**SUPPLEMENTARY MATERIALS**

**STUDY ONE-** **OBSERVATION EFFECT**

**Table S1:** Multiple regression between the observation effect (difference between overt and covert LWIs) and age, sex and % body fat in Study One participants.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Co-E (MJ)** | **SE** | **P-Value** |
| **Age** | 0.008 | 0.017 | 0.631 |
| **Sex** | 0.558 | 0.456 | 0.256 |
| **% Body Fat** | 0.010 | 0.040 | 0.801 |

n = 57

F(3, 53) = 0.823, p = 0.487; adj-R2 = -0.010

Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes

**Table S2:** Multiple regression between the observation effect (difference between overt and covert LWIs) and age, sex, % body fat and psychometric eating behaviour traits in Study One participants.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Co-E (MJ)** | **SE** | **P-Value** |
| **Age** | 0.004 | 0.017 | 0.817 |
| **Sex** | 0.591 | 0.516 | 0.257 |
| **% Body Fat** | 0.014 | 0.040 | 0.736 |
| **Cognitive Restraint** | 0.283 | 0.265 | 0.290 |
| **Emotional Eating** | 0.077 | 0.255 | 0.764 |
| **External Eating** | -0.798 | 0.472 | 0.097 |

n = 57

F(6, 50) = 1.080, p = 0.387; adj-R2 = 0.009

Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes

**Table S3:** Multiple regression between the observation effect (difference between overt and covert LWIs) and age, sex, % body fat and body image in Study One participants.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Co-E (MJ)** | **SE** | **P-Value** |
| **Age** | 0.007 | 0.017 | 0.696 |
| **Sex** | 0.579 | 0.492 | 0.244 |
| **% Body Fat** | 0.018 | 0.043 | 0.683 |
| **Body Image Score** | -0.050 | 0.111 | 0.653 |

n = 57

F(4, 52) = 0.659, p = 0.623; adj-R2 = -0.025

Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes

**Table S4:** Multiple regression between the observation effect (difference between overt and covert LWIs) and age, sex, % body fat and EPQR personality dimensions in Study One participants.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Co-E (MJ)** | **SE** | **P-Value** |
| **Age** | 0.002 | 0.018 | 0.896 |
| **Sex** | 0.368 | 0.484 | 0.451 |
| **% Body Fat** | 0.029 | 0.040 | 0.468 |
| **Psychoticism** | **0.167** | **0.061** | **0.009** |
| **Extraversion** | -0.045 | 0.034 | 0.192 |
| **Neuroticism** | 0.017 | 0.030 | 0.566 |
| **Social Desirability** | 0.028 | 0.054 | 0.601 |

n = 57

F(7, 49) = 1.662, p = 0.141; adj-R2 = 0.076

FDR adjusted q-values = 0.896, 0.701, 0.701, 0.063, 0.672, 0.701, 0.701

Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes, FDR: false discovery rate (Benjamini & Hochberg, 1995).

**Table S5:** Multiple regression between the observation effect (difference between overt and covert LWIs) and age, sex, % body fat and NEO PIR personality dimensions in Study One participants.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Co-E (MJ)** | **SE** | **P-Value** |
| **Age** | 0.006 | 0.016 | 0.736 |
| **Sex** | 0.391 | 0.500 | 0.438 |
| **% Body Fat** | 0.037 | 0.038 | 0.343 |
| **Neuroticism** | 0.005 | 0.008 | 0.551 |
| **Extraversion** | -0.016 | 0.009 | 0.073 |
| **Openness to Experience** | **0.026** | **0.009** | **0.006** |
| **Agreeableness** | **-0.021** | **0.010** | **0.038** |
| **Conscientiousness** | 0.005 | 0.010 | 0.610 |

n = 55

F(8, 46) = 1.862, p = 0.090; adj-R2 = 0.113

FDR adjusted q-values = 0.736, 0.697, 0.686, 0.697, 0.195, **0.048**, 0.152, 0.697

Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes, FDR: false discovery rate (Benjamini & Hochberg, 1995).

**Table S6:** Multiple regression between the observation effect (difference between overt and covert LWIs) and age, sex, % body fat and social desirability in Study One participants.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Co-E (MJ)** | **SE** | **P-Value** |
| **Age** | 0.009 | 0.018 | 0.631 |
| **Sex** | 0.547 | 0.504 | 0.283 |
| **% Body Fat** | 0.009 | 0.041 | 0.827 |
| **Marl Crowne Score** | -0.041 | 0.044 | 0.356 |
| **BIDR- Self-deceptive Enhancement** | 0.025 | 0.058 | 0.669 |
| **BIDR- Impression Management** | -0.008 | 0.066 | 0.903 |

n = 56

F(6, 49) = 0.589, p = 0.738; adj-R2 = -0.047

Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes

**Table S7:** Multiple regression between the observation effect (difference between overt and covert LWIs) and age, sex, % body fat and IQ in Study One participants.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Co-E (MJ)** | **SE** | **P-Value** |
| **Age** | 0.019 | 0.022 | 0.402 |
| **Sex** | 0.674 | 0.516 | 0.197 |
| **% Body Fat** | 0.013 | 0.043 | 0.762 |
| **Ravens Score** | -0.021 | 0.038 | 0.588 |
| **AH4 Score** | 0.017 | 0.016 | 0.293 |
| **NART- Full Scale IQ** | -0.132 | 0.519 | 0.800 |
| **NART- Verbal IQ** | -0.007 | 0.510 | 0.988 |
| **NART- Performance IQ** | 0.155 | 0.568 | 0.786 |

