

Football			Cycling			Control		
Subject	Age	Height (m)	Subject	Age	Height (m)	Subject	Age	Height (m)
			11	49.0	1.8	22	53.0	1.8
			12	49.0	1.7	23	54.0	1.8
			13	39.0	1.8	24	55.0	1.7
			14	48.0	1.8	25	52.0	1.8
			15	61.0	1.7	26	34.0	1.8
			16	45.0	1.8	27	45.0	1.8
			17	43.0	1.8	28	40.0	1.7
			18	51.0	1.695	29	57.0	1.8
			19	56.0	1.79	30	47.0	1.78
			20	46.0	1.79	31	52.0	1.9
			21	58.0	1.765	32	52.0	1.775
<i>M</i>	46.8	1.76		49.5	1.76		49.2	1.8
<i>SD</i>	6.60	0.08		6.61	0.04		7.03	0.06
<i>SEM</i>	2.09	0.02		1.99	0.01		2.12	0.02

Mass (kg)			Cycling			Control		
Subject	Pre	Post	Subject	Pre	Post	Subject	Pre	Post
			11	82.24	82.24	22	101.9	101.28
			12	91.18	91.76	23	84.24	84.42
			13	97.3	95.9	24	67.8	68.7
			14	116.5	116.3	25	84.6	85.9
			15	93.6	92.9	26	95.7	98.6
			16	95.6	95.9	27	92.4	91.6
			17	96.4	97.1	28	89.6	89.5
			18	71.3	69.9	29	108.4	108.8
			19	75.8	75.2	30	99.4	96.4
			20	91.5	90.63	31	91.42	92.24
			21	81.6	80.32	32	103.1	103.08
<i>M</i>	86.3	86.1		90.3	89.8		92.6	92.8
<i>SD</i>	13.6	13.4		12.3	12.6		11.2	10.9
<i>SEM</i>	4.3	4.2		3.7	3.8		3.4	3.3

BMI			Cycling			Control		
Subject	Pre	Post	Subject	Pre	Post	Subject	Pre	Post
			11	26.07	26.07	22	33.27	33.07
			12	32.11	32.32	23	27.04	27.10
			13	28.75	28.33	24	24.91	25.23
			14	36.60	36.55	25	26.10	26.51
			15	31.05	30.82	26	30.20	31.11
			16	31.05	31.15	27	29.31	29.06
			17	30.76	30.99	28	29.59	29.55
			18	24.81	24.34	29	33.46	33.59
			19	23.66	23.48	30	31.37	30.42
			20	28.55	28.29	31	25.06	25.28
			21	26.21	25.78	32	32.72	32.72
<i>M</i>	27.62	27.57		29.06	28.92		29.47	29.42
<i>SD</i>	2.89	2.90		3.76	3.90		3.20	3.07
<i>SEM</i>	0.92	0.92		1.13	1.17		0.97	0.92

W/G (cm)			Cycling			Control		
Football			Cycling			Control		
Subject	Pre	Post	Subject	Pre	Post	Subject	Pre	Post
1	93.5	93.5	11	88.5	87	22	100	100
2	98	98	12	108.5	105.5	23	89	89
3	98.5	86	13	104	104.5	24	84	84.5
4	88	86	14	113	111	25	89	90
5	93	85.5	15	98	98	26	102.5	102
6	92	89	16	95	94	27	103	96
7	82	82	17	95	101	28	102	100.5
8	98.5	97	18	84	81.5	29	112	112
9	100	99	19	92	87	30	106	107
10	105	105	20	95.5	92	31	95	95
			21	93	90	32	107	107
	0.064			0.151			0.401	
<i>M</i>	94.85	92.10		96.95	95.59		99.05	98.45
<i>SD</i>	6.60	7.49		8.55	9.18		8.72	8.50
<i>SEM</i>	2.09	2.37		2.58	2.77		2.63	2.56
H/G (cm)			Cycling			Control		
Football			Cycling			Control		
Subject	Pre	Post	Subject	Pre	Post	Subject	Pre	Post
1	105	104.5	11	96	96	22	108	108
2	100	98	12	101	98	23	98.5	99.5
3	89.5	88.5	13	103	103	24	94	94.5
4	99	97	14	107.5	103.5	25	92	92
5	96	93	15	106	106	26	104.5	104
6	95	95	16	110	107	27	101	100
7	92.5	92.5	17	102	100	28	103.5	103.5
8	105.5	103.5	18	94	92	29	112	112
9	106	103	19	97	96	30	107	108
10	109.5	108	20	100	99	31	103	103
			21	100	100	32	112	112
<i>M</i>	99.80	98.30		101.50	100.05		103.23	103.32
<i>SD</i>	6.58	6.25		4.92	4.55		6.57	6.53
<i>SEM</i>	2.08	1.98		1.48	1.37		1.98	1.97
WHR			Cycling			Control		
Football			Cycling			Control		
Subject	Pre	Post	Subject	Pre	Post	Subject	Pre	Post
1	0.89	0.89	11	0.92	0.91	22	0.93	0.93
2	0.98	1.00	12	1.07	1.08	23	0.90	0.89
3	1.10	0.97	13	1.01	1.01	24	0.89	0.89
4	0.89	0.89	14	1.05	1.07	25	0.97	0.98
5	0.97	0.92	15	0.92	0.92	26	0.98	0.98
6	0.97	0.94	16	0.86	0.88	27	1.02	0.96
7	0.89	0.89	17	0.93	1.01	28	0.99	0.97
8	0.93	0.94	18	0.89	0.89	29	1.00	1.00
9	0.94	0.96	19	0.95	0.91	30	0.99	0.99
10	0.96	0.97	20	0.96	0.93	31	0.92	0.92
			21	0.93	0.90	32	0.96	0.96
<i>M</i>	0.95	0.94		0.95	0.95		0.96	0.95
<i>SD</i>	0.06	0.04		0.06	0.07		0.04	0.04
<i>SEM</i>	0.02	0.01		0.02	0.02		0.01	0.01

