

# Overall Microstructure Summary for Portion Size Meals

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# 1 Demographics

Table 1: Demographics

Characteristic	N = 91
Sex	
Male	46 (51%)
Female	45 (49%)
Age, yr	7.8 (0.6)
BMI %tile	47.8 (24.6)
%Body Fat	28.6 (4.4)
Fat Mass Index	4.5 (0.9)
Ethnicity	
Hispanic/Lantinx	0 (0%)
Not Hispanic/Lantinx	91 (100%)
Race	
0	88 (97%)
2	3 (3.3%)
3	0 (0%)
Income	
< \$51,000	11 (12%)
>\$100,000	33 (38%)
\$51,000 - \$100,000	44 (50%)
Unknown	3
Mother's Education	
> Bachelor Degree	28 (31%)
AA/Technical Degree	9 (10%)
Bachelor Degree	44 (49%)
High School/GED	9 (10%)
Unknown	1
Father's Education	
> Bachelor Degree	32 (37%)
AA/Technical Degree	14 (16%)
Bachelor Degree	29 (33%)
High School/GED	11 (13%)
Other/NA	1 (1.1%)
Unknown	4

<sup>1</sup> n (%); Mean (SD)

# 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
Avg. Liking	3.9 (0.6)	3.8 (0.6)	3.8 (0.6)	3.9 (0.6)
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
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

<sup>1</sup> Mean (SD); n (%)

### 3 Microstructure

#### 3.1 Behaviors Across Meals

Table 3: 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)

<sup>1</sup> Mean (SD)

#### 3.2 Coding Reliability

Table 4: 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 5: Portion Size 1: Correlation Matrix

	nbites	nsips	total_active_eating	bite_latency	meal_duration	bite_rate	bite_rate_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
bite_size_g	-0.59	0.01	-0.38	0.12	-0.33	-0.37	-0.38
bite_size_kcal	-0.59	-0.25	-0.44	0.09	-0.43	-0.29	-0.32
eat_rate_g	-0.09	-0.1	-0.45	-0.08	-0.57	0.56	0.5
eat_rate_kcal	-0.11	-0.26	-0.49	-0.12	-0.61	0.55	0.5
eat_rate_active_g	-0.18	-0.02	-0.53	0.07	-0.52	0.43	0.48
eat_rate_active_kcal	-0.19	-0.22	-0.55	0	-0.58	0.44	0.48
prop_active	0.25	-0.24	0.13	-0.33	-0.26	0.51	0.21

Table 6: Portion Size 2: Correlation Matrix

	nbites	nsips	total_active_eating	bite_latency	meal_duration	bite_rate	bite_rate_ac
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
bite_size_g	-0.61	0.14	-0.32	0.16	-0.28	-0.48	-0.49
bite_size_kcal	-0.58	-0.1	-0.41	0.19	-0.39	-0.32	-0.34
eat_rate_g	-0.18	-0.03	-0.54	-0.02	-0.6	0.46	0.38
eat_rate_kcal	-0.09	-0.21	-0.53	-0.01	-0.59	0.57	0.5
eat_rate_active_g	-0.19	-0.01	-0.55	-0.01	-0.48	0.33	0.36
eat_rate_active_kcal	-0.09	-0.2	-0.55	0	-0.51	0.48	0.5
prop_active	0.01	-0.07	0.02	0	-0.35	0.37	0.06

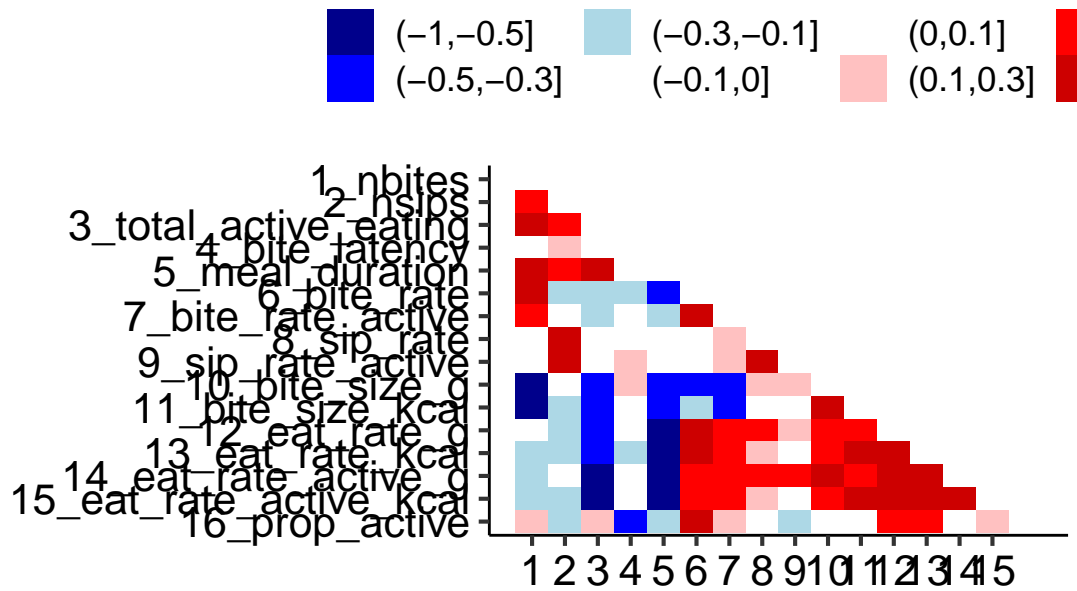
Table 7: Portion Size 3: Correlation Matrix

