Supplemental Materials:

Insulin Clearance: Insulin clearance was calculated for the Visit 2 and Visit 3 hyperinsulinemic-euglycemic clamps. The insulin infusion rate (1.5 mU/kg FFM/min) was divided by difference between the steady state insulin level (time 150-180 min for the Visit 2 hyperinsulinemic-euglycemic clamp, time 150-360 min for the Visit 3 hyperinsulinemic-euglycemic clamp) and the baseline insulin level (38). During Visit 2, the differences between the trained and the sedentary groups for insulin clearance was not significant (trained: 32.3 ml/kg FFM/min ± SE 3.1 vs sedentary: 41.1 ml/kg FFM/min ± SE 3.5 p=0.08). During Visit 3, the insulin clearance between the different groups was not significantly different (Trained glycerol: 36.7 ml/kg FFM/min ± SE 9.9, Trained lipid: 62.3 ml/kg FFM/min ± SE 9.9, Sedentary glycerol: 41.1 ml/kg FFM/min ±SE 10.9, Sedentary lipid: 52.0 ml/kg FFM/min ± SE 10.9)

Figure 1: 6 hour hyperinsulinemic-euglycemic clamp parameters. Glucose (Figure 1A), insulin (Figure 1B) and free fatty acid (FFA: Figure 1C) over the course of the 6 hour hyperinsulinemic-euglycemic clamp are shown below. Values shown are means ± SE. * indicates significant difference compared with glycerol control. + indicates significant difference between trained glycerol and trained lipid groups. White circle=sedentary glycerol group (n=7); black circle=sedentary lipid group (n=7); white square=trained glycerol group (n=7); black square=trained lipid group (n=7).