**Supplementary Material 1.** Outcome of Questionnaire on Eating Behaviors in University Students With or Without Daily Behaviors

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Daily self-weighing** | | **Regular exercise** | | **Skipping breakfast** | | **Frequent late-night eating** | | **Excess soft drink consumption** | |
| **Yes** | **No** | **Yes** | **No** | **Yes** | **No** | **Yes** | **No** | **Yes** | **No** |
| Number | 33 | 67 | 48 | 52 | 37 | 63 | 18 | 82 | 23 | 77 |
| **Recognition of weight and constitution** |  |  |  |  |  |  |  |  |  |  |
| I think I gain weight because I like sweet things. | 2.21±1.08 | 2.27±1.07 | 2.17±1.06 | 2.37±1.09 | 2.00±0.97 | 2.43±1.10 | 2.17±1.10 | 2.29±1.07 | 2.39±1.03 | 2.23±1.09 |
| I think lying down right after eating is a cause of weight gain. | 2.24±1.20 | 2.27±1.05 | 2.15±1.05 | 2.37±1.14 | 2.14±1.03 | 2.33±1.14 | 2.22±0.94 | 2.27±1.13 | 2.22±1.00 | 2.27±1.13 |
| I eat a lot even when I catch a cold. | 2.36±1.11 | 2.00±1.02 | 2.15±1.03 | 2.10±1.09 | **1.78±0.89\*** | **2.32±1.10** | 2.39±0.98 | 2.06±1.07 | 2.04±1.19 | 2.14±1.02 |
| I am the type who gains weight even by drinking water. | 1.30±0.64 | 1.51±0.89 | 1.40±0.79 | 1.48±0.85 | 1.46±0.80 | 1.43±0.84 | 1.61±0.92 | 1.40±0.80 | 1.52±0.95 | 1.42±0.78 |
| I gain weight because of a lack of exercise. | 2.48±1.30 | 2.94±1.22 | **2.19±1.33\*\*** | **3.35±0.88** | 2.59±1.24 | 2.90±1.27 | **2.06±1.21\*** | **2.95±1.22** | 2.74±1.32 | 2.81±1.25 |
| I think my constitution is such that I gain weight easier than other people. | **2.76±1.20\*** | **2.16±1.18** | 2.52±1.18 | 2.21±1.23 | 2.14±1.21 | 2.49±1.20 | 2.06±1.16 | 2.43±1.22 | 2.00±1.13 | 2.47±1.22 |
| I can’t lose weight even though I don’t eat much. | **2.12±1.19\*** | **1.51±0.82** | 1.58±0.85 | 1.83±1.12 | 1.73±1.04 | 1.70±0.98 | 1.39±0.61 | 1.78±1.05 | 1.43±0.79 | 1.79±1.04 |
| **External eating behavior** |  |  |  |  |  |  |  |  |  |  |
| It’s a waste to leave food, so I end up eating everything. | 2.55±1.23 | 2.87±1.07 | **3.00±1.07\*** | **2.54±1.15** | **2.43±1.07\*** | **2.95±1.13** | 3.22±0.88 | 2.66±1.16 | 2.91±1.16 | 2.71±1.12 |
| Even after meals, I can still eat more if it’s food I like. | 2.55±1.15 | 2.49±1.20 | 2.60±1.16 | 2.42±1.19 | 2.32±1.20 | 2.62±1.16 | 2.83±1.15 | 2.44±1.18 | 2.30±1.18 | 2.57±1.17 |
| I’m dissatisfied if a dinner doesn’t have many dishes. | 1.67±0.96 | 1.72±0.87 | 1.65±0.79 | 1.75±0.99 | 1.49±0.73 | 1.83±0.96 | 1.61±0.78 | 1.72±0.92 | 1.43±0.73 | 1.78±0.93 |
| If someone else is eating, I end up eating with them. | 2.27±1.13 | 2.25±1.05 | 2.23±1.10 | 2.29±1.05 | **1.81±0.81\*\*** | **2.52±1.12** | 2.67±0.97 | 2.17±1.08 | 2.17±1.07 | 2.29±1.07 |
