

Supplemental Material:

Table of values used in Figures 1-3.

Muscle TAG levels (ug/mg muscle)					Muscle Oleic Levels in TAG (ug/mg muscle)				
	Sedentary glycerol	Sedentary Lipid	Trained glycerol	Trained Lipid		Sedentary glycerol	Sedentary Lipid	Trained glycerol	Trained Lipid
Bx1	3.81 (0.8)	3.97 (0.89)	3.55 (0.83)	4.1 (0.74)	Bx1	1.17 (0.25)	1.05 (0.12)	1.07 (0.34)	1.21 (0.27)
Bx2	3.3 (0.8)	4.83 (0.86)	4.73 (0.8)	4.3 (0.77)	Bx2	1.01 (0.25)	1.27 (0.11)	1.49 (0.33)	1.25 (0.28)
Bx3	3.25 (0.8)	4.29 (0.94)	4.76 (0.8)	5.42 (0.77)	Bx3	1.11 (0.25)	1.12 (0.13)	1.58 (0.34)	1.61 (0.28)
Muscle Linoleic (18:2) Levels in TAG (ug/mg muscle)					Muscle Linolenic (18:3) Levels in TAG (ug/mg muscle)				
	Sedentary glycerol	Sedentary Lipid	Trained glycerol	Trained Lipid		Sedentary glycerol	Sedentary Lipid	Trained glycerol	Trained Lipid
Bx1	0.74 (0.2)	0.65 (0.08)	0.59 (0.16)	0.57 (0.11)	Bx1	0.04 (0.008)	0.043 (0.006)	0.04 (0.01)	0.043 (0.01)
Bx2	0.58 (0.21)	0.88 (0.08)	0.72 (0.15)	0.6 (0.12)	Bx2	0.03 (0.008)	0.064 (0.006)	0.05 (0.01)	0.047 (0.01)
Bx3	0.65 (0.02)	0.90 (0.09)	0.73 (0.16)	0.93 (0.12)	Bx3	0.04 (0.008)	0.074 (0.007)	0.05 (0.01)	0.082 (0.01)
Muscle Total DAG levels (ug/mg muscle)					Muscle Saturated DAG levels (ug/mg muscle)				
	Sedentary glycerol	Sedentary Lipid	Trained glycerol	Trained Lipid		Sedentary glycerol	Sedentary Lipid	Trained glycerol	Trained Lipid
Bx1	0.16 (0.05)	0.27 (0.05)	0.12 (0.05)	0.16 (0.04)	Bx1	0.11 (0.03)	0.16 (0.03)	0.08 (0.03)	0.11 (0.02)
Bx2	0.17 (0.04)	0.23 (0.05)	0.12 (0.05)	0.19 (0.04)	Bx2	0.12 (0.03)	0.13 (0.03)	0.08 (0.03)	0.12 (0.02)
Bx3	0.13 (0.04)	0.4 (0.05)	0.15 (0.04)	0.22 (0.04)	Bx3	0.1 (0.02)	0.19 (0.03)	0.1 (0.02)	0.14 (0.02)

Muscle Oleic Levels in DAG (ug/mg muscle)									
	Sedentary glycerol	Sedentary Lipid	Trained glycerol	Trained Lipid					
Bx1	0.019 (0.003)	0.040 (0.01)	0.015 (0.003)	0.024 (0.005)					
Bx2	0.020 (0.003)	0.032 (0.01)	0.015 (0.003)	0.025 (0.005)					
Bx3	0.013 (0.003)	0.060 (0.01)	0.020 (0.003)	0.030 (0.005)					
Muscle Linoleic (18:2) Levels in DAG (ug/mg muscle)					Muscle Linolenic (18:3) Levels in DAG (ug/mg muscle)				
	Sedentary glycerol	Sedentary Lipid	Trained glycerol	Trained Lipid		Sedentary glycerol	Sedentary Lipid	Trained glycerol	Trained Lipid
Bx1	0.016 (0.01)	0.043 (0.01)	0.014 (0.01)	0.017 (0.01)	Bx1	0.001 (0.002)	0.004 (0.002)	0.001 (0.002)	0.002 (0.002)
Bx2	0.017 (0.01)	0.041 (0.01)	0.014 (0.01)	0.027 (0.01)	Bx2	0.001 (0.002)	0.005 (0.002)	0.001 (0.002)	0.003 (0.002)
Bx3	0.01 (0.01)	0.11 (0.01)	0.02 (0.01)	0.037 (0.01)	Bx3	0.001 (0.002)	0.014 (0.002)	0.001 (0.002)	0.004 (0.002)
Muscle Arachidonic Acid (20:4) Levels in DAG (ug/mg muscle)					Muscle elaidic acid (Trans 18:1) in DAG (ug/mg muscle)				
	Sedentary glycerol	Sedentary Lipid	Trained glycerol	Trained Lipid		Sedentary glycerol	Sedentary Lipid	Trained glycerol	Trained Lipid
Bx1	0.003 (0.0004)	0.006 (0.002)	0.003 (0.0005)	0.003 (0.0004)	Bx1	0.004 (0.001)	0.002 (0.001)	0.002 (0.0002)	0.002 (0.0004)
Bx2	0.003 (0.0004)	0.005 (0.002)	0.003 (0.0005)	0.003 (0.0004)	Bx2	0.003 (0.001)	0.002 (0.001)	0.002 (0.0002)	0.001 (0.0004)
Bx3	0.003 (0.0004)	0.007 (0.002)	0.003 (0.0004)	0.004 (0.0004)	Bx3	0.004 (0.001)	0.001 (0.001)	0.002 (0.0002)	0.002 (0.0004)

Muscle Total Ceramide levels (ng/mg tissue)					Muscle Saturated Ceramide levels (ng/mg tissue)				
	Sedentary glycerol	Sedentary Lipid	Trained glycerol	Trained Lipid		Sedentary glycerol	Sedentary Lipid	Trained glycerol	Trained Lipid
Bx1	29.6 (5.2)	31.8 (5.9)	43.4 (5.4)	41.5 (5.0)	Bx1	27.1 (4.8)	28.9 (2.4)	39.5 (4.0)	37.5 (6.8)
Bx2	39.2 (5.2)	36.3 (5.9)	42.1 (5.2)	44.3 (5.0)	Bx2	35.4 (4.8)	33.4 (2.4)	38.2 (3.9)	40 (6.5)
Bx3	32.3 (5.2)	37.3 (5.9)	36.9 (5.2)	39.3 (5.0)	Bx3	29.2 (4.8)	34.5 (2.4)	33.8 (3.9)	35.6 (6.8)
Muscle Palmitoyl-carnitine Levels (ug/mg tissue)					Muscle Oleoyl-carnitine Levels (ug/mg tissue)				
	Sedentary glycerol	Sedentary Lipid	Trained glycerol	Trained Lipid		Sedentary glycerol	Sedentary Lipid	Trained glycerol	Trained Lipid
Bx1	0.004 (0.0008)	0.005 (0.0009)	0.006 (0.0008)	0.006 (0.0007)	Bx1	0.01 (0.002)	0.02 (0.002)	0.02 (0.002)	0.03 (0.004)
Bx2	0.004 (0.0007)	0.005 (0.0008)	0.006 (0.0007)	0.006 (0.0007)	Bx2	0.01 (0.002)	0.02 (0.002)	0.02 (0.002)	0.03 (0.004)
Bx3	0.003 (0.0007)	0.004 (0.0008)	0.005 (0.0007)	0.006 (0.0007)	Bx3	0.01 (0.002)	0.02 (0.002)	0.02 (0.002)	0.02 (0.004)