

Supplemental table 1. Interaction between *BDNF* rs6265 genotype and dietary factors on BMI in Puerto Rican adults

Dietary factor		Men				Women			
		GG	GA+AA	<i>P</i>	<i>P</i> Interaction	GG	GA+AA	<i>P</i>	<i>P</i> Interaction
Food intake (g/d)	<3532	28.3±0.6 (n=113)	27.3±0.9 (n=37)	0.283	0.684	32.3±0.4 (n=359)	32.9±0.6 (n=126)	0.378	0.308
	≥3532	31.2±0.6 (n=128)	29.7±0.8 (n=57)	0.095		32.3±0.5 (n=236)	34.0±0.1 (n=90)	0.060	
Total energy (kcal/d)	<2270	29.7±0.7 (n=94)	28.3±0.9 (n=42)	0.154	0.586	32.4±0.4 (n=403)	33.1±0.6 (n=134)	0.261	0.319
	≥2270	29.9±0.6 (n=147)	29.1±0.8 (n=52)	0.336		31.1±0.6 (n=192)	33.9±0.8 (n=82)	0.064	
Protein intake (% energy)	<16.89	29.2±0.6 (n=142)	27.7±0.7 (n=58)	0.054	0.234	31.8±0.4 (n=320)	32.3±0.6 (n=116)	0.492	0.159
	≥16.89	30.7±0.7 (n=99)	30.7±1.1 (n=36)	0.985		32.9±0.5 (n=275)	34.8±0.7 (n=100)	0.020	
SFA (%energy)	<9.63	29.9±0.8 (n=117)	28.3±0.9 (n=46)	0.082	0.502	32.1±0.4 (n=337)	32.3±0.7 (n=117)	0.807	0.045
	≥9.63	29.9±0.6 (n=124)	29.3±0.9 (n=48)	0.533		32.4±0.5 (n=258)	34.8±0.7 (n=99)	0.003	
PUFA (%energy)	<8.76	29.5±0.7 (n=114)	27.4±0.9 (n=42)	0.025	0.042	31.9±0.4 (n=306)	32.3±0.7 (n=105)	0.649	0.135
	≥8.76	30.0±0.6 (n=127)	30.1±0.8 (n=52)	0.890		32.4±0.4 (n=289)	34.4±0.7 (n=111)	0.008	
N-3 : N-6 PUFA ratio	<0.09	29.4±0.6 (n=138)	29.0±0.7 (n=55)	0.612	0.180	31.9±0.4 (n=299)	33.0±0.7 (n=99)	0.182	0.462
	≥0.09	30.4±0.7 (n=102)	28.2±1.1 (n=37)	0.043		32.3±0.4 (n=286)	33.4±0.64 (n=116)	0.166	

P-values and means were adjusted for age, smoking status, drinking status, education, medication use for depression, physical activity, total energy and population admixture.

Supplemental table 2. Interaction between *BDNF* rs6265 genotype and nutrition factors on waist circumference in Puerto Rican adults

