_avg_vas) | -0.017 | 0.110 | -0.159 | 0.874 |
| scale(fmi) | 0.133 | 0.113 | 1.183 | 0.240 |

Table 93: Portion Size 1 - Standardized Coefficitens for Association Between Proportion Active Eating and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.115 | 0.153 | 0.752 | 0.454 |
| scale(ps1_freddy_pre_meal) | -0.170 | 0.108 | -1.577 | 0.119 |
| sexFemale | -0.230 | 0.224 | -1.026 | 0.308 |
| scale(age_yr) | 0.106 | 0.109 | 0.972 | 0.334 |
| scale(ps1_avg_vas) | 0.128 | 0.108 | 1.181 | 0.241 |
| scale(fmi) | 0.002 | 0.111 | 0.019 | 0.985 |

Table 94: Portion Size 1 - Standardized Coefficitens for Association Between Meal Duration and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.160 | 0.152 | 1.058 | 0.293 |
| scale(ps1_freddy_pre_meal) | -0.086 | 0.106 | -0.812 | 0.419 |
| sexFemale | -0.329 | 0.221 | -1.490 | 0.140 |
| scale(age_yr) | -0.127 | 0.107 | -1.185 | 0.239 |
| scale(ps1_avg_vas) | 0.135 | 0.107 | 1.258 | 0.212 |
| scale(fmi) | -0.058 | 0.110 | -0.531 | 0.597 |

Table 95: Portion Size 1 - Standardized Coefficitens for Association Between Eating Rate (g) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.061 | 0.148 | -0.412 | 0.681 |
| scale(ps1_freddy_pre_meal) | -0.026 | 0.104 | -0.249 | 0.804 |
| sexFemale | 0.132 | 0.216 | 0.611 | 0.543 |
| scale(age_yr) | 0.216 | 0.105 | 2.053 | 0.043 |
| scale(ps1_avg_vas) | 0.035 | 0.105 | 0.332 | 0.740 |
| scale(fmi) | 0.244 | 0.107 | 2.275 | 0.025 |

Table 96: Portion Size 1 - Standardized Coefficitens for Association Between Eating Rate (kcal) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.008 | 0.153 | -0.049 | 0.961 |
| scale(ps1_freddy_pre_meal) | -0.029 | 0.108 | -0.265 | 0.791 |
| sexFemale | 0.018 | 0.223 | 0.080 | 0.936 |
| scale(age_yr) | 0.065 | 0.109 | 0.600 | 0.550 |
| scale(ps1_avg_vas) | 0.010 | 0.108 | 0.094 | 0.925 |
| scale(fmi) | 0.226 | 0.111 | 2.035 | 0.045 |

Table 97: Portion Size 1 - FDR Adjusted p-values for the effect of Fat Mass Index on Microstructure

| | ps1_fmi_adj |
|---|---|
| Bites | 0.834 |
| Sips | 0.357 |
| Meal Duration | 0.796 |
| Bite Size, g | 0.351 |
| Bite Size, kcal | 0.384 |
| Eat Rate, g | 0.180 |
| Eat Rate, kcal | 0.180 |
| Prop Active | 0.985 |

#### 4.3.2 Portion Size 2

Table 98: Portion Size 2 - FDR adjusted pvalues

| | ps2_fmi_adj |
|---|---|
| Bites | 0.580 |
| Sips | 0.580 |
| Meal Duration | 0.367 |
| Bite Size, g | 0.108 |
| Bite Size, kcal | 0.078 |
| Eat Rate, g | 0.077 |
| Eat Rate, kcal | 0.077 |
| Prop Active | 0.175 |

Table 99: Portion Size 2 - Standardized Coefficitens for Association Between Bites and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.163 | 0.146 | -1.117 | 0.267 |
| scale(ps2_freddy_pre_meal) | -0.243 | 0.104 | -2.341 | 0.022 |
| sexFemale | 0.362 | 0.220 | 1.642 | 0.104 |
| scale(age_yr) | -0.194 | 0.104 | -1.863 | 0.066 |
| scale(ps2_avg_vas) | 0.136 | 0.104 | 1.303 | 0.196 |
| scale(fmi) | -0.068 | 0.108 | -0.625 | 0.533 |

Table 100: Portion Size 2 - Standardized Coefficitens for Association Between Sips and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.011 | 0.154 | 0.073 | 0.942 |
| scale(ps2_freddy_pre_meal) | -0.001 | 0.110 | -0.013 | 0.990 |
| sexFemale | -0.024 | 0.233 | -0.103 | 0.918 |
| scale(age_yr) | -0.218 | 0.111 | -1.976 | 0.052 |
| scale(ps2_avg_vas) | 0.025 | 0.111 | 0.226 | 0.822 |
| scale(fmi) | -0.064 | 0.115 | -0.556 | 0.580 |

Table 101: Portion Size 2 - Standardized Coefficitens for Association Between Bite Size (g) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.353 | 0.142 | 2.481 | 0.015 |
| scale(ps2_freddy_pre_meal) | 0.131 | 0.101 | 1.290 | 0.201 |
| sexFemale | -0.748 | 0.216 | -3.468 | 0.001 |
| scale(age_yr) | 0.202 | 0.102 | 1.981 | 0.051 |
| scale(ps2_avg_vas) | 0.061 | 0.102 | 0.598 | 0.551 |
| scale(fmi) | 0.207 | 0.106 | 1.954 | 0.054 |