n = 56

F(8, 47) = 0.660, p = 0.724; adj-R2 = -0.052

Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes

**Table S8:** Multiple regression between the observation effect (difference between overt and covert LWIs) and age, sex, % body fat and UWIST hedonic, tense and energetic scores in Study One participants.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Co-E (MJ)** | **SE** | **P-Value** |
| **Age** | 0.023 | 0.021 | 0.298 |
| **Sex** | 0.329 | 0.526 | 0.535 |
| **% Body Fat** | -0.013 | 0.045 | 0.772 |
| **Hedonic** | -0.022 | 0.099 | 0.826 |
| **Tense** | 0.072 | 0.094 | 0.445 |
| **Energetic** | 0.049 | 0.066 | 0.458 |

n = 57

F(6, 50) = 1.939, p = 0.650; adj-R2 = -0.033

Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes

**SUPPLEMENTARY MATERIALS**

**STUDY ONE-** **REPORTING EFFECT**

**Table S9:** Multiple regressions between the reporting effect (difference between overt LWI and self-reported intake method) and age, sex and % body fat in Study One participants.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Personal characteristics** |  | **Sex** | | | **Age** | | | **% Body Fat** | | |
|  | **Model Summary** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P -Value** |
| **WDRa** | F(3, 53 ) = 0.998, p = 0.401, adj-R2 = 0.000 | -0.468 | 0.445 | 0.298 | 0.010 | 0.015 | 0.519 | 0.061 | 0.036 | 0.099 |
| **24hr Recalla** | **F(3, 53 ) = 5.348, p = 0.003, adj-R2 = 0.189** | **-1.629** | **0.463** | **0.001** | 0.027 | 0.016 | 0.097 | **-0.139** | **0.038** | **0.001** |
| **7-day Historya** | F(**3, 53**) = 0.229, p = 0.876, adj-R2 = -0.043 | -0.370 | 0.864 | 0.670 | -0.002 | 0.030 | 0.955 | 0.017 | 0.070 | 0.806 |
| **FFQb** | F(3, 52) = 0.071, p = 0.975, adj-R2 = -0.053 | -0.432 | 1.285 | 0.738 | 0.019 | 0.046 | 0.681 | -0.030 | 0.107 | 0.780 |
| **FFQ2c** | F(3, 51) = 2.700, p = 0.055, adj-R2 = 0.086 | **-2.251** | **0.865** | **0.012** | 0.057 | 0.031 | 0.071 | -0.109 | 0.071 | 0.131 |

Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR:Weighed Dietary Record, FFQ: Aberdeen Food Frequency Questionnaire (administered on day one), FFQ2: Aberdeen Food Frequency Questionnaire (administered on day fifteen), FDR: false discovery rate (Benjamini & Hochberg, 1995).

an = 57. bn = 56. cn = 55.

24hr RecallFDR adjusted q-values = **0.001,** 0.097, **0.001**

FFQ2FDR adjusted q-values = **0.036,** 0.107, 0.131

**Table S10:** Multiple regressions between the reporting effect (difference between LWI and self-reported intake method) and psychometric eating behaviour traits in Study One participants. Note, age, sex and percentage body fat were also included in all models reported but their coefficients are not reported below.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Eating Behavior Traits- DEBQ** |  | **Cognitive Restraint** | | | **Emotional Eating** | | | **External Eating** | | |
|  | **Model Summary** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** |
| **WDRa** | F(6, 50 ) = 0.970, p = 0.455, adj-R2 = -0.003 | -0.314 | 0.245 | 0.206 | -0.042 | 0.236 | 0.861 | 0.556 | 0.437 | 0.210 |
| **24hr Recalla** | F(6, 50) = 3.496, p = 0.006, adj-R2 = 0.211 | -0.006 | 0.251 | 0.982 | **-0.498** | **0.242** | **0.044** | 0.751 | 0.448 | 0.100 |
| **7-day Historya** | F(6, 50) = 0.443, p = 0.847, adj-R2 = -0.064 | -0.203 | 0.479 | 0.673 | -0.409 | 0.462 | 0.295 | 1.175 | 0.856 | 0.176 |
| **FFQb** | F(6, 49) = 0.131, p = 0.992, adj-R2 = -0.105 | 0.319 | 0.726 | 0.663 | 0.315 | 0.698 | 0.654 | -0.270 | 1.291 | 0.835 |
| **FFQ2c** | F(6, 48) = 2.083, p = 0.073, adj-R2 = 0.107 | 0.485 | 0.468 | 0.305 | 0.583 | 0.450 | 0.201 | -0.440 | 0.833 | 0.600 |

Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR:Weighed Dietary Record, FFQ: Aberdeen Food Frequency Questionnaire – administered on day one, FFQ2: Aberdeen Food Frequency Questionnaire – administered on day fifteen, FDR: false discovery rate (Benjamini & Hochberg, 1995).

an = 57. bn = 56. cn = 55.

24hr RecallFDR adjusted q-values = 0.982, 0.088, 0.120

**Table S11:** Multiple regressions between the reporting effect (difference between LWI and self-reported intake method) and body image in Study One participants. Note, age, sex and percentage body fat were also included in all models reported but their coefficients are not reported below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Body Image** |  | **Body Image Score** | | |
|  | **Model Summary** | **Co-E (MJ)** | **SE** | **P-Value** |
| **WDRa** | F(4, 52) = 0.772, p = 0.549, adj-R2 = -0.017 | -0.038 | 0.102 | 0.710 |
| **24hr Recalla** | **F(4, 52) = 3.938, p = 0.007, adj-R2 = 0.173** | 0.009 | 0.106 | 0.932 |
| **7-day Historya** | F(4, 52) = 0.689, p = 0.603, adj-R2 = -0.023 | 0.278 | 0.194 | 0.158 |
| **FFQb** | F(4, 51) = 0.225, p = 0.923, adj-R2 = -0.060 | 0.243 | 0.293 | 0.411 |
| **FFQ2c** | F(4, 50) = 0.051, p = 0.198, adj-R2 = 0.069 | 0.051 | 0.198 | 0.798 |

Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR:Weighed Dietary Record, FFQ: Aberdeen Food Frequency Questionnaire – administered on day one, FFQ2: Aberdeen Food Frequency Questionnaire – administered on day fifteen.

an = 57. bn = 56.cn = 55.

