**Table S1.** Intensity of daily consumption of selected product groups

|  |  |  |
| --- | --- | --- |
| **Frequency of product consumption** | **Number of total participants N=624 (%N)** | |
| **n (%)** | **Mean ± SD** |
| Fruits |  | 45,8 ± 32,7 |
| Low intake | 294 (47) |
| Medium intake | 192 (31) |
| High intake | 138 (22) |
| Fruit juices |  | 14,7 ± 22,6 |
| Low intake | 560 (90) |
| Medium intake | 36 (6) |
| High intake | 28 (4) |
| Candies |  | 31,1 ± 29,8 |
| Low intake | 435 (70) |
| Medium intake | 116 (19) |
| High intake | 73 (12) |
| Sweetened hot drinks 1 |  | 33,4 ± 41,4 |
| Low intake | 407 (65) |
| Medium intake | 60 (10) |
| High intake | 157 (25) |
| Sweetened carbonated or non-carbonated beverages 2 |  | 8,6 ± 17,6 |
| Low intake | 593 (95) |
| Medium intake | 16 (3) |
| High intake | 15 (2) |
| Energy drinks |  | 5,2 ± 14,7 |
| Low intake | 604 (97) |
| Medium intake | 10 (2) |
| High intake | 10 (2) |
| Alcoholic beverages |  | 5,8 ± 8,1 |
| Low intake | 616 (99) |
| Medium intake | 8 (1) |
| High intake | 0 (0) |
| sDI 3 |  | 20,7 ± 12,3 |
| Low intake | 416 (67) |
| Medium intake | 190 (30) |
| High intake | 18 (3) |
| Sweetened hot drinks 1 : e.g. black tea, coffee, herbal or fruit tea  Sweetened carbonated or noncarbonated beverages 2 : e.g. Coca-Cola, Pepsi, Sprite, Fanta, lemonade  sDI 3 – the sum of previously mentioned product groups | | |

**Table S2.** The food frequency intake of the study group (n = 624) described in means and medians

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Mean | ±SD | Median | 95%CI | |
| White bread and bakery products | 0.66 | 0.60 | 0.50 | 0.62 | 0.71 |
| Wholemeal bread | 0.41 | 0.49 | 0.14 | 0.37 | 0.44 |
| White rice, pasta | 0.36 | 0.35 | 0.50 | 0.34 | 0.39 |
| Buckwheat, oats, wholegrain pasta | 0.36 | 0.40 | 0.14 | 0.33 | 0.39 |
| Fast food | 0.11 | 0.19 | 0.06 | 0.09 | 0.12 |
| Fried foods | 0.34 | 0.33 | 0.14 | 0.32 | 0.37 |
| Butter | 0.65 | 0.70 | 0.50 | 0.60 | 0.71 |
| Vegetable oils | 0.53 | 0.48 | 0.50 | 0.49 | 0.57 |
| Milk | 0.69 | 0.66 | 0.50 | 0.64 | 0.74 |
| Fermented milk drinks | 0.40 | 0.42 | 0.50 | 0.37 | 0.44 |
| Fresh cheese curd products | 0.33 | 0.40 | 0.14 | 0.30 | 0.36 |
| Cheese | 0.44 | 0.43 | 0.50 | 0.41 | 0.48 |
| Cured meat | 0.37 | 0.47 | 0.14 | 0.33 | 0.41 |
| Red meat | 0.12 | 0.21 | 0.06 | 0.11 | 0.14 |
| White meat | 0.33 | 0.30 | 0.50 | 0.30 | 0.35 |
| Fish | 0.12 | 0.16 | 0.06 | 0.11 | 0.14 |
| Eggs | 0.33 | 0.32 | 0.14 | 0.30 | 0.35 |
| Legumes-based foods | 0.23 | 0.35 | 0.06 | 0.21 | 0.26 |
| Potatoes | 0.34 | 0.30 | 0.14 | 0.31 | 0.36 |
| Fruit | 0.92 | 0.65 | 1.00 | 0.87 | 0.97 |
| Vegetables | 1.04 | 0.70 | 1.00 | 0.98 | 1.09 |
| Candies | 0.62 | 0.60 | 0.50 | 0.58 | 0.67 |
| Fruit juices | 0.29 | 0.45 | 0.06 | 0.26 | 0.33 |
| Vegetable/fruit juices | 0.16 | 0.29 | 0.06 | 0.14 | 0.18 |
| Sweetened hot beverages | 0.67 | 0.83 | 0.14 | 0.60 | 0.73 |
| Sweetened beverages | 0.17 | 0.35 | 0.06 | 0.14 | 0.20 |
| Energy drinks | 0.10 | 0.29 | 0.00 | 0.08 | 0.13 |
| Water | 1.69 | 0.63 | 2.00 | 1.64 | 1.74 |
| Alcoholic beverages | 0.12 | 0.16 | 0.06 | 0.10 | 0.13 |
| pHDI | 4,83 | 2,48 | 4,56 | 4,63 | 5,02 |
| nHDI | 4,08 | 2,40 | 3,53 | 3,89 | 4,27 |
| sDI | 2,89 | 1,73 | 2,66 | 2,76 | 3,03 |

