**Supplemental Table 1**. Menu card of the 1975 Japanese diet.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Day1 | Day2 | Day3 | Day4 | Day5 | Day6 | Day7 |
| Break-fast | Rice | Raisin bread | Rice | Toast | Rice | Toast | Rice |
| Salt-grilled salmon | Omelet | Hard cured horse mackerel | Bacon and eggs | Rolled egg | Boiled egg | *Sake* steamed short neck clams and cabbage |
| *Natto* (fermented soybeans) | Sausage and cabbage saute | Stewed short neck clams with Japanese mustard spinach | Yogurt with fruit (Apple and Banana) | *Natto* (fermented soybeans) | Tuna salad with broccoli | *Natto* (fermented soybeans) |
| Chinese cabbage and - bean sprout *miso* soup | Fruit (Apple and Banana) | Scarlet runner beans boiled in sugar and soy sauce | Sweet potato rice | Cabbage and deep fried tofu miso soup | Fruit (Banana and grape) | Tofu and deep fried *tofu* *miso* soup |
|  | Milk | Eggplant *miso* soup  | Simmered freeze-dried *tofu* | Fruit (Orange) | Milk |  |
| Lunch | *Udon* noodles with deep-fried tofu | Fried rice | Japanese style chow mein | Pork and vegetables miso soup | Chicken and egg on rice | Rice | Sandwich |
| Fruit (Orange) | *Wakame* seaweed soup | Fruits *Mitsumame* |  | Red and white salad | Sauteed eggplant with mince simmered *hijiki* seaweed | *Consomme* |
|  |  |  |  |  | Food boiled in soy sauce |  | Fruit (Apple and Grape) |
| Dinner | Rice | Rice | Rice | Rice | Rice | Rice | Rice |
| Braised meat and vegetables | Chicken and vegetables *Chikuzen* style | Cream stew | Simmered mackerel in miso | Marinated horse mackerel, N*anban* style | Simmered flatfish | Sliced raw fish |
| *Mozuku* seaweed vinegar | Chilled *tofu* | Pickled Chinese cabbage and dried shrimp dipped in sauce | Cooked beans with various vegetables | *Tofu Dengaku* | Simmered okara tofu lees | Simmered satsuma age (deep fried minced fish and vegetables) and Chinese cabbage |
| Clear cabbage and egg - soup | Spinach and deep-fried - *tofu miso* soup | Marinated cucumber and *hijiki* seaweed | Clear Chinese cabbage and *wakame* seaweed soup | Clear squash and Japanese mustard spinach soup | Taro and white radish *miso* soup | *Tofu* and vegetables in a sesame sauce |

One-week menus (for 21 meals) of the Japanese diet were created based on the National Nutrition Survey under the guidance of a registered dietitian.

**Supplemental Table 2**. Primer pairs used for the real time qRT-PCR analysis.

|  |  |  |  |
| --- | --- | --- | --- |
| Genbank ID | Gene name |  | Primer sequence (5’ to 3’) |
| NM\_007393 | *Actb* | Forward | GGCTGTATTCCCCTCCATCG |
|  |  | Reverse | CCAGTTGGTAACAATGCCATGT |
| NM\_015729 | *Aco* | Forward | TCCAGACTTCCAACATGAGGA |
|  |  | Reverse | CTGGGCGTAGGTGCCAATTA |
| NM\_009948 | *Cpt1* | Forward | ATTCTGTGCGGCCCTTATTGGAT |
|  |  | Reverse | TTTGCCTGGGATGCGTGTAGTGT |
| NM\_009949 | *Cpt2* | Forward | CCTGCTCGCTCAGGATAAACA |
|  |  | Reverse | GTGTCTTCAGAAACCGCACTG |
| NM\_007824 | *Cyp7a1* | Forward | GGGATTGCTGTGGTAGTGAGC |
|  |  | Reverse | GGTATGGAATCAACCCGTTGTC |
| NM\_007988 | *Fas* | Forward | CCTGGATAGCATTCCGAACCTG |
|  |  | Reverse | TTCACAGCCTGGGGTCATCTTTGC |
| NM\_000340 | *Glut2* | Forward | CTGGAGCCCTCTTGATGGGA |
|  |  | Reverse | CCAGTCCTGAAATTAGCCCACA |
| NM\_008194 | *GK* | Forward | ACATACCTGACAGGGCAAGG |
|  |  | Reverse | CGCCCTTAGTTGGTCAGAAG |
| NM\_008062 | *G6pdx* | Forward | TGGGTCCACCACTGCCACTTTTG |
|  |  | Reverse | ATTGGGCTGCACACGGATGACCA |
| AK079302 | *Hmgcr* | Forward | AGCTTGCCCGAATTGTATGTG |
|  |  | Reverse | TCTGTTGTGAACCATGTGACTTC |
| NM\_024172 | *Hsp70* | Forward | GAAGGTGCTGGACAAGTGC |
|  |  | Reverse | GCCAGCAGAGGCCTCTAATC |
| M29546 | *Me* | Forward | GAAAGAGGTGTTTGCCCATGA |
|  |  | Reverse | AATTGCAGCAACTCCTATGAGG |
| NM\_001111099 | *p21* | Forward | CCTGGTGATGTCCGACCTG |
|  |  | Reverse | CCATGAGCGCATCGCAATC |
| NM\_011144 | *Pparα* | Forward | AGAGCCCCATCTGTCCTCTC |
|  |  | Reverse | ACTGGTAGTCTGCAAAACCAAA |
| NM\_011480 | *Srebp1c* | Forward | GGAGACATCGCAAACAAGC |
|  |  | Reverse | TGAGGTTCCAAAGCAGACTG |

*Actb*, actin beta, cytoplasmic; *Aco*, acyl-Coenzyme A oxidase 1, palmitoyl; *Cpt1*, Carnitine palmitoyl transferase 1β; *Cpt2*, carnitine palmitoyltransferase 2; *Cyp7a1*, cytochrome P450, family 7, subfamily a, polypeptide 1; *Fas*, fatty acid synthase; *Glut2*, glucose transporter 2; *Gk*, glycerol kinase; *G6pdx*, glucose-6-phosphate dehydrogenase X-linked; *Hmgcr*, 3-hydroxy-3-methylglutaryl-Coenzyme A reductase; *Hsp70*, heat shock protein 70; *Me*, malic enzyme; *p21*, cyclin-dependent kinase inhibitor 1; *Pparα*, peroxisome proliferator activated receptor alpha; *Srebp1c*, sterol regulatory element binding factor 1.