

**Supplementary material – Baseline levels of analytes by diet group and insulin resistance status (IS, insulin sensitive; IR, insulin resistant), mean (SEM)**

Biomarkers	Lower Fat Diet			Lower Carb Diet			Walnut-Rich Diet		
	IS	IR	All	IS	IR	All	IS	IR	All
<b>% Insulin resistant</b>	0	100	52	0	100	52	0	100	50
<b>Insulin (<math>\mu</math>U/mL)<sup>a</sup></b>	9(0.4)	18(1)	14(1)	8(0.5)	22(1)	15(1)	9(0.3)	19(1)	14(1)
<b>Glucose (mg/dL)<sup>b</sup></b>	95(1)	10(1)	97(1)	92(1)	102(1)	96(1)	95 (1)	100(2)	98(1)
<b>HOMA-IR</b>	2(0.1)	5(0.3)	4(0.2)	2(0.1)	6(0.4)	4(0.3)	2(0.1)	5(0.3)	4(0.2)
<b>Triglycerides (mg/dL)<sup>c</sup></b>	107(7)	154(14)	131(8)	109(11)	146(9)	128(7)	89(5)	136(7)	112(5)
<b>HDL cholesterol (mg/dL)<sup>d</sup></b>	64(3)	56(2)	60(2)	61(2)	55(2)	58(2)	64(2)	56(2)	60(2)
<b>LDL cholesterol (mg/dL)<sup>d</sup></b>	115(5)	121(6)	118(4)	120(5)	125(5)	122(3)	123(5)	126(6)	125(4)
<b>CRP (<math>\mu</math>g/mL)<sup>e</sup></b>	4(0.7)	6(0.8)	5(0.5)	3(0.4)	7(1.1)	5(0.6)	4(0.7)	5(0.9)	4(0.6)
<b>IL-6 (pg/mL)</b>	2(0.3)	3(0.3)	3(0.2)	3(0.4)	3(0.3)	3(0.2)	2(0.3)	3(0.3)	2(0.2)
<b>SHBG (nmol/L)</b>	66(5)	44(4)	54(3)	60(5)	54(6)	57(4)	64(6)	51(6)	58(4)
<b>Estradiol (pg/mL)<sup>f</sup></b>									
<b>Premenopausal (n = 100)</b>	132(20)	104(13)	119(12)	163(30)	133(21)	145(17)	118(14)	107(19)	113(11)
<b>Postmenopausal (n = 145)</b>	24(6)	27(7)	26(5)	29(7)	20(3)	25(4)	20(6)	25(6)	22(4)
<b>Linoleic acid (%)</b>	13(0.4)	13(0.4)	13(0.3)	13(0.4)	13(0.5)	13(0.3)	13(0.4)	13(0.3)	13(0.2)

<b><math>\alpha</math>-Linolenic acid (%)</b>	.13(.01)	.12(.01)	.12(.01)	.12(.01)	.11(.01)	.12(.01)	.13(.01)	.12(.01)	.12(.01)
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<sup>a</sup> Multiply by 6.945 to obtain pmol/L.

<sup>b</sup> Multiply by 0.0555 to obtain mmol/L.

<sup>c</sup> Multiply by 0.0113 to obtain mmol/L.

<sup>d</sup> Multiply by 0.0259 to obtain mmol/L.

<sup>e</sup> Multiply by 9.524 to obtain nmol/L.

<sup>f</sup> Multiply by 3.671 to obtain pmol/L. Postmenopausal was defined as FSH  $\geq$  20 IU/L (and includes two subjects who reported themselves premenopausal at baseline).