**Table S12:** Multiple regressions between the reporting effect (difference between LWI and self-reported intake method) and EPQR personality dimensions in Study One participants. Note, age, sex and percentage body fat were also included in all models reported but their coefficients are not reported below.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Personality Traits**-**EPQR** |  | **Psychoticism** | | | **Extraversion** | | | **Neuroticism** | | | **Social Desirability** | | |
|  | **Model Summary** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P -Value** |
| **WDRa** | F7, 49 ) = 0.416, p = 0.888, adj-R2 = -0.079 | 0.008 | 0.061 | 0.895 | 0.004 | 0.034 | 0.898 | -0.003 | 0.030 | 0.911 | 0.012 | 0.054 | 0.823 |
| **24hr Recalla** | **F(7, 49) = 3.443, p = 0.004, adj-R2 = 0.234** | -0.113 | 0.059 | 0.062 | -0.012 | 0.033 | 0.709 | -0.044 | 0.029 | 0.138 | 0.009 | 0.052 | 0.857 |
| **7-day Historya** | F(7, 49 ) = 1.299, p = 0.271, adj-R2 = 0.036 | **-0.254** | **0.109** | **0.024** | 0.088 | 0.061 | 0.156 | -0.009 | 0.053 | 0.871 | 0.141 | 0.096 | 0.150 |
| **FFQb** | F(7, 48) = 0.102, p = 0.998, adj-R2 = -0.129 | 0.029 | 0.175 | 0.869 | 0.008 | 0.098 | 0.934 | 0.046 | 0.085 | 0.592 | 0.081 | 0.155 | 0.605 |
| **FFQ2c** | F(7, 47 ) = 1.673, p = 0.139, adj-R2 = 0.080 | -0.088 | 0.114 | 0.442 | 0.024 | 0.064 | 0.704 | 0.088 | 0.056 | 0.120 | 0.114 | 0.100 | 0.264 |

Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR:Weighed Dietary Record, FFQ: Aberdeen Food Frequency Questionnaire – administered on day one, FFQ2: Aberdeen Food Frequency Questionnaire – administered on day fifteen, FDR: false discovery rate (Benjamini & Hochberg, 1995).

an = 57. bn = 56.cn = 55.

7-day History FDR adjusted q-values = 0.168, 0.364, 0.884, 0.364

**Table S13:** Multiple regressions between the reporting effect (difference between LWI and self-reported intake method) and NEO PIR personality dimensions in Study One participants. Note, age, sex and percentage body fat were also included in all models reported but their coefficients are not reported below.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Personality Traits- NEO PIR** |  | **Neuroticism** | | | **Extraversion** | | | **Openness to Experience** | | | **Agreeableness** | | | **Conscientiousness** | | |
|  | **Model Summary** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P -Value** | **Co-E (MJ)** | **SE** | **P -Value** |
| **WDRa** | F(8, 46) = 1.018, p = 0.436, adj-R2 = 0.003 | 0.007 | 0.0081 | 0.407 | -0.001 | 0.009 | 0.888 | 0.010 | 0.009 | 0.292 | 0.019 | 0.010 | 0.051 | 0.007 | 0.010 | 0.457 |
| **24hr Recalla** | **F(8, 46) = 5.146, p = 0.003, adj-R2 = 0.170** | -0.002 | 0.008 | 0.786 | 0.000 | 0.009 | 0.966 | -0.007 | 0.009 | 0.446 | 0.013 | 0.010 | 0.214 | 0.013 | 0.010 | 0.230 |
| **7-day Historya** | F(8, 46) = 1.007, p = 0.444**,** adj-R2 = 0.001 | 0.004 | 0.015 | 0.759 | 0.027 | 0.017 | 0.113 | **-0.035** | **0.017** | **0.044** | 0.012 | 0.018 | 0.502 | 0.014 | 0.01ª | 0.447 |
| **FFQb** | F(8, 45) = 0.243, p = 0.980**,** adj-R2 = 0.041 | 0.010 | 0.023 | 0.672 | 0.016 | 0.027 | 0.544 | -0.012 | 0.027 | 0.664 | 0.029 | 0.029 | 0.322 | -0.011 | 0.030 | 0.723 |
| **FFQ2c** | F(8, 44) = 1.333, p = 0.253**,** adj-R2 = 0.049 | 0.021 | 0.015 | 0.182 | 0.004 | 0.018 | 0.802 | 0.014 | 0.018 | 0.450 | -0.006 | 0.019 | 0.771 | 0.020 | 0.020 | 0.315 |

Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR:Weighed Dietary Record, FFQ: Aberdeen Food Frequency Questionnaire – administered on day one, FFQ2: Aberdeen Food Frequency Questionnaire – administered on day fifteen, FDR: false discovery rate (Benjamini & Hochberg, 1995).

an = 55. bn = 54. cn = 53.

