

**Table S1** Ingredient composition of diets for the ND, HFD and HFID groups.

Ingredient	ND		HFD		HFID	
	gm	kcal	gm	kcal	gm	kcal
Casein, 80 Mesh	200	800	200	800	200	800
L-Cystine	3	12	3	12	3	12
Corn Starch	315	1260	72.8	291	72.8	291
Indigestible dextrin	0	0	0	0	87.5	175
Maltodextrin 10	35	140	100	400	56.25	225
Sucrose	350	1400	172.8	691	172.8	691
Cellulose, BW200	50	0	50	0	6.25	0
Soybean Oil	25	225	25	225	25	225
Lard	20	180	177.5	1597.5	177.5	1597.5
Cholesterol	0	0	17.16	154.44	17.16	154.44
Mineral Mix S10026	10	0	10	0	10	0
DiCalcium Phosphate	13	0	13	0	13	0
Calcium Carbonate	5.5	0	5.5	0	5.5	0
Potassium Citrate	16.5	0	16.5	0	16.5	0
Vitamin Mix V10001	10	40	10	40	10	40
Choline Bitartrate	2	0	2	0	2	0
FD&C Yellow Dye #5	0.05	0	0	0	0	0
FD&C Red Dye #40	0	0	0.05	0	0.05	0

**Note:** FD&C: A major subsidiary dye in U.S. certified Allura Red AC dye.