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FIGURES

Figure 1. Map of Peru indicating the CRONICAS Cohort Study's sites.

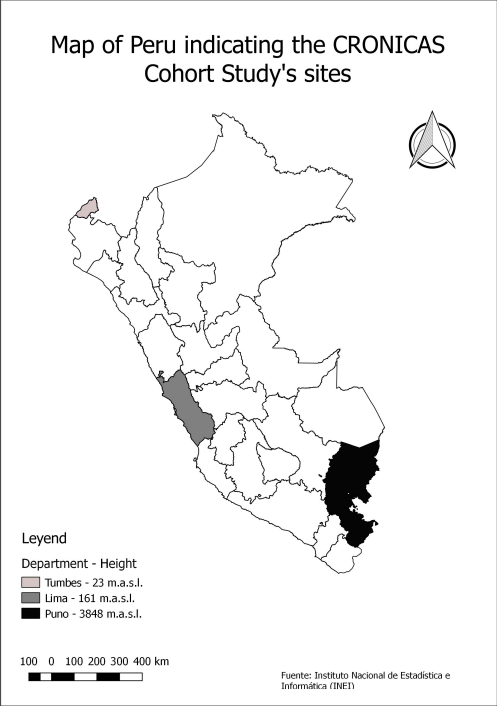
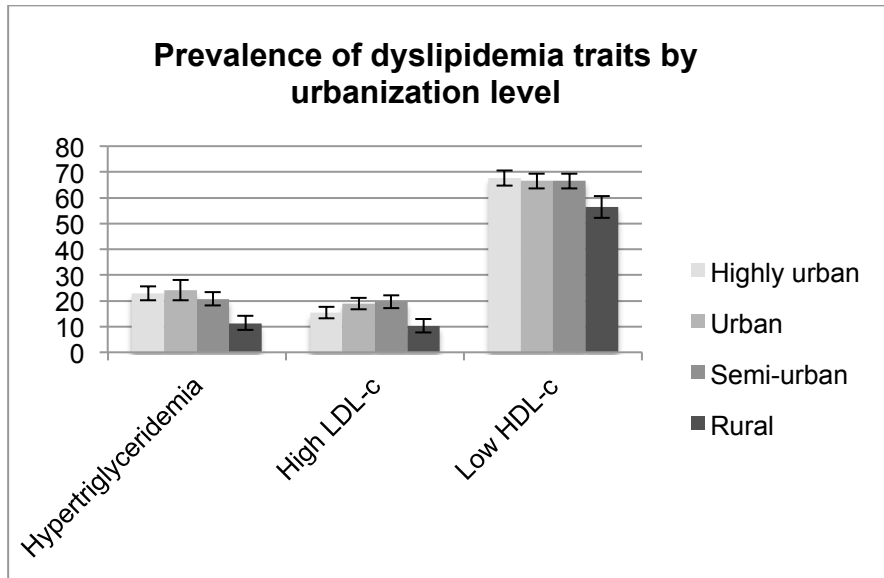
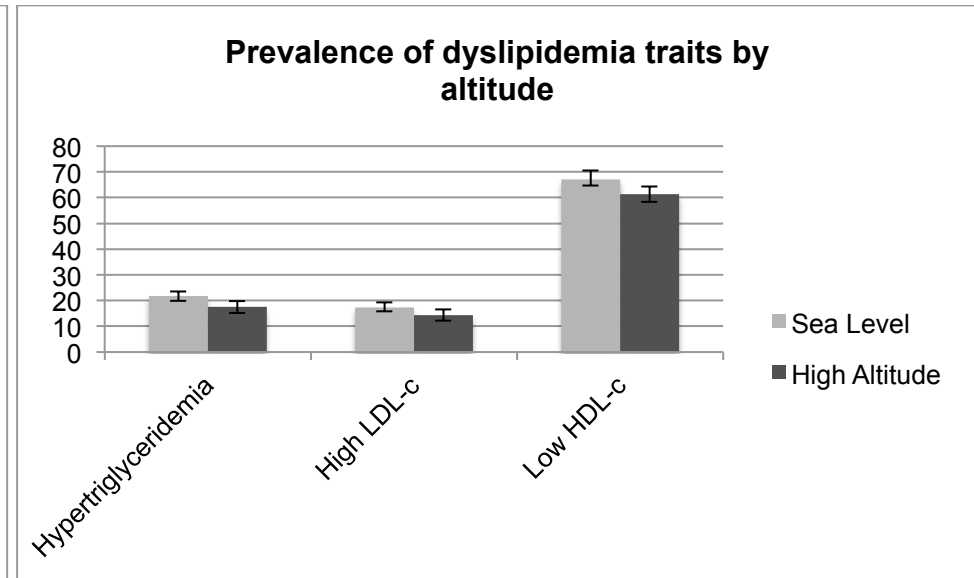


