

1 Supplementary table S1. Compositions of Experimental Diets

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	HFWD	HFWD+0.4% β-sitosterol	HFWD+0.4% stigmasterol
Macronutrient Composition			
protein (% of energy)	20.00	20.00	20.00
carbohydrate (% of energy)	20.00	20.00	20.00
fat (% of energy)	60.00	60.00	60.00
energy(kcal/gm)	23.40	23.40	23.40
Ingredient			
casein (g/kg)	276.90	275.50	274.60
L-cystine (g/kg)	4.20	4.10	4.10
maltodextrin (g/kg)	173.10	172.52	171.66
sucrose (g/kg)	95.30	94.95	94.48
soybean oil (g/kg)	34.60	34.50	34.33
lard (g/kg)	339.20	338.13	336.45
fiber (cellulose) (g/kg)	23.50	23.46	23.35
mineral mix (no added calcium, phosphorus, and potassium) (g/kg)	6.90	6.90	6.87
calcium(g/kg)	0.42	0.42	0.42
phosphorus(g/kg)	6.29	6.26	6.24
potassium (g/kg)	8.24	8.26	8.17
sodium chloride (g/kg)	3.58	3.57	3.56
vitamin mix (no added vitamin D3 and folate) (g/kg)	13.80	13.80	13.73
vitamin D3 (IU/g)	0.14	0.14	0.14
folate (mg/kg)	0.28	0.28	0.28
choline butartrate (g/kg)	1.40	1.40	1.40
β-sitosterol(%)	0.00	0.40	0.00
stigmasterol(%)	0.00	0.00	0.40

3 High-fat western-style diet (HFWD) was based on Chen et al.¹⁹

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