| When eating out or getting delivery, I end up ordering too much. | 1.88±1.02 | 1.99±0.99 | **2.21±1.11\*** | **1.71±0.82** | 1.84±0.93 | 2.02±1.04 | 2.22±1.00 | 1.89±0.99 | 2.00±1.13 | 1.94±0.96 |
| When I buy food, I’m not satisfied if I don’t buy more than I need. | 1.88±0.96 | 1.96±0.99 | 1.94±0.89 | 1.92±1.06 | 1.89±0.84 | 1.95±1.05 | 2.17±0.79 | 1.88±1.01 | 1.96±0.98 | 1.92±0.98 |
| If there are fruits or sweets in front of me, I reach for them without thinking. | 2.42±1.09 | 2.42±1.05 | 2.33±1.02 | 2.50±1.09 | 2.27±1.02 | 2.51±1.08 | **2.89±0.90\*** | **2.31±1.06** | 2.57±1.12 | 2.38±1.04 |
| When I’m preparing meals, I’m not satisfied unless I make a lot of food. | 2.00±1.09 | 1.91±0.88 | 1.92±0.92 | 1.96±0.99 | 2.00±0.85 | 1.90±1.01 | 2.17±0.92 | 1.89±0.96 | 1.61±0.66 | 2.04±1.01 |
| If I see something that looks good in the supermarket or other store, I buy it without thinking, even if I wasn’t planning to. | 2.55±1.06 | 2.54±0.99 | 2.52±0.95 | 2.56±1.07 | 2.38±0.89 | 2.63±1.07 | 2.89±0.90 | 2.46±1.02 | 2.52±1.04 | 2.55±1.01 |
| I start thinking about my next meal soon after eating. | 1.91±1.13 | 1.55±0.96 | 1.58±1.05 | 1.75±1.01 | 1.41±0.80 | 1.83±1.11 | 1.72±1.02 | 1.66±1.03 | 1.74±1.18 | 1.65±0.98 |
| I often eat socially. | 1.64±0.93 | 1.75±0.82 | 1.83±0.95 | 1.60±0.75 | 1.73±0.87 | 1.70±0.85 | 1.83±0.92 | 1.68±0.84 | 1.65±0.88 | 1.73±0.85 |
| **Emotional eating behavior** |  |  |  |  |  |  |  |  |  |  |
| I cannot relax if there is little food in the refrigerator. | 1.45±0.83 | 1.30±0.70 | 1.31±0.66 | 1.38±0.82 | 1.19±0.46 | 1.44±0.86 | **1.78±1.00\*\*** | **1.26±0.64** | 1.43±0.84 | 1.32±0.72 |
| When I am irritated or worried about something, I eat without thinking. | 2.48±1.18 | 2.18±1.13 | 2.17±1.17 | 2.38±1.12 | **1.89±1.05\*** | **2.51±1.15** | 2.72±1.13 | 2.18±1.13 | 2.26±1.25 | 2.29±1.12 |
| I always have food around me. | 1.48±0.71 | 1.69±0.91 | 1.44±0.54 | 1.79±1.04 | 1.46±0.61 | 1.71±0.96 | **2.22±0.81\*\*** | **1.49±0.80** | 1.65±0.83 | 1.61±0.86 |
| If I am not doing anything, I eat without thinking. | 2.12±0.93 | 1.90±0.97 | 2.02±0.98 | 1.92±0.95 | 1.78±0.79 | 2.08±1.04 | **2.56±0.92\*\*** | **1.84±0.92** | 2.09±1.08 | 1.94±0.92 |
| **Sense of hunger or satiety** |  |  |  |  |  |  |  |  |  |  |
| I am irritable when I’m hungry. | 2.15±1.15 | 2.04±1.01 | 1.96±1.05 | 2.19±1.05 | **1.68±0.82\*\*** | **2.32±1.10** | 2.39±1.20 | 2.01±1.01 | 2.09±1.20 | 2.08±1.01 |
| If I don’t eat until I’m stuffed, I do not feel full. | 2.73±0.91 | 2.43±1.03 | **2.75±1.02\*** | **2.33±0.94** | 2.46±0.99 | 2.57±1.01 | 2.61±0.92 | 2.51±1.02 | 2.57±0.99 | 2.52±1.01 |
