

1 **Supplementary Materials: Adequacy of Critical Nutrients Affecting the Quality of the Diet in the ANIBES Study**
2 **Josune Olza^{1,2,3}, Emilio Martínez de Victoria⁴, Javier Aranceta-Bartrina^{3,5}, Marcela González-Gross^{3,6}, Rosa M. Ortega⁷, Lluís Serra-Majem^{3,8}, Gregorio Varela-**
3 **Moreiras^{9,10} and Ángel Gil^{1,2,3,**}**

4 **Supplementary Table 1.** Percentage of the ANIBES population for each diet quality index (DQI) stratified by education and income levels.

DQIs	Income (euros/month)	Education									Total
		Primary			Secondary			Tertiary			
		<1000	1000–2000	>2000	<1000	1000–2000	>2000	<1000	1000–2000	>2000	
HDI	Low	8.4	8.6	1.7	5.3	15.1	6.7	1.5	6.7	4.7	58.7
	Medium	6.0	5.3	1.0	3.4	8.0	3.4	1.4	3.9	3.4	35.8
	High	1.2	0.8	0.1	0.1	1.5	0.6	0.1	0.7	0.5	5.6
	Total	15.6	14.7	2.8	8.8	24.6	10.7	3.0	11.3	8.6	
MDS	Low	5.8	5.8	1.1	3.9	12.6	5.4	1.2	5.0	4.2	45
	High	9.8	8.8	1.7	4.9	12.0	5.3	1.8	6.3	4.4	55
	Total	15.6	14.6	2.8	8.8	24.6	10.7	3.0	11.3	8.6	
MDS-MOD	Low	4.4	4.6	1.1	3.2	8.9	4.2	0.7	3.7	2.1	32.9
	Medium	7.2	6.7	1.0	3.2	10.7	3.7	1.4	4.4	4.3	42.6
	High	4.0	3.3	0.8	2.4	5.0	2.7	0.9	3.1	2.2	24.4
	Total	15.6	14.6	2.9	8.8	24.6	10.6	3.0	11.2	8.6	
MED-DQI	Poor	1.0	1.3	0.3	1.0	3.1	1.2	0.3	0.7	0.5	9.4
	Medium poor	6.2	5.1	1.1	3.4	10.1	4.4	1.1	4.7	3.7	39.8
	Medium good	6.1	6.8	1.2	3.7	9.2	4.1	1.4	4.6	3.1	40.2
	Good	2.3	1.4	0.3	0.7	2.2	0.9	0.3	1.3	1.4	10.8
	Total	15.6	14.6	2.9	8.8	24.6	10.6	3.1	11.3	8.7	
ANIBES-DQI	Low	10.6	8.8	1.7	6.5	16.8	7.1	2.0	7.2	4.6	65.3
	Medium	4.5	5.1	1.0	1.8	6.4	3.1	0.9	3.4	3.4	29.6
	High	0.5	0.7	0.1	0.4	1.5	0.5	0.1	0.6	0.6	5.0
	Total	15.6	14.6	2.8	8.7	24.7	10.7	3.0	11.2	8.6	

5 ANIBES: Anthropometry, Intake and Energy Balance Study; HDI: Healthy Diet Indicator; MDS: Mediterranean Diet Score; MDS-MOD: Mediterranean Diet
6 Score-modified; MED-DQI: Mediterranean-Diet Quality Index; ANIBES-DQI: ANIBES-Diet Quality Index .
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Supplementary Table 2. Major estimated effects of education and income on the degree of diet quality for each DQI based on ordinal regression general linear models.

DQI	Category	Covariates	Effect (x)	e^{-x}	p value
HDI ^a	Low	Education			
		Primary	-0.196	1.217	0.554
		Secondary	0.194	0.823	0.534
		Tertiary	0 ^b		
		Income			
		<1000	0.166	0.847	0.656
		1000–2000	-0.056	1.057	0.855
	>2000	0 ^b			
	Medium	Education			
		Primary	-0.288	1.333	0.398
		Secondary	-0.033	1.034	0.919
		Tertiary	0 ^b		
		Income			
		<1000	0.338	0.713	0.375
1000–2000		-0.089	1.093	0.778	
>2000	0 ^b				
MDS ^a	Low	Education			
		Primary	0.455	0.634	0.000
		Secondary	0.369	1.446	0.020
		Tertiary	0 ^b		
		Income			
		<1000	0.359¹	0.698	0.019
			0.268²	0.765	0.035
	1000–2000	0.091	0.913	0.503	
	>2000	0 ^b			
	Medium	Education			
		Primary	0.042	1.043	0.789
		Secondary	0.019	1.020	0.897
		Tertiary	0 ^b		
		Income			
<1000		0.028	1.029	0.881	
1000–2000		0.207	1.230	0.2287	
>2000	0 ^b				
MDS-mod ^a	Low	Education			
		Primary	0.237	0.789	0.249
		Secondary	0.439	0.645	0.017
		Tertiary	0 ^b		
		Income			
		<1000	-0.145	1.156	0.496
		1000–2000	0.130	0.878	0.474
	>2000	0 ^b			
	Medium	Education			
		Primary	0.146	0.864	0.443
Secondary		0.065	0.937	0.707	
	Income				
<1000	-0.028	1.028	0.892		
1000–2000	0.182	0.834	0.297		