Table 102: Portion Size 2 - Standardized Coefficitens for Association Between Bite Size (kcal) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.309 | 0.146 | 2.113 | 0.038 |
| scale(ps2_freddy_pre_meal) | 0.006 | 0.104 | 0.062 | 0.951 |
| sexFemale | -0.653 | 0.221 | -2.955 | 0.004 |
| scale(age_yr) | 0.210 | 0.105 | 2.003 | 0.049 |
| scale(ps2_avg_vas) | 0.049 | 0.105 | 0.465 | 0.643 |
| scale(fmi) | 0.240 | 0.108 | 2.217 | 0.029 |

Table 103: Portion Size 2 - Standardized Coefficitens for Association Between Proportion Active Eating and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.014 | 0.146 | 0.093 | 0.926 |
| scale(ps2_freddy_pre_meal) | -0.156 | 0.104 | -1.504 | 0.136 |
| sexFemale | -0.032 | 0.221 | -0.147 | 0.883 |
| scale(age_yr) | 0.059 | 0.105 | 0.563 | 0.575 |
| scale(ps2_avg_vas) | 0.332 | 0.105 | 3.168 | 0.002 |
| scale(fmi) | -0.176 | 0.108 | -1.620 | 0.109 |

Table 104: Portion Size 2 - Standardized Coefficitens for Association Between Meal Duration and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.062 | 0.145 | 0.427 | 0.670 |
| scale(ps2_freddy_pre_meal) | -0.215 | 0.103 | -2.085 | 0.040 |
| sexFemale | -0.112 | 0.219 | -0.510 | 0.612 |
| scale(age_yr) | -0.294 | 0.104 | -2.831 | 0.006 |
| scale(ps2_avg_vas) | 0.042 | 0.104 | 0.404 | 0.687 |
| scale(fmi) | -0.118 | 0.108 | -1.098 | 0.275 |

Table 105: Portion Size 2 - Standardized Coefficitens for Association Between Eating Rate (g) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.191 | 0.145 | 1.323 | 0.189 |
| scale(ps2_freddy_pre_meal) | -0.075 | 0.103 | -0.729 | 0.468 |
| sexFemale | -0.403 | 0.219 | -1.838 | 0.070 |
| scale(age_yr) | 0.296 | 0.104 | 2.857 | 0.005 |
| scale(ps2_avg_vas) | 0.125 | 0.104 | 1.208 | 0.231 |
| scale(fmi) | 0.265 | 0.107 | 2.466 | 0.016 |

Table 106: Portion Size 2 - Standardized Coefficitens for Association Between Eating Rate (kcal) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.128 | 0.146 | 0.873 | 0.385 |
| scale(ps2_freddy_pre_meal) | -0.125 | 0.104 | -1.199 | 0.234 |
| sexFemale | -0.268 | 0.222 | -1.211 | 0.229 |
| scale(age_yr) | 0.264 | 0.105 | 2.516 | 0.014 |
| scale(ps2_avg_vas) | 0.103 | 0.105 | 0.982 | 0.329 |
| scale(fmi) | 0.259 | 0.109 | 2.386 | 0.019 |

Table 107: Portion Size 2 - FDR Adjusted p-values for the effect of Fat Mass Index on Microstructure

| | ps2_fmi_adj |
|---|---|
| Bites | 0.580 |
| Sips | 0.580 |
| Meal Duration | 0.367 |
| Bite Size, g | 0.108 |
| Bite Size, kcal | 0.078 |
| Eat Rate, g | 0.077 |
| Eat Rate, kcal | 0.077 |
| Prop Active | 0.175 |

#### 4.3.3 Portion Size 3

Table 108: Portion Size 3 - FDR adjusted pvalues

| | ps3_fmi_adj |
|---|---|
| Bites | 0.996 |
| Sips | 0.488 |
| Meal Duration | 0.996 |
| Bite Size, g | 0.415 |
| Bite Size, kcal | 0.488 |
| Eat Rate, g | 0.415 |
| Eat Rate, kcal | 0.415 |
| Prop Active | 0.488 |

Table 109: Portion Size 3 - Standardized Coefficitens for Association Between Bites and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.185 | 0.150 | -1.232 | 0.222 |
| scale(ps3_freddy_pre_meal) | -0.309 | 0.103 | -2.994 | 0.004 |
| sexFemale | 0.354 | 0.217 | 1.633 | 0.106 |
| scale(age_yr) | -0.142 | 0.105 | -1.362 | 0.177 |
| scale(ps3_avg_vas) | -0.005 | 0.103 | -0.044 | 0.965 |
| scale(fmi) | -0.009 | 0.106 | -0.083 | 0.934 |

Table 110: Portion Size 3 - Standardized Coefficitens for Association Between Sips and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.144 | 0.158 | 0.914 | 0.363 |
| scale(ps3_freddy_pre_meal) | -0.093 | 0.108 | -0.857 | 0.394 |
| sexFemale | -0.296 | 0.228 | -1.300 | 0.197 |
| scale(age_yr) | -0.112 | 0.110 | -1.021 | 0.310 |
| scale(ps3_avg_vas) | 0.052 | 0.108 | 0.477 | 0.635 |
| scale(fmi) | 0.111 | 0.111 | 1.001 | 0.320 |