	nbites	nsips	total_active_eating	bite_latency	meal_duration	bite_rate	bite_rate_ac
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
bite_size_g	-0.6	0.17	-0.35	-0.02	-0.31	-0.42	-0.44
bite_size_kcal	-0.49	-0.18	-0.31	0.03	-0.34	-0.28	-0.34
eat_rate_g	-0.02	-0.01	-0.42	-0.09	-0.54	0.55	0.49
eat_rate_kcal	0	-0.22	-0.36	-0.06	-0.49	0.52	0.44
eat_rate_active_g	-0.1	0	-0.5	-0.05	-0.52	0.46	0.49
eat_rate_active_kcal	-0.05	-0.24	-0.42	-0.01	-0.48	0.47	0.45
prop_active	0.26	-0.05	0.19	-0.14	-0.17	0.39	0.13

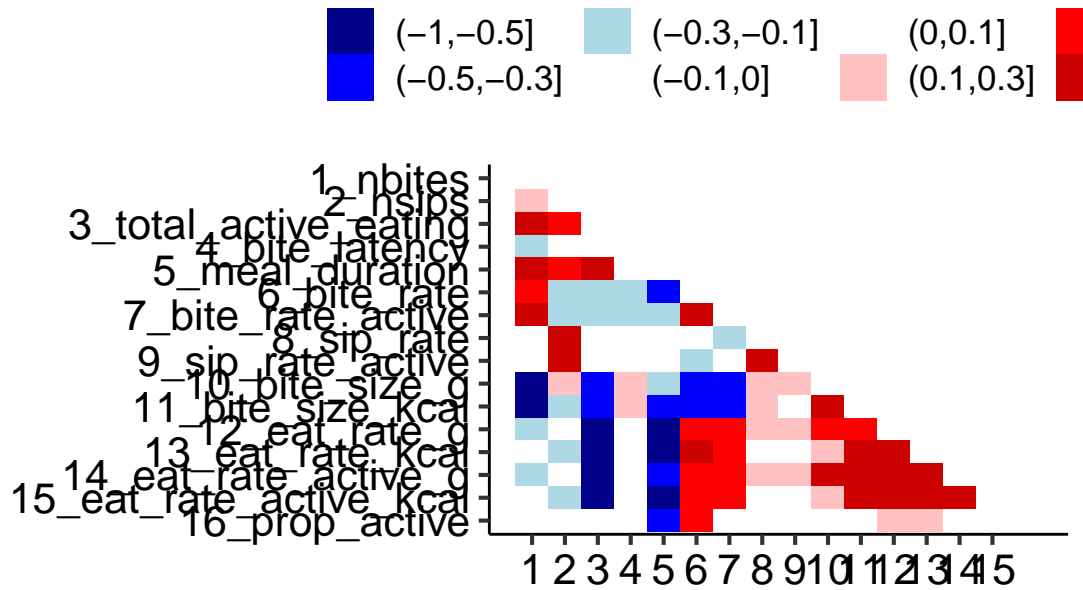
Table 8: Portion Size 4: Correlation Matrix

	nbites	nsips	total_active_eating	bite_latency	meal_duration	bite_rate	bite_rate_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
bite_size_g	-0.59	0.01	-0.38	0.12	-0.33	-0.37	-0.38
bite_size_kcal	-0.59	-0.25	-0.44	0.09	-0.43	-0.29	-0.32
eat_rate_g	-0.09	-0.1	-0.45	-0.08	-0.57	0.56	0.5
eat_rate_kcal	-0.11	-0.26	-0.49	-0.12	-0.61	0.55	0.5
eat_rate_active_g	-0.18	-0.02	-0.53	0.07	-0.52	0.43	0.48
eat_rate_active_kcal	-0.19	-0.22	-0.55	0	-0.58	0.44	0.48
prop_active	0.25	-0.24	0.13	-0.33	-0.26	0.51	0.21

