

Table S1. Details on food provided with the two diets.

Meal	HP diet	M diet
Breakfast	Milk or yogurt with white bread or rusks	Milk or yogurt with wholemeal bread or wholemeal rusks
Lunch/Dinner	First course: pasta or white rice with simple seasoning (vegetables or tomato sauce) and Parmesan cheese; Second course*: white meat, fish, eggs, legumes or cheese and seasonal vegetables with olive oil and wholemeal bread; Fruit flavoured low-fat yogurt or fresh fruit	First course: wholemeal pasta with simple seasoning (vegetables or tomato sauce); Second course †: white meat, bluefish, eggs, legumes or goat cheese and seasonal vegetables with extra virgin olive oil and wholemeal bread; Fresh fruit
Afternoon snack	-	Walnuts

* Second course protein source: in HP diet was: 4/14 meals with white meat, 4/14 with fish, 2/14 with eggs, 2/14 with legumes and 2/14 with cheese. † Second course protein source in M diet was: 3/13 meals with white meat, 3/14 with bluefish, 4/14 with legumes, and 2/14 with goat cheese and 2/14 with eggs.

Table S2. Difference between the two diets in glycemic exposure, control and variability.

Glucose outcome	N	Diet	Unadjusted mean (95% CI)	Unadjusted difference HP vs M diet (95% CI)	Adjusted difference HP vs M diet (95% CI)	P
Glucose exposure						
Mean daily glucose concentration (mg/dl)	16	HP	93.15 (84.01, 102.28)	-0.29 (-4.82, 4.25)	0.006 (-5.07, 5.08)	0.998
		M	93.43 (86.71, 100.15)			
Glucose variability						
Standard Deviation of daily glucose concentration (mg/dl)	16	HP	14.80 (13.19, 16.42)	-2.17 (-4.02, -0.33)	-3.13 (-4.60, -1.67)	0.0004
		M	16.97 (14.70, 19.25)			
Mean Amplitude of Glucose Excursion	16	HP	29.58 (26.26, 32.90)	-2.87 (-7.49, 1.75)	-5.10 (-9.01, -1.18)	0.014
		M	32.45 (28.20, 36.70)			
Mean Of Daily Differences	16	HP	10.67 (9.29, 12.06)	-0.64 (-2.38, 1.11)	-1.50 (-2.95, -0.048)	0.044
		M	11.31 (10.13, 12.49)			
Glucose ranges						

Proportion of time spent with glucose level in range 70–180 mg/dl (%)	16	HP	86.91 (75.13, 98.69)	-2.02 (-10.17, 6.13)	-0.77 (-9.72, 8.18)	0.8568
		M	88.93 (81.23, 96.63)			

Proportion of time spent with glucose level <70 mg/dl (%)	16	HP	13.63 (1.46, 25.80)	1.72 (-6.57, 10.01)	0.63 (-8.53, 9.79)	0.885
		M	11.91 (3.82, 20.01)			

Proportion of time spent with glucose level >180 mg/dl (%)	16	HP	0.23 (0.06, 0.40)	-0.08 (-0.35, 0.19)	-0.17 (-0.44, 0.11)	0.223
		M	0.31 (0.08, 0.54)			

Adjusted estimates with their 95% CI were calculated by a mixed effect regression model. Fixed terms were treatment (HP over M), sequence, period (P1 over P2). HP: high protein diet; M: Mediterranean diet; (N=16).