		>2000	0 ^b		
MED-DQI^c	Poor	Education			
		Primary	0.104 ¹	0.901	0.379
			0.376²	0.687	0.000
		Secondary	-0.275	1.317	0.013
		Tertiary	0 ^b		
		Income			
		<1000	-0.106	0.900	0.756
		1000–2000	0.321	1.378	0.287
		>2000	0 ^b		
		Medium Poor	Education		
		Primary	0.376	0.687	0.000
		Secondary	0.275	1.317	0.171
		Tertiary	0 ^b		
		Income			
		<1000	-0.089	0.914	.721
	1000–2000	0.140	1.150	0.540	
	>2000	0 ^b			
	Medium Good	Education			
	Primary	0.376	0.687	0.000	
	Secondary	0.114	1.120	0.574	
	Tertiary	0 ^b			
	Income				
	<1000	0.048	1.049	0.847	
	1000–2000	0.255	1.290	0.268	
	>2000	0 ^b			
ANIBES^a	Low	Education			
		Primary	-0.168	1.183	0.252
		Secondary	-0.353	1.423	0.012
		Tertiary	0 ^b		
		Income			
		<1000	-0.396	1.486	0.012
		1000–2000	-0.173	1.189	0.209
	>2000	0 ^b			

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9 ANIBES: Anthropometry, Intake and Energy Balance Study; HDI: Healthy Diet Indicator; MDS:
10 Mediterranean Diet Score; MDS-mod: Modified Mediterranean Diet Score; MED: Mediterranean x
11 x: Diet Score. ordinal regression coefficient; e^{^-x}: probability of significant effects of the covariates
12 (income and education) on different DQI categories. Significant values are highlighted in bold

13 ^a. The reference category is: High

14 ^b. This parameter is set to zero because it is redundant.

15 ^c. The reference category is: Good.

16 ¹ Primary vs. tertiary

17 ² Primary vs. secondary

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Supplementary Table 3. Percentage of the ANIBES population (AP) and the plausible energy reporters (PER) for each diet quality index (DQI)

			Total			Adults (18–64 years)			Older adults (65–75 years)		
			Total	Men	Women	Total	Men	Women	Total	Men	Women
HDI	AP	Low	59.0	61.2	57.0	60.2	63.0	57.6	49.0	46.5	51.4
		Medium	35.6	33.6	37.4	34.9	32.2	37.5	40.8	44.4	37.4
		High	5.4	5.2	5.6	4.8	4.8	4.9	10.2	9.1	11.2
	PER	Low	58.6	61.4	55.5	59.8	63.1	56.2	49.1	46.7	51.2
		Medium	36.7	34.3	39.4	36.1	33.0	39.5	41.6	45.3	38.4
		High	4.7	4.3	5.1	4.1	3.9	4.3	9.3	8.0	10.5
MDS	AP	Low	44.8	37.9	51.1	47.4	40.5	53.8	23.8	17.2	29.9
		High	55.2	62.1	48.9	52.6	59.5	46.2	76.2	82.8	70.1
	PER	Low	40.7	35.2	46.6	43.1	37.7	49.1	22.4	14.7	29.1
		High	59.3	64.8	53.4	56.9	62.3	50.9	77.6	85.3	70.9
MDS-MOD	AP	Low	33.2	32.1	34.2	35.5	34.5	36.5	14.6	13.1	15.9
		Medium	42.3	42.3	42.4	41.6	41.6	41.7	48.1	47.5	48.6
		High	24.4	25.6	23.3	22.8	23.9	21.8	37.4	39.4	35.5
	PER	Low	36.5	35.0	38.2	38.5	36.9	40.4	21.1	18.7	23.3
		Medium	41.7	42.5	40.9	41.5	42.3	40.5	43.5	44.0	43.0
		High	21.8	22.5	21.0	20.0	20.8	19.1	35.4	37.3	33.7
MED-DQI	AP	Poor	9.3	10.4	8.4	10.0	11.4	8.8	3.9	2.0	5.6
		Medium Poor	39.9	41.7	38.3	41.8	44.0	39.7	25.2	23.2	27.1
		Medium Good	39.6	39.2	39.9	38.5	37.2	39.7	48.5	55.6	42.1
		Good	11.1	8.7	13.4	9.7	7.4	11.9	22.3	19.2	25.2
	PER	Poor	8.3	10.5	6.0	8.9	11.6	6.0	3.7	1.3	5.8
		Medium Poor	40.6	41.7	39.4	42.4	43.4	41.2	26.7	26.7	26.7
		Medium Good	40.6	39.4	41.9	39.7	37.5	42.1	47.8	56.0	40.7
		Good	10.5	8.4	12.7	9.0	7.5	10.7	21.7	16.0	26.7
Best	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
ANIBES-DQI	AP	Low	69.5	68.5	70.5	70.7	69.0	72.2	60.2	63.6	57.0
		Medium	26.2	26.4	25.9	25.4	26.3	24.6	32.0	27.3	36.4
		High	4.3	5.1	3.5	3.9	4.6	3.2	7.8	9.1	6.5
	PER	Low	49.0	43.4	52.4	50.8	45.6	53.8	31.1	29.2	33.3
		Medium	41.2	40.1	41.9	40.2	39.2	40.7	51.1	45.8	57.1

High

9.8

15.5

5.7

9.0

15.2

5.5

17.8

25.0

9.5

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