

Table S1. The fatty acids composition of test oils

Fatty acid composition	Soybean DAG oil (%)	Soybean TAG oil (%)
C16:0	19.09	18.77
C18:0	4.32	4.5
C18:1	25.13	25.89
C18:2	51.32	50.67
C18:3	0.14	0.17

Table S2. The compositions of different mouse diets

Ingredient	Normal diet		Soybean TAG oil-based high-lipid diet		Soybean DAG oil-based high-lipid diet	
	g (%)	kcal (%)	g (%)	kcal (%)	g (%)	kcal (%)
Casein (%)	20	43.5	25.8	20	25.8	20
L-cystine (%)	0.3	0.6	0.4	0.3	0.4	0.3
Corn starch (%)	39.7	2.3	0	0	0	0
Maltodextrin (%)	13.2	25.8	16	12.2	16	12.2
Sucrose (%)	10	14.2	9	7.2	9	7.2
Cellulose (%)	5	2.3	6	0.5	6	0.5
Soybean triacylglycerol oils (%)	7	11.6	25.8	41.7	0	0
Soybean diacylglycerol oils (%)	0	0	0	0	25.8	41.7
Cocoa butter (%)	0	0	10	17.6	10	17.6
Mineral premix (%)	3.5	0	3.5	0	3.5	0
Vitamin A	0.04		0.02		0.02	
Vitamin D3	0.05		0.025		0.025	
Vitamin E	0.54		0.27		0.27	
Vitamin K3	0.003		0.0015		0.0015	
Vitamin H	0.001		0.0005		0.0005	
Vitamin B12	0.006		0.003		0.003	
Vitamin B	0.01		0.005		0.005	
Nicotinic Acid	0.16		0.08		0.08	
Pantothenic Acid	0.09		0.045		0.045	
Vitamin B6	0.04		0.02		0.02	
Vitamin B2	0.03		0.015		0.015	
Vitamin B1	0.03		0.015		0.015	
Vitamin premix (%)		2		1		1
Choline bitartrate (%)	0.3	0	1.3	0	1.3	0
Dye	0	0	0.2	0	0.2	0
Dietary lipids (g/100g)	7		34.9		34.9	
DAG content (g/100g)	0		0		19.6	
Energy supplied by lipids (%)	15.7		59.9		59.9	