7-day History FDR adjusted q-values = 0.858, 0.452, 0.352, 0.858, 0.858

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Social Desirability** |  | **Marl Crowne Score** | | | **BIDR- Self-deceptive Enhancement** | | | **BIDR- Impression Management** | | |
|  | **Model Summary** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** |
| **WDRa** | F(6, 49) = 0.580, p = 0.745, adj-R2 = -0.048 | 0.029 | 0.040 | 0.469 | -0.023 | 0.053 | 0.670 | 0.015 | 0.061 | 0.803 |
| **24hr Recalla** | **F(6, 49) = 3.127, p = 0.011, adj-R2 = 0.188** | 0.030 | 0.041 | 0.470 | 0.090 | 0.054 | 0.102 | -0.057 | 0.062 | 0.361 |
| **7-day Historya** | F(6, 49) = 1.486, p = 0.202, adj-R2 = 0.050 | 0.113 | 0.073 | 0.119 | 0.191 | 0.096 | 0.051 | -0.018 | 0.110 | 0.872 |
| **FFQb** | F(6, 48) = 0.112, p = 0.995, adj-R2 = -0.109 | 0.064 | 0.117 | 0.590 | 0.014 | 0.153 | 0.929 | 0.063 | 0.175 | 0.721 |
| **FFQ2c** | F(6, 47) = 1.213, p = 0.316, adj-R2 = 0.024 | 0.026 | 0.076 | 0.731 | -0.002 | 0.099 | 0.987 | 0.007 | 0.115 | 0.952 |

**Table S14:** Multiple regressions between the reporting effect (difference between LWI and self-reported intake method) and social desirabilityin Study One participants. Note, age, sex and percentage body fat were also included in all models reported but their coefficients are not reported below.

BIDR: balanced Inventory of Desirable Responding, Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR:Weighed Dietary Record, FFQ: Aberdeen Food Frequency Questionnaire – administered on day one, FFQ2: Aberdeen Food Frequency Questionnaire – administered on day fifteen.

an = 56. bn = 55. cn = 54.

**Table S15:** Multiple regressions between the reporting effect (difference between LWI and self-reported intake method) and IQ in Study One participants. Note, age, sex and percentage body fat were also included in all models reported but their coefficients are not reported below.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **IQ** |  | **Ravens Score** | | | **AH4 Score** | | | **NART- Full Scale IQ** | | | **NART- Verbal IQ** | | | **NART- Performance IQ** | | |
|  | **Model Summary** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P -Value** | **Co-E (MJ)** | **SE** | **P -Value** |
| **WDRa** | F( 8, 47) = 1.656, p = 0.135, adj-R2 = 0.087 | 0.019 | 0.033 | 0.566 | 0.005 | 0.014 | 0.722 | -0.579 | 0.451 | 0.205 | -0.288 | 0.443 | 0.519 | **1.067** | **0.494** | **0.036** |
| **24hr Recalla** | **F(8, 47) = 2.796, p = 0.013, adj-R2 = 0.207** | 0.026 | 0.036 | 0.470 | 0.017 | 0.015 | 0.276 | -0.104 | 0.494 | 0.833 | 0.451 | 0.485 | 0.357 | -0.591 | 0.541 | 0.280 |
| **7-day Historya** | F(8, 47) = 0.512, p = 0.841, adj-R2 = -0.076 | -0.091 | 0.069 | 0.192 | 0.022 | 0.029 | 0.455 | 0.631 | 0.942 | 0.506 | 0.433 | 0.925 | 0.643 | -1.421 | 1.032 | 0.175 |
| **FFQb** | F(8, 46) = 0.845, p = 0.569, adj-R2 = -0.024 | -0.057 | 0.098 | 0.561 | -0.037 | 0.041 | 0.374 | 1.570 | 1.358 | 0.707 | -0.499 | 1.318 | 0.707 | -1.384 | 1.477 | 0.353 |
| **FFQ2c** | **F(8, 45) = 2.164, p = 0.049, adj-R2 = 0.149** | -0.126 | 0.066 | 0.062 | -0.004 | 0.028 | 0.898 | 0.838 | 0.909 | 0.362 | -0.272 | 0.877 | 0.757 | -0.731 | 1.007 | 0.472 |

NART: National Adult Reading Test, AH4: Alison Heim 4, Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR:Weighed Dietary Record, FFQ: Aberdeen Food Frequency Questionnaire – administered on day one, FFQ2: Aberdeen Food Frequency Questionnaire – administered on day fifteen.

an = 56. bn = 55. cn = 54.

WDR FDR adjusted q-values = 0.722, 0.722, 0.722, 0.722, 0.288

**Table S16:** Multiple regressions between the reporting effect (difference between LWI and self-reported intake method) and UWIST hedonic, tense and energetic scores in Study One participants. Note, age, sex and percentage body fat were also included in all models reported but their coefficients are not reported below.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **UWIST Mood** |  | **Hedonic** | | | **Tense** | | | **Energetic** | | |
|  | **Model Summary** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** |
| **WDRa** | F(6, 50) = 1.132, p = 0.358, adj-R2 = 0.014 | -0.110 | 0.089 | 0.222 | 0.040 | 0.084 | 0.639 | -0.057 | 0.059 | 0.344 |
| **24hr Recalla** | **F6, 50) = 2.990, p = 0.014, adj-R2 = 0.176** | 0.001 | 0.094 | 0.993 | -0.080 | 0.089 | 0.373 | -0.072 | 0.063 | 0.257 |
| **7-day Historya** | F(6, 50) = 0.239, p = 0.961, adj-R2 = -0.089 | -0.019 | 0.177 | 0.915 | -0.098 | 0.168 | 0.564 | 0.027 | 0.118 | 0.818 |
| **FFQb** | F(6, 50) = 0.196, p = 0.976, adj-R2 = -0.096 | -0.228 | 0.272 | 0.407 | -0.248 | 0.257 | 0.340 | -0.023 | 0.176 | 0.898 |
| **FFQ2c** | F(6, 48) = 1.536, p = 0.187, adj-R2 = -0.056 | -0.157 | 0.181 | 0.391 | -0.149 | 0.172 | 0.390 | 0.073 | 0.118 | 0.540 |

Co-E:Co-efficient,SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR:Weighed Dietary Record, FFQ: Aberdeen Food Frequency Questionnaire – administered on day one, FFQ2: Aberdeen Food Frequency Questionnaire – administered on day fifteen.

an = 57. bn = 56. cn = 55.

