

**Table S1.** Standardized weight of 5- to 9-year-old Japanese children in each prefecture averaged over an 8-year period (2006–2013).

No.	Prefecture	Standardized weight (Males)					Standardized weight (Females)				
		Age:5	6	7	8	9	Age:5	6	7	8	9
1	Hokkaido	0.48	1.11	1.04	1.29	1.53	0.54	0.80	0.73	1.10	1.47
2	Aomori	2.17	2.28	2.80	2.67	2.17	2.27	2.42	2.13	2.59	2.56
3	Iwate	1.55	1.82	1.79	1.77	1.62	1.45	1.92	1.70	1.69	2.07
4	Miyagi	1.68	1.44	1.19	1.27	1.68	1.76	1.18	1.88	1.31	1.08
5	Akita	2.14	2.30	2.44	2.48	2.53	1.84	2.25	2.51	2.54	2.50
6	Yamagata	1.34	1.42	1.85	1.89	1.62	1.37	1.22	1.55	1.24	0.90
7	Fukushima	1.64	1.59	0.97	1.23	1.63	1.36	0.88	1.21	1.16	0.99
8	Ibaraki	1.13	0.88	0.80	0.56	0.83	1.11	0.74	0.56	0.71	0.55
9	Tochigi	0.65	0.66	0.77	0.82	0.74	0.66	0.72	0.87	0.85	0.60
10	Gunma	0.91	0.49	0.50	0.50	0.28	0.91	0.41	0.51	0.14	0.23
11	Saitama	-0.18	0.12	-0.16	-0.27	-0.16	0.13	-0.18	-0.15	-0.23	-0.33
12	Chiba	0.37	0.07	0.03	-0.12	0.22	0.37	0.04	-0.39	0.08	-0.28
13	Tokyo	0.23	-0.10	-0.17	-0.16	-0.10	-0.04	-0.22	-0.33	-0.53	-0.35
14	Kanagawa	-0.07	-0.56	-0.58	-0.63	-0.57	0.06	-0.26	-0.42	-0.64	-0.79
15	Niigata	0.78	0.54	0.38	0.50	0.80	0.77	0.42	0.55	0.63	0.46
16	Toyama	0.19	0.03	0.30	0.51	0.41	-0.27	0.10	0.07	0.72	0.51
17	Ishikawa	-0.42	-0.07	0.34	0.13	0.26	-0.49	0.18	0.08	0.16	-0.07
18	Fukui	-0.09	0.23	-0.13	0.15	0.00	-0.48	0.04	-0.31	-0.10	0.13
19	Yamanashi	-0.18	-0.24	-0.18	-0.20	0.05	-0.13	-0.35	-0.53	-0.21	0.02
20	Nagano	-0.78	-0.75	-0.69	-0.88	-0.81	-0.57	-0.83	-1.14	-0.87	-1.40
21	Gifu	0.02	-0.46	-0.43	-0.59	-0.43	-0.34	-0.95	-0.56	-0.95	-0.53
22	Shizuoka	-0.69	-1.03	-0.84	-0.91	-0.94	-0.75	-0.98	-0.91	-0.83	-0.86
23	Aichi	-0.72	-0.83	-0.89	-0.75	-1.02	-0.88	-1.04	-0.52	-0.87	-0.91
24	Mie	-0.31	-0.24	-0.31	-0.32	-0.66	-0.49	-0.14	-0.28	-0.28	-0.72
25	Shiga	-0.85	-0.34	-0.52	-0.63	-0.79	-0.70	-0.46	-0.94	-0.72	-0.79
26	Kyoto	-0.82	-0.95	-0.86	-0.79	-0.77	-0.81	-1.05	-0.62	-0.66	-0.72
27	Osaka	-0.30	-0.63	-0.68	-0.79	-0.50	-0.39	-0.72	-0.53	-0.49	-0.73
28	Hyogo	-0.64	-1.03	-1.04	-0.95	-0.79	-0.60	-0.98	-0.75	-1.01	-1.10
29	Nara	-0.56	-0.21	-0.34	-0.57	-0.44	-0.60	-0.29	-0.13	-0.22	-0.45
30	Wakayama	-0.43	-0.25	-0.50	-0.35	-0.19	-0.49	-0.08	-0.13	-0.02	-0.12
31	Tottori	-0.83	-0.20	-0.35	-0.24	-0.44	-0.81	-0.09	-0.21	-0.15	-0.31
