

Table S1. List of food groups estimated from the Meal-based Diet History Questionnaire.

Tier 1 food group	Tier 2 food group
Rice	White rice; brown rice
Bread	White bread; wholegrain bread
Noodles	Wheat noodles; Chinese noodles; instant noodles; spaghetti; buckwheat noodles
Miso soup	---
Potatoes	---
Pulses and nuts	Soy milk; tofu (i.e., soybean curd); natto (i.e., fermented soybeans); tofu products; peanuts and nuts; all other pulses and nuts
Vegetables	Edamame (i.e., immature soybeans) and peas; seaweeds; pumpkins; mushrooms; cabbage; cucumbers; bitter melon; burdock; radishes; onions; Chinese cabbage; tomatoes; eggplants; carrots; green peppers; broccoli; green leafy vegetables; bean sprouts; lettuce; all other vegetables
Pickled vegetables	---
Fruits	Strawberries; persimmons; citrus; kiwi fruit; watermelon; pears; bananas; grapes; melon; peaches; apples; all other fruit
Fish and shellfish	Oily fish; red meat fish; squid and octopus; eel; shrimp and crab; shellfish; small fish with bones; fish eggs; dried fish; salmon; white meat fish; ground fish meat products; canned tuna; all other fish and shellfish
Meat	Liver; processed meat; beef; chicken; pork; all other meat
Eggs	---
Dairy products	Ice cream; cheese; low-fat milk; yogurt; full-fat milk; all other dairy products
Confectioneries	Candies, caramels, and chewing gum; Japanese bread with a sweet filling; snacks made from wheat flour; jellies; rice crackers; chocolates; biscuits and cookies; cakes; Japanese sweets
Fruit and vegetable juice	---
Alcoholic beverages	Beer; sake; shochu (i.e., Japanese distilled beverages); wine; whiskey and other spirits
Soft drinks	---
Green tea	---
Barley tea	---
Oolong tea	---
Black tea	---
Coffee	---
Water	---
Breakfast cereals	---
Seasonings ¹	Sugar added to coffee and tea; salt for cooking; vegetable oils; sugar for cooking; salt for soup; soy sauce; jam for bread; fat spread for bread; mayonnaise and dressing

¹ Not assessed in this study.

Table S2. Mean estimates of daily intakes of Tier 1 food groups (in grams per day) derived from the 4-day weighed dietary record (DR) and those derived from the web version of the Meal-based Diet History Questionnaire (MDHQ) in 111 Japanese women, according to meal type ¹.

Tier 1 food group	Breakfast		Lunch		Dinner		Snacks		Overall diet	
	DR	Web MDHQ	DR	Web MDHQ	DR	Web MDHQ	DR	Web MDHQ	DR	Web MDHQ
Rice ²	45 ± 61	47 ± 46	76 ± 51	78 ± 43	86 ± 57	85 ± 44	1 ± 4	0 ± 0*	208 ± 110	210 ± 85
Bread ²	24 ± 26	25 ± 22	9 ± 17	8 ± 11	1 ± 5	2 ± 6	1 ± 4	0 ± 0**	35 ± 30	35 ± 27
Noodles ²	2 ± 12	1 ± 3	54 ± 56	35 ± 32***	13 ± 24	20 ± 17**	0 ± 1	0 ± 0	69 ± 60	55 ± 36*
Miso soup ²	35 ± 58	46 ± 59**	17 ± 35	28 ± 43**	55 ± 57	68 ± 58**	0 ± 4	0 ± 0	108 ± 86	141 ± 100***
Potatoes ²	3 ± 5	5 ± 7**	10 ± 14	7 ± 7**	17 ± 17	15 ± 9	1 ± 4	0 ± 0*	32 ± 24	26 ± 17*
Pulses and nuts ²	17 ± 30	12 ± 13	11 ± 21	7 ± 7	26 ± 27	23 ± 14	5 ± 16	0 ± 0**	59 ± 55	42 ± 24***
Vegetables ²	28 ± 39	30 ± 32	59 ± 44	41 ± 32***	124 ± 59	99 ± 45***	2 ± 8	0 ± 0**	213 ± 108	169 ± 75***
Pickled vegetables ²	1 ± 4	3 ± 5***	2 ± 4	3 ± 5	3 ± 9	6 ± 7**	0 ± 0	0 ± 0	6 ± 12	12 ± 13***
Fruit	27 ± 36	19 ± 25**	15 ± 25	10 ± 14**	12 ± 20	16 ± 18*	14 ± 28	15 ± 24	67 ± 66	60 ± 49
Fish and shellfish ²	5 ± 11	3 ± 5**	12 ± 18	6 ± 7***	30 ± 22	22 ± 11***	0 ± 3	0 ± 0	48 ± 32	31 ± 17***
Meat ²	7 ± 10	7 ± 7	25 ± 19	15 ± 11***	52 ± 30	37 ± 15***	0 ± 2	0 ± 0*	84 ± 39	59 ± 24***
Eggs ²	13 ± 16	12 ± 11	12 ± 12	8 ± 7***	10 ± 10	7 ± 5**	1 ± 2	0 ± 0**	35 ± 22	27 ± 15***
Dairy products	64 ± 77	62 ± 53	21 ± 42	15 ± 22	9 ± 15	12 ± 18	37 ± 54	21 ± 31***	130 ± 115	111 ± 80*
Confectioneries	6 ± 14	6 ± 11	9 ± 15	7 ± 12	2 ± 6	4 ± 9	17 ± 18	45 ± 34***	34 ± 30	62 ± 44***
Fruit and vegetable juice	4 ± 20	8 ± 29	5 ± 22	5 ± 16	2 ± 9	4 ± 17**	6 ± 25	12 ± 39	17 ± 41	29 ± 59*
Alcoholic beverages ³	0 ± 0	0 ± 0**	1 ± 1	2 ± 12	73 ± 169	67 ± 151	18 ± 69	21 ± 67	92 ± 201	89 ± 188
Soft drinks	1 ± 8	6 ± 17*	6 ± 22	7 ± 20	3 ± 16	5 ± 18	33 ± 55	33 ± 58	43 ± 67	51 ± 95
Green tea	24 ± 55	48 ± 70***	42 ± 56	57 ± 71*	40 ± 73	52 ± 78	81 ± 155	109 ± 143	186 ± 253	267 ± 303**
Barley tea	28 ± 70	44 ± 65*	46 ± 75	68 ± 79**	55 ± 95	79 ± 86**	115 ± 208	140 ± 168	244 ± 375	331 ± 355**
Oolong tea	0 ± 2	5 ± 23*	5 ± 18	8 ± 32	6 ± 35	11 ± 39	12 ± 52	24 ± 85	23 ± 83	48 ± 150*
Black tea	13 ± 42	14 ± 39	9 ± 25	9 ± 27	3 ± 16	8 ± 30	25 ± 66	40 ± 86*	50 ± 102	71 ± 155*
Coffee	85 ± 95	118 ± 90***	29 ± 52	55 ± 65***	7 ± 21	22 ± 49***	116 ± 129	152 ± 144***	236 ± 202	346 ± 262***
Water	18 ± 36	73 ± 79***	10 ± 23	67 ± 84***	8 ± 21	61 ± 83***	156 ± 275	200 ± 197	191 ± 294	400 ± 390***
Breakfast cereals ⁴	1 ± 4	3 ± 9*	0 ± 2	0 ± 0	0 ± 3	0 ± 0	0 ± 0	0 ± 0	2 ± 5	3 ± 9

¹ Values are means ± standard deviations. The values derived from the MDHQ were compared with those derived from the DR using the paired *t*-test: * *p* < 0.05, ** *p* < 0.01, *** *p* < 0.001.

² Not assessed for snacks in the MDHQ; the intake for snacks was 0 g/day for all participants. ³ Not assessed for breakfast in the MDHQ; the intake for breakfast was 0 g/day for all participants. ⁴ Only assessed for breakfast in the MDHQ; the intake for all other eating occasions was 0 g/day for all participants.

Table S3. Mean estimates of daily intakes of Tier 1 food groups (in grams per day) derived from the 4-day weighed dietary record (DR) and those derived from the web version of the Meal-based Diet History Questionnaire (MDHQ) in 111 Japanese men, according to meal type ¹.

Tier 1 food group	Breakfast		Lunch		Dinner		Snacks		Overall diet	
	DR	Web MDHQ	DR	Web MDHQ	DR	Web MDHQ	DR	Web MDHQ	DR	Web MDHQ
Rice ²	62 ± 73	60 ± 62	122 ± 79	124 ± 67	138 ± 87	126 ± 61	0 ± 2	0 ± 0	322 ± 142	310 ± 103
Bread ²	24 ± 29	27 ± 29	9 ± 18	11 ± 20	1 ± 5	1 ± 4	2 ± 6	0 ± 0**	36 ± 34	40 ± 36
Noodles ²	4 ± 20	2 ± 5	81 ± 75	42 ± 40***	20 ± 36	27 ± 26	1 ± 4	0 ± 0	106 ± 82	70 ± 51***
Miso soup ²	44 ± 67	44 ± 61	14 ± 31	25 ± 42**	60 ± 68	64 ± 58	0 ± 0	0 ± 0	119 ± 102	133 ± 102
Potatoes ²	4 ± 8	4 ± 8	10 ± 14	5 ± 6***	22 ± 25	16 ± 9*	1 ± 2	0 ± 0**	36 ± 32	25 ± 17***
Pulses and nuts ²	15 ± 27	9 ± 12**	6 ± 15	5 ± 7	31 ± 27	20 ± 13***	1 ± 3	0 ± 0***	52 ± 48	34 ± 22***
Vegetables ²	31 ± 49	25 ± 31	56 ± 40	37 ± 33***	153 ± 77	107 ± 55***	2 ± 10	0 ± 0	241 ± 118	169 ± 84***
Pickled vegetables ²	1 ± 4	3 ± 6*	3 ± 5	4 ± 7*	3 ± 10	5 ± 7	0 ± 1	0 ± 0	8 ± 15	12 ± 13*
Fruit	23 ± 40	15 ± 25**	9 ± 21	7 ± 14	10 ± 16	12 ± 19	10 ± 34	12 ± 23	51 ± 62	46 ± 53
Fish and shellfish ²	5 ± 11	3 ± 5**	13 ± 16	10 ± 10	43 ± 33	28 ± 13***	1 ± 5	0 ± 0*	62 ± 40	41 ± 20***
Meat ²	11 ± 15	8 ± 8*	32 ± 22	22 ± 12***	72 ± 40	42 ± 15***	1 ± 2	0 ± 0**	115 ± 47	71 ± 25***
Eggs ²	17 ± 18	12 ± 13***	16 ± 16	10 ± 9***	11 ± 12	7 ± 5***	1 ± 2	0 ± 0**	45 ± 25	29 ± 17***
Dairy products	54 ± 85	42 ± 54	14 ± 38	10 ± 21	13 ± 30	7 ± 11*	26 ± 47	12 ± 26**	107 ± 122	71 ± 71***
Confectioneries	9 ± 18	5 ± 12**	7 ± 16	7 ± 14	3 ± 8	6 ± 15*	15 ± 21	40 ± 40***	35 ± 35	58 ± 52***
Fruit and vegetable juice	8 ± 34	18 ± 56*	4 ± 18	5 ± 20	4 ± 31	10 ± 41*	4 ± 27	9 ± 32	20 ± 68	41 ± 89***
Alcoholic beverages ³	1 ± 3	0 ± 0	10 ± 47	10 ± 37	175 ± 304	216 ± 321	77 ± 207	70 ± 153	262 ± 394	297 ± 385
Soft drinks	2 ± 13	6 ± 21	11 ± 45	9 ± 26	8 ± 55	7 ± 23	71 ± 140	52 ± 86	92 ± 193	73 ± 119
Green tea	30 ± 71	47 ± 72**	47 ± 70	67 ± 88*	30 ± 69	41 ± 75	96 ± 178	104 ± 169	204 ± 284	258 ± 328
Barley tea	23 ± 52	37 ± 69*	65 ± 118	67 ± 89	47 ± 86	62 ± 84	106 ± 219	131 ± 193	240 ± 354	296 ± 376
Oolong tea	2 ± 14	13 ± 45**	10 ± 39	15 ± 49	10 ± 52	17 ± 56	24 ± 111	36 ± 120	46 ± 193	81 ± 237
Black tea	3 ± 15	10 ± 41*	2 ± 11	7 ± 29*	2 ± 13	6 ± 31	16 ± 53	20 ± 73	24 ± 66	42 ± 141
Coffee	82 ± 98	110 ± 94***	27 ± 47	58 ± 81***	8 ± 28	18 ± 45**	163 ± 218	187 ± 192	280 ± 273	372 ± 297***
Water	18 ± 42	67 ± 86***	19 ± 43	85 ± 98***	12 ± 40	89 ± 98***	181 ± 397	200 ± 218	229 ± 426	441 ± 410***
Breakfast cereals ⁴	1 ± 5	2 ± 10	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	1 ± 5	2 ± 10