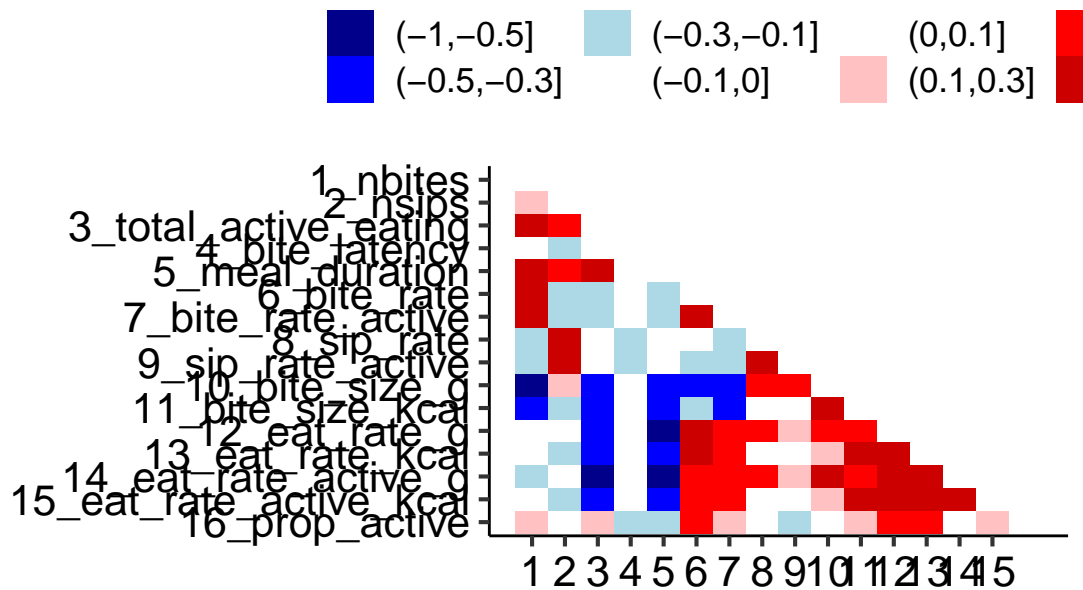
## Portion Size 1 Correlations



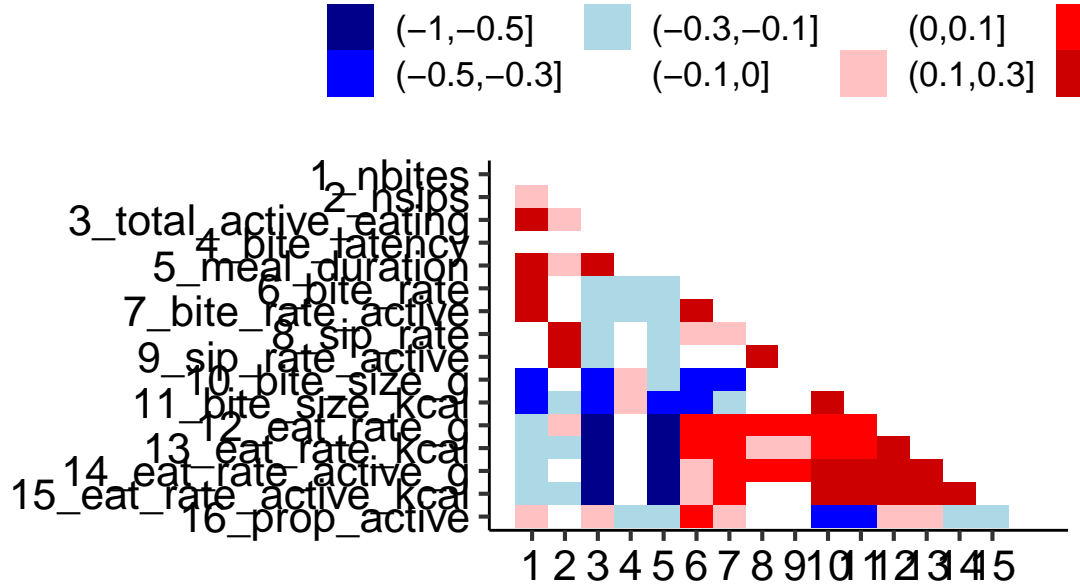
## Portion Size 2 Correlations



## Portion Size 3 Correlations



## Portion Size 4 Correlations



### 3.4 Exploratory Univariate Analyses

Table 9: Number of Bites by Portion Size Meal

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	40.246	16.184	329.386	2.487	0.013
avg_vas	8.583	3.923	336.055	2.188	0.029
freddy_pre_meal	-0.093	0.058	333.691	-1.614	0.107
ps_order	-0.025	1.100	252.852	-0.023	0.982
ps	3.065	1.101	253.590	2.785	0.006

Table 10: Number of Sips by Portion Size Meal

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	4.485	3.057	290.855	1.467	0.143
avg_vas	0.859	0.745	293.211	1.153	0.250
freddy_pre_meal	0.006	0.011	339.318	0.553	0.581
ps_order	-0.133	0.231	255.355	-0.576	0.565
ps	-0.391	0.231	256.460	-1.693	0.092

Table 11: Active Eating Time (min) by Portion Size Meal

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	9.865	2.969	328.895	3.322	0.001
avg_vas	1.511	0.720	335.686	2.099	0.037
freddy_pre_meal	-0.011	0.011	333.873	-1.011	0.313
ps_order	-0.254	0.202	252.124	-1.255	0.211
ps	0.728	0.202	252.870	3.598	0.000