32	Shimane	-0.89	-1.07	-0.74	-0.86	-1.00	-0.81	-0.94	-0.39	-0.20	-0.58
33	Okayama	-1.00	-0.86	-0.54	-0.88	-0.68	-0.78	-0.51	-0.45	-0.82	-0.65
34	Hiroshima	-0.52	-0.59	-0.86	-0.62	-0.63	-0.37	-0.79	-0.49	-0.85	-0.87
35	Yamaguchi	-0.81	-0.97	-1.10	-0.73	-0.86	-0.68	-0.94	-1.19	-0.92	-0.94
36	Tokushima	1.48	0.42	0.61	0.65	0.68	1.42	1.08	0.73	0.76	0.48
37	Kagawa	-0.43	-0.18	-0.50	-0.31	-0.60	-0.03	-0.28	-0.08	-0.58	-0.13
38	Ehime	-0.43	-1.02	-0.61	-0.83	-0.73	-0.48	-0.63	-1.32	-0.63	-0.57
39	Koch	-0.46	-0.44	-0.13	-0.56	-0.36	-1.05	-0.12	-0.41	-0.91	-0.20
40	Fukuoka	-0.43	-0.36	-0.80	-0.59	-0.78	-0.32	-0.74	-0.20	-0.55	-0.05
41	Saga	-0.34	-0.20	-0.34	-0.38	-0.41	0.09	-0.16	-0.21	-0.69	0.04
42	Nagasaki	-0.52	-0.29	-0.37	-0.41	-0.50	0.05	-0.08	-0.25	-0.22	-0.38
43	Kumamoto	-0.04	0.56	0.45	0.36	0.63	0.36	0.51	0.47	0.63	0.40
44	Oita	-0.22	0.30	0.30	0.09	-0.19	-0.45	0.53	0.08	-0.08	0.38
45	Miyazaki	-0.39	-0.21	-0.14	0.23	-0.05	-0.26	-0.39	-0.01	0.23	0.11
46	Kagoshima	-0.87	-1.08	-0.67	-0.81	-0.69	-1.04	-0.49	-0.88	-0.51	-0.33
47	Okinawa	-0.93	-0.46	-0.59	-0.47	-0.99	-0.84	-0.26	-0.29	-0.28	0.22

**Table S2.** Standardized height of 5- to 9-year-old Japanese children in each prefecture averaged over an 8-year period (2006–2013).

No.	Prefecture	Standardized height (Males)					Standardized height (Females)				
		Age:5	6	7	8	9	Age:5	6	7	8	9
1	Hokkaido	0.59	0.93	0.61	0.60	0.82	0.55	0.66	0.79	0.50	1.09
2	Aomori	1.55	1.63	2.27	2.05	1.65	1.55	2.12	1.99	2.50	2.49
3	Iwate	1.42	1.33	0.92	1.17	1.14	1.35	1.31	1.16	0.95	1.34
4	Miyagi	1.14	1.10	1.05	0.94	1.35	1.11	1.30	1.24	0.89	0.94
5	Akita	2.34	2.28	2.33	2.35	2.49	2.13	2.29	2.50	2.44	2.54
6	Yamagata	1.22	1.02	1.41	1.43	1.04	1.32	0.92	1.03	0.95	0.80
7	Fukushima	0.73	0.58	-0.07	0.43	0.74	0.75	0.41	0.46	0.54	0.45
8	Ibaraki	0.40	0.39	0.30	0.11	0.54	0.28	-0.06	0.11	0.17	0.17
9	Tochigi	-0.20	0.00	-0.29	-0.26	-0.03	0.00	0.11	0.07	0.11	-0.22
10	Gunma	0.23	-0.01	0.03	0.02	-0.11	0.56	0.04	0.08	-0.10	-0.60
11	Saitama	-0.21	0.45	0.15	0.15	0.20	-0.17	0.26	0.13	0.24	-0.07
12	Chiba	0.31	0.46	0.70	0.57	0.65	0.39	0.43	0.46	0.49	0.36
13	Tokyo	0.81	0.94	0.80	1.09	0.86	0.46	0.70	0.71	0.19	0.60
14	Kanagawa	0.05	0.42	0.34	0.36	0.20	0.09	0.60	0.63	0.25	-0.16
15	Niigata	1.36	1.38	1.24	1.04	1.36	1.72	1.59	1.64	1.45	1.32