Figure 2. Prevalence of dyslipidemia traits by urbanization level and altitude

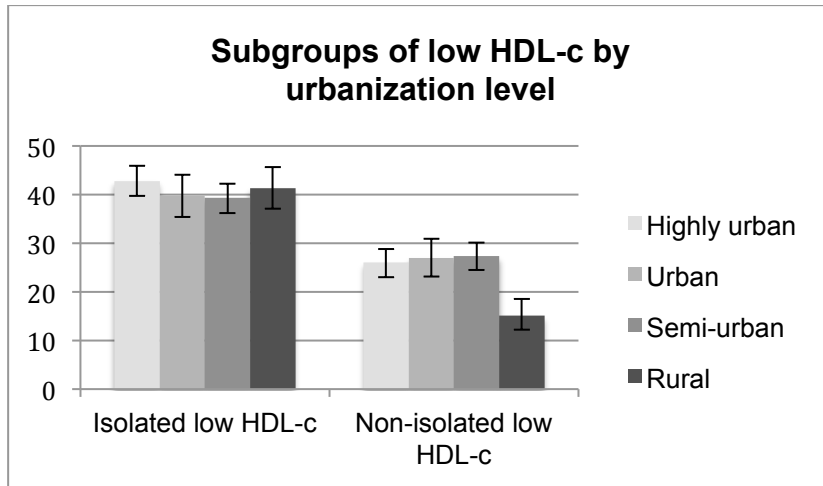


Hypertriglyceridemia ($p < 0.001$), High LDL-c ($p < 0.001$), Low HDL-c ($p < 0.001$)

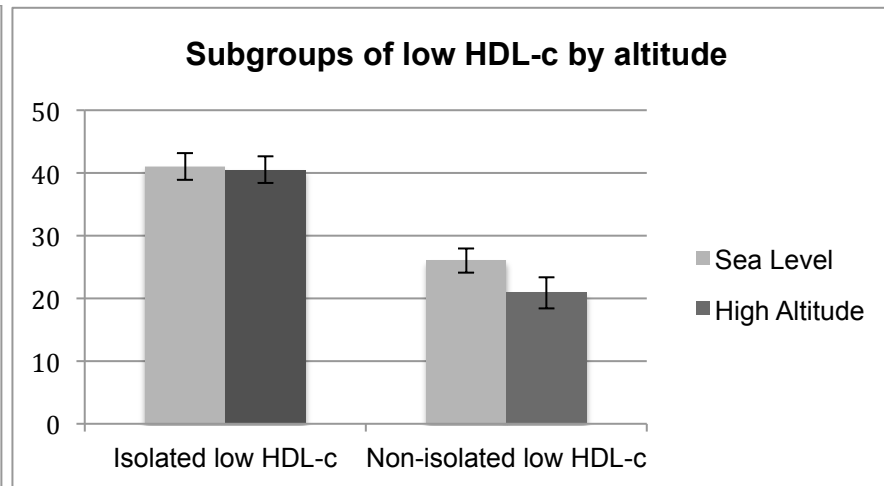


Hypertriglyceridemia ($p = 0.006$), High LDL-c ($p = 0.03$), Low HDL-c ($p = 0.002$)

Figure 3. Prevalence of subgroups of low HDL-c by urbanization level and altitude

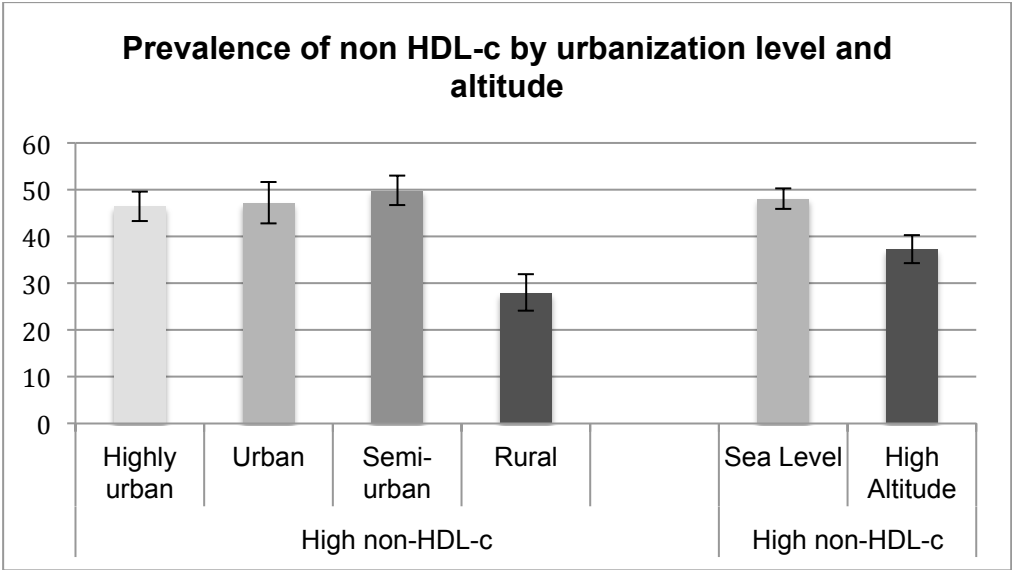


Isolated low HDL-c ($p=0.05$), Non-isolated low HDL-c ($p=0.05$)



