

Supplemental material

# Body Composition Assessment and Mediterranean Diet Adherence in U12 Spanish-male Professional Soccer Players: Cross-Sectional Study

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**Table S1.** Anthropometric parameters by field position in the 8–10 years group.

Antropometric parameters	Goalkeeper (n=4)	Defender (n=8)	Midfielder (n=8)	Forward (n=6)
Age (years)	8.57 ± 0.38	9.22 ± 0.67	8.62 ± 0.49	9.05 ± 0.81
Weight (kg)	32.20 ± 2.03	31.86 ± 3.08	29.21 ± 2.90	29.33 ± 4.67
Height (cm)	139.25 ± 5.51	137.03 ± 6.53	133.74 ± 5.29	131.57 ± 6.90
BMI (kg/m <sup>2</sup> )	16.70 ± 2.16	16.95 ± 0.86	16.31 ± 1.10	16.26 ± 1.44
Weight percentile	79.29 ± 14.11	65.47 ± 17.59	62.91 ± 16.72	44.11 ± 32.90
Height percentile	81.80 ± 20.28	61.62 ± 26.87	64.10 ± 20.49	38.38 ± 31.45*
BMI percentile	54.99 ± 29.80	61.25 ± 14.76	54.51 ± 22.76	49.50 ± 31.01
Triceps skinfold (mm)	9.10 ± 3.08	8.71 ± 3.24	8.45 ± 1.35	7.27 ± 1.97
Calf skinfold (mm)	8.45 ± 2.32	7.25 ± 2.64	7.69 ± 1.95	6.97 ± 1.35
Body fat (Slaughter equation) (%)	13.90 ± 3.79	12.73 ± 4.14	12.86 ± 1.95	11.46 ± 2.35
Body fat (kg)	4.53 ± 1.57	4.04 ± 1.30	3.79 ± 0.87	3.32 ± 1.13

Data are represented as mean ± standard deviation (SD). \*, p ≤ 0.05 compared to the goalkeeper group. BMI, body mass index.

**Table S2.** Anthropometric parameters by field position in the 10-12 years group.

Antropometric parameters	Goalkeeper (n=7)	Defender (n=11)	Midfielder (n=16)	Forward (n=10)
Age (years)	11.13 ± 0.59	10.84 ± 0.40	11.20 ± 0.51	10.91 ± 0.58
Weight (kg)	40.14 ± 3.71	35.35 ± 3.50**	37.43 ± 4.85	36.80 ± 4.68
Height (cm)	145.86 ± 7.25	141.96 ± 5.69	146.54 ± 5.86	147.58 ± 8.94
BMI (kg/m <sup>2</sup> )	18.93 ± 1.91	17.52 ± 1.11	17.35 ± 1.14	16.88 ± 1.36*
Weight percentile	70.09 ± 14.87	52.13 ± 14.39*	52.27 ± 24.28	58.23 ± 17.39
Height percentile	62.46 ± 29.85	48.98 ± 22.97	59.26 ± 28.10	68.93 ± 29.22
BMI percentile	69.10 ± 24.90	56.52 ± 17.28	49.93 ± 18.30*	45.33 ± 20.88*
Triceps skinfold (mm)	12.13 ± 3.89	9.86 ± 3.21	9.83 ± 2.93	8.52 ± 2.04
Calf skinfold (mm)	11.66 ± 3.34	9.67 ± 3.14	8.44 ± 3.42**	7.90 ± 3.27**
Body fat (Slaughter equation) (%)	18.48 ± 5.06	15.35 ± 4.32	14.43 ± 4.52*	13.07 ± 3.68*
Body fat (kg)	7.40 ± 2.08	5.48 ± 1.87*	5.56 ± 2.43*	4.86 ± 1.71**

Data are represented as mean ± standard deviation (SD). \*, p ≤ 0.05; \*\*, p ≤ 0.01 compared to the goalkeeper group. BMI, body mass index.

**Table S3.** Mediterranean diet quality index in the different groups

	8-10 years ( <i>n</i> = 26)	11-12 years ( <i>n</i> = 45)	p-value	Total ( <i>n</i> = 71)
<b>KIDMED score</b>	7.50 ± 2.06	8.15 ± 1.93	0.210	7.83 ± 2.03

Mean of score values ± standard deviation obtained from the Mediterranean diet adherence test (KIDMED). p-value calculated between the 8-10 and 11-12 years groups.

**Table S4.** Non-parametric Spearman's correlations

	Spearman's r	p-value
<b>Weight (kg)</b>	0.2042	0.103
<b>BMI (kg/m<sup>2</sup>)</b>	-0,1343	0.279
<b>Body Fat (%)</b>	-0,1902	0.132

Non-parametric Spearman's correlations between KIDMED score and body composition parameters. BMI, body mass index.

**Table S5.** Details of the responses for each item of the KIDMED test by groups.

ITEMS	Group 1 Goalkeeper + Defender (n=31)		Group 2 Midfielder + Forward (n=40)	
	Yes (%)	No (%)	Yes (%)	No (%)
1	80,65	19,35	82,50	17,50
2	41,94	58,06	57,50	42,50
3	45,16	54,84	62,50	37,50
4	12,90	87,10	25,00	75,00
5	74,19	25,81	67,50	32,50
6	16,13	83,87	15,00	85,00
7	96,77	3,23	100,00	0,00
8	93,55	6,45	87,50	12,50
9	93,55	6,45	80,00	20,00
10	22,58	77,42	32,50	67,50
11	100,00	0,00	100,00	0,00
12	25,81	74,19	17,50	82,50
13	93,55	6,45	90,00	10,00
14	32,26	67,74	17,50	82,50
15	67,74	32,26	72,50	27,50
16	25,81	74,19	12,50	87,50

**Table S6.** Main beverages consume and use of supplements by groups

	<b>Group 1</b> <b>Goalkeeper + Defender (n=30)</b>		<b>Group 2</b> <b>Midfielder + Forward (n=40)</b>	
	<b>Yes (%)</b>	<b>No (%)</b>	<b>Yes (%)</b>	<b>No (%)</b>
Water	28 (93,3%)	2 (6,7%)	35 (87,5%)	5 (12,5%)
Commercial juices	14 (46,7%)	16 (53,3%)	19 (47,5%)	21 (52,5%)
Soft drinks	10 (33,3%)	20 (66,7%)	15 (37,5%)	25 (62,5%)
Use of Supplements	2 (6,7%)*	28 (93,3%)	10 (25%)*	30 (75%)

\* Significantly different between groups at p = 0.038.