¹ Values are means ± standard deviations. The values derived from the MDHQ were compared with those derived from the DR using the paired *t*-test: * *p* < 0.05, ** *p* < 0.01, *** *p* < 0.001.

² Not assessed for snacks in the MDHQ; the intake for snacks was 0 g/day for all participants. ³ Not assessed for breakfast in the MDHQ; the intake for breakfast was 0 g/day for all participants. ⁴ Only assessed for breakfast in the MDHQ; the intake for all other eating occasions was 0 g/day for all participants.

Table S4. Bland–Altman analysis for estimates of daily intakes of Tier 1 food groups (in grams per day) derived from the 4-day weighed dietary record and those derived from the web version of the Meal-based Diet History Questionnaire (MDHQ) in 111 Japanese women, according to meal type ¹.

Tier 1 food group	Breakfast			Lunch			Dinner			Snacks			Overall diet		
	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias
Rice ²	1	-84, 87	-0.34***	2	-97, 102	-0.24*	-1	-92, 89	-0.30**	-1	-9, 7	---	2	-168, 172	-0.31***
Bread ²	1	-48, 50	-0.20	-1	-37, 35	-0.78***	0	-12, 13	0.40**	-1	-8, 6	---	-1	-67, 66	-0.20
Noodles ²	-1	-25, 22	-1.54***	-19	-118, 80	-0.74***	7	-47, 61	-0.60***	0	-3, 3	---	-14	-127, 100	-0.73***
Miso soup ²	11	-59, 81	0.02	10	-65, 85	0.27*	13	-82, 108	0.01	0	-7, 6	---	33	-116, 183	0.17*
Potatoes ²	2	-11, 15	0.34**	-4	-33, 25	-1.13***	-2	-37, 33	-0.97***	-1	-8, 6	---	-5	-55, 45	-0.51***
Pulses and nuts ²	-5	-59, 49	-1.05***	-4	-45, 38	-1.44***	-4	-58, 51	-0.99***	-5	-37, 27	---	-17	-116, 82	-1.04***
Vegetables ²	2	-65, 68	-0.25*	-19	-111, 74	-0.49***	-25	-150, 100	-0.42**	-2	-17, 13	---	-44	-255, 167	-0.53***
Pickled vegetables	2	-8, 12	0.54***	1	-12, 14	0.34	3	-18, 24	-0.38*	0	0, 0	---	5	-23, 33	0.12
Fruit	-8	-67, 51	-0.46***	-5	-42, 32	-0.66***	4	-36, 44	-0.17	1	-61, 64	-0.26	-8	-125, 110	-0.41***
Fish and shellfish ²	-2	-19, 15	-0.88***	-6	-38, 26	-1.11***	-8	-49, 33	-0.90***	0	-6, 5	---	-16	-73, 40	-0.85***
Meat ²	0	-20, 20	-0.60***	-10	-48, 29	-0.83***	-15	-77, 47	-1.13***	0	-4, 4	---	-25	-103, 54	-0.72***
Eggs ²	-1	-27, 25	-0.49***	-4	-27, 19	-0.83***	-3	-22, 16	-0.97***	-1	-5, 4	---	-9	-48, 30	-0.53***
Dairy products	-1	-126, 124	-0.48***	-6	-79, 67	-0.81***	3	-35, 41	0.29*	-16	-103, 72	-0.66***	-20	-190, 150	-0.44***
Confectioneries	0	-29, 29	-0.37**	-1	-33, 30	-0.35*	2	-19, 22	0.82***	28	-31, 87	0.78***	28	-51, 107	0.51***
Fruit and vegetable juice	4	-47, 55	0.45***	0	-32, 32	-0.36***	2	-16, 21	0.65***	6	-55, 67	0.55***	12	-90, 115	0.49***
Alcoholic beverages ³	0	-1, 1	---	1	-24, 26	1.98***	-6	-206, 193	-0.13*	3	-135, 140	-0.04	-3	-211, 205	-0.07
Soft drinks	5	-32, 41	1.31***	2	-40, 43	-0.15	2	-45, 50	0.23	0	-112, 112	0.07	8	-159, 176	0.46***
Green tea	25	-95, 144	0.31**	15	-114, 145	0.32**	12	-124, 148	0.08	28	-274, 330	-0.11	81	-410, 572	0.22*
Barley tea	16	-119, 151	-0.11	22	-111, 154	0.07	24	-146, 193	-0.12	25	-350, 400	-0.28*	87	-523, 696	-0.07
Oolong tea	4	-41, 50	1.98***	3	-55, 61	0.78***	5	-62, 72	0.12	12	-149, 174	0.71***	25	-231, 281	0.75***
Black tea	1	-60, 62	-0.08	0	-60, 60	0.12	5	-50, 60	0.86***	15	-127, 156	0.33***	21	-194, 235	0.47***
Coffee	33	-112, 178	-0.07	26	-90, 142	0.29**	15	-70, 99	1.02***	36	-174, 246	0.12	110	-229, 448	0.29***
Water	54	-97, 205	1.07***	57	-105, 219	1.55***	53	-112, 218	1.70***	45	-445, 535	-0.44***	209	-457, 876	0.36***
Breakfast cereals ⁴	2	-11, 15	0.80***	0	-4, 3	---	0	-5, 5	---	0	0, 0	---	1	-13, 15	0.67***

¹ Mean difference was calculated as mean of difference between the two methods (MDHQ minus DR). Limits of agreement were calculated as the mean difference \pm 1.96 standard deviation. Slope of bias (regression coefficient) was calculated by using a linear regression analysis, in which the difference between the two methods (MDHQ minus DR) was the dependent variable and the average of the two methods was the independent variable; positive values indicate that the difference increases as the average intake increases, while negative values indicate that the difference decreases as the average intake increases (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$). For the food groups the intake of which was not assessed in the MDHQ and thus the intake value was 0 g/day for all participants, the slope of bias was not calculated. ² Not assessed for snacks in the MDHQ. ³ Not assessed for breakfast in the MDHQ. ⁴ Only assessed for breakfast in the MDHQ.

Table S5. Bland–Altman analysis for estimates of daily intakes of Tier 1 food groups (in grams per day) derived from the 4-day weighed dietary record (DR) and those derived from the web version of the Meal-based Diet History Questionnaire (MDHQ) in 111 Japanese men, according to meal type ¹.

Tier 1 food group	Breakfast			Lunch			Dinner			Snacks			Overall diet		
	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias
Rice ²	−2	−98, 95	−0.18*	2	−131, 135	−0.21*	−12	−144, 120	−0.42***	0	−5, 4	---	−12	−240, 216	−0.40***
Bread ²	4	−40, 47	0.03	3	−43, 48	0.18	0	−12, 12	−0.16	−2	−14, 10	---	4	−62, 70	0.09
Noodles ²	−3	−38, 32	−1.41***	−39	−171, 94	−0.82***	6	−76, 89	−0.59***	−1	−9, 8	---	−36	−199, 128	−0.70***
Miso soup ²	0	−85, 86	−0.1	11	−70, 92	0.45***	4	−98, 105	−0.18*	0	0, 0	---	14	−164, 193	0.00
Potatoes ²	0	−17, 17	0.08	−6	−34, 22	−1.31***	−5	−55, 44	−1.38***	−1	−4, 3	---	−11	−76, 54	−0.96***
Pulses and nuts ²	−6	−50, 38	−0.92***	0	−29, 28	−1.09***	−11	−66, 43	−1.11***	−1	−8, 6	---	−19	−102, 65	−0.96***
Vegetables ²	−6	−84, 72	−0.55***	−19	−103, 65	−0.29*	−46	−208, 116	−0.53***	−2	−21, 17	---	−73	−297, 151	−0.47***
Pickled vegetables	1	−10, 13	0.57***	2	−13, 17	0.5**	2	−21, 24	−0.73***	0	−3, 2	---	4	−30, 39	−0.2
Fruit	−8	−60, 44	−0.52***	−2	−38, 34	−0.56***	3	−39, 44	0.20	2	−65, 69	−0.59***	−6	−105, 94	0.0002*
Fish and shellfish ²	−3	−20, 15	−0.99***	−3	−37, 31	−0.70***	−14	−79, 50	−1.30***	−1	−11, 9	---	−21	−100, 58	−1.03***
Meat ²	−3	−28, 22	−0.73***	−10	−53, 32	−0.82***	−30	−110, 50	−1.34***	−1	−5, 4	---	−44	−139, 51	−0.97***
Eggs ²	−5	−32, 22	−0.4***	−6	−35, 23	−0.80***	−4	−26, 18	−1.11***	−1	−5, 4	---	−15	−55, 24	−0.47***
Dairy products	−12	−140, 117	−0.53***	−4	−67, 59	−0.74***	−6	−68, 55	−1.45***	−14	−99, 72	−0.81***	−36	−220, 149	−0.63***
Confectioneries	−5	−40, 31	−0.6***	0	−35, 35	−0.23	3	−31, 37	1.08***	25	−51, 102	0.88***	24	−82, 129	0.59***
Fruit and vegetable juice	10	−71, 91	0.58***	1	−33, 35	0.14	6	−51, 63	0.33***	5	−71, 80	0.28	21	−106, 148	0.31***
Alcoholic beverages ³	−1	−7, 5	---	0	−78, 78	−0.31**	41	−407, 490	0.06	−6	−334, 321	−0.37**	35	−362, 431	−0.02
Soft drinks	3	−39, 45	0.74***	−2	−76, 73	−0.67***	−1	−117, 115	−1.36***	−19	−273, 234	−0.66***	−18	−350, 314	−0.63***
Green tea	17	−95, 129	0.02	20	−167, 206	0.34*	10	−147, 168	0.12	7	−368, 383	−0.07	54	−534, 643	0.19
Barley tea	14	−125, 153	0.43**	2	−221, 225	−0.39**	15	−167, 196	−0.05	25	−366, 416	−0.16	56	−584, 696	0.08
Oolong tea	10	−69, 89	1.3***	6	−84, 96	0.29*	7	−87, 100	0.08	12	−232, 255	0.11	35	−366, 435	0.26*
Black tea	6	−58, 70	1.06***	5	−43, 52	1.08***	3	−51, 58	1.04***	4	−148, 157	0.51***	19	−232, 269	0.97***
Coffee	27	−130, 184	−0.05	31	−94, 156	0.64***	10	−68, 88	0.61***	23	−302, 348	−0.15	92	−313, 498	0.10
Water	49	−129, 227	1.1***	66	−127, 259	1.18***	77	−121, 274	1.31***	20	−725, 764	−0.83***	212	−624, 1047	−0.05
Breakfast cereals ⁴	1	−13, 15	0.79***	0	0, 0	---	0	0, 0	---	0	0, 0	---	1	−13, 15	0.79***