Table 12: Meal Duration (min) by Portion Size Meal

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	14.277	3.400	332.078	4.199	0.000
avg_vas	1.102	0.823	338.231	1.339	0.182
freddy_pre_meal	-0.003	0.012	331.385	-0.286	0.775
ps_order	-0.327	0.229	252.461	-1.430	0.154
ps	0.500	0.229	253.161	2.187	0.030

Table 13: Latency to First Bite (min) by Portion Size Meal

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	0.497	0.110	199.961	4.500	0.000
avg_vas	-0.032	0.026	170.866	-1.195	0.234
freddy_pre_meal	0.000	0.000	235.772	0.905	0.367
ps_order	0.000	0.011	261.880	0.027	0.979
ps	-0.001	0.011	263.607	-0.091	0.928

Table 14: Bites/min by Portion Size Meal

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	2.983	0.710	334.582	4.198	0.000
avg_vas	0.319	0.172	339.838	1.858	0.064
freddy_pre_meal	-0.004	0.003	329.031	-1.584	0.114
ps_order	0.074	0.047	253.469	1.574	0.117
ps	0.042	0.047	254.124	0.885	0.377

Table 15: Bites/min (active) by Portion Size Meal

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	4.093	0.700	337.817	5.845	0.000
avg_vas	0.202	0.169	340.997	1.195	0.233
freddy_pre_meal	-0.002	0.002	324.059	-0.971	0.332
ps_order	0.060	0.046	253.314	1.321	0.188
ps	-0.023	0.046	253.901	-0.504	0.614

Table 16: Sips/min by Portion Size Meal

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	0.392	0.168	288.971	2.333	0.020
avg_vas	0.008	0.041	291.064	0.184	0.854
freddy_pre_meal	0.000	0.001	338.972	0.134	0.893
ps_order	0.002	0.013	254.554	0.149	0.882
ps	-0.024	0.013	255.677	-1.847	0.066

Table 17: Sips/min (active) by Portion Size Meal

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	0.480	0.195	288.655	2.461	0.014
avg_vas	-0.002	0.047	290.666	-0.048	0.962
freddy_pre_meal	0.001	0.001	338.880	0.854	0.394
ps_order	0.008	0.015	254.639	0.527	0.598
ps	-0.035	0.015	255.763	-2.390	0.018

Table 18: g/Bite by Portion Size Meal

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	8.241	1.508	233.251	5.463	0.000
avg_vas	-0.516	0.366	221.062	-1.409	0.160
freddy_pre_meal	0.009	0.006	298.691	1.497	0.135
ps_order	-0.132	0.133	254.756	-0.988	0.324
ps	0.146	0.133	255.845	1.100	0.273

Table 19: kcal/Bite by Portion Size Meal

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	8.241	1.508	233.251	5.463	0.000
avg_vas	-0.516	0.366	221.062	-1.409	0.160
freddy_pre_meal	0.009	0.006	298.691	1.497	0.135
ps_order	-0.132	0.133	254.756	-0.988	0.324
ps	0.146	0.133	255.845	1.100	0.273

Table 20: g/min by Portion Size Meal

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	24.445	4.646	321.916	5.261	0.000
avg_vas	0.248	1.128	328.820	0.220	0.826
freddy_pre_meal	-0.017	0.017	335.217	-0.997	0.320
ps_order	0.310	0.325	252.002	0.955	0.341
ps	0.399	0.324	252.584	1.230	0.220

Table 21: kcal/min by Portion Size Meal

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	26.847	6.271	324.334	4.281	0.000
avg_vas	0.750	1.522	331.124	0.493	0.622
freddy_pre_meal	-0.048	0.022	334.090	-2.123	0.034
ps_order	0.742	0.435	252.415	1.704	0.090
ps	1.182	0.434	252.975	2.723	0.007

Table 22: g/min (active) by Portion Size Meal

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	34.280	5.343	307.471	6.416	0.000
avg_vas	-1.260	1.300	313.204	-0.969	0.333
freddy_pre_meal	-0.003	0.020	338.837	-0.149	0.882
ps_order	0.104	0.389	252.688	0.266	0.790
ps	0.168	0.388	253.378	0.432	0.666

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

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	38.770	7.126	313.918	5.441	0.000
avg_vas	-1.122	1.733	320.330	-0.647	0.518
freddy_pre_meal	-0.036	0.026	337.951	-1.401	0.162
ps_order	0.528	0.511	253.143	1.034	0.302
ps	0.977	0.509	253.786	1.919	0.056

Table 24: active eating/meal duration, min by Portion Size Meal

	Estimate	Std. Error	df	t value	Pr(> t )
(Intercept)	0.750	0.050	216.372	14.895	0.000
avg_vas	0.029	0.012	196.364	2.382	0.018
freddy_pre_meal	0.000	0.000	271.798	-2.080	0.038
ps_order	0.004	0.005	259.799	0.805	0.422
ps	0.012	0.005	261.438	2.461	0.014