**SUPPLEMENTARY MATERIALS- STUDY TWO**

**Table S17:** Multiple regressions of the discrepancy between the laboratory weighed intakes and other methods (outcome variable) and age, sex and % body fat for participants in Study Two.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Sex** | | | **Age** | | | **% body fat** | | |
| **Phase** | **Method** | **Model Summary** | **Co-E**  **(MJ)** | **SE** | **P-Value** | **Co-E**  **(MJ)** | **SE** | **P-Value** | **Co-E**  **(MJ)** | **SE** | **P-Value** |
| **Laboratory Phase: LWI vs** | **WDRa** | F(3, 175) = 2.205, p = 0.089, adj-R2 = 0.020 | **-0.885** | **0.401** | **0.029** | 0.005 | 0.014 | 0.749 | -0.011 | 0.027 | 0.670 |
| **24hr Recalla** | **F(3, 175) = 5.366, p = 0.001, adj-R2 = 0.002** | **-1.456** | **0.463** | **0.002** | -0.006 | 0.017 | 0.724 | -0.003 | 0.031 | 0.916 |
| **7-day Historyb** | **F(3, 174) = 4.048, p = 0.008, adj-R2 = 0.049** | **-1.500** | **0.761** | **0.050** | -0.012 | 0.027 | 0.656 | 0.048 | 0.051 | 0.346 |
| **FFQa** | **F(3, 175) = 3.956, p = 0.009, adj-R2 = 0.047** | -1.240 | 0.846 | 0.145 | 0.003 | 0.030 | 0.930 | 0.075 | 0.057 | 0.187 |
| **Home Phase: WDR-H vs** | **24hr Recallb** | F(3, 174) = 1.396, p = 0.246, adj-R2 = 0.007 | -1.084 | 0.633 | 0.089 | 0.019 | 0.023 | 0.396 | 0.084 | 0.043 | 0.052 |
| **7-day Historyc** | F(3, 173) = 1.059, p = 0.368, adj-R2 = 0.001 | -1.182 | 0.670 | 0.080 | 0.015 | 0.024 | 0.521 | -0.049 | 0.045 | 0.284 |
| **FFQb** | F(3, 174) = 1.195, p = 0.313, adj-R2 = 0.003 | -0.874 | 0.733 | 0.235 | 0.028 | 0.026 | 0.286 | -0.007 | 0.050 | 0.889 |

Co-E: Co-efficients, SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR: Weighed Dietary Record; WDR-H: WDR Home

Phase; FFQ: Aberdeen Food Frequency Questionnaire – administered on day one, FDR: false discovery rate (Benjamini & Hochberg, 1995). an =

179. bn = 178. cn = 177.

**Laboratory Phase:**

WDRFDR adjusted q-values = 0.749, 0.087, 0.749

24HR Recall FDR adjusted q-values = **0.006** 0.916 0.916

7-day HistoryFDR adjusted q-values = 0.150 0.656 0.519

**Table S18:** Multiple regressions of the discrepancy between the criterion measure of food intake in the laboratory (LWI) and home environments (WDR) and the self-reported intake methods (outcome measures) and psychometric eating behaviour traits (predictors) in Study Two participants. Note, age, sex and percentage body fat were included in all models reported but their coefficients are not reported below.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **External Eating** | | | **Emotional Eating** | | | **Cognitive Restraint** | | |
| **Phase** | **Method** | **Model Summary** | **Co-E**  **(MJ)** | **SE** | **P-Value** | **Co-E**  **(MJ)** | **SE** | **P-Value** | **Co-E**  **(MJ)** | **SE** | **P-Value** |
| **Laboratory Phase: LWI vs** | **WDRa** | F(6, 172) = 1.271, p = 0.273, adj-R2 = 0.009 | -0.042 | 0.245 | 0.863 | 0.162 | 0.269 | 0.548 | -0.232 | 0.247 | 0.347 |
| **24hr Recalla** | **F(6, 172) = 2.879, p = 0.011, adj-R2 = 0.060** | -0.111 | 0.283 | 0.694 | 0.199 | 0.311 | 0.523 | -0.271 | 0.285 | 0.343 |
| **7-day Historyb** | F(6, 171) = 2.088, p = 0.057, adj-R2 = 0.036 | -0.042 | 0.465 | 0.928 | -0.311 | 0.513 | 0.545 | 0.024 | 0.470 | 0.959 |
| **FFQa** | **F(6, 172) = 2.839, p = 0.012, adj-R2 = 0.058** | -0.541 | 0.510 | 0.291 | **1.243** | **0.561** | **0.028** | -0.260 | 0.515 | 0.614 |
| **Home Phase: WDR-H vs** | **24hr Recallb** | F(6, 171) = 1.173, p = 0.323, adj-R2 = 0.006 | -0.584 | 0.385 | 0.131 | 0.009 | 0.422 | 0.982 | 0.039 | 0.389 | 0.921 |
| **7-day Historyc** | F(6, 170) = 1.107, p = 0.360, adj-R2 = 0.004 | -0.433 | 0.407 | 0.289 | -0.482 | 0.448 | 0.283 | 0.435 | 0.413 | 0.294 |
| **FFQb** | F(6, 171) = 1.875, p = 0.088, adj-R2 = 0.029 | **-1.001** | **0.440** | **0.030** | **1.055** | **0.482** | **0.024** | 0.066 | 0.445 | 0.882 |

Co-E: Co-efficients, SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR: Weighed Dietary Record; WDR-H: WDR Home

Phase; FFQ: Aberdeen Food Frequency Questionnaire – administered on day one, FDR: false discovery rate (Benjamini & Hochberg, 1995).

an = 179. bn = 178. cn = 177.

