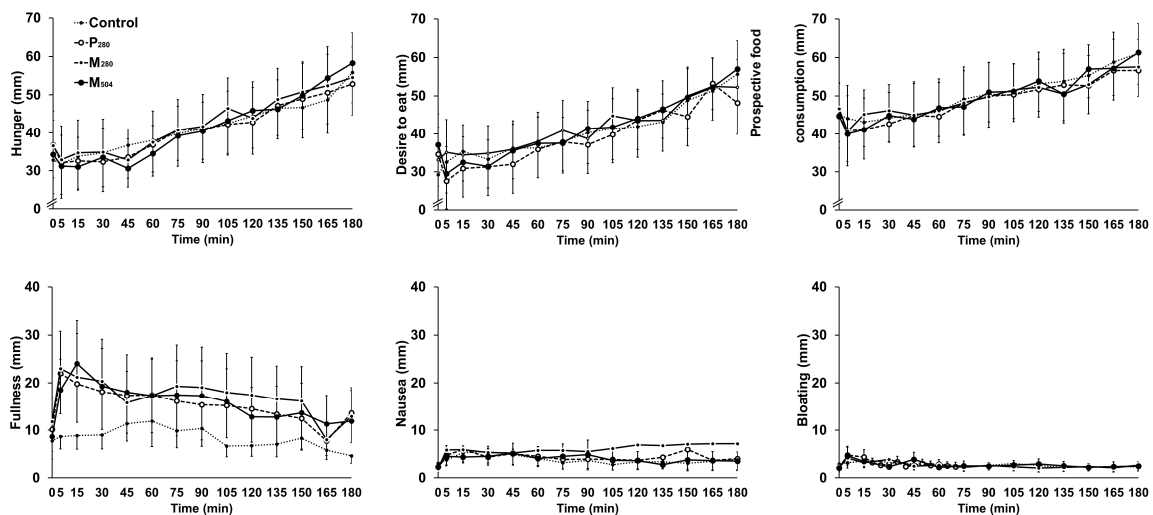


Supplementary Table S1. Glucose, insulin, ghrelin, CCK and GLP-1 after drink ingestion in healthy older men.

Glucose and gut hormones	Control	P ₂₈₀	M ₂₈₀	M ₅₀₄
Peak/nadir concentration				
Glucose	5.9 ± 0.1 ^a	6.1 ± 0.1 ^{a,b}	7.4 ± 0.3 ^b	7.2 ± 0.3 ^b
Insulin	7 ± 3 ^a	39 ± 17 ^{a,b}	56 ± 18 ^{a,b}	67 ± 18 ^b
Ghrelin	2171 ± 240 ^a	1855 ± 183 ^a	2194 ± 251 ^b	1862 ± 198 ^b
CCK	2.7 ± 0.2 ^a	3.9 ± 0.3 ^b	3.1 ± 0.3 ^{a,b}	3.9 ± 0.3 ^b
GLP-1	19 ± 1 ^a	39 ± 3 ^b	25 ± 2 ^a	36 ± 3 ^b
Time to peak/nadir				
Glucose	42 ± 13	20 ± 5	29 ± 3	22 ± 2
Insulin	15 ± 3 ^a	53 ± 7 ^b	39 ± 3 ^b	44 ± 7 ^b
Ghrelin	44 ± 13 ^a	126 ± 14 ^b	58 ± 7 ^a	114 ± 18 ^b
CCK	39 ± 15 ^a	87 ± 16 ^{a,b}	45 ± 12 ^{a,b}	99 ± 16 ^b
GLP-1	87 ± 22 ^a	138 ± 13 ^{a,b}	98 ± 18 ^{a,b}	155 ± 7 ^b
180-min concentration				
Glucose	5.5 ± 0.1 ^a	5.3 ± 0.4 ^a	4.9 ± 0.4 ^b	5.5 ± 0.4 ^a
Insulin	3.9 ± 1.9	21 ± 13	3.8 ± 1.6	32 ± 9
Ghrelin	2069 ± 257 ^a	1302 ± 137 ^{a,b}	2091 ± 259 ^a	1254 ± 117 ^b
CCK	1.8 ± 0.1 ^a	3.0 ± 0.2 ^b	1.9 ± 0.2 ^a	3.0 ± 0.3 ^b
GLP-1	16 ± 1 ^a	35 ± 2 ^b	21 ± 2 ^a	33 ± 3 ^b

Mean (± SEM) peak/nadir concentrations, time to peak/nadir (min) and 180-min concentrations of blood glucose and plasma insulin, ghrelin, CCK and GLP-1 in healthy older men (*n* = 13), after drinks containing either: (i) 70 g whey protein (280 kcal; 'P₂₈₀'), (ii) 14 g protein, 28g carbohydrate, 12.4 g fat (280 kcal; 'M₂₈₀'), (iii) 70 g protein, 28 g carbohydrate, 12.4 g fat (504 kcal; 'M₅₀₄'), or (iv) an iso-palatable control drink (~2 kcal; 'control'). ^{a,b,c,d} *p* < 0.05, post hoc test: different letter indicates significant difference between drink-conditions: control vs. P₂₈₀ vs. M₂₈₀ vs. M₅₀₄.



Supplementary Figure S1. Mean (± SEM) visual analogue score (VAS, mm) of hunger, desire to eat, prospective food consumption, fullness, nausea and bloating in healthy older men (*n* = 13), after drinks containing either: (i) 70 g whey protein (280 kcal; 'P₂₈₀'; dashed line with open circles), (ii) 14 g protein, 28 g carbohydrate, 12.4 g fat (280 kcal; 'M₂₈₀'; solid line with open circles), (iii) 70 g protein, 28 g carbohydrate, 12.4 g fat (504 kcal; 'M₅₀₄'; solid line with closed circles), or (iv) an iso-palatable control drink (~2 kcal; 'control'; dotted line).

Effects of time were significant for hunger ($p < 0.001$), desire to eat ($p < 0.001$), prospective food consumption ($p < 0.001$) and fullness ($p = 0.001$).