Table 111: Portion Size 3 - Standardized Coefficitens for Association Between Bite Size (g) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.253 | 0.152 | 1.671 | 0.099 |
| scale(ps3_freddy_pre_meal) | 0.223 | 0.104 | 2.139 | 0.036 |
| sexFemale | -0.501 | 0.221 | -2.270 | 0.026 |
| scale(age_yr) | 0.108 | 0.106 | 1.016 | 0.313 |
| scale(ps3_avg_vas) | 0.096 | 0.104 | 0.925 | 0.358 |
| scale(fmi) | 0.154 | 0.107 | 1.434 | 0.156 |

Table 112: Portion Size 3 - Standardized Coefficitens for Association Between Bite Size (kcal) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.210 | 0.158 | 1.328 | 0.188 |
| scale(ps3_freddy_pre_meal) | 0.054 | 0.109 | 0.500 | 0.618 |
| sexFemale | -0.416 | 0.230 | -1.811 | 0.074 |
| scale(age_yr) | 0.068 | 0.110 | 0.620 | 0.537 |
| scale(ps3_avg_vas) | 0.069 | 0.109 | 0.633 | 0.529 |
| scale(fmi) | 0.124 | 0.112 | 1.113 | 0.269 |

Table 113: Portion Size 3 - Standardized Coefficitens for Association Between Proportion Active Eating and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.044 | 0.159 | -0.276 | 0.783 |
| scale(ps3_freddy_pre_meal) | -0.034 | 0.109 | -0.309 | 0.758 |
| sexFemale | 0.100 | 0.230 | 0.436 | 0.664 |
| scale(age_yr) | 0.145 | 0.111 | 1.309 | 0.194 |
| scale(ps3_avg_vas) | 0.068 | 0.109 | 0.625 | 0.534 |
| scale(fmi) | -0.102 | 0.112 | -0.909 | 0.366 |

Table 114: Portion Size 3 - Standardized Coefficitens for Association Between Meal Duration and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.063 | 0.153 | 0.410 | 0.683 |
| scale(ps3_freddy_pre_meal) | -0.208 | 0.105 | -1.978 | 0.051 |
| sexFemale | -0.143 | 0.220 | -0.650 | 0.518 |
| scale(age_yr) | -0.228 | 0.106 | -2.145 | 0.035 |
| scale(ps3_avg_vas) | 0.093 | 0.105 | 0.889 | 0.377 |
| scale(fmi) | -0.001 | 0.108 | -0.005 | 0.996 |

Table 115: Portion Size 3 - Standardized Coefficitens for Association Between Eating Rate (g) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.059 | 0.156 | 0.378 | 0.707 |
| scale(ps3_freddy_pre_meal) | -0.078 | 0.107 | -0.725 | 0.470 |
| sexFemale | -0.104 | 0.227 | -0.460 | 0.647 |
| scale(age_yr) | 0.223 | 0.109 | 2.045 | 0.044 |
| scale(ps3_avg_vas) | -0.037 | 0.107 | -0.342 | 0.733 |
| scale(fmi) | 0.171 | 0.110 | 1.550 | 0.125 |

Table 116: Portion Size 3 - Standardized Coefficitens for Association Between Eating Rate (kcal) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.102 | 0.155 | 0.658 | 0.513 |
| scale(ps3_freddy_pre_meal) | -0.186 | 0.106 | -1.744 | 0.085 |
| sexFemale | -0.196 | 0.225 | -0.869 | 0.388 |
| scale(age_yr) | 0.152 | 0.108 | 1.409 | 0.163 |
| scale(ps3_avg_vas) | -0.058 | 0.107 | -0.543 | 0.589 |
| scale(fmi) | 0.187 | 0.110 | 1.710 | 0.091 |

Table 117: Portion Size 3 - FDR Adjusted p-values for the effect of Fat Mass Index on Microstructure

| | ps3_fmi_adj |
|---|---|
| Bites | 0.996 |
| Sips | 0.488 |
| Meal Duration | 0.996 |
| Bite Size, g | 0.415 |
| Bite Size, kcal | 0.488 |
| Eat Rate, g | 0.415 |
| Eat Rate, kcal | 0.415 |
| Prop Active | 0.488 |

#### 4.3.4 Portion Size 4

Table 118: Portion Size 4 - FDR adjusted pvalues

| | ps4_fmi_adj |
|---|---|
| Bites | 0.697 |
| Sips | 0.845 |
| Meal Duration | 0.845 |
| Bite Size, g | 0.845 |
| Bite Size, kcal | 0.845 |
| Eat Rate, g | 0.697 |
| Eat Rate, kcal | 0.697 |
| Prop Active | 0.010 |

Table 119: Portion Size 4 - Standardized Coefficitens for Association Between Bites and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.182 | 0.159 | -1.144 | 0.256 |
| scale(ps4_freddy_pre_meal) | -0.111 | 0.106 | -1.041 | 0.301 |
| sexFemale | 0.343 | 0.226 | 1.520 | 0.133 |
| scale(age_yr) | -0.168 | 0.108 | -1.556 | 0.124 |
| scale(ps4_avg_vas) | 0.277 | 0.106 | 2.601 | 0.011 |
| scale(fmi) | -0.102 | 0.109 | -0.943 | 0.348 |

Table 120: Portion Size 4 - Standardized Coefficitens for Association Between Sips and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.027 | 0.170 | 0.162 | 0.872 |
| scale(ps4_freddy_pre_meal) | 0.078 | 0.114 | 0.686 | 0.495 |
| sexFemale | -0.051 | 0.242 | -0.210 | 0.834 |
| scale(age_yr) | 0.103 | 0.115 | 0.896 | 0.373 |
| scale(ps4_avg_vas) | -0.049 | 0.114 | -0.435 | 0.665 |
| scale(fmi) | -0.023 | 0.116 | -0.198 | 0.844 |