**Laboratory Phase:**

FFQFDR adjusted q-values = 0.465, 0.168, 0.737

**Home Phase:**

FFQFDR adjusted q-values = 0.090, 0.090, 0.999

**Table S19:** Multiple regressions of the discrepancy between the criterion measure of food intake in the laboratory (LWI) and home environments (WDR) and the self-reported intake methods (outcome measures) and body image (predictor) in Study Two participants. Note, age, sex and percentage body fat were included in all models reported but their coefficients are not reported below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | **Body Image Score** | | |
| **Phase** | **Method** | **Model Summary** | **Co-E (MJ)** | **SE** | **P-Value** |
| **Laboratory Phase: LWI vs** | **WDRa** | F(4, 173) = 2.370, p = 0.054, adj-R2 = 0.030 | -0.171 | 0.107 | 0.112 |
| **24hr Recalla** | **F(4, 173) = 4.280, p = 0.003, adj-R2 = 0.069** | 0.035 | 0.124 | 0.779 |
| **7-day Historyb** | F(4, 172) = 3.459, p = 0.010, adj-R2 = 0.053 | -0.177 | 0.203 | 0.384 |
| **FFQa** | **F(4, 173) = 4.757, p = 0.001, adj-R2 = 0.078** | 0.221 | 0.213 | 0.301 |
| **Home Phase: WDR-H vs** | **24hr Recallb** | F(4, 172) = 1.451, p = 0.219, adj-R2 = 0.010 | 0.218 | 0.169 | 0.199 |
| **7-day Historyc** | F(6, 171) = 0.804, p = 0.5254, adj-R2 = -0.005 | 0.018 | 0.180 | 0.919 |
| **FFQb** | **F(6, 172) = 2.875, p = 0.024, adj-R2 = 0.041** | **0.405** | **0.183** | **0.028** |

Co-E: Co-efficients, SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR: Weighed Dietary Record; WDR-H: WDR Home

Phase; FFQ: Aberdeen Food Frequency Questionnaire – administered on day one, FDR: false discovery rate (Benjamini & Hochberg, 1995).

an = 178. bn = 177. cn = 176.

**Home phase:**

FFQFDR adjusted q-values = 0.089

**Table S20:** Multiple regressions of the discrepancy between the criterion measure of food intake in the laboratory (LWI) and home environments (WDR) and the self-reported intake methods (outcome measures) and EPQR personality dimensions (predictors) in Study Two participants. Note, age, sex and percentage body fat were included in all models reported but their coefficients are not reported below.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Psychoticism** | | | **Extraversion** | | | **Neuroticism** | | | **Social Desirability** | | |
| **Phase** | **Method** | **Model Summary** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** |
| **Laboratory Phase: LWI vs** | **WDRa** | F(7, 170) = 1.546, p = 0.155, adj-R2 = 0.021 | -0.066 | 0.049 | 0.179 | -0.003 | 0.031 | 0.932 | 0.044 | 0.031 | 0.157 | 0.024 | 0.042 | 0.561 |
| **24hr Recalla** | **F(7, 170) = 2.584, p = 0.015, adj-R2 = 0.099** | -0.028 | 0.057 | 0.624 | -0.044 | 0.036 | 0.223 | -0.004 | 0.036 | 0.902 | -0.044 | 0.048 | 0.369 |
| **7-day Historyb** | **F(7, 169) = 2.679, p = 0.012, adj-R2 = 0.063** | -0.047 | 0.092 | 0.614 | **-0.125** | **0.058** | **0.032** | 0.052 | 0.058 | 0.364 | -0.061 | 0.078 | 0.440 |
| **FFQa** | **F(7, 170) = 2.629, p = 0.013, adj-R2 = 0.061** | -0.101 | 0.102 | 0.323 | -0.057 | 0.064 | 0.377 | 0.041 | 0.664 | 0.521 | 0.145 | 0.087 | 0.097 |
| **Home Phase: WDR-H vs** | **24hr Recallb** | F(7, 169) = 1.011, p = 0.425, adj-R2 = 0.000 | 0.114 | 0.077 | 0.141 | 0.003 | 0.048 | 0.945 | -0.043 | 0.048 | 0.380 | -0.019 | 0.066 | 0.775 |
| **7-day Historyc** | F(7, 168) = 1.069, p = 0.386, adj-R2 = 0.003 | 0.113 | 0.082 | 0.171 | -0.084 | 0.051 | 0.105 | 0.028 | 0.051 | 0.582 | -0.025 | 0.070 | 0.724 |
| **FFQb** | F(7, 169) = 1.311, p = 0.248, adj-R2 = 0.012 | 0.044 | 0.089 | 0.621 | -0.011 | 0.059 | 0.843 | 0.005 | 0.056 | 0.922 | **0.172** | **0.076** | **0.024** |

Co-E: Co-efficients, SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR: Weighed Dietary Record; WDR-H: WDR Home

Phase; FFQ: Aberdeen Food Frequency Questionnaire – administered on day one, FDR: false discovery rate (Benjamini & Hochberg, 1995).

an = 178. bn = 177. cn = 176.