### 3.5 Repeated Measures Correlation

Table 25: Repeated Measures: Correlation Matrix

	nbites_cl	nsips_cl	total_active_eating_cl	bite_latency_cl	meal_duration_cl	bite_rate_cl	bite_rate_active_cl	sip_rate_cl	sip_rate_active_cl	bite_size_g_cl	bite_size_kcal_cl	eat_rate_g_cl	eat_rate_kcal_cl	eat_rate_active_g_cl	eat_rate_active_kcal_cl	prop_active_cl
nbites_cl																
nsips_cl	0.085															
total_active_eating_cl	0.664	0.173														
bite_latency_cl	-0.117	0.044	-0.042													
meal_duration_cl	0.538	0.213	0.811	-0.006												
bite_rate_cl	0.501	-0.102	-0.076	-0.167	-0.338											
bite_rate_active_cl	0.412	-0.054	-0.294	-0.068	-0.279	0.851										
sip_rate_cl	-0.098	0.825	-0.084	0.006	-0.131	-0.004	-0.011									
sip_rate_active_cl	-0.132	0.843	-0.144	0.067	-0.056	-0.101	0.01	0.947								
bite_size_g_cl	-0.396	-0.06	-0.238	0.058	-0.228	-0.336	-0.338	0.003	0.013							
bite_size_kcal_cl	-0.352	-0.203	-0.232	0.069	-0.243	-0.27	-0.282	-0.142	-0.13	0.923						
eat_rate_g_cl	-0.237	-0.089	-0.307	-0.091	-0.626	0.365	0.231	0.15	0.057	0.512	0.479					
eat_rate_kcal_cl	-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_cl	-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_cl	-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_cl	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	

### 3.5.1 ICC across portion sizes

Table 26: Coding Reliability - ICC

nbites	0.697
nsips	0.534
active_eating	0.676
bite_latency	0.160
meal_duration	0.699
bite_rate	0.729
bite_rate_active	0.760
sip_rate	0.524
sip_rate_active	0.522
bite_size_g	0.316
bite_size_kcal	0.393
eat_rate_g	0.657
eat_rate_kcal	0.674
eat_rate_active_g	0.595
eat_rate_active_kcal	0.633
prop_active	0.258

## 4 Replication of ‘Obesogenic’ Style of Eating

### 4.1 Association with Intake

#### 4.1.1 Portion Size 1

Table 27: Portion Size 1 - Standardized Coefficients for Association Between Eating Behaviors and Intake (g) (adjusted for age, sex, liking, and fullness)

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	0.069	0.057	1.205	0.232
scale(ps1_freddy_pre_meal)	-0.006	0.041	-0.150	0.881
sexFemale	-0.139	0.085	-1.642	0.105
scale(age_yr)	-0.016	0.041	-0.395	0.694
scale(ps1_avg_vas)	0.042	0.040	1.040	0.302
scale(ps1_nbites)	0.486	0.090	5.387	0.000
scale(ps1_nsips)	0.075	0.050	1.497	0.138
scale(ps1_bite_size_g)	0.258	0.074	3.494	0.001
scale(ps1_prop_active)	0.056	0.051	1.092	0.278
scale(ps1_meal_duration)	0.586	0.089	6.583	0.000
scale(ps1_eat_rate_g)	0.568	0.077	7.346	0.000

Table 28: Portion Size 1 - Relative Weighting Analysis, grams

Variables	Raw.RelWeight	Rescaled.RelWeight	Sign
ps1_freddy_pre_meal	0.006	0.695	-
sex_num	0.011	1.191	-
age_yr	0.003	0.327	+
ps1_avg_vas	0.018	1.994	+
ps1_nbites	0.262	29.676	+
ps1_nsips	0.096	10.850	+
ps1_bite_size_g	0.074	8.406	+
ps1_prop_active	0.040	4.555	+
ps1_meal_duration	0.213	24.100	+
ps1_eat_rate_g	0.161	18.207	+

Table 29: Portion Size 1 - Standardized Coefficients for Association Between Eating Behaviors and Intake (kcal) (adjusted for age, sex, liking, and fullness)

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	0.081	0.059	1.369	0.175
scale(ps1_freddy_pre_meal)	0.014	0.043	0.319	0.751
sexFemale	-0.165	0.088	-1.871	0.065
scale(age_yr)	-0.041	0.041	-0.992	0.324
scale(ps1_avg_vas)	0.059	0.042	1.419	0.160
scale(ps1_nbites)	0.559	0.090	6.249	0.000
scale(ps1_nsips)	-0.022	0.048	-0.461	0.646
scale(ps1_bite_size_kcal)	0.264	0.074	3.544	0.001
scale(ps1_prop_active)	0.058	0.053	1.098	0.276
scale(ps1_meal_duration)	0.548	0.092	5.950	0.000
scale(ps1_eat_rate_kcal)	0.606	0.081	7.505	0.000

Table 30: Portion Size 1 - Relative Weighting Analysis, kcal

Variables	Raw.RelWeight	Rescaled.RelWeight	Sign
ps1_freddy_pre_meal	0.006	0.682	-
sex_num	0.017	1.929	-
age_yr	0.010	1.094	-
ps1_avg_vas	0.020	2.293	+
ps1_nbites	0.295	33.720	+
ps1_nsips	0.027	3.130	+
ps1_bite_size_kcal	0.081	9.273	+
ps1_prop_active	0.053	6.051	+
ps1_meal_duration	0.178	20.325	+
ps1_eat_rate_kcal	0.188	21.502	+