Dietary factor		Men				Women			
		GG	GA+AA	<i>P</i>	<i>P</i> Interaction	GG	GA+AA	<i>P</i>	<i>P</i> Interaction
Food intake (g/d)	<3532	99.0±1.8 (n=113)	95.6±2.8 (n=37)	0.224	0.52	100.8±0.8 (n=359)	102.5±1.3 (n=126)	0.254	0.872
	≥3532	107.1±1.7 (n=128)	101.5±2.1 (n=57)	0.014		101.2±1.1 (n=236)	103.3±1.2 (n=90)	0.27	
Energy intake (kcal/d)	<2270	102.1±2.1 (n=94)	97.2±2.9 (n=42)	0.096	0.698	100.9±0.8 (n=403)	103.0±1.3 (n=134)	0.157	0.889
	≥2270	104.1±1.6 (n=147)	100.1±2.2 (n=52)	0.076		101.4±1.2 (n=192)	103.2±1.8 (n=82)	0.381	
Protein intake (% energy)	<16.89	101.7±1.7 (n=142)	95.8±2.2 (n=58)	0.013	0.192	99.5±0.9 (n=320)	99.9±1.4 (n=116)	0.792	0.106
	≥16.89	105.6±1.8 (n=99)	104.4±2.8 (n=36)	0.792		102.5±1.0 (n=275)	106.5±1.6 (n=100)	0.028	
SFA (% energy)	<9.63	103.4±2.0 (n=117)	99.3±2.4 (n=46)	0.085	0.718	100.4±0.9 (n=337)	101.1±1.4 (n=117)	0.66	0.206
	≥9.63	104.2±1.7 (n=124)	99.3±2.5 (n=48)	0.062		101.6±1.1 (n=258)	105.2±1.6 (n=99)	0.056	
PUFA (% energy)	<8.76	101.8±1.9 (n=114)	94.0±2.5 (n=42)	0.003	0.018	100.3±1.0 (n=306)	102.5±1.6 (n=105)	0.226	0.987
	≥8.76	104.3±1.6 (n=127)	103.8±2.3 (n=52)	0.839		101.5±0.9 (n=289)	103.2±1.4 (n=111)	0.178	
N-3 : N-6 PUFA ratio	<0.09	101.4±1.5 (n=138)	99.6±1.9 (n=55)	0.367	0.083	100.6±0.9 (n=299)	101.8±1.5 (n=99)	0.452	0.780
	≥0.09	105.3±2.0 (n=102)	97.7±3.1 (n=37)	0.017		100.8±1.0 (n=286)	103.2±1.5 (n=116)	0.178	

P-values and means were adjusted for age, smoking status, drinking status, education, medication use for depression, physical activity, total energy and population admixture.

Supplemental table 3. Interaction between *BDNF* rs6265 genotype and nutrition factors on hip in BPRHS

Dietary factor		Men				Women			
		GG	GA+AA	<i>P</i>	<i>P</i> Interaction	GG	GA+AA	<i>P</i>	<i>P</i> Interaction
Food intake (g/d)	<3532	101.9±1.3 (n=113)	102.2±2.0 (n=37)	0.899	0.024	109.9±0.8 (n=359)	111.4±1.2 (n=126)	0.27	0.299
	≥3532	108.7±1.4 (n=128)	103.0±1.8 (n=57)	0.003		110.8±1.1 (n=236)	114.8±1.7 (n=90)	0.045	
Energy intake (kcal/d)	<2270	104.3±1.6 (n=94)	103.3±2.26 (n=42)	0.666	0.231	110.1±0.8 (n=403)	110.5±1.2 (n=134)	0.301	0.187
	≥2270	106.5±1.3 (n=147)	102.3±1.7 (n=52)	0.016		110.7±1.3 (n=192)	115.3±1.8 (n=82)	0.031	
Protein intake (%energy)	<16.89	104.6±1.3 (n=142)	100.0±1.7 (n=58)	0.011	0.101	109.1±0.9 (n=320)	110.2±1.4 (n=116)	0.465	0.116
	≥16.89	106.7±1.5 (n=99)	106.8±2.3 (n=36)	0.948		111.4±1.0 (n=275)	115.9±1.5 (n=100)	0.009	
SFA (%energy)	<9.63	105.7±1.7 (n=117)	103.1±2.0 (n=46)	0.198	0.609	109.4±0.8 (n=337)	110.4±1.3 (n=117)	0.507	0.081
	≥9.63	106.0±1.2 (n=124)	102.5±1.9 (n=48)	0.074		110.1±1.4 (n=258)	115.9±1.6 (n=99)	0.010	
PUFA (%energy)	<8.76	105.9±1.6 (n=114)	99.7±2.1 (n=42)	0.005	0.009	109.4±0.9 (n=306)	110.4±1.5 (n=105)	0.526	0.166
	≥8.76	105.0±1.2 (n=127)	105.3±1.8 (n=52)	0.861		110.8±0.9 (n=289)	115.2±1.4 (n=111)	0.006	
N-3 : N-6 PUFA ratio	<0.09	103.5±1.1 (n=138)	103.1±1.4 (n=55)	0.790	0.038	109.8±0.9 (n=299)	113.1±1.5 (n=99)	0.049	0.458
	≥0.09	107.4±1.7 (n=102)	101.4±2.6 (n=37)	0.019		109.9±0.9 (n=286)	111.9±1.4 (n=116)	0.230	

P-values and means were adjusted for age, smoking status, drinking status, education, medication use for depression, physical activity, total energy and population admixture.