¹ Mean difference was calculated as mean of difference between the two methods (MDHQ minus DR). Limits of agreement were calculated as the mean difference \pm 1.96 standard deviation. Slope of bias (regression coefficient) was calculated by using a linear regression analysis, in which the difference between the two methods (MDHQ minus DR) was the dependent variable and the average of the two methods was the independent variable; positive values indicate that the difference increases as the average intake increases, while negative values indicate that the difference decreases as the average intake increases (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$). For the food groups the intake of which was not assessed in the MDHQ and thus the intake value was 0 g/day for all participants, the slope of bias was not calculated. ² Not assessed for snacks in the MDHQ. ³ Not assessed for breakfast in the MDHQ. ⁴ Only assessed for breakfast in the MDHQ.

Table S6. Mean estimates of overall intakes of Tier 2 food groups (in grams per day) derived from the 4-day weighed dietary record (DR) and those derived from the web version of the Meal-based Diet History Questionnaire (MDHQ) and Bland–Altman analysis for these estimates in 111 Japanese women and 111 Japanese men ¹.

Tier 2 food group	Women					Men				
	DR	Web MDHQ	Bland–Altman analysis ²			DR	Web MDHQ	Bland–Altman analysis ²		
			Mean difference	Limits of agreement	Slope of bias			Mean difference	Limits of agreement	Slope of bias
Rice										
White rice	206 ± 110	202 ± 84	−4	−179, 171	−0.34***	320 ± 144	293 ± 106*	−27	−265, 211	−0.39***
Brown rice	3 ± 18	8 ± 19**	6	−31, 42	0.10	2 ± 14	17 ± 44***	15	−62, 92	1.31***
Bread										
White bread	35 ± 31	29 ± 24	−6	−69, 58	−0.37**	35 ± 34	35 ± 32	0	−65, 64	−0.09
Wholegrain bread	1 ± 5	6 ± 9***	5	−12, 22	0.86***	1 ± 5	5 ± 9***	5	−15, 24	1.06***
Noodles										
Wheat noodles	17 ± 34	33 ± 24***	16	−61, 93	−0.60***	26 ± 51	35 ± 27	9	−97, 115	−1.03***
Chinese noodles	18 ± 36	10 ± 12*	−8	−76, 59	−1.33***	26 ± 45	20 ± 32	−6	−109, 97	−0.60***
Instant noodles	13 ± 27	2 ± 6***	−10	−58, 38	−1.50***	30 ± 51	4 ± 9***	−26	−120, 68	−1.63***
Spaghetti	15 ± 23	7 ± 9***	−9	−54, 36	−1.26***	16 ± 31	7 ± 12***	−10	−67, 47	−1.18***
Buckwheat noodles	6 ± 19	4 ± 7	−2	−38, 34	−1.26***	8 ± 23	4 ± 7	−4	−48, 41	−1.47***
Pulses and nuts										
Soy milk	14 ± 41	1 ± 2***	−13	−91, 65	−1.90***	3 ± 14	0 ± 1	−2	−30, 25	−1.93***
Tofu (i.e., soybean curd)	25 ± 26	31 ± 19*	6	−51, 63	−0.47**	31 ± 38	25 ± 18	−5	−74, 64	−0.99***
Natto (i.e., fermented soybeans)	8 ± 11	6 ± 6**	−2	−19, 14	−0.64***	6 ± 11	5 ± 7*	−2	−19, 15	−0.54***
Tofu products	4 ± 8	4 ± 4	0	−15, 14	−1.03***	6 ± 11	3 ± 4**	−3	−25, 18	−1.47***
Peanuts and nuts	5 ± 12	0 ± 1***	−5	−29, 19	−1.97***	5 ± 9	0 ± 1***	−4	−22, 13	−1.88***
All other pulses and nuts	2 ± 5	0 ± 0***	−2	−12, 8	−1.94***	2 ± 5	1 ± 1*	−1	−12, 9	−1.84***
Vegetables										
Edamame (i.e., immature soybeans) and peas	3 ± 8	1 ± 2	−1	−18, 15	−1.76***	2 ± 6	2 ± 2	−1	−12, 10	−1.26***
Seaweeds	6 ± 7	6 ± 5	−1	−17, 15	−0.55***	7 ± 11	6 ± 7	−1	−25, 24	−0.82***
Pumpkins	7 ± 11	4 ± 4**	−3	−23, 17	−1.18***	7 ± 13	3 ± 4***	−4	−27, 19	−1.31***
Mushrooms	13 ± 14	9 ± 7**	−4	−30, 22	−1.00***	13 ± 13	8 ± 9***	−6	−31, 20	−0.57***
Cabbage	26 ± 25	18 ± 13***	−9	−61, 44	−0.99***	35 ± 29	21 ± 19***	−13	−73, 46	−0.63***
Cucumbers	13 ± 13	12 ± 8	−1	−31, 29	−0.86***	12 ± 13	11 ± 9	−1	−28, 26	−0.53***
Bitter melon	2 ± 7	1 ± 1**	−2	−14, 10	−1.58***	2 ± 6	1 ± 2*	−1	−12, 9	−1.40***
Burdock	2 ± 5	1 ± 1***	−2	−11, 7	−1.75***	4 ± 6	1 ± 1***	−3	−16, 9	−1.92***
Radishes	12 ± 15	8 ± 9*	−3	−32, 25	−0.73***	12 ± 15	9 ± 10	−3	−38, 32	−0.81***
Onions	27 ± 21	27 ± 17	−1	−47, 46	−0.29***	33 ± 37	28 ± 20	−5	−79, 69	−0.92***
Chinese cabbage	3 ± 6	1 ± 3	−1	−14, 12	−1.28***	3 ± 8	2 ± 5	−1	−17, 16	−0.80***
Tomatoes	16 ± 20	25 ± 18***	9	−36, 54	−0.18	18 ± 38	24 ± 22	6	−73, 85	−0.87***
Eggplants	10 ± 19	9 ± 7	−1	−35, 33	−1.20***	11 ± 23	8 ± 7	−4	−48, 41	−1.48***
Carrots	13 ± 14	15 ± 11	2	−25, 29	−0.32*	14 ± 15	16 ± 14	2	−29, 32	−0.08
Green peppers	5 ± 8	4 ± 3	−1	−16, 14	−1.14***	7 ± 10	3 ± 3***	−4	−23, 15	−1.39***
Broccoli	4 ± 9	3 ± 3	−2	−18, 15	−1.24***	5 ± 9	2 ± 3**	−2	−18, 14	−1.19***

