

Web Table 1. Difference in the distribution of body mass index between Japan and the U.S. (%)

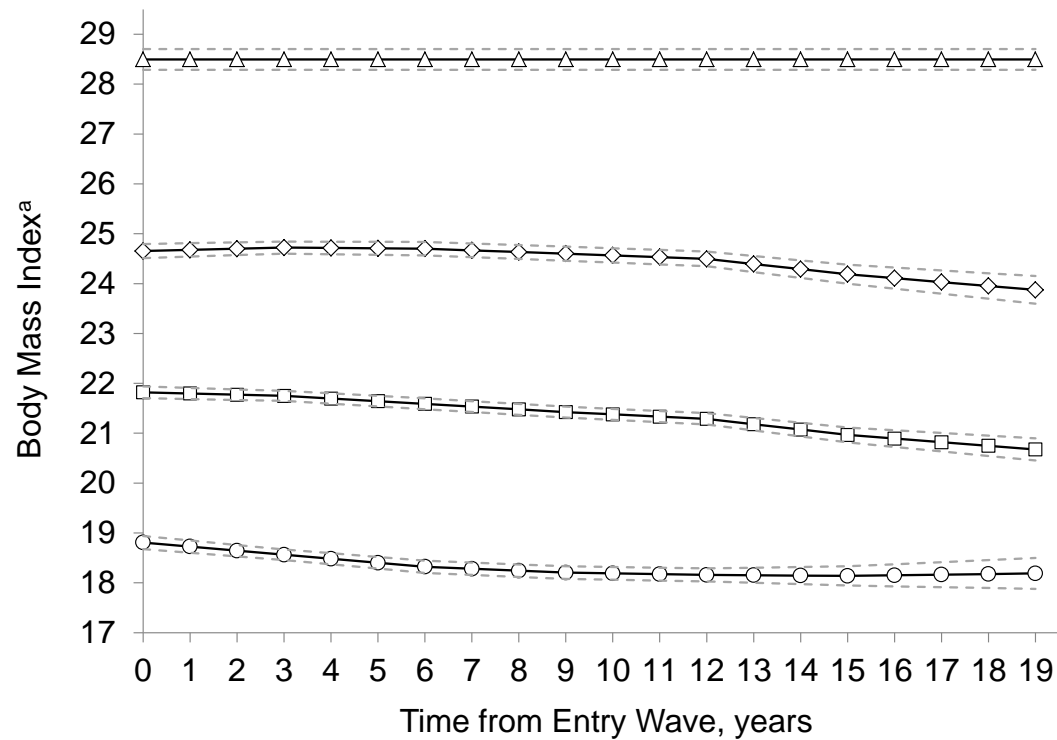
	Japan ^a			U.S. ^b		
	Total (15y+)	65–74y	75y+	Total (18y+)	65–74y	75y+
Both genders						
<18.5	8.2	6.3	10.3	1.7	1.2	3.6
18.5–24.9	67.1	65.7	65.7	35.6	29.6	42.1
25.0–29.9	20.8	24.7	21.7	34.9	38.7	36.6
30.0+	3.9	3.4	2.3	27.7	30.5	17.7
Male						
<18.5	5.2	3.6	8.9	0.9	0.6	1.5
18.5–24.9	65.3	67.1	68.4	29.5	24.3	38.8
25.0–29.9	25.0	27.1	20.5	41.7	45.2	43.4
30.0+	4.4	2.2	2.3	27.8	29.8	16.4
Female						
<18.5	10.6	8.4	11.4	2.5	1.7	5.1
18.5–24.9	68.6	64.5	63.7	41.5	34.3	44.4
25.0–29.9	17.3	22.8	22.6	28.4	33.0	31.9
30.0+	3.5	4.3	2.3	27.5	31.1	18.6

^aSource: National Health and Nutrition Survey, Japan, 2011.

^bSource: National Health Interview Survey, the U.S., 2008–2010.

Web Table 2. The number of the participants at each wave, the National Survey of the Japanese Elderly, 1987–2006

	Wave 1 (1987)	Wave 2 (1990)	Wave 3 (1993)	Wave 4 (1996)	Wave 5 (1999)	Wave 6 (2002)	Wave 7 (2006)	Total observations
Entry wave								
Wave 1 (year of 1987)	2,200	1,671	1,532	1,247	1,005	788	525	8,968
Wave 2 (year of 1990)		366	309	284	263	232	191	1,645
Wave 4 (year of 1996)				898	751	686	592	2,927
Wave 5 (year of 1999)					1,405	1,012	712	3,129
Total participants at each wave	2,200	2,037	1,841	2,429	3,424	2,718	2,020	16,669



Web Figure 1.

Body mass index trajectories for four-group model with quadratic function over 19 years, the National Survey of the Japanese Elderly, 1987–2006

Solid lines, mean values of body mass index for members in the groups. Dashed lines, 95% confidence intervals. The trajectories are as follows: circles, low-normal weight, decreasing; squares, mid-normal weight, decreasing; diamonds, high-normal weight, decreasing; and triangles, overweight, stable.