16	Toyama	0.87	0.46	0.85	1.02	0.70	0.68	0.36	0.36	1.18	1.07
17	Ishikawa	0.91	0.55	0.81	0.70	0.90	0.45	0.49	0.66	0.85	0.32
18	Fukui	0.57	0.42	0.15	0.74	0.85	-0.13	0.36	0.22	0.41	0.80
19	Yamanashi	-0.41	0.04	-0.13	-0.19	-0.34	-0.50	-0.22	-0.49	-0.18	-0.02
20	Nagano	-0.03	-0.07	-0.09	-0.44	-0.50	0.08	0.08	-0.61	-0.62	-1.19
21	Gifu	0.14	-0.35	-0.12	-0.36	-0.30	-0.14	-0.81	-0.18	-0.70	-0.47
22	Shizuoka	-0.53	-1.23	-0.91	-0.75	-0.80	-0.61	-0.88	-0.61	-0.98	-0.81
23	Aichi	-0.19	-0.46	-0.66	-0.43	-0.86	-0.46	-0.58	-0.26	-0.43	-0.93
24	Mie	-0.17	0.01	0.15	-0.01	-0.19	-0.49	-0.01	0.10	-0.22	-0.39
25	Shiga	0.09	0.53	0.46	0.40	0.22	0.14	0.12	-0.16	0.17	-0.01
26	Kyoto	0.24	0.02	0.04	0.21	0.16	0.36	0.00	0.07	0.08	0.16
27	Osaka	0.13	0.10	-0.18	-0.12	-0.15	-0.02	-0.23	-0.24	-0.20	-0.59
28	Hyogo	-0.11	-0.01	-0.13	-0.13	-0.01	-0.09	-0.21	0.00	-0.44	-0.42
29	Nara	-0.04	0.42	0.40	0.17	0.20	-0.36	0.31	0.28	0.28	0.09
30	Wakayama	0.13	-0.25	-0.15	-0.20	-0.09	0.07	-0.08	-0.27	0.00	-0.34
31	Tottori	-0.16	0.02	0.10	0.25	0.24	-0.28	0.30	0.22	0.15	0.19
32	Shimane	-0.52	-1.12	-0.73	-1.15	-0.97	-0.83	-1.23	-0.79	-0.78	-0.92
33	Okayama	-0.70	-0.52	-0.62	-0.63	-0.43	-0.85	-0.34	-0.44	-0.49	-0.51
34	Hiroshima	-0.76	-0.73	-1.14	-1.15	-0.68	-0.44	-1.26	-0.90	-1.13	-1.26
35	Yamaguchi	-0.79	-1.61	-1.43	-1.28	-1.24	-0.82	-1.36	-1.36	-1.11	-1.30
36	Tokushima	-0.16	0.03	0.05	0.17	0.00	0.42	0.35	-0.03	0.15	0.00
37	Kagawa	-1.11	-0.30	-0.70	-0.51	-0.83	-0.98	-0.42	-0.33	-0.53	-0.55
38	Ehime	-0.62	-1.28	-0.55	-0.88	-1.18	-0.68	-0.89	-1.37	-0.77	-0.65
39	Kochi	-1.07	-0.82	-0.77	-0.85	-0.91	-1.43	-0.28	-0.61	-1.15	-0.90
40	Fukuoka	-0.53	-0.42	-0.86	-0.57	-0.53	-0.41	-0.56	-0.29	-0.40	0.14
41	Saga	-0.58	-0.43	-0.32	-0.20	-0.29	-0.37	-0.47	-0.59	-0.91	-0.07
42	Nagasaki	-0.98	-0.66	-0.67	-0.48	-0.36	-0.28	-0.43	-0.57	-0.13	-0.23
43	Kumamoto	-0.07	-0.28	0.14	-0.30	-0.17	0.44	-0.11	-0.13	0.19	0.17
44	Oita	-0.57	-0.53	-0.39	-0.63	-0.68	-0.47	-0.70	-0.64	-0.85	-0.52
45	Miyazaki	-0.80	-0.94	-0.71	-0.32	-0.41	-0.63	-0.98	-0.54	-0.25	-0.11
46	Kagoshima	-1.16	-1.62	-1.48	-1.49	-1.38	-1.26	-1.08	-1.57	-1.13	-0.57
47	Okinawa	-2.36	-1.51	-1.96	-2.32	-2.45	-1.78	-1.57	-1.56	-1.32	-0.85

**Table S3.** Standardized prevalence rate of overweight children in each prefecture averaged over an 8-year period (2006–2013).