Table 121: Portion Size 4 - Standardized Coefficitens for Association Between Bite Size (g) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.033 | 0.172 | -0.190 | 0.850 |
| scale(ps4_freddy_pre_meal) | 0.030 | 0.114 | 0.263 | 0.793 |
| sexFemale | 0.063 | 0.243 | 0.257 | 0.798 |
| scale(age_yr) | -0.007 | 0.117 | -0.062 | 0.951 |
| scale(ps4_avg_vas) | -0.152 | 0.114 | -1.336 | 0.186 |
| scale(fmi) | 0.049 | 0.116 | 0.425 | 0.672 |

Table 122: Portion Size 4 - Standardized Coefficitens for Association Between Bite Size (kcal) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.011 | 0.172 | -0.065 | 0.948 |
| scale(ps4_freddy_pre_meal) | -0.002 | 0.114 | -0.015 | 0.988 |
| sexFemale | 0.020 | 0.243 | 0.081 | 0.935 |
| scale(age_yr) | -0.078 | 0.117 | -0.668 | 0.506 |
| scale(ps4_avg_vas) | -0.135 | 0.114 | -1.187 | 0.239 |
| scale(fmi) | 0.046 | 0.116 | 0.393 | 0.695 |

Table 123: Portion Size 4 - Standardized Coefficitens for Association Between Proportion Active Eating and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.007 | 0.151 | -0.045 | 0.964 |
| scale(ps4_freddy_pre_meal) | -0.229 | 0.101 | -2.258 | 0.027 |
| sexFemale | 0.020 | 0.215 | 0.093 | 0.926 |
| scale(age_yr) | 0.172 | 0.103 | 1.681 | 0.097 |
| scale(ps4_avg_vas) | 0.127 | 0.101 | 1.256 | 0.213 |
| scale(fmi) | -0.348 | 0.103 | -3.363 | 0.001 |

Table 124: Portion Size 4 - Standardized Coefficitens for Association Between Meal Duration and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.073 | 0.166 | 0.441 | 0.661 |
| scale(ps4_freddy_pre_meal) | 0.005 | 0.111 | 0.041 | 0.967 |
| sexFemale | -0.139 | 0.237 | -0.590 | 0.557 |
| scale(age_yr) | -0.216 | 0.113 | -1.917 | 0.059 |
| scale(ps4_avg_vas) | 0.081 | 0.111 | 0.726 | 0.470 |
| scale(fmi) | -0.022 | 0.114 | -0.196 | 0.845 |

Table 125: Portion Size 4 - Standardized Coefficitens for Association Between Eating Rate (g) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.062 | 0.166 | -0.371 | 0.712 |
| scale(ps4_freddy_pre_meal) | -0.115 | 0.110 | -1.046 | 0.299 |
| sexFemale | 0.122 | 0.235 | 0.521 | 0.604 |
| scale(age_yr) | 0.241 | 0.113 | 2.145 | 0.035 |
| scale(ps4_avg_vas) | -0.004 | 0.110 | -0.041 | 0.968 |
| scale(fmi) | 0.118 | 0.112 | 1.058 | 0.294 |

Table 126: Portion Size 4 - Standardized Coefficitens for Association Between Eating Rate (kcal) and Fat Mass Index (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.012 | 0.170 | 0.069 | 0.945 |
| scale(ps4_freddy_pre_meal) | -0.118 | 0.113 | -1.047 | 0.298 |
| sexFemale | -0.020 | 0.241 | -0.084 | 0.933 |
| scale(age_yr) | 0.123 | 0.115 | 1.066 | 0.290 |
| scale(ps4_avg_vas) | 0.004 | 0.113 | 0.037 | 0.970 |
| scale(fmi) | 0.150 | 0.115 | 1.304 | 0.196 |

Table 127: Portion Size 4 - FDR Adjusted p-values for the effect of Fat Mass Index on Microstructure

| | ps4_fmi_adj |
|---|---|
| Bites | 0.697 |
| Sips | 0.845 |
| Meal Duration | 0.845 |
| Bite Size, g | 0.845 |
| Bite Size, kcal | 0.845 |
| Eat Rate, g | 0.697 |
| Eat Rate, kcal | 0.697 |
| Prop Active | 0.010 |

# 5 Supplemental Materials - No Plate Cleaners

### 5.0.1 Portion Size 1

Table 128: Supplemental No Plate Cleaners - Portion Size 1 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (g) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.072 | 0.061 | 1.187 | 0.239 |
| scale(ps1_freddy_pre_meal) | -0.005 | 0.043 | -0.109 | 0.913 |
| sexFemale | -0.142 | 0.091 | -1.569 | 0.121 |
| scale(age_yr) | 0.007 | 0.043 | 0.173 | 0.863 |
| scale(fmi) | 0.052 | 0.044 | 1.175 | 0.244 |
| scale(ps1_avg_vas) | 0.048 | 0.042 | 1.151 | 0.254 |
| scale(ps1_nbites) | 0.497 | 0.092 | 5.410 | 0.000 |
| scale(ps1_nsips) | 0.072 | 0.052 | 1.385 | 0.170 |
| scale(ps1_bite_size_g) | 0.274 | 0.077 | 3.580 | 0.001 |
| scale(ps1_prop_active) | 0.066 | 0.054 | 1.223 | 0.225 |
| scale(ps1_meal_duration) | 0.591 | 0.091 | 6.482 | 0.000 |
| scale(ps1_eat_rate_g) | 0.552 | 0.081 | 6.803 | 0.000 |