Table S6. Continued

Tier 2 food group	Women					Men				
	DR	Web MDHQ	Bland–Altman analysis ²			DR	Web MDHQ	Bland–Altman analysis ²		
			Mean difference	Limits of agreement	Slope of bias			Mean difference	Limits of agreement	Slope of bias
Green leafy vegetables	14 ± 19	16 ± 13	2	–41, 44	–0.64***	14 ± 15	12 ± 12	–1	–37, 34	–0.32
Bean sprouts	10 ± 13	4 ± 4***	–6	–32, 19	–1.53***	12 ± 16	4 ± 5***	–8	–36, 20	–1.34***
Lettuce	7 ± 9	5 ± 5*	–2	–20, 16	–0.91***	8 ± 18	5 ± 6	–3	–35, 30	–1.32***
All other vegetables	19 ± 19	1 ± 1***	–18	–55, 19	–1.97***	22 ± 21	2 ± 2***	–20	–62, 21	–2.02***
Fruit										
Strawberries	0 ± 0	0 ± 1*	0	–2, 3	1.94***	0 ± 0	0 ± 2*	0	–3, 4	1.88***
Persimmons	0 ± 2	0 ± 1	0	–5, 5	–0.60**	1 ± 4	0 ± 0	–1	–8, 7	–1.85***
Citrus	5 ± 13	10 ± 19*	4	–39, 48	0.70***	3 ± 10	7 ± 16*	4	–30, 39	0.83***
Kiwi fruit	2 ± 6	1 ± 3	–1	–9, 8	–0.88***	2 ± 6	1 ± 2*	–1	–10, 8	–1.24***
Watermelon	2 ± 10	1 ± 3	–1	–21, 19	–1.76***	1 ± 6	1 ± 2	0	–13, 12	–1.72***
Pears	11 ± 20	6 ± 10*	–5	–44, 35	–0.94***	10 ± 22	5 ± 10**	–6	–46, 35	–1.05***
Bananas	12 ± 21	17 ± 27*	5	–43, 53	0.33**	12 ± 26	14 ± 29	2	–49, 54	0.16
Grapes	15 ± 31	6 ± 10**	–9	–64, 46	–1.30***	12 ± 32	3 ± 7**	–8	–65, 48	–1.50***
Melon	2 ± 15	1 ± 3	–1	–30, 28	–1.81***	0 ± 1	1 ± 2**	1	–4, 5	0.61***
Peaches	2 ± 9	3 ± 7	1	–18, 20	–0.48**	2 ± 11	1 ± 2	–1	–21, 19	–1.70***
Apples	6 ± 15	6 ± 14	1	–22, 24	–0.07	4 ± 13	7 ± 18*	3	–25, 30	0.35***
All other fruit	10 ± 30	1 ± 1**	–9	–68, 50	–2.00***	4 ± 10	2 ± 4**	–3	–25, 19	–1.54***
Fish and shellfish										
Oily fish	12 ± 20	7 ± 7**	–5	–39, 30	–1.18***	14 ± 19	9 ± 8**	–5	–43, 33	–1.22***
Red meat fish	5 ± 8	5 ± 5	0	–17, 18	–0.86***	5 ± 10	7 ± 6	2	–21, 24	–0.77***
Squid and octopus	3 ± 5	1 ± 2*	–1	–11, 9	–1.20***	4 ± 7	2 ± 3**	–2	–15, 11	–1.24***
Eel	0 ± 2	0 ± 0	0	–4, 3	–1.92***	1 ± 4	0 ± 1	–1	–9, 7	–1.98***
Shrimp and crab	3 ± 5	1 ± 2**	–1	–12, 9	–1.60***	4 ± 7	2 ± 3**	–2	–17, 13	–1.49***
Shellfish	1 ± 3	1 ± 1	0	–7, 6	–1.24***	1 ± 3	1 ± 2	0	–7, 7	–0.94***
Small fish with bones	1 ± 2	0 ± 1	0	–3, 3	–1.21***	1 ± 3	0 ± 1	0	–5, 5	–1.70***
Fish eggs	1 ± 2	0 ± 0**	–1	–5, 4	–1.70***	1 ± 3	0 ± 0**	–1	–7, 5	–1.96***
Dried fish	4 ± 10	2 ± 2*	–2	–22, 18	–1.73***	5 ± 13	2 ± 4*	–3	–28, 22	–1.62***
Salmon	8 ± 11	4 ± 4***	–4	–27, 19	–1.40***	9 ± 13	6 ± 7*	–4	–33, 26	–1.24***
White meat fish	5 ± 11	4 ± 5	–2	–24, 20	–1.24***	7 ± 13	5 ± 6	–1	–28, 25	–1.22***
Ground fish meat products	5 ± 7	5 ± 5	0	–15, 16	–0.71***	8 ± 14	5 ± 6*	–3	–32, 26	–1.27***
Canned tuna	2 ± 3	1 ± 1**	–1	–7, 5	–1.33***	2 ± 4	1 ± 2*	–1	–10, 8	–1.09***
All other fish and shellfish	0 ± 0	0 ± 0	0	0, 0	–1.73***	0 ± 1	0 ± 0	0	–2, 2	–1.99***
Meat										
Beef	13 ± 17	7 ± 6***	–5	–38, 27	–1.33***	17 ± 22	10 ± 8**	–7	–49, 35	–1.35***
Chicken	30 ± 26	16 ± 10***	–14	–66, 37	–1.31***	46 ± 39	19 ± 11***	–26	–104, 51	–1.64***
Processed meat	10 ± 10	10 ± 8	0	–20, 20	–0.36**	13 ± 13	13 ± 11	0	–29, 29	–0.30*
Pork	30 ± 25	26 ± 14	–4	–56, 48	–0.95***	39 ± 27	29 ± 14***	–10	–70, 50	–1.14***

Table S6. Continued

Tier 2 food group	Women					Men				
	DR	Web MDHQ	Bland–Altman analysis ²			DR	Web MDHQ	Bland–Altman analysis ²		
			Mean difference	Limits of agreement	Slope of bias			Mean difference	Limits of agreement	Slope of bias
Liver	0 ± 2	0 ± 0	0	–5, 5	–1.92***	1 ± 4	0 ± 0	0	–8, 7	–1.95***
All other meat	0 ± 1	0 ± 0	0	–3, 3	–2.00***	0 ± 3	0 ± 0	0	–5, 5	–2.00***
Dairy products										
Ice cream	6 ± 13	6 ± 15	0	–34, 34	0.24	6 ± 14	5 ± 11	–1	–35, 34	–0.38*
Cheese	5 ± 7	5 ± 10	0	–23, 23	0.79***	5 ± 7	4 ± 14	–1	–31, 30	1.23***
Low-fat milk	10 ± 35	5 ± 16	–6	–64, 53	–0.95***	18 ± 77	7 ± 27	–11	–127, 105	–1.06***
Yogurt	67 ± 93	38 ± 54***	–29	–174, 115	–0.65***	53 ± 85	28 ± 52***	–25	–147, 97	–0.57***
Full-fat milk	38 ± 56	56 ± 57**	18	–98, 133	0.03	20 ± 42	25 ± 41	5	–66, 77	–0.04
All other dairy products	4 ± 11	1 ± 4*	–3	–25, 19	–1.32***	5 ± 20	2 ± 7	–3	–43, 36	–1.39***
Confectioneries										
Candies, caramels, and chewing gum	0 ± 2	1 ± 2	0	–4, 4	–0.04	0 ± 1	1 ± 2**	1	–4, 6	1.54***
Japanese bread with a sweet filling	3 ± 9	7 ± 10***	4	–20, 28	0.15	8 ± 15	7 ± 15	–1	–38, 36	0.09
Snacks made from wheat flour	1 ± 4	4 ± 8***	3	–12, 18	1.01***	2 ± 8	4 ± 7**	3	–15, 20	–0.19
Jellies	4 ± 11	1 ± 1***	–3	–24, 17	–1.85***	4 ± 14	1 ± 2**	–4	–31, 24	–1.91***
Rice crackers	2 ± 5	8 ± 11***	6	–14, 26	1.12***	1 ± 4	9 ± 13***	7	–18, 32	1.55***
Chocolates	4 ± 6	12 ± 15***	8	–20, 36	1.13***	3 ± 5	10 ± 16***	7	–21, 36	1.33***
Biscuits and cookies	2 ± 4	4 ± 6***	2	–10, 14	0.39*	1 ± 3	2 ± 4	1	–8, 10	0.18
Cakes	9 ± 17	16 ± 16***	7	–34, 47	–0.05	8 ± 17	14 ± 17**	6	–31, 43	0.06
Japanese sweets	8 ± 14	10 ± 12	1	–31, 34	–0.25	7 ± 16	11 ± 20	3	–44, 50	0.38*
Alcoholic beverages										
Beer	55 ± 140	61 ± 149	5	–135, 146	0.07	174 ± 329	207 ± 332*	33	–288, 355	0.01
Sake	1 ± 9	2 ± 14	1	–11, 13	0.38***	8 ± 35	10 ± 39	3	–63, 68	0.12
Shochu (i.e., Japanese distilled beverages)	23 ± 69	20 ± 63	–4	–112, 104	–0.10	65 ± 153	64 ± 112	–1	–252, 250	–0.39***
Wine	10 ± 61	6 ± 20	–3	–101, 94	–1.16***	6 ± 32	9 ± 51	3	–99, 105	0.69***
Whiskey and other spirits	0 ± 0	0 ± 3	0	–6, 7	2.00***	6 ± 27	6 ± 30	0	–50, 49	0.11

¹ Values are means ± standard deviations. The values derived from the MDHQ were compared with those derived from the DR using the paired *t*-test: * *p* < 0.05, ** *p* < 0.01, *** *p* < 0.001. ² Mean difference was calculated as mean of difference between the two methods (MDHQ minus DR). Limits of agreement were calculated as the mean difference ± 1.96 standard deviation. Slope of bias (regression coefficient) was calculated by using a linear regression analysis, in which the difference between the two methods (MDHQ minus DR) was the dependent variable and the average of the two methods was the independent variable; positive values indicate that the difference increases as the average intake increases, while negative values indicate that the difference decreases as the average intake increases (* *p* < 0.05, ** *p* < 0.01, *** *p* < 0.001).

Table S7. Median estimates of daily intakes of Tier 1 food groups (in grams per day) derived from the paper version of the Meal-based Diet History Questionnaire (MDHQ) in 111 Japanese women and 111 Japanese men, according to meal type ¹.

Tier 1 food group	Women					Men				
	Breakfast	Lunch	Dinner	Snacks	Overall diet	Breakfast	Lunch	Dinner	Snacks	Overall diet
Rice ²	35 (0, 89)	82 (41, 104)	97 (39, 116)	0 (0, 0)**	220 (155, 258)	48 (11, 121)	122 (86, 173)	140 (83, 171)*	0 (0, 0)*	317 (255, 383)
Bread ²	19 (5, 45)	10 (0, 20)*	0 (0, 0)	0 (0, 0)**	38 (15, 56)	12 (0, 46)	6 (0, 13)*	0 (0, 0)	0 (0, 0)***	30 (11, 64)
Noodles ²	0 (0, 0)	25 (13, 50)*	10 (10, 21)*	0 (0, 0)	46 (29, 78)	0 (0, 0)	26 (13, 53)***	22 (0, 25)	0 (0, 0)	51 (34, 92)***
Miso soup ²	13 (0, 100)***	12 (0, 71)***	75 (13, 123)***	0 (0, 0)	140 (75, 217)***	13 (0, 100)	11 (0, 67)***	52 (13, 127)**	0 (0, 0)	146 (63, 231)***
Potatoes ²	3 (0, 6)*	5 (3, 6)*	14 (7, 21)	0 (0, 0)***	21 (13, 28)**	0 (0, 6)	3 (0, 5)***	8 (8, 17)**	0 (0, 0)***	19 (9, 28)***
Pulses and nuts ²	11 (0, 22)	6 (3, 11)	16 (8, 30)	0 (0, 0)***	39 (21, 58)*	3 (0, 16)*	3 (0, 11)	18 (9, 28)**	0 (0, 0)***	31 (18, 52)***
Vegetables ²	24 (6, 59)*	40 (13, 66)**	117 (75, 138)***	0 (0, 0)***	171 (122, 237)***	12 (0, 46)	40 (7, 64)***	116 (69, 154)***	0 (0, 0)***	177 (103, 240)***
Pickled vegetables ²	0 (0, 7)***	0 (0, 3)*	2 (0, 7)***	0 (0, 0)	5 (0, 13)***	0 (0, 4)***	2 (0, 9)**	3 (0, 10)***	0 (0, 0)	12 (2, 21)***
Fruit	11 (0, 34)	5 (0, 20)	6 (0, 23)**	12 (0, 25)***	62 (23, 102)	6 (0, 23)*	0 (0, 5)	6 (0, 22)	8 (0, 30)***	30 (12, 86)
Fish and shellfish ²	2 (0, 4)	6 (3, 13)**	19 (10, 27)***	0 (0, 0)**	29 (19, 40)***	2 (0, 5)	7 (4, 14)	26 (13, 37)***	0 (0, 0)**	40 (27, 55)***
Meat ²	7 (2, 13)	16 (10, 22)***	34 (25, 43)***	0 (0, 0)**	59 (43, 73)***	8 (2, 12)	21 (14, 30)***	41 (31, 53)***	0 (0, 0)**	72 (56, 88)***
Eggs ²	12 (0, 22)	8 (4, 12)*	7 (4, 10)*	0 (0, 0)***	28 (15, 38)**	12 (3, 25)	9 (2, 14)***	8 (4, 11)*	0 (0, 0)***	31 (17, 45)***
Dairy products	57 (18, 123)	6 (0, 24)	6 (0, 22)*	13 (0, 40)	112 (63, 180)	10 (0, 111)	0 (0, 7)	5 (0, 11)	0 (0, 13)**	43 (14, 134)***
Confectioneries	0 (0, 14)	4 (0, 8)	0 (0, 4)**	36 (18, 64)***	58 (32, 88)***	0 (0, 5)	0 (0, 5)	0 (0, 4)	23 (4, 54)***	39 (14, 73)***
Fruit and vegetable juice	0 (0, 0)*	0 (0, 0)	0 (0, 0)*	0 (0, 21)***	0 (0, 42)***	0 (0, 0)***	0 (0, 0)	0 (0, 0)*	0 (0, 18)***	0 (0, 52)***
Alcoholic beverages ³	0 (0, 0)***	0 (0, 0)***	0 (0, 43)**	0 (0, 0)	0 (0, 70)**	0 (0, 0)***	0 (0, 0)*	66 (0, 251)	0 (0, 75)	132 (0, 377)
Soft drinks	0 (0, 0)***	0 (0, 0)	0 (0, 0)	8 (0, 34)	16 (0, 48)	0 (0, 0)**	0 (0, 11)	0 (0, 0)*	12 (0, 61)	22 (0, 103)
Green tea	0 (0, 51)**	14 (0, 84)	0 (0, 84)	36 (0, 153)	94 (0, 375)	0 (0, 52)*	15 (0, 101)	0 (0, 56)	29 (0, 185)*	146 (0, 417)*
Barley tea	0 (0, 105)***	57 (0, 165)***	56 (0, 168)***	97 (0, 271)***	266 (0, 677)***	0 (0, 49)***	17 (0, 101)	0 (0, 146)***	31 (0, 222)***	146 (0, 528)***
Oolong tea	0 (0, 0)**	0 (0, 0)*	0 (0, 0)	0 (0, 0)***	0 (0, 15)***	0 (0, 0)***	0 (0, 0)	0 (0, 0)	0 (0, 17)**	0 (0, 17)***
Black tea	0 (0, 0)	0 (0, 0)	0 (0, 0)*	0 (0, 40)**	13 (0, 79)**	0 (0, 0)***	0 (0, 0)**	0 (0, 0)	0 (0, 16)*	0 (0, 17)**
Coffee	148 (15, 205)***	25 (0, 80)***	0 (0, 0)*	128 (49, 261)***	333 (171, 475)***	122 (0, 208)***	15 (0, 119)***	0 (0, 0)**	144 (15, 363)***	298 (137, 626)***
Water	26 (0, 171)***	28 (0, 117)***	28 (0, 174)***	156 (24, 355)***	366 (73, 619)***	0 (0, 170)***	17 (0, 153)***	15 (0, 188)***	106 (15, 309)***	272 (15, 652)***
Breakfast cereals ⁴	0 (0, 0)***	0 (0, 0)	0 (0, 0)	0 (0, 0)	0 (0, 0)**	0 (0, 0)**	0 (0, 0)	0 (0, 0)	0 (0, 0)	0 (0, 0)**

