

Basal and cold-induced fatty acid uptake of human brown adipose tissue is impaired in obesity

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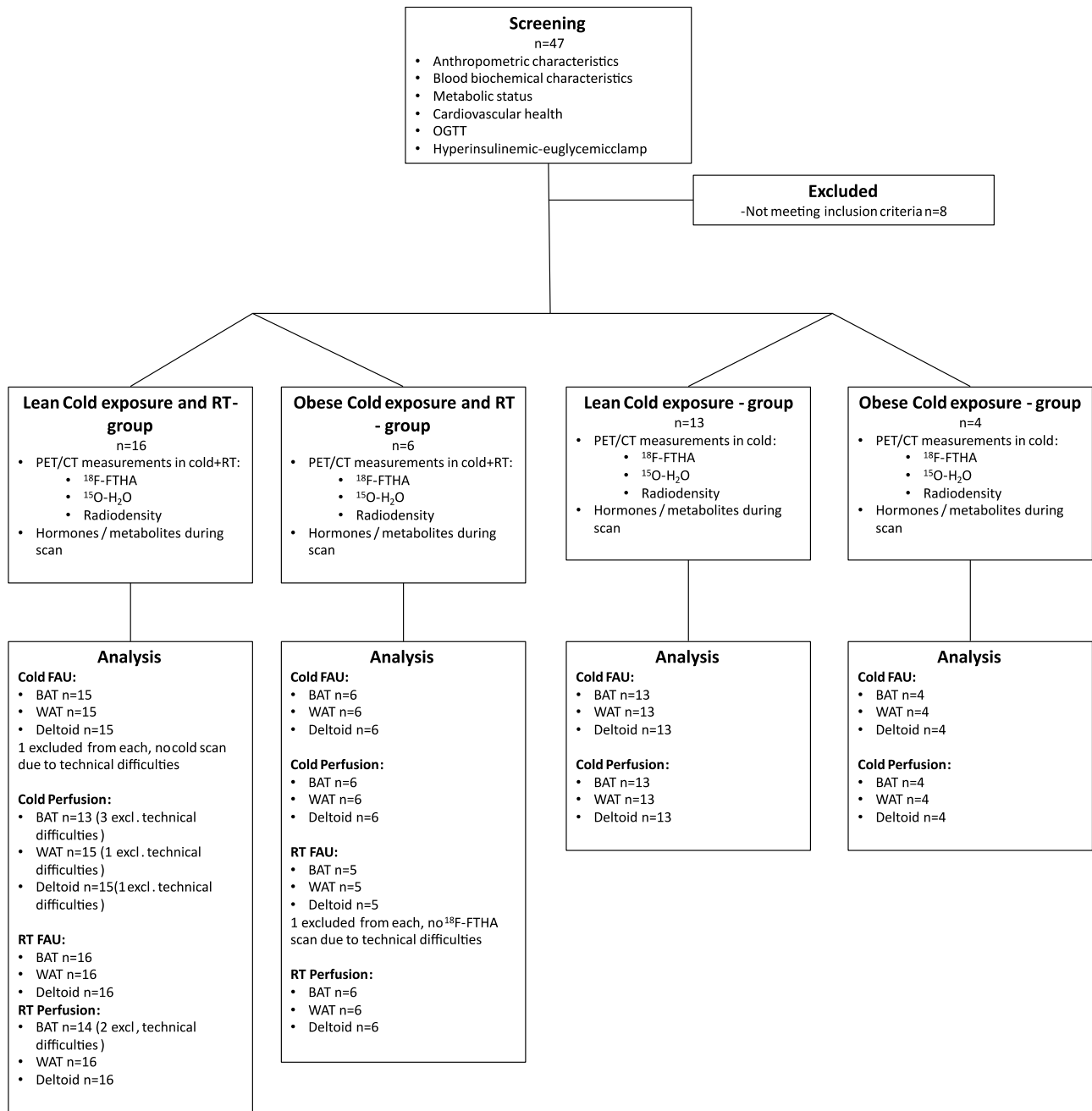
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Supplementary Table 1. General characteristics of histologically proven BAT positive (BAT⁽⁺⁾) and BAT negative subjects (BAT⁽⁻⁾) and measurements taken at baseline, and during cold exposure or room temperature scans. Values are presented as mean \pm SD.