Table 129: Supplemental No Plate Cleaners - Portion Size 1 - Relative Weighting Analysis, grams

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps1_freddy_pre_meal | 0.006 | 0.640 | - |
| sex_num | 0.008 | 0.900 | - |
| age_yr | 0.005 | 0.567 | + |
| fmi | 0.012 | 1.408 | + |
| ps1_avg_vas | 0.022 | 2.471 | + |
| ps1_nbites | 0.260 | 29.467 | + |
| ps1_nsips | 0.093 | 10.502 | + |
| ps1_bite_size_g | 0.075 | 8.513 | + |
| ps1_prop_active | 0.040 | 4.531 | + |
| ps1_meal_duration | 0.211 | 23.976 | + |
| ps1_eat_rate_g | 0.150 | 17.024 | + |

Table 130: Supplemental No Plate Cleaners - Portion Size 1 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (kcal) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.077 | 0.064 | 1.204 | 0.233 |
| scale(ps1_freddy_pre_meal) | 0.018 | 0.045 | 0.400 | 0.691 |
| sexFemale | -0.151 | 0.096 | -1.586 | 0.117 |
| scale(age_yr) | -0.031 | 0.043 | -0.725 | 0.471 |
| scale(fmi) | 0.008 | 0.046 | 0.175 | 0.861 |
| scale(ps1_avg_vas) | 0.063 | 0.044 | 1.439 | 0.154 |
| scale(ps1_nbites) | 0.560 | 0.093 | 6.048 | 0.000 |
| scale(ps1_nsips) | -0.030 | 0.051 | -0.591 | 0.556 |
| scale(ps1_bite_size_kcal) | 0.275 | 0.078 | 3.528 | 0.001 |
| scale(ps1_prop_active) | 0.063 | 0.055 | 1.141 | 0.257 |
| scale(ps1_meal_duration) | 0.562 | 0.096 | 5.883 | 0.000 |
| scale(ps1_eat_rate_kcal) | 0.615 | 0.086 | 7.170 | 0.000 |

Table 131: Supplemental No Plate Cleaners - Portion Size 1 - Relative Weighting Analysis, kcal

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps1_freddy_pre_meal | 0.005 | 0.613 | - |
| sex_num | 0.013 | 1.497 | - |
| age_yr | 0.005 | 0.540 | - |
| fmi | 0.005 | 0.631 | + |
| ps1_avg_vas | 0.023 | 2.691 | + |
| ps1_nbites | 0.293 | 33.702 | + |
| ps1_nsips | 0.025 | 2.833 | + |
| ps1_bite_size_kcal | 0.084 | 9.640 | + |
| ps1_prop_active | 0.052 | 6.034 | + |
| ps1_meal_duration | 0.176 | 20.253 | + |
| ps1_eat_rate_kcal | 0.188 | 21.566 | + |

# 6 Supplemental Materials - Extra Covarys: Association with Intake

### 6.0.1 Portion Size 1

Table 132: Supplemental Covars - Portion Size 1 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (g) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.006 | 0.077 | -0.080 | 0.937 |
| ps1_time_of_dayLunch | 0.087 | 0.084 | 1.035 | 0.304 |
| ps1_bookresearcher | 0.132 | 0.095 | 1.394 | 0.167 |
| scale(ps1_freddy_pre_meal) | -0.020 | 0.042 | -0.482 | 0.631 |
| sexFemale | -0.227 | 0.093 | -2.434 | 0.017 |
| scale(age_yr) | -0.015 | 0.041 | -0.365 | 0.716 |
| scale(fmi) | 0.070 | 0.043 | 1.623 | 0.109 |
| scale(ps1_avg_vas) | 0.054 | 0.041 | 1.315 | 0.192 |
| scale(ps1_nbites) | 0.482 | 0.090 | 5.369 | 0.000 |
| scale(ps1_nsips) | 0.059 | 0.052 | 1.135 | 0.260 |
| scale(ps1_bite_size_g) | 0.243 | 0.074 | 3.262 | 0.002 |
| scale(ps1_prop_active) | 0.056 | 0.051 | 1.100 | 0.275 |
| scale(ps1_meal_duration) | 0.594 | 0.091 | 6.526 | 0.000 |
| scale(ps1_eat_rate_g) | 0.551 | 0.078 | 7.053 | 0.000 |

Table 133: Supplemental Covars - Portion Size 1 - Relative Weighting Analysis, grams

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps1_time_of_day_num | 0.009 | 0.971 | - |
| ps1_book_num | 0.007 | 0.754 | + |
| ps1_freddy_pre_meal | 0.007 | 0.774 | - |
| sex_num | 0.013 | 1.461 | - |
| age_yr | 0.003 | 0.306 | + |
| fmi | 0.016 | 1.763 | + |
| ps1_avg_vas | 0.019 | 2.086 | + |
| ps1_nbites | 0.260 | 29.192 | + |
| ps1_nsips | 0.093 | 10.384 | + |
| ps1_bite_size_g | 0.070 | 7.894 | + |
| ps1_prop_active | 0.041 | 4.547 | + |
| ps1_meal_duration | 0.205 | 23.049 | + |
| ps1_eat_rate_g | 0.150 | 16.818 | + |