| After I eat a lot, I regret it. | **2.70±1.26\*** | **2.07±1.05** | 2.40±1.25 | 2.17±1.06 | 2.16±1.09 | 2.34±1.19 | 2.44±1.20 | 2.24±1.15 | 2.35±1.27 | 2.26±1.13 |
| I can’t sleep if I feel hungry. | 1.82±1.04 | 1.85±1.05 | 1.79±1.05 | 1.88±1.04 | 1.76±0.98 | 1.89±1.08 | 1.83±0.86 | 1.84±1.08 | 1.87±1.14 | 1.83±1.02 |
| I can’t tell if I’m hungry or full. | 1.09±0.38 | 1.15±0.47 | 1.06±0.24 | 1.19±0.56 | **1.30±0.66\*\*** | **1.03±0.18** | 1.22±0.43 | 1.11±0.44 | 1.09±0.29 | 1.14±0.48 |
| Usually, I’m not hungry before I eat. | 1.33±0.54 | 1.58±0.78 | 1.48±0.71 | 1.52±0.73 | 1.59±0.69 | 1.44±0.74 | 1.72±0.83 | 1.45±0.69 | 1.48±0.67 | 1.51±0.74 |
| **Eating style** |  |  |  |  |  |  |  |  |  |  |
| I am a fast eater. | 2.55±1.09 | 2.52±1.08 | 2.63±1.16 | 2.44±1.00 | 2.43±1.09 | 2.59±1.07 | 2.50±1.20 | 2.54±1.06 | 2.57±1.20 | 2.52±1.05 |
| People often ask me, “You eat a lot, don’t you? | 2.39±1.22 | 2.24±1.09 | 2.42±1.15 | 2.17±1.12 | **2.00±1.11\*** | **2.46±1.12** | 2.61±1.24 | 2.22±1.10 | 2.04±1.11 | 2.36±1.13 |
| I do not chew my food well. | 2.39±1.14 | 2.48±0.94 | 2.46±1.03 | 2.44±1.00 | 2.41±1.01 | 2.48±1.01 | 2.28±1.07 | 2.49±1.00 | 2.22±0.80 | 2.52±1.06 |
| I stuff my mouth full when I am eating. | 1.76±0.97 | 1.75±0.96 | **2.00±0.99\*** | **1.52±0.87** | 1.57±0.80 | 1.86±1.03 | 1.94±1.00 | 1.71±0.95 | 1.78±0.90 | 1.74±0.98 |
| During meals, I end up having one mouthful after another. | 2.55±1.03 | 2.36±1.03 | **2.77±0.95\*\*** | **2.10±1.00** | 2.49±0.93 | 2.38±1.08 | 2.61±0.85 | 2.38±1.06 | 2.74±0.86 | 2.32±1.06 |
| **Food preferences** |  |  |  |  |  |  |  |  |  |  |
| I often visit convenience stores. | 2.94±1.00 | 3.15±0.97 | 3.10±0.92 | 3.06±1.04 | 3.05±0.97 | 3.10±1.00 | 3.33±0.69 | 3.02±1.03 | 3.39±0.72 | 2.99±1.03 |
| I often eat snack foods. | 1.85±0.97 | 2.10±0.94 | 2.15±0.97 | 1.90±0.93 | 2.05±0.94 | 2.00±0.97 | **2.50±0.99\*** | **1.91±0.92** | **2.35±0.93\*** | **1.92±0.94** |
| I like strong tastes. | 2.58±1.15 | 2.33±1.12 | 2.60±1.16 | 2.33±1.08 | 2.51±1.02 | 2.35±1.19 | 2.50±1.10 | 2.39±1.14 | 2.43±1.20 | 2.40±1.12 |
| I like noodles. | 3.18±1.04 | 3.03±1.13 | **3.38±0.94\*** | **2.81±1.17** | 3.05±1.00 | 3.10±1.16 | 3.44±0.98 | 3.00±1.11 | **3.47±0.79\*** | **2.94±1.14** |
| I often eat out or get deliveries. | 2.33±1.02 | 2.51±1.01 | 2.65±1.00 | 2.27±0.99 | 2.68±1.08 | 2.32±0.95 | 2.89±1.08 | 2.35±0.97 | **2.91±1.00\*** | **2.31±0.98** |
| My meals are more Western than Japanese. | 2.58±1.09 | 2.51±1.08 | 2.60±1.09 | 2.46±1.07 | 2.49±1.07 | 2.56±1.09 | 2.67±1.08 | 2.50±1.08 | 2.91±0.95 | 2.42±1.09 |
| I often eat hamburgers or other fast foods. | **1.39±0.70\*** | **1.85±0.87** | 1.83±0.88 | 1.58±0.80 | **1.97±0.93\*** | **1.54±0.76** | 1.89±0.90 | 1.66±0.83 | **2.13±0.92\*\*** | **1.57±0.79** |