Isolated low HDL-c ($p<0.001$), Non-isolated low HDL-c ($p<0.001$)

Figure 4. Prevalence of high non HDL-c by urbanization level and altitude



Urbanization level ($p < 0.001$), Altitude ($p < 0.001$)

TABLES

Table 1. Means of the plasma lipids

	Total (N=3,037)	Sea level highly urban (N=1,005)	High altitude urban (N=506)	Sea level semi-urban (N=991)	High altitude rural (N=535)	p
Triglycerides, mean (SD)	149.0 (70.0)	154.8 (73.1)	159.3 (69.3)	149.4 (68.9)	127.7 (61.9)	<0.001
LDL-c, mean (SD)	127.2 (34.5)	127.6 (33.4)	128.7 (36.7)	131.9 (33.8)	116.4 (33.1)	<0.001
HDL-c, mean (SD)	41.9 (11.4)	41.3 (11.2)	41.7 (10.9)	41.2 (11.8)	44.4 (11.3)	<0.001
Non-HDL-c, mean (SD)	156.9 (39.5)	158.5 (38.5)	160.6 (41.2)	161.7 (38.4)	141.9 (38.4)	<0.001

Table 2: Characteristics of the study population by dyslipidemia traits

	N	Hypertriglyceridemia n (%)	p	High LDL-c n (%)	p	Low HDL-c n (%)	p	High non-HDL-c n (%)	p
Socio-demographics									
Sex									
Female	1,565	298 (19.0%)	0.08	291 (18.6%)	<0.001	1,176 (75.1%)	<0.001	708 (45.2%)	0.33
Male	1,472	318 (21.6%)		206 (14.0%)		802 (54.5%)		640 (43.5%)	
Age									
35 - 44 years	742	131 (17.7%)	<0.001	88 (11.9%)	<0.001	527 (71.0%)	<0.001	289 (38.9%)	<0.001
45 – 54 years	771	181 (23.5%)		135 (17.5%)		509 (66.0%)		359 (46.6%)	
55 – 64 years	766	190 (24.8%)		158 (20.6%)		503 (65.7%)		398 (51.9%)	
65+ years	756	114 (15.1%)		115 (15.2%)		438 (57.9%)		301 (39.8%)	
Education level									
< 7 years	1,394	237 (17.0%)	<0.001	209 (15.0%)	0.11	897 (64.4%)	0.28	567 (40.7%)	0.001
7 – 11 years	1,001	201 (20.1%)		169 (16.9%)		646 (64.5%)		469 (46.9%)	
12+ years	640	178 (27.8%)		119 (18.6%)		434 (67.8%)		312 (48.8%)	
Socioeconomic status									
Lowest tertile	948	135 (14.2%)	<0.001	123 (13.0%)	0.003	591 (62.3%)	0.03	336 (35.4%)	<0.001
Middle tertile	1,042	210 (20.2%)		183 (17.6%)		676 (64.9%)		472 (45.3%)	
Highest tertile	1,047	271 (25.9%)		191 (18.2%)		711 (67.9%)		540 (51.6%)	
Lifestyles behaviors									
Daily smoking									
No	2,939	593 (20.2%)	0.43	479 (16.3%)	0.59	1,924 (65.5%)	0.03	1,302 (44.3%)	0.61
Yes	98	23 (23.5%)		18 (18.4%)		54 (55.1%)		46 (46.9%)	
Hazardous drinking									

No	2,625	517 (19.7%)	0.04	444 (16.9%)	0.04	1,762 (67.1%)	<0.001	1,170 (44.6%)	0.60
Yes	412	99 (24.0%)		53 (12.9%)		216 (52.4%)		178 (43.2%)	
Physical activity									
Low	972	196 (20.2%)	0.89	171 (17.6%)	0.18	651 (67.0%)	0.14	452 (46.5%)	0.10
Moderate/high	2,061	420 (20.4%)		323 (15.7%)		1,324 (64.2%)		893 (43.3%)	
Measurements									
Body mass index									
<25 kg/m ²)	904	81 (9.0%)	<0.001	105 (11.6%)	<0.001	408 (45.1%)	<0.001	255 (28.2%)	<0.001
≥25 and <30 kg/m ²	1,322	306 (23.2%)		229 (17.3%)		913 (69.1%)		643 (48.6%)	
≥30 kg/m ²	807	229 (28.4%)		163 (20.2%)		654 (81.0%)		449 (55.6%)	
Hypertension									
No	2,253	445 (19.8%)	0.19	339 (15.1%)	0.001	1,452 (64.5%)	0.19	953 (42.3%)	<0.001
Yes	780	171 (21.9%)		158 (20.3%)		523 (67.1%)		394 (50.5%)	
Diabetes									
No	2,797	551 (19.7%)	<0.001	446 (16.0%)	0.03	1,806 (64.6%)	0.03	1,227 (43.9%)	0.05
Yes	240	65 (27.1%)		51 (21.3%)		172 (71.7%)		121 (50.4%)	

* Low HDL-c = Isolated low HDL and/or high LDL-c and/or hypertriglyceridemia