**Table S3.** Mean food frequency intake per day for high, medium and low adherence to the Sweet-western dietary pattern (SWDP)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Low adherence to  SWDP  n=208 | | Medium adherence to  SWDP  n=203 | | High adherence to SWDP  n=213 | | |
|  | Mean | ±SD | Mean | ±SD | Mean | ±SD | |
| White bread and bakery products | 0.30a | 0.32 | 0.55b | 0.45 | 1.12c | 0.65 |
| Wholemeal bread | 0.43ab | 0.47 | 0.45a | 0.50 | 0.34b | 0.49 |
| White rice, pasta | 0.30a | 0.30 | 0.36ab | 0.30 | 0.43b | 0.42 |
| Buckwheat, oats, wholegrain pasta | 0.48a | 0.45 | 0.36b | 0.34 | 0.24c | 0.35 |
| Fast food | 0.07a | 0.07 | 0.11ab | 0.19 | 0.14b | 0.25 |
| Fried foods | 0.17a | 0.19 | 0.32b | 0.25 | 0.54c | 0.40 |
| Butter | 0.26a | 0.36 | 0.52b | 0.55 | 1.16c | 0.78 |
| Vegetable oils | 0.38a | 0.37 | 0.52b | 0.42 | 0.69c | 0.56 |
| Milk | 0.61a | 0.65 | 0.67ab | 0.63 | 0.80b | 0.69 |
| Fermented milk drinks | 0.42a | 0.48 | 0.40a | 0.42 | 0.39a | 0.37 |
| Fresh cheese curd products | 0.30a | 0.42 | 0.35a | 0.40 | 0.33a | 0.39 |
| Cheese | 0.24a | 0.24 | 0.47b | 0.37 | 0.62c | 0.53 |
| Cured meat | 0.14a | 0.19 | 0.29b | 0.32 | 0.68c | 0.59 |
| Red meat | 0.06a | 0.12 | 0.12b | 0.16 | 0.18c | 0.29 |
| White meat | 0.24a | 0.26 | 0.28a | 0.23 | 0.45b | 0.36 |
| Fish | 0.13a | 0.15 | 0.13a | 0.15 | 0.12a | 0.19 |
| Eggs | 0.30a | 0.34 | 0.33a | 0.28 | 0.34a | 0.34 |
| Legumes-based foods | 0.31a | 0.43 | 0.23ab | 0.31 | 0.16b | 0.27 |
| Potatoes | 0.23a | 0.25 | 0.31b | 0.23 | 0.46c | 0.35 |
| Fruit | 0.86a | 0.67 | 0.95a | 0.65 | 0.94a | 0.65 |
| Vegetables | 1.07ab | 0.75 | 1.11a | 0.68 | 0.94b | 0.64 |
| Candies | 0.24a | 0.25 | 0.57b | 0.42 | 1.04c | 0.70 |
| Fruit juices | 0.16a | 0.29 | 0.28b | 0.38 | 0.44c | 0.58 |
| Vegetable/fruit juices | 0.11a | 0.19 | 0.16ab | 0.25 | 0.21b | 0.37 |
| Sweetened hot beverages | 0.24a | 0.50 | 0.67b | 0.79 | 1.08c | 0.91 |
| Sweetened beverages | 0.04a | 0.06 | 0.12b | 0.20 | 0.35c | 0.52 |
| Energy drinks | 0.04a | 0.09 | 0.09a | 0.25 | 0.18b | 0.42 |
| Water | 1.66a | 0.69 | 1.72a | 0.57 | 1.70a | 0.62 |
| Alcoholic beverages | 0.09a | 0.14 | 0.11ab | 0.13 | 0.14b | 0.20 |
| pHDI | 4.85a | 2.77 | 4.93a | 2.36 | 4.72a | 2.28 |
| nHDI | 1.96a | 0.86 | 3.63b | 0.89 | 6.58c | 2.14 |
| sDI | 1.67a | 0.87 | 2.80b | 1.22 | 4.17c | 1.87 |
| a,b,c - statistically significant differences are indicated by different letter inscriptions | | | | | | | |

