

Table 1 Baseline characteristics of study population

Variables	Total (n = 10613)	Seronegative (n = 8543)	Seropositive (n = 2070)	P value
Male, n (%)	5153 (48.6)	4101 (48.0)	1052 (50.8)	0.023
Age (years)	22.5 ± 12.1	21.4 ± 11.8	27.3 ± 12.4	< 0.001
Age group, n (%)				< 0.001
6-14	3367 (31.7)	3018 (35.3)	349 (16.9)	
15-20	2741 (25.8)	2247 (26.3)	494 (23.9)	
21-30	1655 (15.6)	1286 (15.1)	369 (17.8)	
31-40	1492 (14.1)	1060 (12.4)	432 (20.9)	
41-49	1358 (12.8)	932 (10.9)	426 (20.6)	
Season, n (%)				< 0.001
Cold season	5333 (50.2)	4114 (48.2)	1219 (58.9)	
Warm season	5280 (49.8)	4429 (51.8)	851 (41.1)	
Race, n (%)				< 0.001
Mexican American	2950 (27.8)	2272 (26.6)	678 (32.8)	
Other Hispanic	423 (4.0)	284 (3.3)	139 (6.7)	
Non-Hispanic White	3839 (36.2)	3234 (37.9)	605 (29.2)	
Non-Hispanic Black	2969 (28)	2417 (28.3)	552 (26.7)	
Other	432 (4.1)	336 (3.9)	96 (4.6)	
Hypertension, n (%)	921 (8.7)	649 (7.6)	272 (13.1)	< 0.001
Diabetes, n (%)	264 (2.5)	186 (2.2)	78 (3.8)	< 0.001
Cigarettes consumption > 100, n (%)	2093 (19.7)	1532 (17.9)	561 (27.1)	< 0.001
Overdrinking, n (%)	1190 (11.2)	859 (10.1)	331 (16)	< 0.001
25(OH)D level (ng/mL)	23.2 ± 8.9	23.5 ± 9.0	22.2 ± 8.5	< 0.001
Vitamin D deficiency, n (%)	3973 (37.4)	3100 (36.3)	873 (42.2)	< 0.001

Table 2 The multivariate regression analysis for the *T.gondii* infection

Variables	OR	95%CI	P value
Vitamin D deficiency	1.219	1.097–1.354	<0.001
Male	1.150	1.041–1.27	0.006
Age (years)	1.040	1.035–1.046	<0.001
Race	0.916	0.879–0.955	<0.001
Warm season	0.672	0.605–0.746	<0.001
Hypertension	1.085	0.919–1.282	0.334
Diabetes	0.994	0.748–1.321	0.967
Smoking history	0.929	0.81–1.065	0.291
Drinking history	1.171	1.005–1.365	0.044
BMI \geq 25 (Kg/m ²)	0.923	0.826–1.032	0.160

Table 3 Comparison between *T. gondii* antibody seronegative and seropositive population after PSM

Variables	Seronegative (n = 1918)	Seropositive (n = 1918)	P value
Male, n (%)	1015 (52.9)	962 (50.2)	0.093
Age (year)	25.5 \pm 12.9	26.3 \pm 12.2	0.041
Season, n (%)			0.743
Cold season	1138 (59.3)	1127 (58.8)	
Warm season	780 (40.7)	791 (41.2)	
Race, n (%)			0.148
Mexican American	667 (34.8)	624 (32.5)	
Other Hispanic	89 (4.6)	106 (5.5)	
Non-Hispanic White	616 (32.1)	587 (30.6)	
Non-Hispanic Black	467 (24.3)	523 (27.3)	
Other	79 (4.1)	78 (4.1)	
Hypertension, n (%)	182 (9.5)	219 (11.4)	0.057
Diabetes, n (%)	36 (1.9)	36 (1.9)	1.000
Cigarettes consumption > 100, n (%)	527 (27.5)	484 (25.2)	0.124
Overdrinking, n (%)	294 (15.3)	266 (13.9)	0.217
25(OH)D level (ng/mL)	23.7 \pm 9.1	22.2 \pm 8.5	< 0.001
Vitamin D deficiency, n (%)	680 (35.5)	808 (42.1)	< 0.001

Table 4 The multivariate regression analysis for the T.gondii infection in PSM group

Variables	OR	95%CI	<i>P</i> value
Vitamin D deficiency	1.299	1.132–1.490	<0.001
Male	0.936	0.823–1.065	0.315
Age (years)	1.006	1.000–1.013	0.051
Race	1.011	0.960–1.066	0.669
Warm season	1.064	0.928–1.220	0.372
Hypertension	1.157	0.924–1.449	0.204
Diabetes	0.802	0.495–1.300	0.372
Smoking history	0.829	0.695–0.989	0.038
Drinking history	0.923	0.756–1.128	0.435
BMI \geq 25 (Kg/m ²)	1.042	0.904–1.200	0.573