

Electronic supplementary material

Table 3 Glucose and fat metabolism at baseline and during the clamp

Variable	Basal state			Clamp 1			Clamp 2		
	FHBL	Control	<i>p</i>	FHBL	Control	<i>p</i>	FHBL	Control	<i>p</i>
Glucose (mmol/l)	5.5 (4.2–5.6)	5.0 (4.0–5.5)	NS	5.1 (4.8–5.2)	4.9 (4.6–5.1)	NS	4.9 (4.7–5.2)	4.9 (4.8–5.3)	NS
	5.2±0.2	4.8±0.2		5.0±0.1	4.9±0.1		4.9±0.1	4.9±0.1	
Insulin (pmol/l)	53 (8–71)	24 (8–83)	NS	199 (177–302)	162 (132–294)	NS	615 (572–836)	504 (426–712)	NS
	44±9	32±10		230±19	195±26		641±36	541±45	
EGP (μmol [kg FFM] ⁻¹ min ⁻¹)	11.5 (10.1–13.2)	13.0 (11.4–14.0)	NS	3.1 (1.5–5.2)	2.2 (1.3–6.4)	NS	— ^a	— ^a	
	11.9±0.5	12.8±0.4		3.4±0.5	2.8±0.6				
<i>R</i> _d (μmol [kg FFM] ⁻¹ min ⁻¹)	—	—		22.4 (16.2–32.6)	22.5 (18.8–42.9)	NS	57.5 (48.2–73.7)	65.0 (44.3–82.9)	NS
				22.9±2.1	26.0±3.3		57.3±3.1	63.2±5.9	
Insulin clearance (mU [m ² body surface area] ⁻¹ min ⁻¹ [pmol/l] ⁻¹)	—	—		0.10 (0.07–0.11)	0.12 (0.07–0.15)	NS	0.10 (0.07–0.10)	0.12 (0.08–0.14)	NS
	—	—		0.09±0.007	0.11±0.01		0.09±0.005	0.12±0.01	
Glucose oxidation (μmol [kg FFM] ⁻¹ min ⁻¹)	6.8 (5.1–11.1)	9.1 (5.2–11.9)	NS	—	—		22.6 (16.4–25.7)	26.1 (16.9–37.1)	NS
	7.7±0.8	9.3±0.8					22.0±1.3	25.5±2.7	
NOGD (μmol [kg FFM] ⁻¹ min ⁻¹)	3.2 (2.1–8.1)	3.7 (0.0–6.3)	NS	—	—		33.1 (28.2–55.5)	42.0 (26.5–52.1)	NS
	4.2±0.8	3.6±0.7					35.4±3.5	37.8±3.7	

Variable	Basal state			Clamp 1			Clamp 2		
	FHBL	Control	<i>p</i>	FHBL	Control	<i>p</i>	FHBL	Control	<i>p</i>
			value			value			value
REE (kJ/day)	7,125 (6,113–9874)	7,280 (6,653–8,786)	NS	–	–	–	7,908 (6,515–9,945)	7,862 (6,991–9,803)	NS
	7,514±594	7,636±322					8,012±469	8,096±372	
NEFA (mmol/l)	0.47 (0.18–0.49)	0.40 (0.29–0.82)	NS	0.08 (0.03–0.18)	0.05 (0.03–0.18)	NS	0.03 (0.01–0.06)	0.01 (0.01–0.05)	NS
	0.41±0.04	0.50±0.08		0.08±0.02	0.07±0.02		0.03±0.01	0.02±0.01	
Lipolysis ($\mu\text{mol kg}^{-1} \text{min}^{-1}$)	1.6 (1.5–1.9)	1.7 (1.2–2.5)	NS	0.8 (0.4–1.0)	0.6 (0.4–1.1)	NS	0.6 (0.3–0.9)	0.4 (0.3–0.8)	NS
	3.3±0.1	3.8±0.4		1.0±0.1	0.9±0.2		0.8±0.1	0.6±0.1	
Fat oxidation ($\mu\text{mol [kg FFM]}^{-1} \text{min}^{-1}$)	1.8 (1.2–2.1)	1.7 (1.0–1.9)	NS	–	–	–	0.6 (0.5–1.2)	0.4 (0.0–1.0)	NS
	1.7±0.1	1.6±0.1					0.7±0.1	0.4±0.2	

Data are median (range) and mean±SEM

To convert from $\mu\text{mol kg}^{-1} \text{min}^{-1}$ to $\text{mg kg}^{-1} \text{min}^{-1}$, multiply by 0.18

^aEGP was completely suppressed in both groups during high-dose insulin infusion

NOGD, non-oxidative glucose disposal