Table 134: Supplemental Covars - Portion Size 1 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (kcal) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.013 | 0.082 | -0.165 | 0.870 |
| ps1_time_of_dayLunch | 0.125 | 0.086 | 1.462 | 0.148 |
| ps1_bookresearcher | 0.125 | 0.099 | 1.260 | 0.212 |
| scale(ps1_freddy_pre_meal) | -0.001 | 0.043 | -0.029 | 0.977 |
| sexFemale | -0.233 | 0.097 | -2.407 | 0.019 |
| scale(age_yr) | -0.047 | 0.042 | -1.127 | 0.263 |
| scale(fmi) | 0.023 | 0.045 | 0.523 | 0.603 |
| scale(ps1_avg_vas) | 0.073 | 0.042 | 1.730 | 0.088 |
| scale(ps1_nbites) | 0.552 | 0.090 | 6.150 | 0.000 |
| scale(ps1_nsips) | -0.036 | 0.051 | -0.702 | 0.485 |
| scale(ps1_bite_size_kcal) | 0.251 | 0.075 | 3.341 | 0.001 |
| scale(ps1_prop_active) | 0.053 | 0.053 | 1.010 | 0.316 |
| scale(ps1_meal_duration) | 0.567 | 0.095 | 5.979 | 0.000 |
| scale(ps1_eat_rate_kcal) | 0.619 | 0.083 | 7.468 | 0.000 |

Table 135: Supplemental Covars - Portion Size 1 - Relative Weighting Analysis, kcal

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps1_time_of_day_num | 0.003 | 0.386 | - |
| ps1_book_num | 0.010 | 1.159 | + |
| ps1_freddy_pre_meal | 0.006 | 0.709 | - |
| sex_num | 0.018 | 1.986 | - |
| age_yr | 0.009 | 1.029 | - |
| fmi | 0.007 | 0.777 | + |
| ps1_avg_vas | 0.021 | 2.328 | + |
| ps1_nbites | 0.292 | 33.151 | + |
| ps1_nsips | 0.028 | 3.128 | + |
| ps1_bite_size_kcal | 0.080 | 9.020 | + |
| ps1_prop_active | 0.053 | 6.042 | + |
| ps1_meal_duration | 0.171 | 19.367 | + |
| ps1_eat_rate_kcal | 0.184 | 20.920 | + |

### 6.0.2 Portion Size 2

Table 136: Supplemental Covars - Portion Size 2 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (g) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.013 | 0.104 | -0.123 | 0.902 |
| ps2_time_of_dayLunch | 0.203 | 0.111 | 1.829 | 0.072 |
| ps2_bookresearcher | -0.027 | 0.120 | -0.228 | 0.820 |
| scale(ps2_freddy_pre_meal) | -0.011 | 0.056 | -0.194 | 0.847 |
| sexFemale | -0.107 | 0.125 | -0.853 | 0.397 |
| scale(age_yr) | 0.008 | 0.054 | 0.140 | 0.889 |
| scale(fmi) | 0.036 | 0.057 | 0.631 | 0.530 |
| scale(ps2_avg_vas) | 0.047 | 0.056 | 0.834 | 0.407 |
| scale(ps2_nbites) | 0.165 | 0.114 | 1.445 | 0.153 |
| scale(ps2_nsips) | 0.080 | 0.057 | 1.421 | 0.160 |
| scale(ps2_bite_size_g) | 0.045 | 0.099 | 0.458 | 0.649 |
| scale(ps2_prop_active) | 0.000 | 0.064 | 0.003 | 0.998 |
| scale(ps2_meal_duration) | 0.879 | 0.127 | 6.944 | 0.000 |
| scale(ps2_eat_rate_g) | 0.782 | 0.103 | 7.566 | 0.000 |

Table 137: Supplemental Covars - Portion Size 2 - Relative Weighting Analysis, grams

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps2_time_of_day_num | 0.007 | 0.886 | - |
| ps2_book_num | 0.011 | 1.382 | + |
| ps2_freddy_pre_meal | 0.030 | 3.589 | - |
| sex_num | 0.020 | 2.383 | - |
| age_yr | 0.008 | 1.014 | - |
| fmi | 0.008 | 1.005 | + |
| ps2_avg_vas | 0.014 | 1.668 | + |
| ps2_nbites | 0.175 | 21.191 | + |
| ps2_nsips | 0.070 | 8.442 | + |
| ps2_bite_size_g | 0.054 | 6.550 | + |
| ps2_prop_active | 0.017 | 2.095 | - |
| ps2_meal_duration | 0.237 | 28.764 | + |
| ps2_eat_rate_g | 0.173 | 21.030 | + |

Table 138: Supplemental Covars - Portion Size 2 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (kcal) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.003 | 0.111 | 0.023 | 0.982 |
| ps2_time_of_dayLunch | 0.139 | 0.119 | 1.167 | 0.247 |
| ps2_bookresearcher | -0.027 | 0.128 | -0.215 | 0.831 |
| scale(ps2_freddy_pre_meal) | -0.023 | 0.060 | -0.391 | 0.697 |
| sexFemale | -0.094 | 0.130 | -0.721 | 0.474 |
| scale(age_yr) | 0.000 | 0.057 | 0.001 | 0.999 |
| scale(fmi) | 0.097 | 0.060 | 1.602 | 0.114 |
| scale(ps2_avg_vas) | 0.012 | 0.059 | 0.211 | 0.834 |
| scale(ps2_nbites) | 0.341 | 0.124 | 2.748 | 0.008 |
| scale(ps2_nsips) | -0.011 | 0.057 | -0.188 | 0.851 |
| scale(ps2_bite_size_kcal) | 0.151 | 0.102 | 1.483 | 0.143 |
| scale(ps2_prop_active) | 0.003 | 0.068 | 0.049 | 0.961 |
| scale(ps2_meal_duration) | 0.678 | 0.136 | 4.995 | 0.000 |
| scale(ps2_eat_rate_kcal) | 0.726 | 0.119 | 6.119 | 0.000 |