**Table S4.** Mean food frequency intake per day for high, medium and low adherence to the Pro-healthy dietary pattern (PHDP)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Low adherence to  PHDP  n=205 | | Medium adherence to  PHDP  n=206 | | | High adherence to PHDP  n=213 | |
|  | Mean | ±SD | Mean | ±SD | | Mean | ±SD |
| White bread and bakery products | 0.70a | 0.61 | 0.70a | 0.58 | 0.59a | | 0.62 |
| Wholemeal bread | 0.24a | 0.33 | 0.42b | 0.48 | 0.55c | | 0.57 |
| White rice, pasta | 0.29a | 0.27 | 0.40b | 0.38 | 0.40b | | 0.38 |
| Buckwheat, oats, wholegrain pasta | 0.14a | 0.16 | 0.30b | 0.31 | 0.63c | | 0.47 |
| Fast food | 0.11a | 0.13 | 0.11a | 0.19 | 0.10a | | 0.24 |
| Fried foods | 0.37a | 0.32 | 0.39a | 0.35 | 0.27b | | 0.31 |
| Butter | 0.70a | 0.71 | 0.77a | 0.71 | 0.49b | | 0.65 |
| Vegetable oils | 0.47a | 0.45 | 0.57a | 0.49 | 0.55a | | 0.48 |
| Milk | 0.52a | 0.54 | 0.75b | 0.64 | 0.80b | | 0.76 |
| Fermented milk drinks | 0.25a | 0.30 | 0.39b | 0.35 | 0.56c | | 0.53 |
| Fresh cheese curd products | 0.24a | 0.31 | 0.35b | 0.37 | 0.40b | | 0.49 |
| Cheese | 0.47a | 0.45 | 0.47a | 0.41 | 0.38a | | 0.43 |
| Cured meat | 0.43a | 0.45 | 0.41a | 0.49 | 0.28b | | 0.45 |
| Red meat | 0.13a | 0.21 | 0.14a | 0.24 | 0.10a | | 0.17 |
| White meat | 0.30a | 0.23 | 0.39b | 0.37 | 0.29a | | 0.29 |
| Fish | 0.09a | 0.11 | 0.10a | 0.12 | 0.17b | | 0.22 |
| Eggs | 0.23a | 0.22 | 0.34b | 0.31 | 0.41b | | 0.39 |
| Legumes-based foods | 0.07a | 0.08 | 0.17b | 0.20 | 0.46c | | 0.48 |
| Potatoes | 0.27a | 0.27 | 0.37b | 0.28 | 0.37b | | 0.34 |
| Fruit | 0.32a | 0.23 | 0.80b | 0.34 | 1.61c | | 0.51 |
| Vegetables | 0.39a | 0.24 | 0.90b | 0.45 | 1.79c | | 0.41 |
| Candies | 0.44a | 0.42 | 0.74b | 0.64 | 0.69b | | 0.65 |
| Fruit juices | 0.27ab | 0.44 | 0.37a | 0.50 | 0.25b | | 0.41 |
| Vegetable/fruit juices | 0.10a | 0.19 | 0.20b | 0.32 | 0.18b | | 0.32 |
| Sweetened hot beverages | 0.63ab | 0.76 | 0.80a | 0.86 | 0.59b | | 0.85 |
| Sweetened beverages | 0.17a | 0.28 | 0.21a | 0.39 | 0.15a | | 0.38 |
| Energy drinks | 0.11a | 0.29 | 0.10a | 0.26 | 0.10a | | 0.33 |
| Water | 1.43a | 0.79 | 1.75b | 0.56 | 1.89c | | 0.38 |
| Alcoholic beverages | 0.11a | 0.15 | 0.12a | 0.17 | 0.11a | | 0.15 |
| pHDI | 2.57a | 1.14 | 4.56b | 1.34 | 7.26c | | 2.03 |
| nHDI | 4.02ab | 2.12 | 4.57a | 2.48 | 3.67b | | 2.50 |
| sDI | 2.04a | 1.34 | 3.13b | 1.63 | 3.49b | | 1.83 |
| a,b,c - statistically significant differences are indicated by different letter inscriptions | | | | | | | |

