

Supplementary Table 1. Estimates for odds ratio of periodontal disease for Japanese compared to Koreans with adjustment for an unmeasured factors.

OR*	P1‡	P0†	0.05	0.1	0.2	0.3	0.5	0.8
			1.8	0.05	1.68 (1.42-2.00)	1.75 (1.47-2.08)	1.88 (1.58-2.23)	2.01 (1.69-2.38)
	0.1	1.62 (1.36-1.93)	1.68 (1.42-2.00)	1.81 (1.52-2.15)	1.93 (1.63-2.30)	2.18 (1.84-2.59)	2.55 (2.15-3.04)	
	0.2	1.51 (1.27-1.79)	1.57 (1.32-1.86)	1.68 (1.42-2.00)	1.80 (1.51-2.14)	2.03 (1.71-2.41)	2.38 (2.00-2.83)	
	0.3	1.41 (1.19-1.68)	1.47 (1.23-1.74)	1.57 (1.33-1.87)	1.68 (1.42-2.00)	1.90 (1.60-2.26)	2.23 (1.87-2.64)	
	0.5	1.25 (1.05-1.49)	1.30 (1.09-1.54)	1.39 (1.17-1.66)	1.49 (1.25, 1.77)	1.68 (1.42-2.00)	1.97 (1.66-2.34)	
	0.8	<b>1.07 (0.90-1.27)</b>	<b>1.11 (0.93-1.32)</b>	1.19 (1.00-1.41)	1.27 (1.07-1.51)	1.44 (1.21-1.71)	1.68 (1.42-2.00)	
2.2	0.05	1.68 (1.42-2.00)	1.78 (1.50-2.11)	1.97 (1.66-2.34)	2.16 (1.82-2.57)	2.54 (2.14-3.02)	3.11 (2.62-3.70)	
	0.1	1.59 (1.34-1.89)	1.68 (1.42-2.00)	1.86 (1.57-2.21)	2.04 (1.72-2.43)	2.40 (2.02-2.86)	2.94 (2.48-3.50)	
	0.2	1.44 (1.21-1.71)	1.52 (1.28-1.81)	1.68 (1.42-2.00)	1.85 (1.55-2.19)	2.17 (1.83-2.58)	2.66 (2.24-3.16)	
	0.3	1.31 (1.10-1.56)	1.39 (1.17-1.65)	1.53 (1.29-1.82)	1.68 (1.42-2.00)	1.98 (1.67-2.35)	2.42 (2.04-2.88)	
	0.5	<b>1.11 (0.94-1.32)</b>	<b>1.18 (0.99-1.40)</b>	1.30 (1.10-1.55)	1.43 (1.20-1.70)	1.68 (1.42-2.00)	2.06 (1.74-2.45)	
	0.8	<b>0.91 (0.77-1.08)</b>	<b>0.96 (0.81-1.14)</b>	<b>1.06 (0.90-1.26)</b>	<b>1.17 (0.98-1.39)</b>	1.37 (1.16-1.63)	1.68 (1.42-2.00)	

OR (95%CI)

OR were adjusted for diabetes, covariates, and an unmeasured factor having an OR of periodontal disease of 1.8 or 2.2.

Bold indicates that OR was not significant.

\*OR of periodontal disease comparing between participants with and without an unmeasured factor.

†Prevalence of an unmeasured factor in Koreans

‡Prevalence of an unmeasured factor in Japanese

OR, odds ratio; CI, confidence interval.

Supplementary Table 2. Regression coefficients for number of teeth according to country.

	Model 1		Model 2		Model 3	
	$\beta$ coefficient (95% CI)	p value	$\beta$ coefficient (95% CI)	p value	$\beta$ coefficient (95% CI)	p value
Country						
Korea						
Japan	0.19 (0.17; 0.21)	<0.001	0.19 (0.17; 0.21)	<0.001	0.19 (0.17; 0.22)	<0.001
Diabetes						
No						
Yes	-0.04 (-0.06; -0.02)	<0.001				
MetS						
No						
Yes			-0.03 (-0.04; -0.01)	<0.001		
Individual MetS components						
Waist						
Normal						
Elevated					-0.006 (-0.019; 0.006)	0.314
Fasting glucose						
Normal						
Elevated					-0.007 (-0.019; 0.005)	0.248
Triglyceride						
Normal						
Elevated					-0.007 (-0.020; 0.005)	0.251
HDL						
Normal						
Reduced					-0.007 (-0.019; 0.005)	0.237
Blood pressure						
Normal						
Elevated					-0.007 (-0.019; 0.004)	0.216

Participants who received periodontal examination (n = 3,428 in Korea and n = 2,153 in Japan).

Generalized linear models with a Poisson probability distribution using number of teeth as the dependent variable and country as the independent variables.

Diabetes, MetS, and individual MetS components were included in Model 1, 2, and 3, respectively.

All models were adjusted for age, sex, number of teeth, number of decayed and filled teeth, dental visit, current smoking, and job.

CI, confidence interval; MetS, metabolic syndrome; HDL, high density lipoprotein.

Supplementary Table 3. Adjusted odds ratio for periodontal disease stratified by number of teeth.

	Model 1		Model 2	
	OR	(95% CI)	OR	(95% CI)
10-19 teeth (n = 405 in Korea and n = 258 in Japan)				
Country				
Korea	1		1	
Japan	2.53	(1.69-3.78)	2.51	(1.68-3.75)
Diabetes				
No	1			
Yes	1.14	(0.77-1.70)		
MetS				
No			1	
Yes			1.22	(0.88-1.71)
20-27 teeth (n = 1,463 in Korea and n = 1,089 in Japan)				
Country				
Korea	1		1	
Japan	1.58	(1.20-2.07)	1.57	(1.20-2.06)
Diabetes				
No	1			
Yes	1.46	(1.14-1.86)		
MetS				
No			1	
Yes			1.06	(0.89-1.26)
≥28 teeth (n = 1,349 in Korea and n = 720 in Japan)				
Country				
Korea	1		1	
Japan	1.50	(1.02-2.19)	1.46	(0.99-2.14)
Diabetes				
No	1			
Yes	1.78	(1.26-2.52)		
MetS				
No			1	
Yes			1.33	(1.07-1.67)

Logistic regression analysis using periodontal disease as the dependent variable and country as the independent variables.

Diabetes and MetS were included in Model 1 and 2, respectively.

All models were adjusted for age, sex, number of teeth, number of decayed and filled teeth, dental visit, current smoking, and job.

OR, odds ratio; CI, confidence interval; KNHANES, Korean National Health and Nutrition Examination Survey; MetS, metabolic syndrome.