¹ Values are medians (25th and 75th percentiles). The values derived from the MDHQ were compared with those derived from the DR (shown in Table 2 for women and Table 3 for men) using the Wilcoxon signed-rank test: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. ² Not assessed for snacks in the MDHQ; the intake for snacks was 0 g/day for all participants. ³ Not assessed for breakfast in the MDHQ; the intake for breakfast was 0 g/day for all participants. ⁴ Only assessed for breakfast in the MDHQ; the intake for all other eating occasions was 0 g/day for all participants.

Table S8. Mean estimates of daily intakes of Tier 1 food groups (in grams per day) derived from the paper version of the Meal-based Diet History Questionnaire (MDHQ) in 111 Japanese women and 111 Japanese men, according to meal type ¹.

Tier 1 food group	Women					Men				
	Breakfast	Lunch	Dinner	Snacks	Overall diet	Breakfast	Lunch	Dinner	Snacks	Overall diet
Rice ²	46 ± 44	78 ± 38	84 ± 44	0 ± 0*	209 ± 81	64 ± 61	125 ± 59	124 ± 64*	0 ± 0	313 ± 104
Bread ²	25 ± 22	11 ± 12	1 ± 3	0 ± 0**	38 ± 25	25 ± 27	12 ± 17	1 ± 2	0 ± 0**	37 ± 32
Noodles ²	2 ± 6	39 ± 32**	17 ± 15	0 ± 0	58 ± 38	3 ± 7	38 ± 34***	21 ± 19	0 ± 0	62 ± 41***
Miso soup ²	50 ± 60***	36 ± 48***	70 ± 56***	0 ± 0	156 ± 106***	51 ± 62	32 ± 45***	70 ± 59*	0 ± 0	152 ± 110***
Potatoes ²	4 ± 6	5 ± 5***	14 ± 8*	0 ± 0*	23 ± 14***	4 ± 6	5 ± 5***	13 ± 9***	0 ± 0**	22 ± 16***
Pulses and nuts ²	13 ± 13	8 ± 9	21 ± 13	0 ± 0**	42 ± 26***	10 ± 13*	6 ± 7	21 ± 14***	0 ± 0***	36 ± 24***
Vegetables ²	33 ± 30	43 ± 31***	101 ± 43***	0 ± 0**	177 ± 80***	26 ± 29	39 ± 31***	105 ± 52***	0 ± 0	170 ± 87***
Pickled vegetables ²	3 ± 5***	3 ± 5	4 ± 5	0 ± 0	10 ± 13**	3 ± 6***	5 ± 6***	6 ± 6	0 ± 0	14 ± 14***
Fruit	21 ± 25*	11 ± 14	15 ± 19	20 ± 25**	67 ± 55	16 ± 23**	7 ± 11	13 ± 17	17 ± 23**	52 ± 49
Fish and shellfish ²	3 ± 5	8 ± 7**	21 ± 12***	0 ± 0	32 ± 18***	4 ± 5	10 ± 8*	27 ± 13***	0 ± 0*	41 ± 20***
Meat ²	7 ± 7	16 ± 11***	35 ± 14***	0 ± 0*	58 ± 23***	9 ± 8	22 ± 12***	42 ± 15***	0 ± 0**	73 ± 24***
Eggs ²	13 ± 11	9 ± 6**	7 ± 5**	0 ± 0**	29 ± 15***	15 ± 14	10 ± 8***	8 ± 6**	0 ± 0**	33 ± 19***
Dairy products	67 ± 49	19 ± 25	12 ± 15	28 ± 39*	126 ± 89	43 ± 53	10 ± 19	10 ± 15	13 ± 27**	76 ± 77***
Confectioneries	7 ± 12	8 ± 13	4 ± 8*	44 ± 32***	64 ± 45***	6 ± 14	5 ± 10	4 ± 10	32 ± 32***	48 ± 42**
Fruit and vegetable juice	9 ± 25*	5 ± 14	4 ± 15*	15 ± 30**	33 ± 58**	16 ± 49*	7 ± 22	7 ± 32*	21 ± 47***	50 ± 87***
Alcoholic beverages ³	0 ± 0**	1 ± 9	54 ± 125*	22 ± 77	77 ± 165	0 ± 0	10 ± 33	177 ± 255	81 ± 168	268 ± 353
Soft drinks	6 ± 19**	6 ± 18	4 ± 16	25 ± 40	41 ± 75	7 ± 22*	13 ± 32	8 ± 23	52 ± 85	80 ± 126
Green tea	40 ± 64**	49 ± 66	49 ± 74	100 ± 142	238 ± 301*	37 ± 65	58 ± 77	37 ± 68	117 ± 162	249 ± 310
Barley tea	51 ± 68***	76 ± 78***	79 ± 83**	160 ± 174**	365 ± 362***	37 ± 65**	65 ± 84	66 ± 86*	139 ± 188*	306 ± 359**
Oolong tea	7 ± 29*	13 ± 41*	10 ± 34	29 ± 80**	59 ± 163**	12 ± 38**	12 ± 41	15 ± 49	45 ± 126*	83 ± 236*
Black tea	16 ± 42	12 ± 34	6 ± 23*	39 ± 74*	74 ± 146**	11 ± 37**	7 ± 27*	4 ± 24	29 ± 92	51 ± 157*
Coffee	119 ± 88***	54 ± 65***	16 ± 43*	170 ± 152***	359 ± 263***	110 ± 91***	62 ± 79***	19 ± 47**	207 ± 200**	398 ± 324***
Water	73 ± 78***	66 ± 79***	69 ± 83***	208 ± 193*	416 ± 377***	58 ± 81***	71 ± 89***	78 ± 91***	197 ± 219	404 ± 411***
Breakfast cereals ⁴	3 ± 10***	0 ± 0	0 ± 0	0 ± 0	3 ± 10*	3 ± 11*	0 ± 0	0 ± 0	0 ± 0	3 ± 11*

¹ Values are means ± standard deviations. The values derived from the MDHQ were compared with those derived from the DR (shown in Table S2 for women and Table S3 for men) using the paired *t*-test: * *p* <0.05, ** *p* <0.01, *** *p* <0.001. ² Not assessed for snacks in the MDHQ; the intake for snacks was 0 g/day for all participants. ³ Not assessed for breakfast in the MDHQ; the intake for breakfast was 0 g/day for all participants. ⁴ Only assessed for breakfast in the MDHQ; the intake for all other eating occasions was 0 g/day for all participants.

Table S9. Spearman correlation coefficients between estimates of daily intakes of Tier 1 food groups (in grams per day) derived from the 4-day weighed dietary record and those derived from the paper version of the Meal-based Diet History Questionnaire (MDHQ) in 111 Japanese women and 111 Japanese men, according to meal type ¹.