**Table S5.** Mean food frequency intake per day for high, medium and low adherence to the Dairy dietary pattern (DDP)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Low adherence to  DDP  n=205 | | Medium adherence to  DDP  n=207 | | | High adherence to DDP  n=212 | |
|  | Mean | ±SD | Mean | ±SD | | Mean | ±SD |
| White bread and bakery products | 0.63a | 0.60 | 0.74a | 0.60 | 0.62a | | 0.60 |
| Wholemeal bread | 0.29ab | 0.41 | 0.37b | 0.44 | 0.55c | | 0.57 |
| White rice, pasta | 0.31a | 0.26 | 0.39b | 0.38 | 0.40b | | 0.39 |
| Buckwheat, oats, wholegrain pasta | 0.27a | 0.32 | 0.31a | 0.29 | 0.50b | | 0.50 |
| Fast food | 0.09a | 0.17 | 0.12a | 0.20 | 0.11a | | 0.20 |
| Fried foods | 0.33a | 0.34 | 0.35a | 0.29 | 0.35a | | 0.36 |
| Butter | 0.53a | 0.67 | 0.62a | 0.67 | 0.80b | | 0.73 |
| Vegetable oils | 0.44a | 0.46 | 0.53ab | 0.43 | 0.62b | | 0.51 |
| Milk | 0.42a | 0.54 | 0.74b | 0.65 | 0.90c | | 0.70 |
| Fermented milk drinks | 0.14a | 0.19 | 0.32b | 0.26 | 0.74c | | 0.50 |
| Fresh cheese curd products | 0.08a | 0.12 | 0.23b | 0.19 | 0.67c | | 0.49 |
| Cheese | 0.18a | 0.22 | 0.43b | 0.29 | 0.71c | | 0.53 |
| Cured meat | 0.28a | 0.41 | 0.33a | 0.39 | 0.50b | | 0.56 |
| Red meat | 0.10a | 0.20 | 0.12a | 0.22 | 0.14a | | 0.20 |
| White meat | 0.29a | 0.32 | 0.33a | 0.28 | 0.35a | | 0.31 |
| Fish | 0.11a | 0.14 | 0.12a | 0.15 | 0.14a | | 0.20 |
| Eggs | 0.25a | 0.29 | 0.31a | 0.24 | 0.41b | | 0.39 |
| Legumes-based foods | 0.24a | 0.40 | 0.21a | 0.30 | 0.25a | | 0.34 |
| Potatoes | 0.34a | 0.34 | 0.33a | 0.29 | 0.34a | | 0.27 |
| Fruit | 1.02a | 0.72 | 0.82b | 0.62 | 0.91ab | | 0.62 |
| Vegetables | 1.09a | 0.74 | 0.96a | 0.66 | 1.06a | | 0.67 |
| Candies | 0.81a | 0.71 | 0.55b | 0.54 | 0.51b | | 0.47 |
| Fruit juices | 0.29a | 0.47 | 0.28a | 0.41 | 0.31a | | 0.48 |
| Vegetable/fruit juices | 0.15a | 0.31 | 0.15a | 0.24 | 0.18a | | 0.30 |
| Sweetened hot beverages | 0.67a | 0.85 | 0.66a | 0.82 | 0.68a | | 0.82 |
| Sweetened beverages | 0.18a | 0.37 | 0.14a | 0.30 | 0.19a | | 0.38 |
| Energy drinks | 0.08a | 0.24 | 0.10a | 0.31 | 0.13a | | 0.33 |
| Water | 1.70a | 0.67 | 1.66a | 0.64 | 1.71a | | 0.58 |
| Alcoholic beverages | 0.11a | 0.15 | 0.09a | 0.10 | 0.15b | | 0.21 |
| pHDI | 3.96a | 2.03 | 4.41a | 2.12 | 6.08b | | 2.69 |
| nHDI | 3.63a | 2.35 | 3.98a | 2.03 | 4.61b | | 2.68 |
| sDI | 3.17a | 1.82 | 2.63b | 1.60 | 2.88ab | | 1.72 |
| a,b,c - statistically significant differences are indicated by different letter inscriptions | | | | | | | |

