

Supplementary Materials

The Relevance of Plant-Based Diets and Micronutrient Supplementation for Body Composition: Data from the VeggieNutri Cross-Sectional Study

Table S1. Variations between self-reported diet groups (OMNI, VEG, LOV) and real diet groups, as confirmed by the FFQ.

	Self-reported diet	Real diet	Total variation	Group variation
Dietary pattern, n	425	425		
OMNI, n (%)	247 (58)	263 (62)	+16 (+4%)	+ 14 from LOV + 2 from VEG
LOV, n (%)	106 (25)	98 (23)	-8 (-2%)	- 1 to VEG - 14 to OMNI
VEG, n (%)	72 (17)	64 (15)	-8 (-2%)	+ 7 from VEG - 2 to OMNI - 7 to LOV + 1 from LOV

Legend: LOV, lacto-ovovegetarians; OMNI, omnivorous; VEG, vegans.

Table S2. Analysis on subgroups based on the duration of diet adherence to assess its association with anthropometric parameters, body composition and age.

	LOV			VEG		
	diet duration ≤ 5 years	diet duration > 5 years	<i>p</i>	diet duration ≤ 5 years	diet duration > 5 years	<i>p</i>
Weight						
Median (P25; P75), kg	63 (57.7; 73.9)	65.5 (57.5; 61.4)	0.871 ^a	62.2 (52.7; 75.1)	59.9 (54.6; 78.9)	0.811 ^a
Height						
Mean ± SD, cm	166.5 ± 7.6	167.6 ± 6.3	0.768 ^b	167.8 ± 9.7	167.7 ± 8.9	0.699 ^b
BMI						
Median (P25; P75), kg/m ²	23.4 (21.2; 25.5)	23.3 (20.5; 25.6)	0.856 ^a	22.9 (20.4; 25.7)	21.9 (20.6; 26.5)	1.000 ^a
Waist circumference						
Median (P25; P75), cm	79.3 (71.8; 86.0)	80.7 (74.6; 86.8)	0.236 ^a	80.1 (72.5; 88.4)	79.7 (75.1; 89.0)	0.794 ^a
Fat mass						
Median (P25; P75), %	26.7 (19.9; 30.7)	25.8 (21.6; 33.0)	0.670 ^a	24.3 (20.1; 28.9)	25.1 (17.8; 28.0)	0.741 ^a
Visceral Fat						
Median (P25; P75)	3.0 (1.5; 4.5)	4.0 (3.0; 5.5)	0.039 ^a	3.0 (1.5; 5.0)	3.3 (2.0; 5.3)	0.620 ^a
Bone mass						
Median (P25; P75), kg	2.4 (2.2; 2.7)	2.3 (2.2; 2.6)	0.833 ^a	2.3 (2.1; 3.0)	2.3 (2.1; 2.9)	0.969 ^a
Muscle mass						
Median (P25; P75), kg	44.3 (41.2; 50.1)	43.8 (40.9; 48.7)	0.837 ^a	43.1 (38.6; 57.6)	42.8 (39.7; 53.3)	0.829 ^a
Muscle mass adjusted for body weight						
Mean ± SD, %	70.8 ± 8.0	69.8 ± 7.1	0.135 ^b	72.5 ± 6.9	71.7 ± 7.5	0.740 ^b
Total body water						
Median (P25; P75), %	51.5 (47.3; 56.1)	51.2 (47.1; 54.7)	0.564 ^a	54.0 (51; 55.8)	51.9 (51.3; 57.5)	0.569 ^a
Age						
Mean ± SD, years	31.2 ± 9.3	35.9 ± 10.3	0.026 ^a	31.7 ± 9.0	32.5 ± 7.4	0.498 ^a

Legend: LOV, lacto-ovovegetarians; VEG, vegans. ^a Mann-Whitney test; ^b ANOVA.

Table S3. Analysis on subgroups based on the duration of diet adherence to assess its impact on biochemical parameters.