#### 4.1.2 Portion Size 2

Table 31: Portion Size 2 - Standardized Coefficients for Association Between Eating Behaviors and Intake (g)  
(adjusted for age, sex, liking, and fullness)

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	0.024	0.073	0.329	0.743
scale(ps2_freddy_pre_meal)	-0.011	0.057	-0.200	0.842
sexFemale	-0.078	0.114	-0.687	0.494
scale(age_yr)	0.004	0.053	0.079	0.937
scale(ps2_avg_vas)	0.043	0.056	0.768	0.445
scale(ps2_nbites)	0.214	0.110	1.937	0.056
scale(ps2_nsips)	0.080	0.056	1.412	0.162
scale(ps2_bite_size_g)	0.096	0.097	0.991	0.325
scale(ps2_prop_active)	-0.030	0.062	-0.483	0.631
scale(ps2_meal_duration)	0.838	0.123	6.823	0.000
scale(ps2_eat_rate_g)	0.755	0.101	7.502	0.000

Table 32: Portion Size 2 - Relative Weighting Analysis, grams

Variables	Raw.RelWeight	Rescaled.RelWeight	Sign
ps2_freddy_pre_meal	0.029	3.577	-
sex_num	0.019	2.339	-
age_yr	0.009	1.062	-
ps2_avg_vas	0.014	1.700	+
ps2_nbites	0.181	22.148	+
ps2_nsips	0.069	8.437	+
ps2_bite_size_g	0.058	7.143	+
ps2_prop_active	0.019	2.325	-
ps2_meal_duration	0.240	29.461	+
ps2_eat_rate_g	0.178	21.808	+

Table 33: Portion Size 2 - Standardized Coefficients for Association Between Eating Behaviors and Intake (kcal) (adjusted for age, sex, liking, and fullness)

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	0.005	0.077	0.069	0.945
scale(ps2_freddy_pre_meal)	-0.025	0.060	-0.409	0.684
sexFemale	-0.037	0.120	-0.310	0.758
scale(age_yr)	-0.012	0.056	-0.209	0.835
scale(ps2_avg_vas)	0.018	0.059	0.310	0.757
scale(ps2_nbites)	0.378	0.120	3.146	0.002
scale(ps2_nsips)	-0.008	0.057	-0.144	0.886
scale(ps2_bite_size_kcal)	0.186	0.100	1.856	0.067
scale(ps2_prop_active)	-0.038	0.066	-0.580	0.563
scale(ps2_meal_duration)	0.637	0.130	4.902	0.000
scale(ps2_eat_rate_kcal)	0.711	0.114	6.232	0.000

Table 34: Portion Size 2 - Relative Weighting Analysis, kcal

Variables	Raw.RelWeight	Rescaled.RelWeight	Sign
ps2_freddy_pre_meal	0.040	5.073	-
sex_num	0.007	0.882	-
age_yr	0.008	0.964	-
ps2_avg_vas	0.009	1.126	+
ps2_nbites	0.235	29.748	+
ps2_nsips	0.009	1.138	+
ps2_bite_size_kcal	0.077	9.719	+
ps2_prop_active	0.014	1.799	-
ps2_meal_duration	0.176	22.298	+
ps2_eat_rate_kcal	0.215	27.253	+

#### 4.1.3 Portion Size 3



Table 35: Portion Size 3 - Standardized Coefficients for Association Between Eating Behaviors and Intake (g)  
(adjusted for age, sex, liking, and fullness)

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	-0.020	0.054	-0.366	0.715
scale(ps3_freddy_pre_meal)	-0.028	0.041	-0.671	0.504
sexFemale	0.050	0.078	0.641	0.524
scale(age_yr)	-0.028	0.039	-0.707	0.482
scale(ps3_avg_vas)	0.052	0.038	1.375	0.173
scale(ps3_nbites)	0.403	0.097	4.163	0.000
scale(ps3_nsips)	0.009	0.044	0.212	0.833
scale(ps3_bite_size_g)	0.216	0.079	2.739	0.008
scale(ps3_prop_active)	0.062	0.043	1.454	0.150
scale(ps3_meal_duration)	0.703	0.090	7.796	0.000
scale(ps3_eat_rate_g)	0.593	0.083	7.099	0.000

Table 36: Portion Size 3 - Relative Weighting Analysis, grams

Variables	Raw.RelWeight	Rescaled.RelWeight	Sign
ps3_freddy_pre_meal	0.036	4.002	-
sex_num	0.003	0.348	+
age_yr	0.008	0.842	-
ps3_avg_vas	0.011	1.206	+
ps3_nbites	0.262	29.287	+
ps3_nsips	0.061	6.836	+
ps3_bite_size_g	0.068	7.572	+
ps3_prop_active	0.031	3.405	+
ps3_meal_duration	0.253	28.276	+
ps3_eat_rate_g	0.163	18.226	+

