Supporting Information

Walnut consumption induces tissue-specific omega-6/omega-3 decrease in high fructose-fed Wistar rats

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Table S1. Absolute organ weights

	Fructose-naïve		Fructose-fed		F^a	W^b	F x W^c
	Control	Walnuts	Fructose	Fructose+ Walnuts			
Liver (g)	12.07±0.33	13.15±0.44	13.84±0.41	15.29±0.30	**<0.001**	**0.002**	0.622
Adipose Tissue* (g)	2.54±0.29	3.43±0.31	2.94±0.17	4.42±0.47	**0.040**	**0.001**	0.369
Kidney (g)	2.96±0.14	2.92±0.11	2.83±0.10	2.98±0.09	0.786	0.614	0.409

Data are presented as Mean±SEM, n=8-9. *epididymal adipose tissue.[a, b, c] Probabilities upon two-way ANOVA for fructose effect (*F*), walnuts effect (*W*), and interaction between fructose and walnuts (*F*x*W*), respectively, upon 6-weeks.

Table S2. Correlations between serum lipids and n-6/n-3 ratio across the tissues

	Plasma	Liver	Adipose Tissue	Kidney
Control				
TC	-0.04	0.18	-0.35	0.25
LDL	-0.33	0.03	-0.13	0.32
TAG	0.34	0.27	-0.43	-0.05
Walnuts				
TC	0.39	0.26	0.32	**0.67***
LDL	0.27	0.25	0.21	0.54
TAG	0.49	-0.06	-0.11	0.05
Fructose				
TC	**0.84****	0.63	0.66	0.50
LDL	0.38	0.53	0.22	-0.16
TAG	0.22	-0.15	0.21	0.22
Fructose+Walnuts				
TC	-0.12	-0.13	0.16	-0.07
LDL	-0.36	0.05	0.06	0.25
TAG	0.30	0.10	-0.28	-0.16

Pearson correlation coefficients are presented, bolded text denotes statistical significance. ** Correlation is significant at the 0.01 level; * Correlation is significant at the 0.05 level. LDL-c, low-density lipoprotein cholesterol; TAG, triglycerides; TC, total cholesterol.

Table S3. Composition of a standard diet

Diet component	
Protein, not less than (%)	20
Moisture, not more than (%)	13.5
Ash, not more than (%)	10
Cellulose, not more than (%)	8
Ca, not less than (%)	1
Na (%)	0.15–0.25
P, not less than (%)	0.5
Lys, not less than (%)	0.9
Met + Cys, not less than (%)	0.75
Vitamin A, not less than (IJ/kg)	10000
Vitamin D3, not less than (IJ/kg)	1600
Vitamin E, not less than (mg/kg)	25
Vitamin B12, not less than (mg/kg)	0.02
Zn, not less than (mg/kg)	100
Fe, not less than (mg/kg)	100
Mn, not less than (mg/kg)	30
Cu, not less than (mg/kg)	20
I, not less than (mg/kg)	0.5
Se, not less than (mg/kg)	0.1
Antioxidant, not less than (mg/kg)	100

Ca, calcium; Na, sodium; P, phosphorus; Lys, lysine; Met, methionine; Cys, cysteine; Zn, zinc; Fe, iron; Mn, manganese; Cu, copper; I, iodine; Se, selenium.

Figure S1. Feeding behavior parameters. Food (A), liquid (B), and caloric (C) intakes of studied animals.