

	Total population (N=44) Mean ± SE	Microarray subjects	
		Lean (N=7) Mean ± SE	Obese (N=7) Mean ± SE
Procedure	Hernia/Fundoplication	20	5
	Bariatric	16	1
	Gallbladder	4	1
	Other	4	0
History	CVD or hypertension	29	4
	Dyslipidemia	15	5
	Endocrine disorder	18	4
	Type II diabetes	5	0
	Arthritis	3	0
Medications	anti-hypertensive	24	3
	anti-lipid	15	2
	non-estrogen hormone	16	5
	antibiotics	4	0
	Anti-inflammatory	2	0

Table S1. Surgery, medical history and medications of the total population and subjects whose adipocyte samples were isolated by microarray.

	SS. <i>IFNG</i>	<i>N</i>
Age	0.49^a	23
BMI	0.37^b	23
BAI	0.32	22
WHR	0.45^a	22
FPG	0.08	23
TG	0.42^b	22
HDL	-0.14	22
SBP	0.11	23
DBP	-0.37^b	23
FPI	0.58^a	20
Cholesterol	-0.10	22
LDL	-0.09	22
TNFA	0.58^a	21
Leptin	0.41^b	21
IL-6	0.22	21
MCP-1	0.09	21
hsCRP	0.03	20
HOMA-IR	0.54^a	20
Caspase-1 activity	0.40^b	20
SA. <i>NLRP3</i>	0.37^b	22
SA. <i>PYCARD</i>	0.53^a	22
SA. <i>SOD2</i>	-0.16	22
SA. <i>NQO1</i>	0.33	20
SA. <i>TNFA</i>	0.49^a	22
SA. <i>CCL2</i>	0.32	22
SA. <i>LEP</i>	0.26	22
SA. <i>IL1B</i>	0.44^a	22
SA. <i>CIIITA</i>	0.42^b	22
SA. <i>HLA-DPB</i>	0.46^a	22
SS. <i>CIIITA</i>	0.22	12
SS. <i>HLA-DPB</i>	0.18	15
SS. <i>NLRP3</i>	0.15	23
SS. <i>PYCARD</i>	0.28	23

Table S2. Pearson correlation of human subcutaneous SVF (SS) *IFNG* expression, indicating significant correlation (^a $p<0.5$) and trend (^b $p<0.1$) towards correlation. The number of paired values available for each correlation is shown, with smaller numbers indicating missing values.

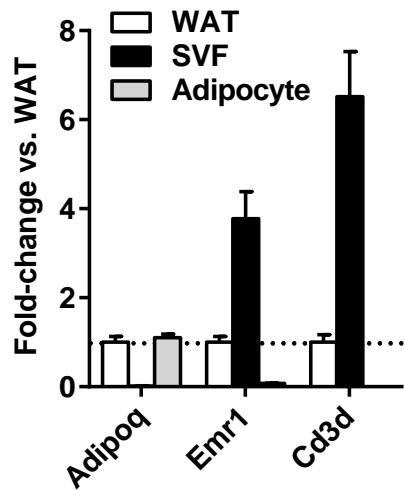


Figure S1. RT-PCR analysis of adipocyte (Adipoq), macrophage (Emr1), and T-cell-specific (Cd3d) mRNAs in human white adipose tissue (WAT), SVF and purified adipocyte samples (Mean \pm SEM, N=3-4).

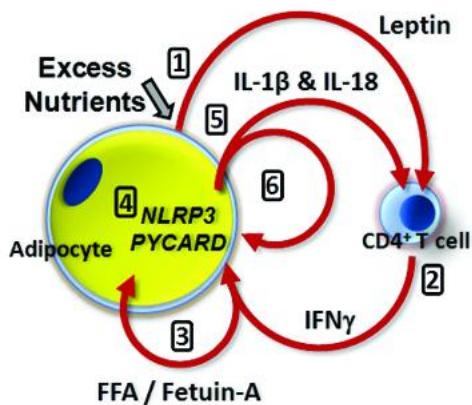


Figure S2. Schematic of a putative adipocyte and T cell interactions during obesity. Nutrient excess increases 1) adipocyte leptin secretion, which simulates 2) IFN γ release from adipose-resident T-cells. IFN γ increases adipocyte lipolysis resulting in 3) increased FFA/Fetuin-A mediated TLR4-signaling. Both IFN γ and TLR4 signaling additively induce 4) adipocyte NLRP3 and PYCARD expression, resulting in increased NLRP3 inflammasome activity and IL-1 β and IL-18 secretion that can induce 5) further IFN γ production, and 6) directly simulate adipocyte NLRP3 inflammasome expression.