Table 37: Portion Size 3 - Standardized Coefficients for Association Between Eating Behaviors and Intake (kcal) (adjusted for age, sex, liking, and fullness)

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	0.014	0.059	0.234	0.816
scale(ps3_freddy_pre_meal)	0.014	0.044	0.322	0.748
sexFemale	-0.014	0.085	-0.164	0.870
scale(age_yr)	-0.037	0.042	-0.875	0.384
scale(ps3_avg_vas)	0.071	0.041	1.745	0.085
scale(ps3_nbites)	0.436	0.096	4.541	0.000
scale(ps3_nsips)	-0.008	0.045	-0.189	0.851
scale(ps3_bite_size_kcal)	0.224	0.082	2.719	0.008
scale(ps3_prop_active)	0.045	0.048	0.952	0.344
scale(ps3_meal_duration)	0.556	0.089	6.249	0.000
scale(ps3_eat_rate_kcal)	0.611	0.091	6.732	0.000

Table 38: Portion Size 3 - Relative Weighting Analysis, kcal

Variables	Raw.RelWeight	Rescaled.RelWeight	Sign
ps3_freddy_pre_meal	0.040	4.562	-
sex_num	0.004	0.459	-
age_yr	0.010	1.181	-
ps3_avg_vas	0.010	1.187	+
ps3_nbites	0.254	28.869	+
ps3_nsips	0.013	1.519	+
ps3_bite_size_kcal	0.101	11.449	+
ps3_prop_active	0.045	5.116	+
ps3_meal_duration	0.194	22.004	+
ps3_eat_rate_kcal	0.208	23.655	+

#### 4.1.4 Portion Size 4

Table 39: Portion Size 4 - Standardized Coefficients for Association Between Eating Behaviors and Intake (g)  
(adjusted for age, sex, liking, and fullness)

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	0.063	0.070	0.906	0.368
scale(ps4_freddy_pre_meal)	-0.035	0.048	-0.715	0.477
sexFemale	-0.134	0.099	-1.363	0.177
scale(age_yr)	0.006	0.050	0.113	0.910
scale(ps4_avg_vas)	0.053	0.048	1.102	0.274
scale(ps4_nbites)	0.160	0.073	2.183	0.032
scale(ps4_nsips)	0.143	0.052	2.760	0.007
scale(ps4_bite_size_g)	-0.027	0.065	-0.415	0.680
scale(ps4_prop_active)	0.115	0.060	1.923	0.059
scale(ps4_meal_duration)	0.844	0.084	10.024	0.000
scale(ps4_eat_rate_g)	0.831	0.076	10.976	0.000

Table 40: Portion Size 4 - Relative Weighting Analysis, grams

Variables	Raw.RelWeight	Rescaled.RelWeight	Sign
ps4_freddy_pre_meal	0.011	1.329	-
sex_num	0.006	0.750	-
age_yr	0.006	0.760	+
ps4_avg_vas	0.012	1.425	+
ps4_nbites	0.165	19.395	+
ps4_nsips	0.121	14.227	+
ps4_bite_size_g	0.024	2.848	+
ps4_prop_active	0.026	3.105	+
ps4_meal_duration	0.258	30.275	+
ps4_eat_rate_g	0.220	25.887	+

Table 41: Portion Size 4 - Standardized Coefficients for Association Between Eating Behaviors and Intake (kcal) (adjusted for age, sex, liking, and fullness)

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	0.027	0.073	0.366	0.715
scale(ps4_freddy_pre_meal)	-0.025	0.050	-0.500	0.619
sexFemale	-0.072	0.104	-0.693	0.490
scale(age_yr)	-0.056	0.052	-1.068	0.289
scale(ps4_avg_vas)	0.056	0.051	1.109	0.271
scale(ps4_nbites)	0.196	0.079	2.475	0.016
scale(ps4_nsips)	0.034	0.051	0.670	0.505
scale(ps4_bite_size_kcal)	-0.014	0.067	-0.215	0.830
scale(ps4_prop_active)	0.100	0.061	1.652	0.103
scale(ps4_meal_duration)	0.816	0.087	9.392	0.000
scale(ps4_eat_rate_kcal)	0.906	0.076	11.977	0.000

Table 42: Portion Size 4 - Relative Weighting Analysis, kcal

Variables	Raw.RelWeight	Rescaled.RelWeight	Sign
ps4_freddy_pre_meal	0.011	1.273	-
sex_num	0.007	0.796	-
age_yr	0.014	1.618	-
ps4_avg_vas	0.015	1.763	+
ps4_nbites	0.192	22.862	+
ps4_nsips	0.018	2.093	+
ps4_bite_size_kcal	0.034	4.115	+
ps4_prop_active	0.025	3.006	+
ps4_meal_duration	0.232	27.740	+
ps4_eat_rate_kcal	0.291	34.735	+

