

Supplementary data:

Effects of Fish Oil and Grape Seed Extract Combination on Hepatic Endogenous Antioxidants and Bioactive Lipids in Diet-Induced Early Stages of Insulin Resistance in Rats

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Table S3. Composition of diets

	STD	HFHS	FO	GSE	FO + GSE
Diet composition					
Flour (g)	1000 ^a	1000 ^b	1000 ^b	1000 ^b	1000 ^b
TBHQ (g)	0.08	0.08	0.08	0.08	0.08
Porcine gelatin (g)	25	25	25	25	25
Soybean lecithin (g)	6	22	22	22	22
Soybean ^c or FO ^d oil (mL)	19	24	24	24	24
GSE ^f (mg)	-	-	-	1090	1090
Macronutrients (% weight)					
Protein	16.4	21.7	21.7	21.7	21.7
Fat	6.2	24.1	24.1	24.1	24.1
Carbohydrates	46.6	45.0	45.0	44.9	44.9
Macronutrients (% caloric value)^g					
Protein	21.3	17.9	17.9	17.9	17.9
Fat	18.2	44.9	44.9	44.9	44.9
Carbohydrates	60.5	37.2	37.2	37.2	37.2
Total energy density (kcal/g)	3.1	4.8	4.8	4.8	4.8

Abbreviations: STD, Standard; HFHS, High-Fat High-Sucrose; FO, Fish Oil; GSE, Grape Seed Extract. ^aStandard flour (Teklad Global 2014), containing wheat middlings, ground wheat, ground corn, corn gluten meal, calcium carbonate, soybean oil, dicalcium phosphate, iodized salt, l-lysine, vitamin E acetate, DL-methionine, magnesium oxide, choline chloride, manganous oxide, ferrous sulphate, menadione sodium bisulphite complex (source of vitamin K activity), zinc oxide, copper sulphate, niacin, calcium pantothenate, calcium iodate, pyridoxine hydrochloride, riboflavin, thiamin mononitrate, vitamin A acetate, vitamin B12 supplement, folic acid, cobalt carbonate, biotin and vitamin D3 supplement. ^bHigh-fat high-sucrose diet (Tekland TD 08811), containing sucrose (34 % of the total pellet weight), anhydrous milkfat, casein, maltodextrin, corn starch, cellulose, mineral mix AIN-93G-MX, soybean oil, vitamin mix AIN-93G-VX, L-cystine, choline, bitartrate, green food colour, tert-butylhydroquinone. ^cSoybean oil was purchased from Clearspring Ltd. (London, United Kingdom). ^dFO with eicosapentaenoic acid (EPA, C20:5 n-3) and docosahexaenoic acid (DHA, C22:6 n-3) in a balanced 1:1 ratio was obtained by mixing the appropriate quantities of the commercial fish oils AFAMPES 121 EPA (AFAMSA, Vigo, Spain), Omega-3 RX (EnerZona, Milan, Italy) and Oligem liquid DHA 80% (IFIGEN-EQUIP 98, S.L., Barcelona, Spain). ^fGSE (Fine Grafnol®, powder 98 %) was purchased from JF-Natural Product (Tianjin, China). ^gEnergy density is estimated as metabolizable energy based on the Atwater factors, assigning 4 kcal/g to protein, 9 kcal/g to fat and 4 kcal/g to carbohydrate, including dietary fibre.