Tier 1 food group	Women					Men				
	Breakfast	Lunch	Dinner	Snacks	Overall diet	Breakfast	Lunch	Dinner	Snacks	Overall diet
Rice ²	0.84***	0.49***	0.65***	—	0.65***	0.81***	0.64***	0.63***	—	0.55***
Bread ²	0.66***	0.31***	0.13	—	0.61***	0.74***	0.64***	0.29**	—	0.63***
Noodles ²	0.22*	0.42***	0.23*	—	0.28**	0.42***	0.48***	0.12	—	0.31**
Miso soup ²	0.79***	0.41***	0.78***	—	0.70***	0.77***	0.37***	0.76***	—	0.73***
Potatoes ²	0.43***	0.12	0.14	—	0.17	0.41***	0.23*	0.08	—	0.22*
Pulses and nuts ²	0.65***	0.40***	0.13	—	0.49***	0.70***	0.22*	0.27**	—	0.46***
Vegetables ²	0.69***	0.36***	0.29**	—	0.43***	0.67***	0.44***	0.24*	—	0.48***
Pickled vegetables ²	0.42***	0.35***	0.20*	—	0.43***	0.30**	0.28**	0.20*	—	0.34***
Fruit	0.66***	0.53***	0.46***	0.45***	0.70***	0.65***	0.34***	0.27**	0.39***	0.64***
Fish and shellfish ²	0.57***	0.34***	0.27**	—	0.32***	0.39***	0.24*	0.20*	—	0.33***
Meat ²	0.58***	0.37***	0.27**	—	0.34***	0.53***	0.39***	0.17	—	0.26**
Eggs ²	0.50***	0.25**	0.30**	—	0.42***	0.70***	0.48***	0.39***	—	0.59***
Dairy products	0.77***	0.22*	0.33***	0.54***	0.69***	0.69***	0.31***	0.38***	0.23*	0.70***
Confectioneries	0.30**	0.25**	0.37***	0.50***	0.46***	0.39***	0.40***	0.02	0.53***	0.52***
Fruit and vegetable juice	0.36***	0.17	0.37***	0.35***	0.49***	0.58***	0.32***	0.25**	0.29**	0.47***
Alcoholic beverages ³	—	0.04	0.73***	0.48***	0.76***	—	0.08	0.73***	0.64***	0.83***
Soft drinks	-0.03	0.32***	0.07	0.38***	0.44***	0.19*	0.12	0.22*	0.45***	0.43***
Green tea	0.57***	0.58***	0.57***	0.53***	0.70***	0.65***	0.51***	0.53***	0.65***	0.70***
Barley tea	0.63***	0.67***	0.73***	0.71***	0.79***	0.66***	0.58***	0.68***	0.63***	0.73***
Oolong tea	-0.03	0.39***	0.50***	0.38***	0.53***	0.46***	0.66***	0.54***	0.45***	0.42***
Black tea	0.74***	0.63***	0.33***	0.55***	0.70***	0.59***	0.60***	0.34***	0.34***	0.43***
Coffee	0.71***	0.52***	0.50***	0.73***	0.76***	0.75***	0.60***	0.47***	0.75***	0.77***
Water	0.35***	0.33***	0.17	0.63***	0.64***	0.27**	0.31***	0.36***	0.69***	0.63***
Breakfast cereals ⁴	0.68***	—	—	—	0.67***	0.52***	—	—	—	0.44***

¹ Values are Spearman correlation coefficients. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. ² Not assessed for snacks in the MDHQ; the intake for snacks was 0 g/day for all participants. ³ Not assessed for breakfast in the MDHQ; the intake for breakfast was 0 g/day for all participants. ⁴ Only assessed for breakfast in the MDHQ; the intake for all other eating occasions was 0 g/day for all participants.

Table S10. Bland–Altman analysis for estimates of daily intakes of Tier 1 food groups (in grams per day) derived from the 4-day weighed dietary record (DR) and those derived from the paper version of the Meal-based Diet History Questionnaire (MDHQ) in 111 Japanese women, according to meal type ¹.

Tier 1 food group	Breakfast			Lunch			Dinner			Snacks			Overall diet		
	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias
Rice ²	1	−80, 82	−0.38***	2	−90, 95	−0.40***	−2	−80, 77	−0.29***	−1	−9, 7	---	0	−153, 154	−0.36***
Bread ²	2	−38, 41	−0.22*	2	−31, 35	−0.55***	0	−9, 9	−0.77***	−1	−8, 6	---	2	−51, 55	−0.25*
Noodles ²	0	−26, 25	−1.01***	−15	−116, 86	−0.75***	4	−46, 54	−0.76***	0	−3, 3	---	−11	−130, 108	−0.68***
Miso soup ²	14	−51, 80	0.04	19	−63, 100	0.42***	16	−60, 92	−0.02	0	−7, 6	---	49	−95, 193	0.23**
Potatoes ²	1	−11, 13	0.05	−5	−34, 24	−1.52***	−4	−39, 31	−1.23***	−1	−8, 6	---	−9	−59, 41	−0.89***
Pulses and nuts ²	−4	−55, 47	−1.01***	−2	−43, 38	−1.20***	−5	−62, 52	−1.13***	−5	−37, 27	---	−16	−110, 77	−0.93***
Vegetables ²	5	−57, 67	−0.29**	−16	−103, 71	−0.53***	−23	−143, 97	−0.47***	−2	−17, 13	---	−37	−234, 161	−0.41***
Pickled vegetables	2	−7, 11	0.49***	1	−9, 11	0.14	1	−17, 19	−0.70***	0	0, 0	---	4	−21, 29	0.08
Fruit	−6	−61, 49	−0.46***	−4	−52, 43	−0.82***	3	−33, 40	−0.06	6	−41, 54	−0.15	0	−106, 106	−0.23*
Fish and shellfish ²	−2	−21, 17	−0.96***	−4	−35, 26	−1.04***	−9	−50, 32	−0.87***	0	−6, 5	---	−16	−72, 41	−0.78***
Meat ²	1	−18, 19	−0.58***	−9	−45, 28	−0.84***	−17	−74, 41	−1.06***	0	−4, 4	---	−26	−98, 47	−0.73***
Eggs ²	0	−26, 26	−0.43***	−3	−27, 20	−0.90***	−3	−22, 17	−1.07***	−1	−5, 4	---	−7	−47, 33	−0.48***
Dairy products	3	−105, 111	−0.52***	−2	−76, 72	−0.70***	3	−28, 34	−0.02	−8	−91, 74	−0.39***	−5	−187, 177	−0.31**
Confectioneries	1	−29, 32	−0.26	−1	−37, 36	−0.25	2	−14, 17	0.46***	27	−32, 85	0.76***	29	−47, 106	0.51***
Fruit and vegetable juice	5	−37, 47	0.27**	0	−38, 37	−0.59***	2	−19, 24	0.58***	9	−48, 67	0.25*	16	−85, 118	0.47***
Alcoholic beverages ³	0	−1, 1	---	1	−17, 18	1.93***	−19	−181, 143	−0.32***	4	−118, 126	0.14	−15	−211, 182	−0.21***
Soft drinks	5	−35, 45	1.47***	0	−34, 35	−0.26**	1	−44, 46	−0.01	−8	−121, 104	−0.49***	−2	−158, 155	0.18
Green tea	16	−89, 121	0.20*	7	−110, 124	0.20	10	−111, 131	0.01	19	−271, 309	−0.12	51	−441, 543	0.21*
Barley tea	23	−105, 151	−0.03	30	−100, 159	0.05	24	−121, 168	−0.15	45	−299, 388	−0.22*	121	−418, 659	−0.04
Oolong tea	7	−50, 64	1.99***	9	−67, 84	1.09***	4	−51, 58	−0.06	17	−120, 155	0.57***	36	−236, 308	0.83***
Black tea	3	−43, 49	0.00	3	−51, 57	0.37***	4	−30, 38	0.42***	14	−117, 145	0.14	24	−152, 200	0.39***
Coffee	34	−109, 177	−0.10	26	−94, 145	0.30**	9	−66, 84	0.9***	54	−154, 263	0.19*	123	−220, 466	0.30***
Water	55	−85, 195	0.98***	57	−91, 205	1.46***	61	−102, 224	1.66***	53	−395, 500	−0.44***	225	−395, 846	0.31**
Breakfast cereals ⁴	2	−10, 15	0.81***	0	−4, 3	---	0	−5, 5	---	0	0, 0	---	2	−12, 16	0.68***

¹ Mean difference was calculated as mean of difference between the two methods (MDHQ minus DR). Limits of agreement were calculated as the mean difference \pm 1.96 standard deviation. Slope of bias (regression coefficient) was calculated by using a linear regression analysis, in which the difference between the two methods (MDHQ minus DR) was the dependent variable and the average of the two methods was the independent variable; positive values indicate that the difference increases as the average intake increases, while negative values indicate that the difference decreases as the average intake increases (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$). For the food groups the intake of which was not assessed in the MDHQ and thus the intake value was 0 g/day for all participants, the slope of bias was not calculated. ² Not assessed for snacks in the MDHQ. ³ Not assessed for breakfast in the MDHQ. ⁴ Only assessed for breakfast in the MDHQ.

Table S11. Bland–Altman analysis for estimates of daily intakes of Tier 1 food groups (in grams per day) derived from the 4-day weighed dietary record (DR) and those derived from the paper version of the Meal-based Diet History Questionnaire (MDHQ) in 111 Japanese men, according to meal type ¹.

Tier 1 food group	Breakfast			Lunch			Dinner			Snacks			Overall diet		
	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias	Mean difference	Limits of agreement	Slope of bias
Rice ²	2	−81, 84	−0.19**	4	−119, 126	−0.35***	−14	−139, 112	−0.37***	0	−5, 4	---	−9	−240, 222	−0.39***
Bread ²	1	−39, 41	−0.08	3	−37, 43	−0.06	−1	−9, 8	−1.05***	−2	−14, 10	---	2	−55, 58	−0.06
Noodles ²	−1	−37, 34	−1.21***	−43	−174, 88	−0.99***	1	−75, 77	−1.02***	−1	−9, 8	---	−44	−205, 117	−1.02***
Miso soup ²	6	−75, 87	−0.08	17	−74, 109	0.58***	10	−79, 98	−0.17*	0	0, 0	---	34	−133, 200	0.09
Potatoes ²	0	−16, 16	−0.35*	−6	−34, 22	−1.38***	−9	−59, 42	−1.50***	−1	−4, 3	---	−15	−80, 50	−1.08***
Pulses and nuts ²	−4	−48, 40	−0.86***	0	−28, 27	−1.09***	−10	−63, 43	−0.92***	−1	−8, 6	---	−16	−98, 66	−0.87***
Vegetables ²	−6	−76, 64	−0.59***	−17	−94, 60	−0.33**	−47	−206, 111	−0.60***	−2	−21, 17	---	−72	−289, 146	−0.42***
Pickled vegetables	2	−10, 14	0.58***	2	−11, 15	0.34*	2	−20, 25	−0.80***	0	−3, 2	---	6	−30, 42	−0.08
Fruit	−8	−62, 46	−0.60***	−2	−40, 35	−0.85***	3	−34, 40	0.06	7	−50, 64	−0.50***	0	−101, 102	−0.29**
Fish and shellfish ²	−1	−21, 18	−0.90***	−3	−35, 29	−0.96***	−15	−78, 47	−1.22***	−1	−11, 9	---	−21	−95, 53	−0.94***
Meat ²	−2	−29, 25	−0.80***	−10	−51, 31	−0.83***	−30	−111, 52	−1.45***	−1	−5, 4	---	−42	−137, 53	−1.03***
Eggs ²	−2	−28, 24	−0.32***	−6	−31, 19	−0.79***	−3	−25, 19	−0.95***	−1	−5, 4	---	−12	−53, 29	−0.37***
Dairy products	−11	−128, 106	−0.55***	−5	−63, 54	−0.79***	−4	−50, 43	−0.77***	−12	−94, 70	−0.74***	−31	−203, 141	−0.53***
Confectioneries	−3	−41, 35	−0.40**	−2	−37, 33	−0.74***	1	−23, 26	0.27	17	−40, 74	0.54***	13	−72, 99	0.26*
Fruit and vegetable juice	8	−60, 76	0.42***	2	−35, 40	0.31**	3	−27, 33	0.05	17	−73, 106	0.78***	30	−98, 157	0.28***
Alcoholic beverages ³	−1	−7, 5	---	0	−62, 61	−0.41***	2	−357, 362	−0.19**	4	−234, 242	−0.23***	6	−340, 352	−0.12*
Soft drinks	5	−44, 53	0.94***	3	−89, 94	−0.50***	0	−115, 116	−1.35***	−19	−259, 221	−0.65***	−11	−355, 332	−0.56***
Green tea	7	−82, 96	−0.10	11	−143, 164	0.12	7	−115, 129	−0.02	21	−277, 318	−0.11	45	−428, 518	0.10
Barley tea	14	−90, 117	0.28**	0	−197, 197	−0.44***	19	−135, 174	−0.01	33	−302, 368	−0.19*	66	−453, 585	0.02
Oolong tea	9	−53, 72	1.10***	2	−61, 66	0.05	4	−73, 81	−0.07	21	−186, 227	0.16	37	−270, 344	0.23**
Black tea	7	−49, 63	0.96***	5	−38, 47	0.99***	2	−33, 36	0.67***	13	−163, 189	0.79***	27	−227, 281	0.99***
Coffee	28	−126, 182	−0.09	35	−88, 159	0.61***	11	−66, 89	0.62***	44	−284, 371	−0.10	118	−328, 564	0.20*
Water	39	−112, 190	0.89***	53	−110, 216	0.97***	66	−102, 234	1.08***	16	−621, 653	−0.72***	175	−541, 891	−0.05
Breakfast cereals ⁴	2	−14, 18	0.86***	0	0, 0	---	0	0, 0	---	0	0, 0	---	2	−14, 17	0.87***

