

**Supplement. Table.1 Logistic regression analysis of the association of intervention methods
with hypovitaminosis D in each age group**

Intervention methods	n (%)	Model 1	Model 2	Model 3
0 < age < 3				
No intervention	8891 (33.11)	1	1	1
Supplementation intervention	13002 (48.42)	0.359 (0.339, 0.380)	0.359 (0.340, 0.380)	0.359 (0.340, 0.380)
Therapeutic intervention	4961 (18.47)	0.188 (0.174, 0.203)	0.188 (0.174, 0.203)	0.181 (0.167, 0.196)
3 ≤ age < 6				
No intervention	7606 (57.96)	1	1	1
Supplementation intervention	3237 (24.66)	0.561 (0.505, 0.624)	0.561 (0.505, 0.624)	0.460 (0.412, 0.514)
Therapeutic intervention	2281 (17.38)	0.244 (0.220, 0.272)	0.244 (0.220, 0.272)	0.208 (0.186, 0.232)
6 ≤ age < 18				
No intervention	11831 (74.19)	1	1	1
Supplementation intervention	2144 (13.44)	0.773 (0.641, 0.932)	0.775 (0.643, 0.934)	0.758 (0.629, 0.914)
Therapeutic intervention	1972 (12.37)	0.150 (0.132, 0.170)	0.149 (0.132, 0.170)	0.150 (0.132, 0.171)

Associations were examined using multivariable logistic regression. Model 1: adjusted for sex. Model 2: adjusted for BMI for age on the basis of model 1. Model 3: adjusted for season and outdoor time on the basis of model 2.