

Supplemental Table 1: Nutrition content for high-fat and control diets

	HIGH-FAT DIET (D12492)		CONTROL DIET (D12450J)	
PRODUCT	gm%	kcal%	gm%	kcal%
Protein	26.2	20	19.2	20
Carbohydrate	26.3	20	67.3	70
Fat	34.9	60	4.3	10
kcal/gm	5.24		3.85	
INGREDIENT	gm	kcal	gm	kcal
Casein	(30 Mesh) 200	800	(30 Mesh) 200	800
L-Cystine	3	12	3	12
Corn Starch	0	0	506.2	2024.8
Maltodextrin 10	125	500	125	500
Sucrose	68.8	275.2	68.8	275.2
Cellulose, BW200	50	0	50	0
Soybean Oil	25	225	25	225
Lard	245	2205	20	180
Mineral Mix, S10026	10	0	10	0
Di Calcium Phosphate	13	0	13	0
Calcium Carbonate	5.5	0	5.5	0
Potassium Citrate, 1 H2O	16.5	0	16.5	0
Vitamin Mix V10001	10	40	10	40
Choline Bitartrate	2	0	2	0
FD&C Blue Dye #1	0.05	0	0.04	0
FD&C Blue Dye #5			0.01	0
Total	773.85	4057	1055.05	4057

Supplemental Figure 1: Experimental workflow for mouse placental explant cultures

Supplemental Figure 2: Placental cell-free DNA release in obese vs. lean dams by fetal sex and time in culture

Legend:

There is no significant difference in placental cfDNA release by fetal sex in lean and obese dams

Lean: Control dams; *Obese*: Maternal obesity; *M*: Male, *F*: female *: $p < 0.05$