		Histologically evident BAT-positive n = 7	Histologically evident BAT-negative n = 24	p-value
Age (years)		27.57 \pm 7.7	40.52 \pm 10.68	0.004
Gender (M/F)		4F / 3M	10F / 11M	
BMI (kg/m ²)		24.8 \pm 3.0	28.11 \pm 5.05	0.050
Waist circumference (cm)		85.71 \pm 10.87	94.98 \pm 18.86	0.13
M-value (mg/kg/min)		7.35 \pm 2.14	6.34 \pm 3.92	0.40
Fat percentage of weight (%)		30.26 \pm 9.37	30.55 \pm 8.60	0.5
HDL cholesterol (mmol/L)		1.74 \pm 0.42	1.49 \pm 0.39	0.207
LDL cholesterol (mmol/L)		2.71 \pm 0.95	2.84 \pm 0.67	0.76
Total cholesterol (mmol/L)		4.57 \pm 0.88	4.82 \pm 0.72	0.526
Triglycerides (mmol/L)		0.81 \pm 0.21	1.05 \pm 0.71	0.205
HbA _{1c} (mmol/mol)		33.19 \pm 4.21	35.47 \pm 4.50	0.248
Alanine transaminase (U/L)		19.57 \pm 10.39	29.15 \pm 15.50	0.086
Gamma-glutamyltransferase (U/L)		15.86 \pm 7.82	27.45 \pm 19.22	0.036
Alkaline phosphatase (U/L)		49.0 \pm 17.04	64.10 \pm 17.73	0.065
COLD EXPOSURE	BAT Fatty Acid Uptake (μ mol/100g/min)	2.64 \pm 1.01	0.54 \pm 0.24	0.001
	BAT blood flow (mL/100g/min)	16.56 \pm 5.80	11.06 \pm 4.96	0.051
	BAT radiodensity (HU)	-82.85 \pm 5.64	-88.25 \pm 9.72	0.089
	WAT Fatty Acid Uptake (μ mol/100g/min)	0.31 \pm 0.12	0.22 \pm 0.067	0.079
	WAT blood flow (mL/100g/min)	2.44 \pm 1.22	2.84 \pm 0.96	0.45
	WAT radiodensity (HU)	-83.99 \pm 2.88	-83.12 \pm 6.88	0.64
	Deltoid Fatty Acid Uptake (μ mol/100g/min)	0.76 \pm 0.22	0.44 \pm 0.13	0.007
	Deltoid blood flow (mL/100g/min)	4.10 \pm 2.84	3.04 \pm 2.97	0.416
	Deltoid radiodensity (HU)	64.44 \pm 14.51	37.49 \pm 34.03	0.008
ROOM TEMPERATURE	BAT Fatty Acid Uptake (μ mol/100g/min)	1.19 \pm 0.43	0.36 \pm 0.22	0.025
	BAT blood flow (mL/100g/min)	6.38 \pm 4.25	7.02 \pm 4.74	0.83
	BAT radiodensity (HU)	-86.46 \pm 5.97	-89.89 \pm 9.38	0.28
	WAT Fatty Acid Uptake (μ mol/100g/min)	0.32 \pm 0.13	0.22 \pm 0.10	0.22
	WAT blood flow (mL/100g/min)	1.95 \pm 0.44	3.52 \pm 3.80	0.19
	WAT radiodensity (HU)	-84.41 \pm 0.91	-83.80 \pm 5.45	0.70
	Deltoid Fatty Acid Uptake (μ mol/100g/min)	0.53 \pm 0.034	0.40 \pm 0.11	0.003
	Deltoid blood flow (mL/100g/min)	2.22 \pm 1.85	2.10 \pm 0.89	0.9
	Deltoid radiodensity (HU)	52.44 \pm 17.20	38.02 \pm 29.31	0.13
All data presented as mean \pm SD				
Unpaired student t-test has been used to compare data between lean and obese study subjects				



Supplementary Figure 1. More detailed version of Figure 2, with all excluded PET measurement details.