Table 139: Supplemental Covars - Portion Size 2 - Relative Weighting Analysis, kcal

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps2_time_of_day_num | 0.002 | 0.188 | - |
| ps2_book_num | 0.008 | 1.037 | + |
| ps2_freddy_pre_meal | 0.040 | 4.977 | - |
| sex_num | 0.009 | 1.105 | - |
| age_yr | 0.007 | 0.876 | - |
| fmi | 0.024 | 3.041 | + |
| ps2_avg_vas | 0.008 | 1.011 | + |
| ps2_nbites | 0.229 | 28.640 | + |
| ps2_nsips | 0.009 | 1.158 | + |
| ps2_bite_size_kcal | 0.073 | 9.073 | + |
| ps2_prop_active | 0.013 | 1.574 | - |
| ps2_meal_duration | 0.175 | 21.829 | + |
| ps2_eat_rate_kcal | 0.204 | 25.491 | + |

#### 6.0.3 Portion Size 3

Table 140: Supplemental Covars - Portion Size 3 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (g) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.060 | 0.068 | -0.890 | 0.376 |
| ps3_time_of_dayLunch | 0.179 | 0.079 | 2.272 | 0.026 |
| ps3_bookresearcher | 0.067 | 0.084 | 0.808 | 0.422 |
| scale(ps3_freddy_pre_meal) | -0.048 | 0.039 | -1.230 | 0.223 |
| sexFemale | -0.076 | 0.086 | -0.889 | 0.377 |
| scale(age_yr) | -0.024 | 0.037 | -0.644 | 0.522 |
| scale(fmi) | 0.120 | 0.038 | 3.135 | 0.003 |
| scale(ps3_avg_vas) | 0.060 | 0.036 | 1.668 | 0.100 |
| scale(ps3_nbites) | 0.374 | 0.091 | 4.102 | 0.000 |
| scale(ps3_nsips) | -0.007 | 0.042 | -0.179 | 0.858 |
| scale(ps3_bite_size_g) | 0.182 | 0.075 | 2.441 | 0.017 |
| scale(ps3_prop_active) | 0.090 | 0.042 | 2.110 | 0.038 |
| scale(ps3_meal_duration) | 0.699 | 0.084 | 8.276 | 0.000 |
| scale(ps3_eat_rate_g) | 0.582 | 0.079 | 7.395 | 0.000 |

Table 141: Supplemental Covars - Portion Size 3 - Relative Weighting Analysis, grams

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps3_time_of_day_num | 0.008 | 0.884 | - |
| ps3_book_num | 0.002 | 0.264 | + |
| ps3_freddy_pre_meal | 0.037 | 4.100 | - |
| sex_num | 0.005 | 0.505 | - |
| age_yr | 0.007 | 0.773 | - |
| fmi | 0.030 | 3.295 | + |
| ps3_avg_vas | 0.011 | 1.190 | + |
| ps3_nbites | 0.254 | 27.844 | + |
| ps3_nsips | 0.057 | 6.203 | + |
| ps3_bite_size_g | 0.063 | 6.930 | + |
| ps3_prop_active | 0.034 | 3.736 | + |
| ps3_meal_duration | 0.249 | 27.237 | + |
| ps3_eat_rate_g | 0.155 | 17.039 | + |

Table 142: Supplemental Covars - Portion Size 3 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (kcal) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | -0.013 | 0.073 | -0.180 | 0.857 |
| ps3_time_of_dayLunch | 0.148 | 0.084 | 1.777 | 0.080 |
| ps3_bookresearcher | 0.079 | 0.089 | 0.895 | 0.374 |
| scale(ps3_freddy_pre_meal) | -0.012 | 0.042 | -0.278 | 0.782 |
| sexFemale | -0.165 | 0.091 | -1.814 | 0.074 |
| scale(age_yr) | -0.034 | 0.039 | -0.873 | 0.385 |
| scale(fmi) | 0.148 | 0.041 | 3.576 | 0.001 |
| scale(ps3_avg_vas) | 0.071 | 0.038 | 1.849 | 0.069 |
| scale(ps3_nbites) | 0.428 | 0.090 | 4.755 | 0.000 |
| scale(ps3_nsips) | -0.043 | 0.043 | -1.006 | 0.318 |
| scale(ps3_bite_size_kcal) | 0.214 | 0.077 | 2.783 | 0.007 |
| scale(ps3_prop_active) | 0.079 | 0.047 | 1.684 | 0.097 |
| scale(ps3_meal_duration) | 0.547 | 0.083 | 6.573 | 0.000 |
| scale(ps3_eat_rate_kcal) | 0.573 | 0.086 | 6.637 | 0.000 |

Table 143: Supplemental Covars - Portion Size 3 - Relative Weighting Analysis, kcal

