

Supplementary Information

Association between hedonic hunger and body-mass index versus obesity status.

Gabriela Ribeiro^{a, b, #}, Marta Camacho^{a, #}, Osvaldo Santos^{c, d}, Cristina Pontes^e, Sandra Torres^f, Albino J. Oliveira-Maia^{a, g, h, i, *}

^a Champalimaud Clinical Centre,
Champalimaud Centre for the Unknown,
Av. de Brasília, Doca de Pedrouços,
1400-038 Lisboa, Portugal.

^b Lisbon Academic Medical Centre PhD Program,
Faculdade de Medicina, Universidade de Lisboa,
Avenida Professor Egas Moniz,
1649-028 Lisboa, Portugal.

^c Instituto de Saúde Ambiental,
Faculdade de Medicina, Universidade de Lisboa,
Avenida Professor Egas Moniz,
1649-028 Lisboa, Portugal.

^d Instituto de Medicina Preventiva e Saúde Pública,
Faculdade de Medicina, Universidade de Lisboa,
Avenida Professor Egas Moniz,
1649-028 Lisboa, Portugal.

^e Psychiatry and Mental Health Clinic,
Centro Hospitalar de São João,
Alameda Prof. Hernâni Monteiro,
4200-319 Porto, Portugal.

^f Faculdade de Psicologia e de Ciências da Educação,
Universidade do Porto,
Rua Alfredo Allen,
4200-135 Porto, Portugal.

^g Department of Psychiatry and Mental Health,
Centro Hospitalar de Lisboa Ocidental,
Rua da Junqueira, 126,
1340-019 Lisboa, Portugal.

^h NOVA Medical School | Faculdade de Ciências Médicas,
Universidade Nova de Lisboa,
Campo Mártires da Pátria 130,
1169-056 Lisboa, Portugal

ⁱ Champalimaud Research,
Champalimaud Centre for the Unknown,
Av. de Brasília, Doca de Pedrouços,
1400-038 Lisboa, Portugal.

these authors contributed equally to this work

Supplementary Table 1. Associations between BMI and P-PFS scores, tested in the clinical and non-clinical samples using sequential multivariable linear regression models.

Variable	Model 1 (R ² =0.57)		Model 2 (R ² =0.57)		Model 3 (R ² =0.57)		Model 4 (R ² =0.56)		Model 5 (R ² =0.57)	
	β	p	β	p	β	p	β	p	β	p
Gender	0.45	0.6	0.48	0.6	0.52	0.5	0.47	0.6	0.46	0.6
Age	1.51	<0.001	1.52	<0.001	1.52	<0.001	1.52	<0.001	1.5	<0.001
Age²	-0.01	<0.001	-0.01	<0.001	-0.01	<0.001	-0.01	<0.001	-0.01	<0.001
Education	-2.13	0.001	-2.1	0.001	-2.1	0.001	-2.1	0.001	-2.1	0.001
Education²	0.08	0.003	0.08	0.003	0.08	0.003	0.08	0.003	0.08	0.003
P-PFS - Aggregate			0.56	0.2						
P-PFS - Food Available					1.02	0.01				
P-PFS - Food Present							0.17	0.6		
P-PFS - Food Tasted									-0.39	0.3

Supplementary Table 2. Associations between group status (clinical vs. non-clinical) and P-PFS scores, tested in the clinical and non-clinical samples using sequential multivariable logistic regression models.

Variable	Model 11 (c=0.96)			Model 12 (c=0.96)			Model 13 (c=0.96)			Model 14 (c=0.96)			Model 15 (c=0.96)		
	β	p	OR (95% CI)	β	p	OR (95% CI)	β	p	OR (95% CI)	β	p	OR (95% CI)	β	p	OR (95% CI)
Gender	-1.44	0.003	0.2 (0.09-0.6)	-1.45	0.002	0.2 (0.09-0.6)	-1.47	0.002	0.2 (0.09-0.6)	-1.42	0.002	0.2 (0.097-0.6)	-1.43	0.002	0.2 (0.096-0.6)
Age	0.5	<0.01	1.7 (1.3-2.1)	0.51	<0.01	1.7 (1.3-2.2)	0.51	<0.01	1.7 (1.3-2.2)	0.51	<0.01	1.7 (1.3-2.2)	0.5	<0.01	1.6 (1.3-2.1)
Age²	-0.004	0.02	0.996 (0.993-0.999)	-0.004	0.02	0.996 (0.992-0.999)	-0.004	0.03	0.996 (0.992-1)	-0.004	0.02	0.996 (0.992-0.999)	-0.004	0.02	0.996 (0.993-0.999)
Education	-0.57	0.049	0.6 (0.3-0.99)	-0.54	0.06	0.6 (0.3-1.02)	-0.51	0.08	0.6 (0.3-1.06)	-0.55	0.05	0.6 (0.3-1.01)	-0.57	0.05	0.6 (0.3-1.002)
Education²	0.03	0.03	1.03 (1.003-1.06)	0.03	0.04	1.03 (1.002-1.06)	0.03	0.05	1.03 (1-1.05)	0.03	0.03	1.03 (1.002-1.06)	0.03	0.03	1.03 (1.003-1.06)
P-PFS - Aggregate				0.4	0.08	1.5 (0.95-2.5)									
P-PFS - Food Available							0.6	0.008	1.8 (1.2-2.8)						
P-PFS - Food Present										0.22	0.2	1.3 (0.9-1.8)			
P-PFS - Food Tasted													-0.1	0.6	0.9 (0.6-1.4)