The effect of depressive symptomatology on the

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association of vitamin D and sleep

Supplement S2: Results of regression analyses

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Table S1. Results of regression analyses regarding the role of the severity of depressive

symptoms as possible moderator for the association of vitamin D concentrations and night

24 sleep parameters

Independent variables	b [95% CI]	beta	р
Night sleep duration as dependent var	riable		
1. Model without any covariates			
CES-D sum score (without item 11)	0.001	0.009	0.892
(CES-D)	[-0.019;0.022]		
Vitamin D concentration (Vit D)	0.007	0.080	0.106
	[-0.002;0.016]		
CES-D x Vit D	-0.00006	-0.010	0.891
	[-0.001;0.001]		
Model with covariates			
CES-D sum score (without item 11)	0.002	0.010	0.872
(CES-D)	[-0.019;0.022]		
Vitamin D concentration (Vit D)	0.004	0.041	0.407
	[-0.005;0.012]		
CES-D x Vit D	-0.00003	-0.006	0.938
	[-0.001;0.001]		
Midsleep time as dependent variable			
1. Model without any covariates			
CES-D sum score (without item 11)	0.007	0.048	0.465
(CES-D)	[-0.011;0.024]		
Vitamin D concentration (Vit D)	0.00004	0.001	0.991
	[-0.007;0.007]		
CES-D x Vit D	-0.0001	-0.025	0.735
	[-0.001;0.001]		
2. Model with covariates			
CES-D sum score (without item 11)	0.007	0.052	0.425
(CES-D)	[-0.010;0.025]		
Vitamin D concentration (Vit D)	0.00042	0.006	0.913
	[-0.007;0.008]		
CES-D x Vit D	-0.00015	-0.031	0.681
	[-0.001;0.001]		

Notes: b: unstandardized regression coefficient; beta: standardized regression coefficient; CES-D: German version of the Centre for Epidemiological Studies Depression Scale (CES-D, [35, 36]) – the corresponding sum score has been modified by subtracting item 11 (reflecting the intensity of sleep problems) form the original total score; CI: confidence interval; p: p value. The results of different linear regression models are given: models without any covariates and models with covariates (age, the BMI score and the season in which vitamin D concentrations had been measured).