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps3_time_of_day_num | 0.003 | 0.290 | - |
| ps3_book_num | 0.003 | 0.312 | + |
| ps3_freddy_pre_meal | 0.041 | 4.524 | - |
| sex_num | 0.008 | 0.864 | - |
| fmi | 0.041 | 4.558 | + |
| age_yr | 0.010 | 1.070 | - |
| ps3_avg_vas | 0.010 | 1.091 | + |
| ps3_nbites | 0.249 | 27.548 | + |
| ps3_nsips | 0.012 | 1.312 | + |
| ps3_bite_size_kcal | 0.096 | 10.653 | + |
| ps3_prop_active | 0.050 | 5.493 | + |
| ps3_meal_duration | 0.190 | 21.012 | + |
| ps3_eat_rate_kcal | 0.192 | 21.271 | + |

#### 6.0.4 Portion Size 4

Table 144: Supplemental Covars - Portion Size 4 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (g) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.158 | 0.094 | 1.687 | 0.096 |
| ps4_time_of_dayLunch | 0.079 | 0.105 | 0.752 | 0.455 |
| ps4_bookresearcher | -0.176 | 0.114 | -1.546 | 0.127 |
| scale(ps4_freddy_pre_meal) | -0.043 | 0.047 | -0.902 | 0.370 |
| sexFemale | -0.133 | 0.110 | -1.210 | 0.231 |
| scale(age_yr) | 0.022 | 0.050 | 0.443 | 0.659 |
| scale(fmi) | 0.080 | 0.053 | 1.526 | 0.132 |
| scale(ps4_avg_vas) | 0.066 | 0.049 | 1.353 | 0.181 |
| scale(ps4_nbites) | 0.174 | 0.074 | 2.369 | 0.021 |
| scale(ps4_nsips) | 0.163 | 0.055 | 2.957 | 0.004 |
| scale(ps4_bite_size_g) | 0.001 | 0.066 | 0.018 | 0.986 |
| scale(ps4_prop_active) | 0.161 | 0.065 | 2.487 | 0.015 |
| scale(ps4_meal_duration) | 0.793 | 0.086 | 9.198 | 0.000 |
| scale(ps4_eat_rate_g) | 0.789 | 0.078 | 10.179 | 0.000 |

Table 145: Supplemental Covars - Portion Size 4 - Relative Weighting Analysis, grams

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps4_time_of_day_num | 0.005 | 0.595 | - |
| ps4_book_num | 0.025 | 2.869 | + |
| ps4_freddy_pre_meal | 0.012 | 1.375 | - |
| sex_num | 0.006 | 0.680 | - |
| age_yr | 0.007 | 0.778 | + |
| fmi | 0.008 | 0.926 | + |
| ps4_avg_vas | 0.012 | 1.344 | + |
| ps4_nbites | 0.168 | 19.439 | + |
| ps4_nsips | 0.127 | 14.648 | + |
| ps4_bite_size_g | 0.025 | 2.863 | + |
| ps4_prop_active | 0.032 | 3.742 | + |
| ps4_meal_duration | 0.234 | 27.086 | + |
| ps4_eat_rate_g | 0.204 | 23.655 | + |

Table 146: Supplemental Covars - Portion Size 4 - Standardized Coefficitens for Association Between Eating Behaivors and Intake (kcal) (adjusted for age, sex, liking, and fullness)

| | Estimate | Std. Error | t value | Pr(>\|t\|) |
|---|---|---|---|---|
| (Intercept) | 0.125 | 0.102 | 1.223 | 0.225 |
| ps4_time_of_dayLunch | 0.007 | 0.113 | 0.064 | 0.949 |
| ps4_bookresearcher | -0.150 | 0.122 | -1.236 | 0.221 |
| scale(ps4_freddy_pre_meal) | -0.030 | 0.051 | -0.590 | 0.557 |
| sexFemale | -0.066 | 0.120 | -0.548 | 0.585 |
| scale(age_yr) | -0.042 | 0.053 | -0.799 | 0.427 |
| scale(fmi) | 0.064 | 0.057 | 1.115 | 0.269 |
| scale(ps4_avg_vas) | 0.060 | 0.053 | 1.141 | 0.258 |
| scale(ps4_nbites) | 0.210 | 0.081 | 2.578 | 0.012 |
| scale(ps4_nsips) | 0.054 | 0.055 | 0.975 | 0.333 |
| scale(ps4_bite_size_kcal) | 0.006 | 0.070 | 0.092 | 0.927 |
| scale(ps4_prop_active) | 0.131 | 0.068 | 1.936 | 0.057 |
| scale(ps4_meal_duration) | 0.770 | 0.091 | 8.457 | 0.000 |
| scale(ps4_eat_rate_kcal) | 0.866 | 0.080 | 10.860 | 0.000 |

Table 147: Supplemental Covars - Portion Size 4 - Relative Weighting Analysis, kcal

| Variables | Raw.RelWeight | Rescaled.RelWeight | Sign |
|---|---|---|---|
| ps4_time_of_day_num | 0.004 | 0.527 | + |
| ps4_book_num | 0.027 | 3.158 | + |
| ps4_freddy_pre_meal | 0.011 | 1.291 | - |
| sex_num | 0.006 | 0.728 | - |
| age_yr | 0.011 | 1.298 | - |
| fmi | 0.011 | 1.350 | + |
| ps4_avg_vas | 0.014 | 1.610 | + |
| ps4_nbites | 0.191 | 22.631 | + |
| ps4_nsips | 0.022 | 2.583 | + |
| ps4_bite_size_kcal | 0.035 | 4.113 | + |
| ps4_prop_active | 0.029 | 3.486 | + |
| ps4_meal_duration | 0.212 | 25.035 | + |
| ps4_eat_rate_kcal | 0.272 | 32.189 | + |