**Laboratory phase:**

7-day History FDR adjusted q-values = 0.628, 0.224, 0.628, 0.628

**Home phase:**

FFQFDR adjusted q-values = 0.991 0.991, 0.991, 0.168

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Neuroticism** | | | **Extraversion** | | | **Openness to Experience** | | | **Agreeableness** | | | **Conscientiousness** | | |
| **Phase** | **Method** | **Model Summary** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-**  **Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** |
| **Laboratory Phase: LWI vs** | **WDRa** | **F(8, 169) = 2.484, p = 0.014, adj-R2 = 0.063** | 0.007 | 0.007 | 0.343 | -0.010 | 0.009 | 0.275 | -0.005 | 0.009 | 0.569 | -0.018 | 0.009 | 0.051 | -0.003 | 0.008 | 0.657 |
| **24hr Recalla** | **F(8, 169) = 3.379, p = 0.001, adj-R2 = 0.097** | **0.018** | **0.008** | **0.022** | 0.007 | 0.010 | 0.485 | **-0.022** | **0.010** | **0.029** | 0.006 | 0.010 | 0.588 | -0.002 | 0.009 | 0.858 |
| **7-day Historyb** | **F(8, 168) = 2.657, p = 0.009, adj-R2 = 0.070** | 0.015 | 0.013 | 0.266 | -0.028 | 0.017 | 0.101 | 0.005 | 0.017 | 0.753 | 0.017 | 0.017 | 0.326 | -0.012 | 0.015 | 0.397 |
| **FFQb** | **F(8, 169) = 2.849, p = 0.005, adj-R2 = 0.077** | 0.011 | 0.014 | 0.410 | -0.020 | 0.018 | 0.272 | 0.004 | 0.017 | 0.825 | 0.026 | 0.018 | 0.156 | -0.006 | 0.015 | 0.684 |
| **Home Phase: WDR-H vs** | **24hr Recallb** | F(8, 168) = 0.742, p = 0.654, adj-R2 = -0.012 | 0.004 | 0.011 | 0.752 | 0.016 | 0.015 | 0.288 | -0.013 | 0.014 | 0.359 | 0.010 | 0.015 | 0.496 | -0.004 | 0.013 | 0.739 |
| **7-day Historyc** | F(8, 167) = 1.232, p = 0.283, adj-R2 = 0.010 | 0.002 | 0.012 | 0.846 | -0.025 | 0.015 | 0.099 | 0.020 | 0.015 | 0.172 | 0.017 | 0.015 | 0.263 | -0.012 | 0.013 | 0.373 |
| **FFQb** | F(8, 168) = 1.575, p = 0.136, adj-R2 = 0.025 | -0.003 | 0.012 | 0.801 | 0.012 | 0.016 | 0.440 | 0.014 | 0.015 | 0.377 | 0.030 | 0.016 | 0.062 | -0.008 | 0.013 | 0.531 |

**Table S21:** Multiple regressions of the discrepancy between the criterion measure of food intake in the laboratory (LWI) and home environments (WDR) and the self-reported intake methods (outcome measures) and NEO PIR personality dimensions (predictors) in Study Two participants. Note, age, sex and percentage body fat were included in all models reported but their coefficients are not reported below.

Co-E: Co-efficients, SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR: Weighed Dietary Record; WDR-H: WDR Home

Phase; FFQ: Aberdeen Food Frequency Questionnaire – administered on day one.FDR: false discovery rate (Benjamini & Hochberg, 1995).

an = 178. bn = 177. cn = 176.

**Laboratory phase:**

24hr Recall FDR adjusted q-values = 0.077, 0.885, 0.077, 0.885, 0.885

**Table 22:** Multiple regressions of the discrepancy between the criterion measure of food intake in the laboratory (LWI) and home environments (WDR) and the self-reported intake methods (outcome measures) and social desirability(predictors) in Study Two participants. Note, age, sex and percentage body fat were included in all models reported but their coefficients are not reported below.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Marl Crowne Score** | | | **BIDR- Self-deceptive Enhancement** | | | **BIDR- Impression Management** | | |
| **Phase** | **Method** | **Model Summary** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-**  **Value** |
| **Laboratory Phase: LWI vs** | **WDRa** | F(6, 170) = 1.141, p = 0.341, adj-R2 = 0.005 | 0.025 | 0.036 | 0.490 | -0.038 | 0.054 | 0.485 | 0.002 | 0.049 | 0.968 |
| **24hr Recalla** | **F(6, 170) = 3.353, p = 0.004, adj-R2 = 0.074** | 0.041 | 0.041 | 0.313 | **-0.123** | **0.062** | **0.048** | -0.008 | 0.056 | 0.890 |
| **7-day Historyb** | **F(6, 169) = 2.179, p = 0.047, adj-R2 = 0.039** | -0.044 | 0.068 | 0.515 | -0.047 | 0.102 | 0.645 | -0.041 | 0.093 | 0.661 |
| **FFQa** | F(6, 169) = 1.849, p = 0.092, adj-R2 = 0.028 | -0.025 | 0.075 | 0.743 | 0.005 | 0.113 | 0.965 | 0.057 | 0.103 | 0.581 |
| **Home Phase: WDR-H vs** | **24hr Recallb** | F(6, 169) = 1.739, p = 0.115, adj-R2 = 0.025 | 0.072 | 0.054 | 0.188 | -0.159 | 0.082 | 0.054 | 0.078 | 0.074 | 0.298 |
| **7-day Historyc** | F(6, 168) = 0.731, p = 0.625, adj-R2 = -0.009 | -0.005 | 0.060 | 0.928 | -0.084 | 0.090 | 0.352 | 0.043 | 0.082 | 0.599 |
| **FFQb** | F(6, 169) = 1.162, p = 0.329, adj-R2 = 0.040 | 0.006 | 0.065 | 0.922 | -0.031 | 0.098 | 0.749 | 0.142 | 0.089 | 0.111 |

Co-E: Co-efficients, SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR: Weighed Dietary Record; WDR-H: WDR Home

Phase; FFQ: Aberdeen Food Frequency Questionnaire – administered on day one.FDR: false discovery rate (Benjamini & Hochberg, 1995).

an = 177. bn = 176. cn = 175.