| I often eat sweet buns. | **1.39±0.66\*** | **1.84±0.96** | 1.71±0.87 | 1.67±0.92 | 1.65±0.92 | 1.71±0.89 | 1.83±0.86 | 1.66±0.91 | 1.96±1.02 | 1.61±0.85 |
| I like oily foods. | 2.67±1.02 | 2.70±1.06 | 2.88±1.00 | 2.52±1.06 | 2.78±0.95 | 2.63±1.09 | 3.00±1.08 | 2.62±1.03 | 2.87±1.06 | 2.64±1.04 |
| I have a sweet tooth. | 2.09±1.07 | 2.43±1.13 | 2.23±1.08 | 2.40±1.16 | **2.03±1.04\*\*** | **2.49±1.13** | 2.72±1.13 | 2.23±1.10 | 2.26±1.14 | 2.34±1.12 |
| I eat a lot of meat. | 2.82±1.07 | 2.87±0.97 | **3.08±0.96\*** | **2.63±0.99** | **3.14±0.92\*\*** | **2.68±1.01** | 3.11±0.90 | 2.79±1.02 | 3.17±0.89 | 2.75±1.02 |
| **Regularity of eating habits** |  |  |  |  |  |  |  |  |  |  |
| I often eat late-night snacks. | 2.03±0.81 | 2.30±0.94 | 2.38±0.98 | 2.06±0.80 | 2.32±0.97 | 2.14±0.86 | **3.33±0.59\*\*** | **1.96±0.76** | 2.35±0.88 | 2.17±0.91 |
| I often go to banquets or drinking parties. | 2.06±1.06 | 1.91±0.95 | **2.33±1.00\*\*** | **1.62±0.84** | 2.16±1.09 | 1.84±0.90 | **2.44±1.04\*** | **1.85±0.94** | 2.09±0.79 | 1.92±1.04 |
| I’m a night person with little energy in the morning. | 2.61±1.09 | 2.55±1.13 | 2.71±1.13 | 2.44±1.09 | **2.97±1.07\*** | **2.33±1.08** | 2.56±1.10 | 2.57±1.12 | 2.83±1.23 | 2.49±1.07 |
| I always gain weight on long weekends and during summer and winter vacations. | 2.73±1.21 | 2.52±1.24 | 2.63±1.30 | 2.56±1.16 | 2.54±1.19 | 2.62±1.25 | 2.56±1.46 | 2.60±1.17 | 2.78±1.31 | 2.53±1.20 |
| I often snack between meals. | 2.27±1.10 | 2.37±1.13 | 2.44±1.05 | 2.25±1.17 | 2.32±1.08 | 2.35±1.14 | **3.06±0.94\*\*** | **2.18±1.09** | **2.74±1.01\*** | **2.22±1.12** |
| I do not eat at regular times. | 2.39±0.93 | 2.52±0.96 | 2.60±0.94 | 2.37±0.95 | **2.84±0.90\*\*** | **2.27±0.92** | 2.83±0.79 | 2.40±0.97 | **2.91±0.90\*** | **2.35±0.93** |
| Of my daily meals, dinner is the biggest and fanciest. | 2.79±1.19 | 2.85±1.03 | **3.13±0.94\*** | **2.56±1.14** | 3.03±1.07 | 2.71±1.08 | 2.89±1.08 | 2.82±1.09 | 3.00±1.21 | 2.78±1.05 |
| I eat dinner late. | 2.18±0.85 | 2.36±0.85 | 2.38±0.76 | 2.23±0.92 | **2.54±0.61\*** | **2.16±0.94** | **2.72±0.67\*** | **2.21±0.86** | 2.57±0.90 | 2.22±0.82 |
| I don’t have time to eat slowly. | 1.76±1.15 | 1.64±0.85 | 1.77±1.02 | 1.60±0.89 | 1.65±0.89 | 1.70±0.99 | 1.83±1.10 | 1.65±0.92 | 1.65±0.93 | 1.69±0.96 |
| I don’t eat breakfast. | 2.09±1.28 | 2.12±1.16 | 2.13±1.20 | 2.10±1.21 | **3.30±0.97\*\*** | **1.41±0.64** | 2.11±1.08 | 2.11±1.23 | 2.00±1.17 | 2.14±1.21 |

Data are expressed as mean ± standard deviation. Statistically significant data are shown in bold; \*P<0.05, \*\*P<0.005 vs. No.