

Table S. Diet compositions (g/kg diet).

Groups Composition	LF		HF		RO		RP	
	g	kcal	g	kcal	g	kcal	g	kcal
corn starch	405	1397.25	195	672.75	195	672.75	195	672.75
lard	–	–	200	1794	100	897	100	897
Rapeseed oil	–	–	–	–	100	899	100	899
Soybean oil	45	397.8	45	397.8	45	397.8	45	397.8
Casein	200	710	200	710	200	710	200	710
Maltodextrin	150	600	150	600	150	600	150	600
Cellulose	50	189	50	189	50	189	50	189
Cholesterol	–	–	10	300	10	300	10	300
DL-methionine	3	12	3	12	3	12	3	12
Sucrose	100	389	100	389	100	389	100	389
Choline chloride	2	8	2	8	2	8	2	8
Mineral premix	35	–	35	–	35	–	35	–
Vitamin premix	10	–	10	–	10	–	10	–
Total	1000	3703.05	1000	5072.55	1000	5074.55	1000	5074.55

Note: RP diet was prepared by 50 mg sinapine addition per 100g rapeseed oil first, then replaced 100g of lard in high fat diet.