**Laboratory phase:**

24hr Recall FDR adjusted q-values = 0.626, 0.144, 0.890

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Ravens Score** | | | **AH4 Score** | | | **NART-**  **Full Scale IQ** | | | **NART-**  **Verbal IQ** | | | **NART-**  **Performance IQ** | | |
| **Phase** | **Method** | **Model Summary** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-**  **Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** |
| **Laboratory Phase: LWI vs** | **WDRa** | F(8, 167) = 1.501, p = 0.160, adj-R2 = 0.022 | -0.025 | 0.040 | 0.539 | -0.002 | 0.015 | 0.898 | -0.462 | 0.395 | 0.245 | 0.265 | 0.367 | 0.471 | 0.176 | 0.403 | 0.664 |
| **24hr Recalla** | **F(8, 167) = 2.393, p = 0.018, adj-R2 = 0.060** | -0.049 | 0.047 | 0.303 | 0.019 | 0.017 | 0.273 | -0.573 | 0.467 | 0.277 | 0.472 | 0.434 | 0.277 | 0.021 | 0.476 | 0.964 |
| **7-day Historyb** | F(8, 166) = 1.691, p = 0.104, adj-R2 = 0.031 | 0.021 | 0.077 | 0.784 | -0.026 | 0.028 | 0.358 | -0.488 | 0.760 | 0.521 | -0.149 | 0.706 | 0.834 | 0.833 | 0.775 | 0.284 |
| **FFQb** | **F(8, 167) = 2.124, p = 0.036, adj-R2 = 0.049** | -0.129 | 0.085 | 0.130 | -0.002 | 0.031 | 0.940 | 0.376 | 0.835 | 0.653 | -0.971 | 0.775 | 0.212 | 0.893 | 0.851 | 0.296 |
| **Home Phase: WDR-H vs** | **24hr Recallb** | F(8, 166) = 0.979, p = 0.454, adj-R2 = -0.001 | -0.062 | 0.063 | 0.330 | 0.034 | 0.023 | 0.140 | -0.328 | 0.621 | 0.597 | 0.563 | 0.577 | 0.330 | -0.396 | 0.633 | 0.533 |
| **7-day Historyc** | F(8, 166) = 0.979, p = 0.454, adj-R2 = -0.001 | -0.062 | 0.063 | 0.330 | 0.034 | 0.023 | 0.140 | -0.328 | 0.621 | 0.597 | 0.563 | 0.577 | 0.330 | -0.396 | 0.633 | 0.533 |
| **FFQb** | F(8, 166) = 1.317, p = 0.238, adj-R2 = 0.014 | -0.141 | 0.074 | 0.057 | 0.012 | 0.027 | 0.643 | 0.629 | 0.726 | 0.387 | -0.896 | 0.674 | 0.185 | 0.488 | 0.740 | 0.510 |

**Table S23:** Multiple regressions of the discrepancy between the criterion measure of food intake in the laboratory (LWI) and home environments (WDR) and the self-reported intake methods (outcome measures) and IQ (predictors) in Study Two participants. Note, age, sex and percentage body fat were included in all models reported but their coefficients are not reported below.

Co-E: Co-efficients, SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR: Weighed Dietary Record; WDR-H: WDR Home

Phase; FFQ: Aberdeen Food Frequency Questionnaire – administered on day one.

an = 176. bn = 175. cn = 174.

**Table S24:** Multiple regressions of the discrepancy between the criterion measure of food intake in the laboratory (LWI) and home environments (WDR) and the self-reported intake methods (outcome measures) and UWIST hedonic, tense and energetic scores (predictors) in Study Two participants. Note, age, sex and percentage body fat were included in all models reported but their coefficients are not reported below.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Hedonic** | | | **Tense** | | | **Energetic** | | |
| **Phase** | **Method** | **Model Summary** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-Value** | **Co-E (MJ)** | **SE** | **P-**  **Value** |
| **Laboratory Phase: LWI vs** | **WDRa** | F(6, 171) = 1.664, p = 0.133, adj-R2 = 0.022 | -0.081 | 0.077 | 0.291 | 0.024 | 0.067 | 0.719 | 0.073 | 0.046 | 0.116 |
| **24hr Recalla** | **F(6, 171) = 3.009, p = 0.008, adj-R2 = 0.064** | 0.065 | 0.089 | 0.469 | 0.082 | 0.077 | 0.288 | 0.010 | 0.053 | 0.846 |
| **7-day Historyb** | **F(6, 170) = 2.410, p = 0.029, adj-R2 = 0.046** | -0.006 | 0.147 | 0.965 | 0.147 | 0.127 | 0.247 | 0.079 | 0.088 | 0.366 |
| **FFQa** | F(6, 171) = 1.930, p = 0.079, adj-R2 = 0.031 | 0.004 | 0.164 | 0.981 | 0.015 | 0.142 | 0.913 | -0.011 | 0.098 | 0.912 |
| **Home Phase: WDR-H vs** | **24hr Recallb** | F(6, 170) = 1.476, p = 0.189, adj-R2 = 0.016 | **0.241** | **0.211** | **0.049** | 0.134 | 0.105 | 0.204 | -0.106 | 0.073 | 0.140 |
| **7-day Historyc** | F(6, 169) = 1.023, p = 0.412, adj-R2 = 0.001 | 0.141 | 0.130 | 0.278 | 0.170 | 0.122 | 0.132 | -0.059 | 0.077 | 0.451 |
| **FFQb** | F(6, 170) = 1.045, p = 0.398, adj-R2 = 0.002 | 0.174 | 0.142 | 0.221 | 0.062 | 0.123 | 0.617 | -0.131 | 0.085 | 0.124 |

Co-E: Co-efficients, SE: Standard Error, LWI: Laboratory Weighed Intakes, WDR: Weighed Dietary Record; WDR-H: WDR Home

Phase; FFQ: Aberdeen Food Frequency Questionnaire – administered on day one, FDR: false discovery rate (Benjamini & Hochberg, 1995).

an = 178. bn = 177. cn = 176.

**Home phase:**

24hr Recall FDR adjusted q-values = 0.147, 0.245, 0.222