

Supplemental Table 1: Constituents of Research Diets D12331 and D12328

Diet	D12331 (DIO)			D12328 (CON)	
	gm%	kcal%		gm%	kcal%
Protein	23	16.4		16.8	16.4
Carbohydrate	35.5	25.5		74.3	73.1
Fat	35.8	58		4.8	10.5
Casein	228	912		228	912
DL-methionine	2	0		2	0
Maltodextrin	170	680		170	680
Corn starch	0	0		835	3340
Sucrose	175	700		0	0
Soybean oil	25	225		25	225
Coconut oil	333.5	3001.5		40	360
Mineral mix	40	0		40	0
Sodium bicarbonate	10.5	0		10.5	0
Potassium citrate	4	0		4	0
Vitamin mix	10	40		10	40
Choline bitartrate	2	0		2	0

Supplemental Table 2: Primer sequences

Gene accession number	Primer sequence	UPL probe
5 α reductase <i>5ar</i> (NM_175283.3)	For – gggaaactggatacaaaataccc Rev - ccacgagctcccaaaaata	41
5 β -reductase <i>5br</i> (NM_145364.2)	For – gaaaagatagcagaagggaaggt Rev - gggacatgctctgtattccataa	103
11 β hydroxysteroid dehydrogenase <i>11bhsd1</i> (NM_008288.2)	For – tctacaaatgaagagttcagaccag Rev - gccccagtgcacatcactt	1
Glucocorticoid receptor <i>gr</i> (NM_008173.3)	For – tgacgtgtggaagctgtaaagt Rev - catttctccagcacaaggt	56
Lipoprotein lipase <i>lpl</i> (NM_008509.1)	For – ctgcgtctcagatgcctac Rev - gggtgtgttgcttgccatt	95
peroxisome proliferator activated receptor- α <i>ppara</i> (NM_011144.2)	For – ccttcctgtgaactgacg Rev - ccacagagcgctaagctgt	5
phosphoenolpyruvate carboxykinase <i>pepck</i> (NM_011044.2)	For – gatgacattgcctggatgaa Rev - cgttttctgggttgatagcc	105
Acetyl Co-A carboxylase <i>Acc</i> (NM_133360.2)	For – ggatgtggatgatggtctga Rev - aggccttgatcatcactgga	73
Carnitine palmitoyltransferase 1a <i>Cpt1a</i> (NM_013495.1)	For – aaaccaccaggctacagtg Rev - ggcaactgcttagggatgtgt	2
Fatty acid synthase <i>fasn</i> (NM_007988.3)	For – ccaaatccaacatgggaca Rev - tgctccaggataacagca	34
Peroxisome proliferator activated receptor γ coactivator 1alpha <i>pgc1a</i> (NM_008904.1)	For – gaaagggccaaacagagaga Rev - ggcaactgcttagggatgtgt	29
peroxisome proliferator activated receptor- γ <i>ppary</i> (NM_011146.1)	For – tgctgttatgggtgaaactctg Rev - ctgtgtcaaccatggtaatttctt	2

Supplemental Table 3: Plasma lipids, hepatic triglyceride content, plasma corticosterone concentrations and organ weights at 6 months in F1 offspring. Organ weights are expressed relative to total body weight. Data were analysed using independent t-testing.

	F1 Con males n=10	F1 DIO males n=6	p value	F1 Con females n=6	F1 DIO females n=5	p value
Plasma triglycerides (mmol/l)	1.10 ± 0.02	1.03 ± 0.07	0.23	1.07 ± 0.10	0.91 ± 0.04	0.23
Plasma cholesterol (mmol/l)	2.22 ± 0.14	2.14 ± 0.24	0.78	2.16 ± 0.27	2.03 ± 0.16	0.70
Liver weight (g)	3.93 ± 0.10	4.02 ± 0.03	0.52	4.32 ± 0.18	4.51 ± 0.06	0.39
Nadir plasma corticosterone (nmol/l)	35.3 ± 5.7	27.3 ± 5.0	0.35	23.7 ± 6.9	39.8 ± 12.0	0.24
Peak plasma corticosterone (nmol/l)	222.1 ± 16.5	196.4 ± 17.0	0.31	312.1 ± 64.2	289.8 ± 43.4	0.79
Mesenteric fat weight (g)	0.96 ± 0.08	0.88 ± 0.14	0.60	1.24 ± 0.38	1.02 ± 0.33	0.33
Subcutaneous fat weight (g)	0.85 ± 0.12	0.84 ± 0.13	0.92	1.04 ± 0.15	1.02 ± 0.10	0.92
Retroperitoneal fat weight (g)	0.52 ± 0.07	0.38 ± 0.07	0.20	1.15 ± 0.17	0.73 ± 0.09	0.07
Epididymal fat weight (g)	1.29 ± 0.10	1.04 ± 0.07	0.10			