**Table S6.** TIPI – results

|  |  |  |
| --- | --- | --- |
| **Number of question** | **Patients' perceptions of themselves** | **Number of total participants**  **N=624 (%N)** |
| **n (%)** |
| 1 | Extraverted, enthusiastic. |  |
| Disagree strongly | 20 (3) |
| Disagree moderately | 61 (10) |
| Disagree a little | 60 (10) |
| Neither agree nor disagree | 58 (9) |
| Agree a little | 96 (15) |
| Agree moderately | 237 (38) |
| Agree strongly | 92 (15) |
| 2 | Critical, quarrelsome. |  |
| Disagree strongly | 148 (24) |
| Disagree moderately | 206 (33) |
| Disagree a little | 49 (8) |
| Neither agree nor disagree | 70 (11) |
| Agree a little | 103 (17) |
| Agree moderately | 39 (6) |
| Agree strongly | 9 (1) |
| 3 | Dependable, self-disciplined. |  |
| Disagree strongly | 23 (4) |
| Disagree moderately | 40 (6) |
| Disagree a little | 51 (8) |
| Neither agree nor disagree | 62 (10) |
| Agree a little | 103 (17) |
| Agree moderately | 232 (37) |
| Agree strongly | 113 (18) |
| 4 | Anxious, easily upset. |  |
| Disagree strongly | 46 (7) |
| Disagree moderately | 111 (18) |
| Disagree a little | 42 (7) |
| Neither agree nor disagree | 58 (9) |
| Agree a little | 132 (21) |
| Agree moderately | 125 (20) |
| Agree strongly | 110 (18) |
| 5 | Open to new experiences, complex. |  |
| Disagree strongly | 5 (1) |
| Disagree moderately | 38 (6) |
| Disagree a little | 26 (4) |
| Neither agree nor disagree | 76 (12) |
| Agree a little | 131 (21) |
| Agree moderately | 224 (36) |
| Agree strongly | 124 (20) |
| 6 | Reserved, quiet. |  |
| Disagree strongly | 117 (19) |
| Disagree moderately | 170 (27) |
| Disagree a little | 33 (5) |
| Neither agree nor disagree | 57 (9) |
| Agree a little | 123 (20) |
| Agree moderately | 87 (14) |
| Agree strongly | 37 (6) |
| 7 | Sympathetic, warm. |  |
| Disagree strongly | 6 (1) |
| Disagree moderately | 16 (3) |
| Disagree a little | 21 (3) |
| Neither agree nor disagree | 43 (7) |
| Agree a little | 82 (13) |
| Agree moderately | 299 (48) |
| Agree strongly | 157 (25) |
| 8 | Disorganised, careless. |  |
| Disagree strongly | 187 (30) |
| Disagree moderately | 214 (34) |
| Disagree a little | 47 (8) |
| Neither agree nor disagree | 55 (9) |
| Agree a little | 65 (10) |
| Agree moderately | 34 (5) |
| Agree strongly | 22 (4) |
| 9 | Calm, emotionally stable. |  |
| Disagree strongly | 130 (21) |
| Disagree moderately | 150 (24) |
| Disagree a little | 90 (14) |
| Neither agree nor disagree | 86 (14) |
| Agree a little | 64 (10) |
| Agree moderately | 85 (14) |
| Agree strongly | 19 (3) |
| 10 | Conventional, uncreative. |  |
| Disagree strongly | 35 (6) |
| Disagree moderately | 137 (22) |
| Disagree a little | 47 (8) |
| Neither agree nor disagree | 165 (26) |
| Agree a little | 104 (17) |
| Agree moderately | 115 (18) |
| Agree strongly | 21 (3) |

**Table S7.** TIPI - intensity of features

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of total participants N=624 (%N)** | | | |
| **Feature** | Intensity of features | **n (%)** | **Mean ± SD** |
| Extraversion | Low | 225 (36) | 4,7 ± 1,6 |
| Medium | 276 (44) |
| High | 123 (20) |
| Agreeablenes | Low | 251 (40) | 5,4 ± 1,2 |
| Medium | 185 (30) |
| High | 188 (30) |
| Conscientiousness | Low | 260 (42) | 5,2 ± 1,5 |
| Medium | 183 (29) |
| High | 181 (29) |
| Emotional Stability | Low | 260 (42) | 3,4 ± 1,7 |
| Medium | 167 (27) |
| High | 197 (31) |
| Openness to Experiences | Low | 231 (37) | 4,7 ± 1,1 |
| Medium | 202 (32) |
| High | 191 (31) |

**Table S8.** TFEQ-13 - interpreted results

|  |  |  |  |
| --- | --- | --- | --- |
| **Number of total participants N=624 (%N)** | | | |
| **Subscale** | **Severity of disorders** | **n (%)** | **Mean ± SD** |
| Cognitive restraint  (R1–R5) | Low | 227 (36) | 7,3 ± 2,3 |
| Medium | 219 (35) |
| High | 178 (29) |
| Uncontrolled eating  (J1–J5) | Low | 233 (37) | 9,2 ± 2,9 |
| Medium | 181 (29) |
| High | 210 (34) |
| Emotional eating  (E1–E3) | Low | 283 (45) | 5,3 ± 2,4 |
| Medium | 141 (23) |
| High | 200 (32) |