¹ Mean difference was calculated as mean of difference between the two methods (MDHQ minus DR). Limits of agreement were calculated as the mean difference \pm 1.96 standard deviation. Slope of bias (regression coefficient) was calculated by using a linear regression analysis, in which the difference between the two methods (MDHQ minus DR) was the dependent variable and the average of the two methods was the independent variable; positive values indicate that the difference increases as the average intake increases, while negative values indicate that the difference decreases as the average intake increases (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$). For the food groups the intake of which was not assessed in the MDHQ and thus the intake value was 0 g/day for all participants, the slope of bias was not calculated. ² Not assessed for snacks in the MDHQ. ³ Not assessed for breakfast in the MDHQ. ⁴ Only assessed for breakfast in the MDHQ.

Table S12. Estimates of overall intakes of Tier 2 food groups (in grams per day) derived from the 4-day weighed dietary record (DR) and those derived from the paper version of the Meal-based Diet History Questionnaire (MDHQ), Spearman correlation coefficients, and Bland–Altman analysis in 111 Japanese women and 111 Japanese men ¹.

Tier 2 food group	Women						Men					
	Median (P25, P75) ¹	Correlation ²	Mean ± SD ³	Bland–Altman analysis ⁴			Median (P25, P75)	Correlation ²	Mean ± SD	Bland–Altman analysis ²		
				Mean difference	Limits of agreement	Slope of bias				Mean difference	Limits of agreement	Slope of bias
Rice												
White rice	211 (147, 252)	0.62***	199 ± 80	−7	−167, 153	−0.37***	301 (240, 375)	0.57***	297 ± 107*	−23	−252, 206	−0.37***
Brown rice	0 (0, 7)***	0.37***	10 ± 33**	7	−48, 62	0.75***	0 (0, 7)***	0.39***	16 ± 43***	14	−58, 87	1.23***
Bread												
White bread	29 (12, 46)	0.57***	31 ± 21	−4	−57, 49	−0.47***	27 (7, 52)	0.58***	33 ± 28	−2	−62, 57	−0.23*
Wholegrain bread	5 (0, 12)***	0.10	7 ± 8***	6	−11, 23	0.89***	0 (0, 4)***	−0.09	4 ± 12**	4	−21, 29	1.47***
Noodles												
Wheat noodles	25 (12, 41)***	0.19*	30 ± 23***	13	−63, 89	−0.65***	25 (11, 38)**	0.25**	28 ± 25	2	−104, 108	−1.12***
Chinese noodles	7 (1, 16)	0.30**	11 ± 13*	−7	−74, 59	−1.25***	12 (3, 23)	0.33***	17 ± 19*	−9	−96, 79	−1.18***
Instant noodles	0 (0, 4)*	0.38***	4 ± 11***	−8	−56, 40	−1.06***	3 (0, 6)	0.46***	5 ± 10***	−25	−119, 70	−1.61***
Spaghetti	6 (1, 10)	0.17	8 ± 12**	−7	−54, 39	−0.96***	5 (1, 9)	0.26**	7 ± 11**	−9	−66, 48	−1.28***
Buckwheat noodles	1 (0, 7)***	0.35***	5 ± 8	−1	−36, 34	−1.05***	1 (0, 6)***	0.28**	4 ± 7	−4	−46, 39	−1.42***
Pulses and nuts												
Soy milk	0 (0, 0)	0.56***	1 ± 3***	−13	−91, 65	−1.86***	0 (0, 0)	0.40***	0 ± 1	−2	−30, 25	−1.87***
Tofu (i.e., soybean curd)	27 (15, 45)**	0.39***	31 ± 20*	6	−47, 59	−0.40**	24 (13, 36)	0.43***	27 ± 18	−4	−71, 63	−0.94***
Natto (i.e., fermented soybeans)	4 (1, 8)*	0.53***	6 ± 6**	−2	−19, 15	−0.68***	2 (0, 6)	0.66***	5 ± 10	−1	−16, 14	−0.06
Tofu products	3 (1, 6)*	0.31***	4 ± 4	0	−15, 15	−1.02***	2 (0, 6)	0.28**	3 ± 4*	−3	−25, 19	−1.40***
Peanuts and nuts	0 (0, 0)***	0.28**	0 ± 0***	−5	−29, 19	−1.94***	0 (0, 0)***	0.37***	0 ± 1***	−5	−22, 13	−1.85***
All other pulses and nuts	0 (0, 0)	0.18	0 ± 0***	−2	−12, 8	−1.97***	0 (0, 0)	0.11	1 ± 1*	−1	−12, 9	−1.86***
Vegetables												
Edamame (i.e., immature soybeans) and peas	0 (0, 2)	0.24**	1 ± 2	−1	−17, 15	−1.70***	0 (0, 2)	0.33***	2 ± 2	−1	−11, 10	−1.12***
Seaweeds	5 (2, 9)	0.20*	7 ± 6	0	−17, 17	−0.38*	4 (1, 8)	0.33***	6 ± 6	−1	−22, 21	−0.84***
Pumpkins	3 (0, 5)	0.41***	4 ± 4**	−3	−23, 17	−1.18***	3 (0, 5)	0.48***	4 ± 4***	−4	−27, 19	−1.23***
Mushrooms	7 (3, 14)*	0.45***	10 ± 8**	−3	−27, 21	−0.72***	7 (2, 13)***	0.46***	9 ± 7***	−5	−28, 18	−0.74***
Cabbage	16 (10, 29)*	0.39***	20 ± 14**	−7	−53, 40	−0.82***	17 (8, 29)***	0.37***	22 ± 19***	−13	−70, 45	−0.62***
Cucumbers	10 (5, 17)	0.50***	11 ± 8	−2	−27, 23	−0.76***	9 (5, 16)	0.49***	11 ± 8	−2	−25, 22	−0.61***
Bitter melon	0 (0, 1)	0.46***	1 ± 2**	−2	−14, 10	−1.44***	0 (0, 1)	0.53***	1 ± 2*	−1	−11, 9	−1.33***
Burdock	0 (0, 1)**	0.43***	1 ± 1***	−2	−10, 7	−1.64***	0 (0, 2)***	0.25**	1 ± 1***	−3	−15, 9	−1.72***
Radishes	9 (2, 16)	0.39***	11 ± 11	−1	−31, 30	−0.48***	9 (2, 17)	0.23*	11 ± 11	−1	−34, 32	−0.57***
Onions	27 (15, 40)	0.19*	29 ± 20	2	−49, 53	−0.11	23 (12, 39)	0.22*	26 ± 19	−7	−80, 67	−1.01***
Chinese cabbage	1 (0, 2)	0.38***	2 ± 3	−1	−13, 11	−1.02***	1 (0, 4)*	0.20*	3 ± 5	0	−16, 16	−0.72***
Tomatoes	18 (6, 36)***	0.49***	21 ± 17**	5	−34, 45	−0.22	17 (4, 30)*	0.39***	19 ± 16	1	−70, 72	−1.12***
Eggplants	6 (3, 11)	0.47***	8 ± 6	−2	−33, 29	−1.20***	6 (2, 10)	0.50***	7 ± 6*	−4	−45, 37	−1.37***
Carrots	15 (9, 26)***	0.51***	18 ± 13***	5	−22, 31	−0.09	14 (4, 22)	0.40***	16 ± 14	2	−29, 33	−0.04
Green peppers	3 (1, 6)	0.44***	4 ± 3*	−2	−16, 12	−1.19***	3 (1, 5)**	0.41***	4 ± 3***	−3	−21, 14	−1.30***
Broccoli	2 (0, 4)	0.43***	3 ± 3	−2	−18, 15	−1.26***	2 (0, 4)	0.47***	2 ± 3**	−2	−18, 14	−1.24***

