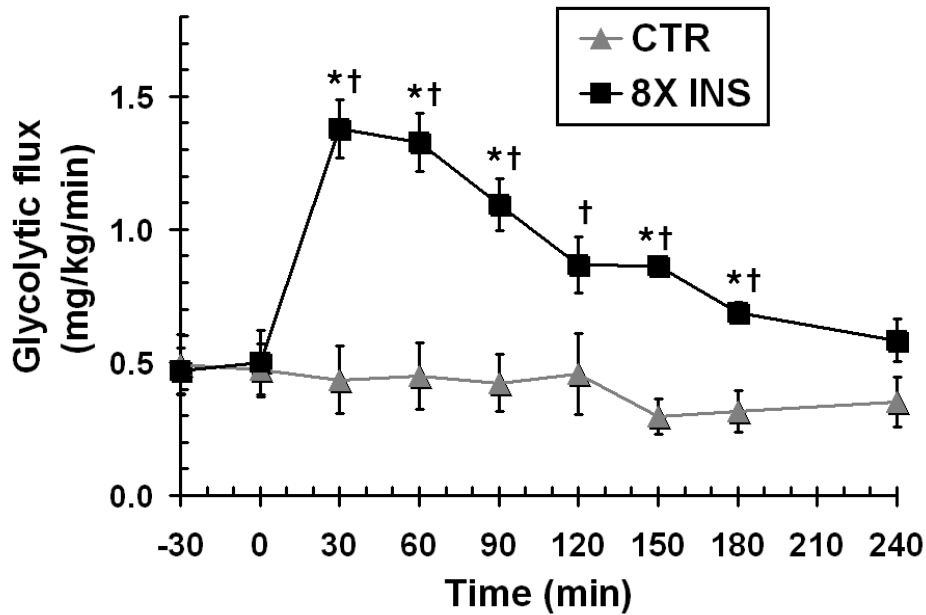


Supplementary Table 1. Arterial blood/plasma levels, net hepatic uptake, and net hepatic fractional extraction of selected gluconeogenic substrates in the 24 h fasted conscious dog subjected to either euinsulinemia (Control) or hyperinsulinemia (8X INS). Somatostatin, insulin and glucagon were infused from 0-min to control hormone levels and glucose was infused peripherally to maintain euglycemia.

	Basal Period	Experimental Period (min)					
		30	60	90	120	180	240
Arterial Plasma Glycerol Level (µmol/L)							
Control	97 ± 9	86 ± 7	84 ± 9	87 ± 13	79 ± 10	77 ± 4	80 ± 11
8X INS	97 ± 5	48 ± 5*†	39 ± 5*†	32 ± 2*†	30 ± 2*†	25 ± 2*†	35 ± 4*†
Net Hepatic Glycerol Uptake (µmol/kg/min)							
Control	1.9 ± 0.2	1.6 ± 0.2	1.6 ± 0.1	1.6 ± 0.1	2.0 ± 0.3	1.6 ± 0.1	1.9 ± 0.2
8X INS	2.1 ± 0.2	0.8 ± 0.1*†	0.7 ± 0.1*†	0.5 ± 0.1*†	0.6 ± 0.1*†	0.5 ± 0.1*†	0.8 ± 0.1*†
Arterial Blood Alanine Level (µmol/L)							
Control	391 ± 82	405 ± 77	428 ± 78	453 ± 78	467 ± 64	443 ± 52	438 ± 63
8X INS	329 ± 31	324 ± 31	326 ± 35	270 ± 24*	196 ± 8*†	180 ± 5*†	152 ± 6*†
Net Hepatic Alanine Uptake (µmol/kg/min)							
Control	3.3 ± 0.7	3.5 ± 0.6	3.3 ± 0.7	4.2 ± 0.7	3.9 ± 0.9	3.8 ± 1.0	3.5 ± 0.6
8X INS	3.1 ± 0.3	2.9 ± 0.3	3.1 ± 0.6	3.6 ± 0.6	3.4 ± 0.4	3.0 ± 0.1	2.9 ± 0.1
Net Hepatic Alanine Fractional Extraction							
Control	0.26 ± 0.05	0.25 ± 0.08	0.22 ± 0.08	0.29 ± 0.05	0.28 ± 0.05	0.29 ± 0.05	0.30 ± 0.04
8X INS	0.25 ± 0.03	0.24 ± 0.02	0.25 ± 0.01	0.34 ± 0.03†	0.39 ± 0.01*†	0.41 ± 0.02*†	0.45 ± 0.01*†
Arterial Blood GNG Amino Acid Level (µmol/L)							
Control	1722 ± 189	1819 ± 187	1861 ± 188	1913 ± 213	1914 ± 213	2028 ± 231	2021 ± 350
8X INS	1619 ± 96	1527 ± 95	1465 ± 76	1359 ± 68*	1252 ± 70*†	1143 ± 42*†	1096 ± 38*†
Net Hepatic GNG Amino Acid Uptake (µmol/kg/min)							
Control	4.4 ± 1.2	5.1 ± 2.0	4.0 ± 1.4	5.4 ± 0.9	5.1 ± 1.3	5.4 ± 1.1	5.6 ± 0.3
8X INS	4.6 ± 0.5	4.1 ± 0.5	4.9 ± 0.6	5.7 ± 0.5	5.5 ± 0.5	4.9 ± 0.5	5.6 ± 0.4
Net Hepatic GNG Amino Acid Fractional Extraction							
Control	0.10 ± 0.02	0.12 ± 0.04	0.08 ± 0.03	0.12 ± 0.03	0.12 ± 0.03	0.13 ± 0.05	0.10 ± 0.02
8X INS	0.09 ± 0.01	0.12 ± 0.01	0.15 ± 0.01*†	0.15 ± 0.02†	0.16 ± 0.01†	0.13 ± 0.01†	0.14 ± 0.01*†

Mean ± S.E.M; n=6 and n=30 in Control and 8X INS groups, respectively. *P<0.05 vs. Control group, † P<0.05 vs. basal period.

Supplementary Figure 1



Supplemental Figure 1. Glycolytic flux in 24 h fasted conscious dogs during the basal (-30 to 0 min) and experimental (0-240 min) periods. No persisting alteration in GNG flux-to-G6P was observed in either group. Thus, calculation for glycolytic flux assumed GNG flux-to-G6P was constant at basal rates and that lactate flux was unidirectional in the control period. Data are means \pm S.E.M, n=7 in CTR and n=20 in 8X INS groups. *P<0.05 vs. CTR group; †P<0.05 vs. basal period.