	LOV			VEG		
	diet duration ≤ 5 years	diet duration > 5 years	<i>p</i>	diet duration ≤ 5 years	diet duration > 5 years	<i>p</i>
B12 vitamin						
Median (P25; P75), (pg/mL)	309 (230; 407)	320 (234; 391)	0.729 ^a	400 (278; 507)	407 (298; 568)	0.883 ^a
Iron						
Median (P25; P75), (µg/mL)	95 (65; 125)	93 (75; 115)	0.997 ^a	108 (77; 131)	106 (77; 153)	0.666 ^a
C-Reactive protein						
Median (P25; P75), (mg/mL)	2.2 (0.8; 3.7)	1.1 (0.6; 3.2)	0.260 ^a	0.7 (0.4; 2.8)	0.7 (0.4; 1.1)	0.558 ^a
Homocysteine						
Median (P25; P75), (µmol/mL)	9.0 (6.7; 10.4)	9.5 (8.2; 11.3)	0.167 ^a	8.5 (7.3; 21.1)	8 (7; 9)	0.230 ^a

Legend: LOV, lacto-ovovegetarians; VEG, vegans. ^a Mann-Whitney test.

Table S4. Crude linear regression models for the association between dietary patterns and body composition, anthropometric, health measurements.

		OMN	LOV			VEG		
		I	Beta	95% CI	p	Beta	95% CI	p
Weight, kg	Ref		-0.805	(-3.834; 2.223)	0.602	-1.652	(-5.206; 1.902)	0.362
Height, cm	Ref		0.406	(-1.608; 2.419)	0.693	1.209	(-1.238; 3.504)	0.349
BMI, kg/m ²	Ref		0.289	(-1.178; 0.599)	0.523	-1.077	(23.626; 24.548)	0.043
Waist circumference, cm	Ref		-0.778	(-1.492; -0.063)	0.033	-1.042	(-1.880; -0.203)	0.015
Visceral Fat	Ref		-3.48	(-6.103; -0.850)	0.009	-2.989	(-6.082; 0.104)	0.058
Fat Mass, %	Ref		2.276	(0.369; 4.183)	0.019	-1.146	(-3.384; 1.091)	0.315
Bone Mass, kg	Ref		-0.082	(-0.190; 0.026)	0.137	-0.044	(-0.171; 0.083)	0.497
Muscle Mass, kg	Ref		-1.670	(-3.853; 0.512)	0.134	-0.521	(-3.082; 2.040)	0.690
% Muscle Mass, %	Ref		-1.314	(-3.018; 0.390)	0.131	1.171	(-0.829; 3.170)	0.251
Total Body Water, %	Ref		0.016	(-1.346; 1.379)	0.981	2.438	(0.839; 4.037)	0.003
Handgrip strenght, kgf	Ref		0.346	(-2.197; 2.888)	0.790	1.643	(-1.545; 4.831)	0.313
Systolic blood pressure, mmHg	Ref		-2.504	(-5.787; 0.780)	0.135	-1.465	(-5.303; 2.373)	0.454
Diastolic blood pressure, mmHg	Ref		-0.857	(-2.988; 1.274)	0.431	-1.583	(0.908; 1.552)	0.213

Legend: BMI, body mass index; CI, confidence interval; LOV, lacto-ovovegetarians; OMNI, omnivorous; Ref, reference; VEG, vegans.

Table S5. Sex-specific reference levels for blood ferritin and blood B12 vitamin set by the Clinical Pathology Department of CHUSJoão, Porto, Portugal that were used as cut-offs of adequacy.

Ferritin adequacy	MALE
above adequacy	> 200 ng/mL
within adequacy	15 – 200 ng/mL
below adequacy	< 15 ng/mL
Ferritin adequacy	FEMALE
above adequacy	> 150 ng/mL
within adequacy	15 – 150 ng/mL
below adequacy	< 15 ng/mL
B12 vitamin adequacy	MALE/FEMALE
above adequacy	> 883 pg/mL
within adequacy	187– 883 pg/mL
below adequacy	< 187 pg/mL