Table S12. Continued

Tier 2 food group	Women						Men					
	Median (P25, P75) ¹	Correlation ²	Mean ± SD ³	Bland–Altman analysis ⁴			Median (P25, P75)	Correlation ²	Mean ± SD	Bland–Altman analysis ²		
				Mean difference	Limits of agreement	Slope of bias				Mean difference	Limits of agreement	Slope of bias
Green leafy vegetables	15 (5, 26)**	0.44***	17 ± 14	2	−40, 45	−0.59***	14 (3, 22)	0.23*	16 ± 14	2	−35, 40	−1.24
Bean sprouts	4 (2, 6)***	0.37***	4 ± 4***	−6	−31, 19	−1.43***	4 (1, 7)***	0.34***	5 ± 5***	−8	−36, 20	−1.30***
Lettuce	4 (1, 7)	0.45***	5 ± 5*	−2	−19, 15	−0.91***	4 (1, 8)	0.46***	6 ± 6	−2	−35, 30	−1.27***
All other vegetables	1 (1, 2)***	0.02	1 ± 1***	−18	−55, 20	−2.00***	1 (1, 2)***	0.03	1 ± 1***	−20	−62, 21	−2.00***
Fruit												
Strawberries	0 (0, 0)**	−0.01	0 ± 1	0	−2, 2	1.87***	0 (0, 0)**	−0.05	1 ± 2*	0	−3, 4	1.92***
Persimmons	0 (0, 0)**	0.34***	1 ± 2	0	−5, 5	0.10	0 (0, 0)	0.37***	1 ± 4	0	−9, 10	−0.12**
Citrus	4 (0, 13)***	0.14	11 ± 19***	6	−25, 36	0.48***	0 (0, 9)***	0.24*	8 ± 13***	5	−20, 29	0.45***
Kiwi fruit	0 (0, 2)	0.51***	1 ± 3	0	−10, 9	−0.74***	0 (0, 1)	0.50***	1 ± 2*	−1	−10, 8	−1.13***
Watermelon	0 (0, 2)***	0.17	1 ± 3	0	−21, 20	−1.60***	0 (0, 1)***	0.15	1 ± 2	0	−13, 12	−1.60***
Pears	5 (1, 13)	0.54***	11 ± 15	−1	−38, 36	−0.37**	1 (0, 9)	0.48***	7 ± 12	−4	−44, 37	−0.87***
Bananas	5 (0, 22)***	0.65***	16 ± 24*	4	−37, 45	0.16	1 (0, 13)	0.65***	14 ± 27	1	−40, 42	0.03
Grapes	3 (1, 9)	0.45***	9 ± 15*	−7	−59, 46	−0.92***	1 (0, 8)	0.49***	7 ± 15	−5	−61, 51	−0.94***
Melon	0 (0, 0)***	0.22*	1 ± 2	−1	−30, 27	−1.90***	0 (0, 0)***	0.13	1 ± 2*	1	−4, 5	0.87***
Peaches	0 (0, 1)**	0.09	1 ± 3	−1	−18, 17	−1.44***	0 (0, 0)	0.23*	1 ± 3	−1	−22, 20	−1.54***
Apples	3 (0, 18)***	0.46***	12 ± 19***	6	−25, 36	0.28**	0 (0, 12)***	0.44***	9 ± 19***	5	−22, 31	0.42***
All other fruit	1 (0, 1)	0.15	1 ± 1**	−9	−68, 50	−1.98***	1 (0, 2)	0.06	2 ± 4	−2	−25, 21	−1.46***
Fish and shellfish												
Oily fish	6 (1, 11)	0.19*	7 ± 6*	−4	−42, 34	−1.45***	8 (2, 13)*	0.29**	8 ± 7**	−6	−42, 31	−1.31***
Red meat fish	3 (1, 6)	0.08	4 ± 4	−1	−17, 16	−1.06***	5 (1, 9)*	0.16	6 ± 6	1	−21, 23	−0.78***
Squid and octopus	0 (0, 2)	0.28**	1 ± 2*	−1	−11, 9	−1.42***	1 (0, 4)	0.37***	2 ± 3**	−2	−15, 12	−1.28***
Eel	0 (0, 0)***	0.24*	0 ± 0	0	−3, 3	−1.81***	0 (0, 0)***	0.26**	0 ± 1	−1	−9, 7	−1.84***
Shrimp and crab	0 (0, 2)	0.06	1 ± 2**	−1	−11, 9	−1.55***	1 (0, 3)	0.08	2 ± 3	−2	−17, 13	−1.21***
Shellfish	0 (0, 2)	0.13	1 ± 1	0	−7, 6	−1.34***	0 (0, 2)*	0.24*	1 ± 2	0	−7, 7	−0.99***
Small fish with bones	0 (0, 1)**	0.26**	1 ± 1	0	−4, 3	−0.55***	0 (0, 0)**	0.33***	0 ± 1	0	−5, 5	−1.58***
Fish eggs	0 (0, 0)	0.25**	0 ± 1**	−1	−6, 4	−1.68***	0 (0, 0)	0.31***	0 ± 0**	−1	−7, 5	−1.90***
Dried fish	1 (0, 3)	0.28**	2 ± 3	−2	−21, 18	−1.50***	1 (0, 4)	0.24*	3 ± 4*	−3	−27, 22	−1.44***
Salmon	3 (1, 5)*	0.29**	4 ± 5***	−4	−26, 19	−1.22***	4 (1, 8)*	0.15	5 ± 4***	−5	−31, 22	−1.49***
White meat fish	1 (1, 7)	0.27**	4 ± 5	−1	−23, 21	−1.19***	5 (1, 10)	0.22*	6 ± 6	−1	−26, 25	−1.18***
Ground fish meat products	4 (1, 7)*	0.26**	5 ± 5	0	−15, 16	−0.68***	5 (1, 8)	0.34***	6 ± 6	−2	−30, 26	−1.13***
Canned tuna	1 (0, 1)	0.39***	1 ± 1**	−1	−7, 5	−1.31***	0 (0, 1)	0.24*	1 ± 3*	−1	−10, 8	−0.76***
All other fish and shellfish	0 (0, 0)***	0.10	0 ± 0	0	0, 0	−1.81***	0 (0, 0)***	−0.15	0 ± 0	0	−2, 2	−2.00***
Meat												
Beef	6 (1, 9)**	0.21*	7 ± 6***	−6	−38, 27	−1.42***	11 (5, 15)	0.16	11 ± 9*	−5	−50, 40	−1.42***
Chicken	17 (11, 22)***	0.34***	17 ± 8***	−14	−62, 34	−1.38***	18 (13, 26)***	0.17	20 ± 9***	−26	−103, 50	−1.69***
Processed meat	8 (4, 14)	0.40***	10 ± 8	0	−21, 20	−0.40**	11 (6, 20)	0.29**	14 ± 11	0	−29, 29	−0.36*
Pork	25 (18, 31)*	0.33***	25 ± 12*	−5	−52, 41	−1.02***	27 (20, 38)***	0.06	29 ± 13***	−10	−69, 49	−1.27***

Table S12. Continued

Tier 2 food group	Women						Men					
	Median (P25, P75) ¹	Correlation ²	Mean ± SD ³	Bland–Altman analysis ⁴			Median (P25, P75)	Correlation ²	Mean ± SD	Bland–Altman analysis ²		
				Mean difference	Limits of agreement	Slope of bias				Mean difference	Limits of agreement	Slope of bias
Liver	0 (0, 0)***	0.18	0 ± 0	0	–5, 5	–1.92***	0 (0, 0)***	0.21*	0 ± 0	0	–8, 7	–1.92***
All other meat	0 (0, 0)***	0.01	0 ± 0	0	–3, 3	–2.00***	0 (0, 0)***	–0.12	0 ± 0	0	–5, 5	–2.00***
Dairy products												
Ice cream	1 (0, 4)	0.36***	4 ± 8	–2	–28, 24	–0.77***	1 (0, 4)	0.30**	3 ± 5	–3	–31, 25	–1.34
Cheese	1 (0, 4)**	0.25**	4 ± 10	–1	–24, 21	0.77***	1 (0, 4)*	0.21*	3 ± 6*	–2	–18, 14	–0.21
Low-fat milk	0 (0, 0)	0.51***	5 ± 17*	–5	–54, 44	–0.77***	0 (0, 0)	0.62***	9 ± 31	–9	–123, 105	–0.95***
Yogurt	19 (1, 59)**	0.60***	44 ± 63**	–24	–178, 131	–0.50***	2 (0, 17)***	0.64***	27 ± 53***	–26	–144, 93	–0.53***
Full-fat milk	60 (14, 107)***	0.61***	68 ± 60***	30	–88, 148	0.08	7 (0, 57)***	0.56***	32 ± 45**	12	–72, 95	0.09
All other dairy products	0 (0, 1)	–0.08	1 ± 2**	–3	–24, 18	–1.87***	0 (0, 1)	–0.03	2 ± 4	–4	–43, 36	–1.83***
Confectioneries												
Candies, caramels, and chewing gum	0 (0, 1)***	0.20*	1 ± 1	0	–4, 4	–0.48**	0 (0, 0)***	0.28**	1 ± 2***	1	–3, 4	1.12***
Japanese bread with a sweet filling	3 (1, 8)***	0.24*	6 ± 7*	3	–18, 23	–0.38*	1 (0, 6)	0.37***	7 ± 13	–1	–34, 32	–0.13
Snacks made from wheat flour	1 (0, 4)***	0.46***	3 ± 4***	2	–7, 10	0.04	1 (0, 4)***	0.34***	3 ± 5	1	–11, 13	–0.55***
Jellies	0 (0, 1)***	0.13	1 ± 2**	–3	–24, 18	–1.92***	0 (0, 0)***	0.16	0 ± 1**	–4	–31, 23	–1.94***
Rice crackers	5 (1, 10)***	0.43***	7 ± 9***	5	–10, 21	0.86***	3 (0, 9)***	0.46***	7 ± 11***	5	–14, 25	1.31***
Chocolates	7 (2, 16)***	0.43***	12 ± 16***	8	–21, 37	1.16***	2 (0, 14)***	0.41***	9 ± 13***	6	–16, 28	1.13***
Biscuits and cookies	2 (0, 6)***	0.35***	4 ± 5***	2	–8, 12	0.05	0 (0, 4)***	0.39***	2 ± 4*	1	–7, 9	0.15
Cakes	14 (3, 26)***	0.42***	18 ± 19***	9	–31, 49	0.20	6 (1, 18)***	0.31**	12 ± 16*	4	–34, 42	–0.07
Japanese sweets	8 (2, 19)**	0.23*	12 ± 14*	4	–29, 37	–0.03	2 (0, 12)*	0.52***	7 ± 11	0	–31, 31	–0.54***
Alcoholic beverages												
Beer	0 (0, 25)	0.78***	50 ± 127	–6	–110, 99	–0.10*	50 (0, 206)	0.80***	185 ± 307	11	–250, 272	–0.07
Sake	0 (0, 0)	0.64***	2 ± 13	1	–9, 10	0.32***	0 (0, 0)	0.60***	9 ± 27	2	–41, 45	–0.30***
Shochu (i.e., Japanese distilled beverages)	0 (0, 0)	0.70***	20 ± 66	–4	–98, 90	–0.05	2 (0, 67)	0.72***	62 ± 108	–3	–210, 204	–0.40***
Wine	0 (0, 0)	0.48***	6 ± 22	–3	–90, 83	–1.00***	0 (0, 0)	0.58***	5 ± 20	–1	–34, 32	–0.48***
Whiskey and other spirits	0 (0, 0)	— ⁵	0 ± 2	0	–3, 3	2.00***	0 (0, 0)	0.90***	7 ± 31	1	–39, 40	0.16*

P25, 25th percentile; P75, 75th percentile; SD, standard deviation. ¹ The values derived from the MDHQ were compared with those derived from the DR (shown in Table 5) using the Wilcoxon signed-rank test: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. ² Spearman correlation coefficients: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. ³ The values derived from the MDHQ were compared with those derived from DR (shown in Table S6) using the paired t -test: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. ⁴ Mean difference was calculated as mean of difference between the two methods (MDHQ minus DR). Limits of agreement were calculated as the mean difference \pm 1.96 SD. Slope of bias (regression coefficient) was calculated by using a linear regression analysis, in which the difference between the two methods (MDHQ minus DR) was the dependent variable and the average of the two methods was the independent variable; positive values indicate that the difference increases as the average intake increases, while negative values indicate that the difference decreases as the average intake increases (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$). ⁵ Not available because the intake derived from the DR was 0 g/day for all participants.