No.	Prefecture	Standardized prevalence rate of overweight children (Males)					Standardized prevalence rate of overweight children (Females)				
		Age:5	6	7	8	9	Age:5	6	7	8	9
1	Hokkaido	0.46	1.36	1.24	1.23	1.34	0.53	0.82	0.99	1.47	1.49
2	Aomori	1.67	1.86	2.19	2.40	2.04	1.95	2.08	1.94	1.93	1.95
3	Iwate	1.40	1.32	1.67	1.55	1.27	1.38	1.62	1.26	1.36	1.61
4	Miyagi	1.00	1.21	1.02	1.06	1.75	1.48	0.71	1.39	1.32	1.27
5	Akita	1.46	1.69	1.34	1.77	1.75	0.77	1.77	1.48	1.50	1.55
6	Yamagata	1.09	0.98	1.71	1.29	1.43	1.05	0.82	1.26	0.73	0.35
7	Fukushima	1.72	1.85	1.48	1.48	1.92	1.44	1.23	1.27	1.37	1.24
8	Ibaraki	1.07	0.77	0.63	0.69	0.66	1.52	0.50	0.78	1.00	0.81
9	Tochigi	0.87	0.84	1.15	1.09	1.18	0.58	0.86	1.11	0.70	0.98
10	Gunma	0.80	0.62	0.54	0.75	0.80	0.73	0.54	0.78	0.44	0.62
11	Saitama	-0.40	-0.24	-0.25	-0.56	-0.40	0.22	-0.38	-0.05	-0.42	-0.60
12	Chiba	-0.20	-0.27	-0.12	-0.33	-0.06	-0.08	0.09	-0.60	-0.03	-0.63
13	Tokyo	-0.38	-0.73	-0.59	-0.74	-0.76	-0.76	-0.75	-0.87	-0.61	-0.89
14	Kanagawa	-0.44	-0.64	-0.68	-0.70	-0.73	-0.63	-0.53	-0.79	-0.79	-0.52
15	Niigata	-0.12	-0.28	0.12	0.18	0.16	0.06	-0.32	-0.04	0.08	-0.11
16	Toyama	-0.44	-0.63	-0.13	-0.11	-0.15	-0.75	-0.34	-0.69	-0.11	-0.54
17	Ishikawa	-0.54	-0.65	-0.13	-0.57	-0.27	-0.64	-0.46	-0.75	-0.36	-0.51
18	Fukui	-0.59	-0.42	-0.61	-0.74	-0.98	-0.40	-0.59	-0.74	-0.95	-0.86
19	Yamanashi	0.22	0.21	0.51	0.23	0.50	-0.04	0.09	0.25	0.22	0.45
20	Nagano	-0.41	-0.27	-0.54	-0.47	-0.58	-0.34	-0.84	-0.88	-0.52	-0.86
21	Gifu	0.04	-0.41	-0.69	-0.70	-0.46	-0.64	-0.64	-0.76	-0.99	-0.50
22	Shizuoka	-0.52	-0.42	-0.33	-0.67	-0.74	-0.48	-0.69	-0.65	-0.67	-0.21
23	Aichi	-0.91	-0.44	-0.71	-0.78	-0.62	-0.86	-1.23	-0.47	-0.96	-0.34
24	Mie	-0.13	-0.30	-0.62	-0.17	-0.82	0.06	-0.35	-0.16	-0.16	-0.65
25	Shiga	-0.97	-0.86	-1.06	-1.17	-1.02	-0.86	-0.64	-0.77	-0.96	-1.08
26	Kyoto	-1.03	-1.03	-0.89	-0.99	-0.96	-0.98	-1.10	-0.89	-1.03	-1.11
27	Osaka	-0.60	-0.81	-0.53	-1.08	-0.53	-0.86	-0.91	-0.68	-0.28	-0.72
28	Hyogo	-1.03	-1.14	-1.26	-0.90	-1.12	-0.63	-1.01	-0.95	-1.09	-1.17
29	Nara	-0.65	-0.66	-0.81	-0.69	-0.73	-0.50	-0.69	-0.43	-0.54	-0.86
30	Wakayama	-0.16	-0.23	-0.55	-0.30	-0.31	-0.46	-0.02	0.02	0.04	-0.08
31	Tottori	-0.71	-0.37	-0.48	-0.56	-0.65	-0.53	-0.54	-0.60	-0.16	-0.42
