

Supplements

Table 4. Multivariate analysis of the association between serum 25(OH)D status and elevated ALT, stratified by gender & BMI category [OR (95% CI)] only among subjects with normal GGT†

25(OH)D ng/mL	Elevated ALT (U/L)			
	Men		Women	
	OR (95% CI)	P value	OR (95% CI)	P value
	BMI≤25 (n=5,266)		BMI≤25 (n=20,362)	
Model^b				
>30	1 (ref)		1 (ref)	
20-30	1.11 (0.81-1.54)	0.517	0.88 (0.73-1.07)	0.198
<20	1.46 (1.05-2.01)	0.024	0.89 (0.74-1.08)	0.237
	25<BMI≤30 (n=7,912)		25<BMI≤30 (n=12,242)	
Model^b				
>30	1 (ref)		1 (ref)	
20-30	1.20 (0.97-1.48)	0.087	1.05 (0.84-1.32)	0.658
<20	1.34 (1.08-1.65)	0.007	0.99 (0.79-1.24)	0.949
	BMI>30 (n=4,174)		BMI>30 (n=8,124)	
Model^b				
>30	1 (ref)		1 (ref)	
20-30	1.10 (0.82-1.46)	0.553	0.87 (0.65-1.16)	0.353
<20	0.97 (0.73-1.29)	0.849	0.93 (0.70-1.23)	0.604

^b Adjusted for: age, BMI, glucose, total cholesterol, triglycerides, statin use and season.

†Exclusion of subjects with elevated GGT; above 55 (U/L) for men and above 38 for women.

Note: GGT test was available for 64,259 subjects.

Table 5. Multivariate analysis of the association between serum 25(OH)D status and elevated ALT, stratified by gender & BMI category [OR (95% CI)] only among subjects with AST to ALT ratio<1†

25(OH)D ng/mL		Elevated ALT (U/L)			
		OR (95% CI)	P value	OR (95% CI)	P value
		Men		Women	
		BMI≤25 (n=8,231)		BMI≤25 (n=27,367)	
Model^b					
>30	1 (ref)			1 (ref)	
20-30	1.07 (0.85-1.35)	0.573		1.02 (0.86-1.2)	0.828
<20	1.31 (1.03-1.65)	0.026		1.14 (0.97-1.34)	0.103
		25<BMI≤30 (n=11,812)		25<BMI≤30 (n=16,665)	
Model^b					
>30	1 (ref)			1 (ref)	
20-30	1.04 (0.88-1.22)	0.681		1.07 (0.89-1.28)	0.499
<20	1.24 (1.05-1.46)	0.010		0.99 (0.82-1.18)	0.882
		BMI>30 (n=6,511)		BMI>30 (n=11,422)	
Model^b					
>30	1 (ref)			1 (ref)	
20-30	0.99 (0.79-1.23)	0.906		0.91 (0.72-1.15)	0.438
<20	0.96 (0.77-1.19)	0.702		0.93 (0.75-1.17)	0.535

^b Adjusted for: age, BMI, glucose, total cholesterol, triglycerides, statin use and season.

†Exclusion of subjects with elevated ALT who had AST/ ALT > 1.