

Rodent Diets With 10 or 45 kcal% Fat and Same With added Vitamins A, D3, B1, B5, and C

Table S1: Composition of the custom diets

Product #	D12450K		D23112201		D12451		D23112202	
	10 kcal% Fat Control		10 kcal% Fat with vitamins		45 kcal% Fat Control		45 kcal% Fat with vitamins	
	gm%	kcal%	gm%	kcal%	gm%	kcal%	gm%	kcal%
Protein	19.2	20	19.2	20	23.7	20	23.5	20
Carbohydrate	67.3	70	67.0	70	41.4	35	41.2	35
Fat	4.3	10	4.2	10	23.6	45	23.5	45
Total		100		100		100		100
kcal/gm	3.85		3.83		4.73		4.70	
Ingredient	gm	kcal	gm	kcal	gm	kcal	gm	kcal
Casein	200	800	200	800	200	800	200	800
L-Cystine	3	12	3	12	3	12	3	12
Corn Starch	550	2200	550	2200	72.8	291.2	72.8	291.2
Maltodextrin 10	150	600	150	600	100	400	100	400
Sucrose	0	0	0	0	172.8	691	172.8	691
Cellulose, BW200	50	0	50	0	50	0	50	0
Soybean Oil	25	225	25	225	25	225	25	225
Lard	20	180	20	180	177.5	1597.5	177.5	1597.5
Mineral Mix S10026	10	0	10	0	10	0	10	0
DiCalcium Phosphate	13	0	13	0	13	0	13	0
Calcium Carbonate	5.5	0	5.5	0	5.5	0	5.5	0
Potassium Citrate, 1 H2O	16.5	0	16.5	0	16.5	0	16.5	0
Vitamin Mix V10001	10	40	10	40	10	40	10	40
Choline Bitartrate	2	0	2	0	2	0	2	0
Vitamin A Acetate (500,000 IU/gm)	0	0	0.04	0	0	0	0.04	0
Vitamin D3 (100,000 IU/gm)	0	0	0.25	0	0	0	0.25	0
Vitamin B1 (Thiamine HCl 78.6%, active)	0	0	0.636	0	0	0	0.636	0
Vitamin B5 (Calcium Pantothenate)	0	0	0.5	0	0	0	0.5	0
Vitamin C (Ascorbic Acid Phosphate, L)	0	0	3.03	0	0	0	3.03	0
FD&C Blue Dye #1	0.025	0	0.05	0	0	0	0.025	0
FD&C Yellow Dye #5	0	0	0	0	0	0	0.025	0
FD&C Red Dye #40	0.025	0	0	0	0.05	0	0	0
Total	1055.05	4057	1059.506	4057	858.15	4057	862.606	4057
	D12450K		D23112201		D12451		D23112202	
Added Levels of Vitamins (on top of existing levels)								
Vitamin A (IU)	0		20000		0		20000	
Vitamin D3 (IU)	0		25000		0		25000	
Vitamin B1 (mg)	0		500		0		500	
Vitamin B5 (mg)	0		500		0		500	
Vitamin C (mg)	0		1000		0		1000	
Final IU or ug/Kcal								
Vitamin A (IU)	1.0		5.9		1.0		5.9	
Vitamin D3 (IU)	0.2		6.4		0.2		6.4	
Vitamin B1 (ug)	1.2		124.4		1.2		124.4	
Vitamin B5 (ug)	3.9		127.2		3.9		127.2	
Vitamin C (ug)	0.0		246.5		0.0		246.5	
Estimated Levels of Vitamins								
Vitamin A (IU/kg)	3791		22652		4661		27823	
Vitamin D3 (IU/kg)	948		24540		1165		30141	
Vitamin B1 (mg/kg)	4		476		6		585	
Vitamin B5 (mg/kg)	15		487		19		598	
Vitamin C (mg/kg)	0		944		0		1159	
Vitamin and mineral levels are based on the amounts added to the diets and do not take into account any residual levels in ingredients. If you need to know the exact levels of vitamins and minerals, we suggest that they be assayed prior to beginning your study.								

Table S2. Primer sequences

<i>36b4</i>	Forward	GCTTCGTGTTACCAAGGAGGA
	Reverse	GTCCTAGACCAGTGTTCTGAGC
<i>β-actin</i>	Forward	GTGACGTTGACATCCGTAAAGA
	Reverse	GCCGGACTCATCGTACTCC
<i>Cebpa</i>	Forward	GCAAAGCCAAGAAGTCGGTGGA
	Reverse	CCTTCTGTTGCGTCTCCACGTT
<i>Cd137</i>	Forward	CGTGCAGAACTCCTGTGATAAC
	Reverse	GTCCACCTATGCTGGAGAAGG
<i>Cidea</i>	Forward	GGTGGACACAGAGGAGTTCTTTC
	Reverse	CGAAGGTGACTCTGGCTATCC
<i>Fas</i>	Forward	GACCTCAGGCTGCAGTGAAT
	Reverse	GTCCCCACTTGATGTGAGGGG
<i>Fabp4</i>	Forward	TGA AATCACCGCAGACGACAGG
	Reverse	GCTTGTCAACATCTCGTTTTCTC
<i>G6p</i>	Forward	AGATAGCAAGAGTAGAAGTGAC
	Reverse	TTCCAAGTGGATTCTGTTTGG
<i>Glut2</i>	Forward	TGAGTTCCTTCCAGTTCGGC
	Reverse	CTGAGGCCAGCAATTCTGACT
<i>Glut4</i>	Forward	GCTCTGACGTAAGGATGGGG
	Reverse	TGGCCAGTTGGTTGAGTGTT
<i>Il6</i>	Forward	GTTCTCTGGAAATCGTGGA
	Reverse	GCCACTCCTTCTGTGACTCC
<i>Pgc1α</i>	Forward	GAATCAAGCCACTACAGACACCG
	Reverse	CATCCCTCTTGAGCCTTTCGTG
<i>Ppary</i>	Forward	GTA CTGTCGGTTTCAGAAGTGCC
	Reverse	ATCTCCGCCAACAGCTTCTCCT
<i>Srebp1c</i>	Forward	CTGGTGAGTGGAGGGACCAT
	Reverse	GAGCCATCTCTGCTCTCTGC
<i>Tnfa</i>	Forward	TGTAGCCACGTCGTAGCAAA
	Reverse	GCTGGCACCAGTAGTTGGTTGT
<i>Ucp1</i>	Forward	GCTTTGCCTCACTCAGGATTGG
	Reverse	CCAATGAACACTGCCACACCTC