



Figure S1 Flow chart illustrating numbers of participants at different study stages as well as recruitment periods. n, number of participants. CIT, cold-induced thermogenesis.

Table S1 Descriptive statistics of subgroups by BMI

Variables	Value
Normal weight (BMI <25 kg/m ²)	
N	25
Female, n (%)	14 (56.0)
Normally distributed, mean ± SD [range]	
Weight, kg	68.2±12.0 [50.0–92.5]
Height, cm	175.1±11.2 [157.6–195.2]
BF%, %	19.8±8.5 [4.6–32.7]
TF%, %	24.3±8.7 [10.6–41.4]
CIT, %	5.6±8.5 [–10.6 to 24.3]
Not normally distributed, mean ± SD [range]	
Age, years	26 [20–37]
BMI, kg/m ²	22.1 [19.0–24.3]
SAT volume (normalized to trunk length), mL/cm	90.3 [28.6–192.8]
VAT volume (normalized to trunk length), mL/cm	19.2 [4.0–90.4]
Supraclavicular PDFF, %	80.6 [69.7–85.9]
Gluteal PDFF, %	89.8 [82.3–93.5]
Delta PDFF, %	8.9 [5.4–21.8]
Overweight/obese (BMI ≥25 kg/m ²)	
N	14
Female, n (%)	10 (71.4)
Normally distributed, mean ± SD [range]	
Weight, kg	93.5±12.3 [72.8–121.4]
Height, cm	172.8±9.0 [157.2–190.1]
BF%, %	34.8±10.2 [10.2–45.3]
TF%, %	45.6±10.1 [21.1–56.4]
CIT, %	3.0±10.0 [–8.2 to 22.9]
Not normally distributed, mean ± SD [range]	
Age, years	29.5 [23–53]
BMI, kg/m ²	31.7 [25.6–38.5]
SAT volume (normalized to trunk length), mL/cm	334.4 [87.8–447.9]
VAT volume (normalized to trunk length), mL/cm	45.9 [22.2–184.2]
Supraclavicular PDFF, %	83.3 [78.3–88.1]
Gluteal PDFF, %	92.0 [88.0–93.2]
Delta PDFF, %	8.1 [3.9–14.5]

Characteristics of subgroups sorted by BMI are presented for normal weight subgroup (BMI <25 kg/m²) and for overweight (BMI ≥25 kg/m²) subgroup. BF%, body fat percentage; BMI, body mass index; CIT, cold induced thermogenesis; n, numbers of participants; PDFF, proton density fat fraction; SAT, subcutaneous adipose tissue; TF%, trunk fat percentage; VAT, visceral adipose tissue; SD, standard deviation.

Table S2 Descriptive statistics of subgroups by BF%

Variables	Value
Normal BF% (male BF% <25%, female BF% <30%)	
N	24
Female, n (%)	11 (45.8)
Normally distributed, mean \pm SD [range]	
Weight, kg	70.8 \pm 14.3 [50.1–97.5]
Height, cm	176.8 \pm 11.7 [157.6–195.2]
BF%, %	17.9 \pm 7.6 [4.6–29.8]
TF%, %	22.6 \pm 7.0 [10.6–37.3]
CIT, %	3.9 \pm 8.0 [–10.6 to 24.3]
Not normally distributed, mean \pm SD [range]	
Age, years	26 [20–33]
BMI, kg/m ²	22.3 [19.0–30.4]
SAT volume (normalized to trunk length), mL/cm	88.2 [28.6–153.3]
VAT volume (normalized to trunk length), mL/cm	17.5 [4.4–90.3]
Supraclavicular PDFF, %	80.6 [69.7–85.8]
Gluteal PDFF, %	89.7 [82.3–92.8]
Delta PDFF, %	8.8 [5.4–21.8]
High BF% (male BF% \geq 25%, female BF% \geq 30%)	
N	15
Female, n (%)	13 (86.7)
Normally distributed, mean \pm SD [range]	
Weight, kg	87.7 \pm 16.4 [62.7–121.4]
Height, cm	170.2 \pm 6.7 [157.2–182.5]
BF%, %	36.8 \pm 5.9 [26.2–45.3]
TF%, %	46.8 \pm 6.9 [37.4–56.4]
CIT, %	5.8 \pm 10.6 [–8.2 to 22.9]
Not normally distributed, mean \pm SD [range]	
Age, years	30 [23–53]
BMI, kg/m ²	30.6 [21.4–38.5]
SAT volume (normalized to trunk length), mL/cm	306.0 [165.4–447.8]
VAT volume (normalized to trunk length), mL/cm	39.3 [19.7–184.2]
Supraclavicular PDFF, %	83.6 [78.3–88.1]
Gluteal PDFF, %	92.4 [88.0–93.5]
Delta PDFF, %	8.8 [3.9–14.5]

Characteristics of subgroups sorted by gender adapted BF% are presented for normal BF% (male BF% <25%, female BF% <30%) and high BF% (male BF% \geq 25%, female BF% \geq 30%). BF%, body fat percentage; BMI, body mass index; CIT, cold induced thermogenesis; n, numbers of participants; PDFF, proton density fat fraction; SAT, subcutaneous adipose tissue; TF%, trunk fat percentage; VAT, visceral adipose tissue; SD, standard deviation.