32	Shimane	-1.13	-0.84	-0.61	-0.33	-0.69	-0.47	-0.52	-0.56	0.03	-0.49
33	Okayama	-0.68	-0.45	-0.23	-0.59	-0.64	-0.11	-0.13	0.01	-0.57	-0.52
34	Hiroshima	-0.63	-0.73	-0.46	-0.46	-0.50	-0.19	-0.44	-0.36	-0.48	-0.39
35	Yamaguchi	-0.06	-0.06	-0.78	-0.53	-0.53	-0.57	-0.44	-0.90	-0.75	-0.49
36	Tokushima	2.09	0.24	0.74	0.96	0.92	1.29	0.60	0.74	0.61	0.64
37	Kagawa	-0.05	0.43	-0.16	0.02	-0.22	0.53	0.45	0.22	-0.38	0.45
38	Ehime	-0.13	-0.24	-0.38	-0.28	-0.11	-0.22	0.22	-0.75	-0.41	-0.25
39	Kochi	0.33	0.03	0.01	-0.28	-0.08	-0.53	0.42	0.02	-0.21	-0.02
40	Fukuoka	-0.37	-0.23	-0.74	-0.26	-0.62	-0.55	-0.48	-0.61	-0.27	-0.12
41	Saga	-0.26	-0.23	-0.38	-0.31	-0.21	-0.39	-0.15	-0.02	-0.58	0.08
42	Nagasaki	-0.23	-0.13	-0.46	-0.22	-0.48	-0.24	-0.24	-0.11	-0.46	-0.31
43	Kumamoto	0.02	0.49	0.39	0.66	0.78	0.26	0.67	0.50	0.69	0.30
44	Oita	-0.08	0.53	0.45	0.21	-0.17	0.01	0.95	0.43	0.58	0.78
45	Miyazaki	0.12	-0.01	0.23	0.26	0.13	0.07	0.09	0.39	0.69	0.38
46	Kagoshima	-0.34	-0.17	-0.09	-0.49	-0.24	-0.20	-0.04	0.13	0.13	0.10
47	Okinawa	0.36	0.02	0.36	0.64	0.38	0.54	0.36	0.65	0.34	0.72

**Table S4.** Age at Peak Height Velocity (PHV) in each prefecture.

No.	Prefecture	Age at PHV (y)	
		Male	Female
1	Hokkaido	11.63	9.40
2	Aomori	11.66	9.32
3	Iwate	11.66	9.39
4	Miyagi	11.68	9.52
5	Akita	11.56	9.37
6	Yamagata	11.73	9.57
7	Fukushima	11.61	9.47
8	Ibaraki	11.67	9.52
9	Tochigi	11.70	9.51
10	Gunma	11.73	9.56
11	Saitama	11.84	9.50
12	Chiba	11.77	9.56
13	Tokyo	11.78	9.69
14	Kanagawa	11.85	9.71
15	Niigata	11.77	9.51
16	Toyama	11.76	9.51
17	Ishikawa	11.83	9.68
18	Fukui	11.85	9.46
19	Yamanashi	11.93	9.46
20	Nagano	11.83	9.71
21	Gifu	11.80	9.73
22	Shizuoka	11.84	9.55
23	Aichi	11.85	9.67
24	Mie	11.86	9.61
25	Shiga	11.97	9.57
26	Kyoto	12.01	9.68
27	Osaka	11.92	9.63
28	Hyogo	11.92	9.62
29	Nara	11.79	9.56
30	Wakayama	11.88	9.58
31	Tottori	11.90	9.60
32	Shimane	11.84	9.62
33	Okayama	11.76	9.76
34	Hiroshima	11.74	9.66
35	Yamaguchi	11.95	9.60
36	Tokushima	11.75	9.52
37	Kagawa	11.73	9.57
38	Ehime	11.72	9.60
39	Kochi	11.67	9.80
40	Fukuoka	11.80	9.43
41	Saga	11.92	9.44
42	Nagasaki	11.89	9.58
43	Kumamoto	11.73	9.59
44	Oita	11.73	9.45
45	Miyazaki	11.70	9.39
46	Kagoshima	11.77	9.46
47	Okinawa	11.63	9.33