

SUPPLEMENTARY DATA

Supplementary Table 1. The commercially available and pre-validated TaqMan® primer/probe sets used for gene expression analyses

Transferrin, TF	Hs01067777_m1
solute carrier family 40 (iron-regulated transporter), member 1, SLC40A1	Hs00205888_m1
ferritin, light polypeptide, FTL	Hs00830226_gH
ferritin, heavy polypeptide 1, FTH1	Hs01694011_s1
transferrin receptor (p90, CD71), TFRC	Hs00951083_m1
hepcidin antimicrobial peptide, HAMP	Hs00221783_m1
adiponectin, C1Q and collagen domain containing, ADIPOQ	Hs00605917_m1
peroxisome proliferator-activated receptor gamma, PPARG	Hs00234592_m1
insulin receptor substrate 1, IRS1	Hs00178563_m1
solute carrier family member 4, SLC2A4 or GLUT4	Hs00168966_m1
fatty acid synthase, FASN	Hs00188012_m1
tumor necrosis factor, TNF	Hs01113624_g1
cytochrome b-245, alpha polypeptide, CYBA	Hs03044361_m1
acetyl-Coenzyme A carboxylase alpha, ACC	Hs00167385_m1
stearoyl-CoA desaturase (delta-9-desaturase), SCD	Hs01682761_m1
Leptin, LEP	Hs00174877_m1
Interleukin 6, IL6	Hs00985639_m1
CD14	Hs02621496_s1
peptidylprolyl isomerase A (cyclophilin A), PPIA	Hs99999904_m1

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Supplementary Table 2. Effects of bariatric surgery – induced weight loss in iron-related gene expressions, anthropometric, clinical and biochemical parameters and other gene expressions from subcutaneous adipose tissue in cohort 4.

	PRE	POST	P
N	25		
Weight (kg)	117.93 ± 17.7	78.96 ± 16.8	<0.0001
BMI (kg/m ²)	43.67 ± 4.6	29.32 ± 5.17	<0.0001
Waist (cm)	124.81 ± 12.7	92.94 ± 16.37	<0.0001
Fasting Glucose (mg/dl)	102.37 ± 37.9	88 ± 15.7	0.04
Euglycemic clamp (mg/kg·min)	4.27 ± 2.5	6.08 ± 2.1	0.001
HDL-Cholesterol (mg/dl)	55.99 ± 12.84	72.34 ± 21.13	<0.0001
Triglycerides (mg/dl)	118.27 ± 52.7	89.21 ± 48.1	0.001
C-reactive protein (mg/dl)	0.957 ± 0.081	0.089 ± 0.75	<0.0001
<i>ADIPOQ</i> gene expression (R.U.)	3.39 ± 1.62	4.48 ± 1.53	0.02
<i>ACCI</i> gene expression (R.U.)	0.037 ± 0.02	0.084 ± 0.049	<0.0001
<i>SCD</i> gene expression (R.U.)	2.91 ± 2.51	8.53 ± 5.94	<0.0001
<i>GLUT4</i> gene expression (R.U.)	0.054 ± 0.045	0.089 ± 0.053	0.002
<i>IRS1</i> gene expression (R.U.)	0.010 ± 0.005	0.014 ± 0.006	0.09
<i>LEP</i> gene expression (R.U.)	0.927 ± 0.44	0.51 ± 0.41	0.007
<i>IL6</i> gene expression (R.U.)	0.00135 ± 0.0011	0.00057 ± 0.00034	0.003
<i>TNFα</i> gene expression (R.U.)	0.0027 ± 0.0017	0.00075 ± 0.00038	<0.0001
<i>CD14</i> gene expression (R.U.)	0.169 ± 0.084	0.061 ± 0.028	<0.0001
<i>TF</i> gene expression (R.U.)	0.019 ± 0.011	0.047 ± 0.033	<0.0001
<i>FTL</i> gene expression (R.U.)	20.33 ± 14.23	9.97 ± 7.33	0.005
<i>FTH</i> gene expression (R.U.)	0.011 ± 0.004	0.0061 ± 0.003	<0.0001
<i>SLC40A1</i> gene expression (R.U.)	0.161 ± 0.10	0.10 ± 0.037	0.008
<i>TFRC</i> gene expression (R.U.)	0.039 ± 0.030	0.016 ± 0.011	0.01
<i>CYBA</i> gene expression (R.U.)	0.085 ± 0.048	0.051 ± 0.041	0.02