

Supplementary Materials

Plasma Cholesterol- and Body Fat-Lowering Effects of Chicken Protein Hydrolysate and Oil in High-Fat Fed Male Wistar Rats

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Supplementary tables

Table S1. Plasma lipid levels and hepatic enzyme activities in Wistar rats fed high-fat diets with different protein sources for 12 weeks^a.

	Casein	Chicken	Pork	CPH
Plasma lipids				
Cholesterol (mmol/L)	2.44 ± 0.47	2.19 ± 0.25	2.18 ± 0.41	1.69 ± 0.29 ^{*#}
HDL cholesterol (mmol/L)	1.91 ± 0.32	1.62 ± 0.22	1.70 ± 0.34	1.32 ± 0.22 [*]
LDL cholesterol (mmol/L)	0.49 ± 0.09	0.38 ± 0.10	0.27 ± 0.09 [*]	0.23 ± 0.09 ^{*#}
Free cholesterol (mmol/L)	0.60 ± 0.14	0.54 ± 0.08	0.54 ± 0.12	0.44 ± 0.10
Triglycerides (mmol/L)	1.02 ± 0.28	1.26 ± 0.42	1.39 ± 0.53	1.10 ± 0.32
Phospholipids (mmol/L)	2.01 ± 0.39	1.90 ± 0.26	1.90 ± 0.34	1.67 ± 0.27
Free fatty acids (mmol/L)	0.31 ± 0.08	0.28 ± 0.08	0.29 ± 0.12	0.34 ± 0.11
Liver enzyme activity				
β-oxidation (nmol/mg/min)	0.42 ± 0.07	0.49 ± 0.09	0.43 ± 0.09	0.49 ± 0.08
Inhibition of β-oxidation with malonyl-CoA (%)	21.9 ± 7.30	25.5 ± 4.74	20.9 ± 5.64	22.8 ± 9.30
CPT2 (nmol/mg/min)	1.07 ± 0.17	1.26 ± 0.33	1.29 ± 0.38	1.39 ± 0.29
HMG CoA synthase (nmol/mg/min)	2.94 ± 0.88	3.19 ± 0.73	3.50 ± 0.91	3.09 ± 0.74
ACOX (nmol/mg/min)	14.0 ± 2.99	14.4 ± 2.50	13.6 ± 2.27	12.2 ± 1.38
GPAT (nmol/mg/min)	1.01 ± 0.13	1.08 ± 0.13	1.09 ± 0.17	0.89 ± 0.12
FAS (nmol/mg/min)	0.21 ± 0.09	0.25 ± 0.09	0.22 ± 0.07	0.10 ± 0.04 [#]
ACC (nmol/mg/min)	4.79 ± 2.26	4.30 ± 0.88	5.16 ± 1.43	2.72 ± 0.83
HMG CoA reductase (pmol/mg/min)	12.7 ± 2.75	13.8 ± 2.81	-	11.5 ± 2.04

Abbreviations: ACC, acetyl-CoA carboxylase; ACOX, acyl-coenzyme A oxidase 1; CPT2, carnitine palmitoyltransferase II; FAS, fatty acid synthase; GPAT, glycerol-3-phosphate acyltransferase.

^a Means ± standard deviations are shown (*n* = 8). Different superscript letters indicate significantly different values as determined by one-way ANOVA with Tukey's post hoc test, *p* < 0.05.