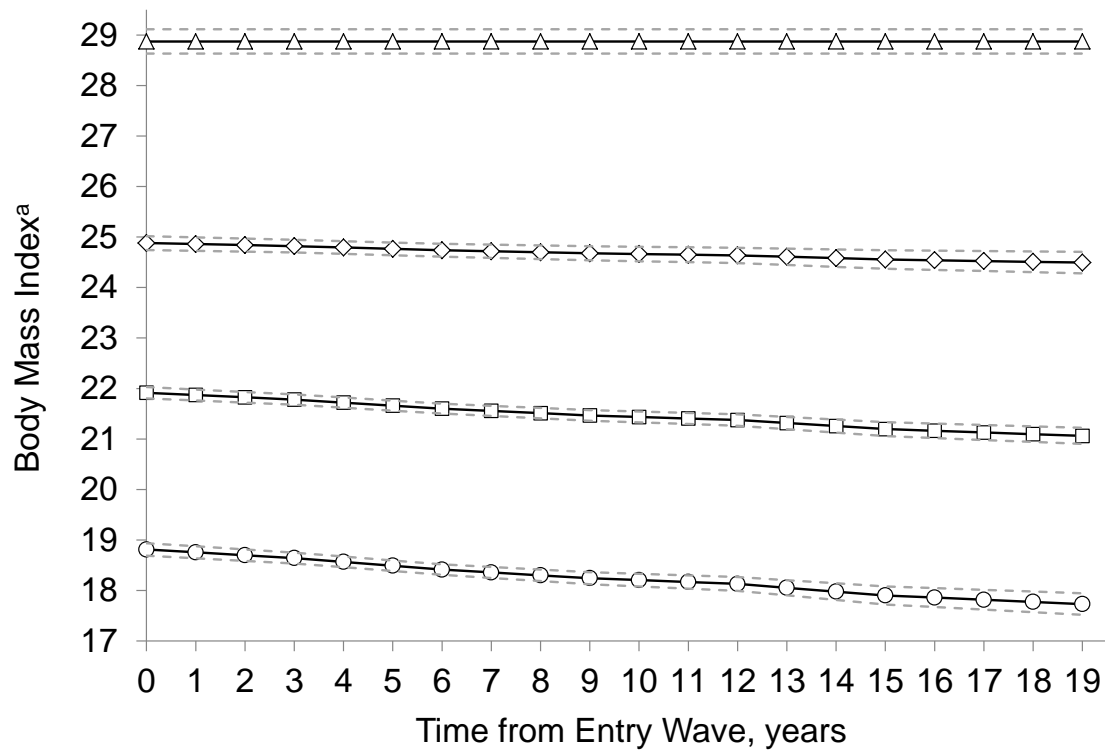
^aweight (kg)/height (m)².

Web Table 3. Estimates of growth curves parameters for body mass index trajectories with non-imputed dataset, the National Survey of the Japanese Elderly, 1987–2006

	Low-normal weight, decreasing		Mid-normal weight, decreasing		High-normal weight, decreasing		Overweight, stable	
	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI	Estimate	95% CI
Intercept	18.8	18.7, 18.9	21.9	21.8, 22.0	24.9	24.7, 25.0	28.9	28.6, 29.1
Linear slope	-0.06	-0.07, -0.04	-0.04	-0.05, -0.04	-0.02	-0.03, -0.01	-	
Group membership	23.3%		44.3%		27.1%		5.3%	
Average group probability ^a	0.870		0.808		0.867		0.901	

CI, confidence interval.

^aAverage group probability indicates the posterior probability of membership among the cases in each trajectory group.



Web Figure 2.

Body mass index trajectories for four-group model over 19 years with non-imputed dataset, the National Survey of the Japanese Elderly, 1987–2006

Solid lines, mean values of body mass index for members in the groups. Dashed lines, 95% confidence intervals. The trajectories are as follows: circles, low-normal weight, decreasing; squares, mid-normal weight, decreasing; diamonds, high-normal weight, decreasing; and triangles, overweight, stable.

^aweight (kg)/height (m)².

Web Table 4. Association between body mass index trajectories and all-cause mortality, stratified by smoking status, frequency of exercise, and history of diseases, the National Survey of the Japanese Elderly, 1987–2006

	Model 2b				Model 2c				Model 2d			
	Non-current smokers ^a		Current smokers ^a		Physically active individuals (often/sometimes) ^b		Physically inactive individuals (rarely/none) ^b		No history of cardiovascular disease, stroke, lung disease, liver disease and kidney disease ^c		Any history of cardiovascular disease, stroke, lung disease, liver disease or kidney disease ^c	
	n=3,674		n=1,195		n=2,336		n=2,533		n=3,868		n=1,001	
	HR	95% CI	HR	95% CI	HR	95% CI	HR	95% CI	HR	95% CI	HR	95% CI
Low-normal weight, decreasing	1.06	0.94, 1.21	1.41	0.99, 2.01	1.30	1.09, 1.57	1.09	0.93, 1.29	1.18	1.01, 1.38	1.10	0.87, 1.40
Mid-normal weight, decreasing	1.00	Reference	1.00	Reference	1.00	Reference	1.00	Reference	1.00	Reference	1.00	Reference
High-normal weight, decreasing	0.82	0.69, 0.96	0.79	0.62, 1.02	0.85	0.70, 1.02	0.81	0.68, 0.96	0.80	0.70, 0.93	0.85	0.59, 1.22
Overweight, stable	0.84	0.57, 1.22	0.42	0.22, 0.79	0.75	0.48, 1.19	0.69	0.49, 0.97	0.69	0.47, 1.01	0.79	0.48, 1.30

CI, confidence interval. HR, hazard ratio.

^aAdjusted for age, gender, marital status, current working, education, annual household income, weight (kg), number of drinking days per month, frequency of exercise, history of cardiovascular disease, stroke, lung disease, liver disease and kidney disease, self-rated health and functional status at baseline, and entry wave.

^bAdjusted for age, gender, marital status, current working, education, annual household income, weight (kg), number of cigarettes smoked per day, number of drinking days per month, history of cardiovascular disease, stroke, lung disease, liver disease and kidney disease, self-rated health and functional status at baseline, and entry wave.

^cAdjusted for age, gender, marital status, current working, education, annual household income, weight (kg), number of cigarettes smoked per day, number of drinking days per month, frequency of exercise, self-rated health and functional status at baseline, and entry wave.