## 4.2 Association with BMI Percentile

### 4.2.1 Portion Size 1

Table 43: Portion Size 1 - Standardized Coefficients 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 44: Portion Size 1 - Standardized Coeffitens 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 45: Portion Size 1 - Standardized Coeffitens 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 46: Portion Size 1 - Standardized Coeffitens 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 47: Portion Size 1 - Standardized Coeffitens 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 48: Portion Size 1 - Standardized Coefficients 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 49: Portion Size 1 - Standardized Coefficients 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 50: Portion Size 1 - Standardized Coefficients 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 51: Portion Size 1 - FDR Adjusted p-values for the effect of BMI Percentile on Microstructure

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

#### 4.2.2 Portion Size 2

Table 52: Portion Size 2 - Standardized Coefficients 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 53: Portion Size 2 - Standardized Coefficients 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 54: Portion Size 2 - Standardized Coeffitens 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 55: Portion Size 2 - Standardized Coeffitens 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 56: Portion Size 2 - Standardized Coeffitens 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 57: Portion Size 2 - Standardized Coeffitens 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 58: Portion Size 2 - Standardized Coefficients 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 59: Portion Size 2 - Standardized Coefficients 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 60: Portion Size 2 - FDR Adjusted p-values for the effect of BMI Percentile on Microstructure

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

### 4.2.3 Portion Size 3

Table 61: Portion Size 3 - Standardized Coeffitens 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 62: Portion Size 3 - Standardized Coeffitens 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 63: Portion Size 3 - Standardized Coeffitens 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 64: Portion Size 3 - Standardized Coeffitens 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 65: Portion Size 3 - Standardized Coefficients 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 66: Portion Size 3 - Standardized Coefficients 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 67: Portion Size 3 - Standardized Coefficients 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 68: Portion Size 3 - Standardized Coefficients 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 69: Portion Size 3 - FDR Adjusted p-values for the effect of BMI Percentile on Microstructure

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

#### 4.2.4 Portion Size 4

Table 70: Portion Size 4 - Standardized Coefficients 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 71: Portion Size 4 - Standardized Coefficients 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 72: Portion Size 4 - Standardized Coeffitens 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 73: Portion Size 4 - Standardized Coeffitens 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 74: Portion Size 4 - Standardized Coeffitens 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 75: Portion Size 4 - Standardized Coeffitens 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 76: Portion Size 4 - Standardized Coefficients 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 77: Portion Size 4 - Standardized Coefficients 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 78: Portion Size 4 - FDR Adjusted p-values for the effect of BMI Percentile on Microstructure

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

## 4.3 Association with Fat Mass Index

### 4.3.1 Portion Size 1

Table 79: Portion Size 1 - Standardized Coefficients 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 80: Portion Size 1 - Standardized Coefficients 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 81: Portion Size 1 - Standardized Coefficients 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 82: Portion Size 1 - Standardized Coefficients 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 83: Portion Size 1 - Standardized Coeffitens 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 84: Portion Size 1 - Standardized Coeffitens 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 85: Portion Size 1 - Standardized Coeffitens 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 86: Portion Size 1 - Standardized Coeffitens 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 87: 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
Bite Size, g	0.351
Bite Size, kcal	0.384
Prop Active	0.985
Meal Duration	0.796
Eat Rate, g	0.180
Eat Rate, kcal	0.180

#### 4.3.2 Portion Size 2

Table 88: Portion Size 2 - Standardized Coefficients 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 89: Portion Size 2 - Standardized Coefficients 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 90: Portion Size 2 - Standardized Coefficients 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 91: Portion Size 2 - Standardized Coefficients 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 92: Portion Size 2 - Standardized Coefficients 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 93: Portion Size 2 - Standardized Coefficients 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 94: Portion Size 2 - Standardized Coefficients 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 95: Portion Size 2 - Standardized Coefficients 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 96: 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
Bite Size, g	0.108
Bite Size, kcal	0.078
Prop Active	0.175
Meal Duration	0.367
Eat Rate, g	0.077
Eat Rate, kcal	0.077

### 4.3.3 Portion Size 3

Table 97: Portion Size 3 - Standardized Coeffitens 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 98: Portion Size 3 - Standardized Coeffitens 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 99: Portion Size 3 - Standardized Coeffitens 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 100: Portion Size 3 - Standardized Coeffitens 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 101: Portion Size 3 - Standardized Coefficients 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 102: Portion Size 3 - Standardized Coefficients 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 103: Portion Size 3 - Standardized Coefficients 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 104: Portion Size 3 - Standardized Coefficients 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 105: 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
Bite Size, g	0.415
Bite Size, kcal	0.488
Prop Active	0.488
Meal Duration	0.996
Eat Rate, g	0.415
Eat Rate, kcal	0.415

#### 4.3.4 Portion Size 4

Table 106: Portion Size 4 - Standardized Coefficients 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 107: Portion Size 4 - Standardized Coefficients 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 108: 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 109: 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 110: 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 111: 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 112: Portion Size 4 - Standardized Coefficients 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 113: Portion Size 4 - Standardized Coefficients 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 114: 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
Bite Size, g	0.845
Bite Size, kcal	0.845
Prop Active	0.010
Meal Duration	0.845
Eat Rate, g	0.697
Eat Rate, kcal	0.697