Total Chol								
Football			Cycling			Control		
Subject	PRE	POST	Subject	PRE	POST	Subject	PRE	POST
1.0	4.9	4.9	11	5.0	4.0	22	4.5	5.2
2.0	6.0	5.8	12	4.8	5.2	23	4.8	4.6
3.0	4.6	4.1	13	5.7	6.0	24	5.4	6.2
4.0	5.6	4.5	14	6.2	5.7	25	5.2	4.6
5.0	4.4	4.3	15	4.8	5.0	26	5.8	5.0
6.0	7.3	6.6	16	6.2	5.6	27	4.0	4.2
7.0	5.5	5.4	17	4.3	4.6	28	3.1	3.9
8.0	4.9	5.2	18	4.0	4.3	29	5.2	5.2
9.0	6.7	6.6	19	6.4	6.4	30	5.5	5.2
10.0	4.4	4.7	20	5.9	5.5	31	5.7	5.4
			21	5.1	4.2	32	6.8	6.2
<i>M</i>	5.4	5.2		5.3	5.1		5.1	5.1
<i>SD</i>	1.0	0.9		0.8	0.8		1.0	0.7
<i>SEM</i>	0.3	0.3		0.2	0.2		0.3	0.2

LDL								
Football			Cycling			Control		
Subject	PRE	POST	Subject	PRE	POST	Subject	PRE	POST
1.0	3.2	3.1	11	3.3	2.3	22	2.7	3.7
2.0	3.6	3.7	12	3.0	3.2	23	2.8	2.5
3.0	2.8	2.3	13	3.6	4.2	24	4.1	3.4
4.0	3.8	2.8	14	3.9	3.7	25	2.8	2.5
5.0	2.6	2.4	15	3.4	3.2	26	4.0	3.3
6.0	5.2	4.2	16	4.4	3.8	27	2.5	2.7
7.0	4.0	3.8	17	2.1	2.2	28	2.1	2.4
8.0	3.3	3.5	18	2.4	2.5	29	3.5	3.4
9.0	5.1	4.7	19	4.2	4.1	30	3.2	3.8
10.0	2.2	2.4	20	4.3	3.8	31	3.7	3.6
			21	3.3	2.5	32	4.8	4.1
<i>M</i>	3.6	3.3		3.4	3.2		3.3	3.2
<i>SD</i>	1.0	0.8		0.7	0.7		0.8	0.6
<i>SEM</i>	0.3	0.3		0.2	0.2		0.2	0.2

HDL								
Football			Cycling			Control		
Subject	PRE	POST	Subject	PRE	POST	Subject	PRE	POST
1.0	1.2	1.3	11	1.2	1.2	22	0.8	0.8
2.0	1.0	1.1	12	1.3	1.5	23	1.7	1.8
3.0	1.2	1.1	13	1.2	1.2	24	1.7	1.7
4.0	1.5	1.3	14	1.0	0.8	25	2.0	1.5
5.0	1.4	1.5	15	1.0	1.0	26	1.3	1.3
6.0	1.0	1.0	16	1.3	1.3	27	1.1	1.2
7.0	1.0	1.1	17	1.7	1.9	28	0.8	0.7
8.0	1.1	1.2	18	1.5	1.6	29	1.1	1.1
9.0	1.0	1.0	19	1.6	1.5	30	1.0	1.0
10.0	1.6	1.8	20	1.2	1.2	31	1.6	1.3
			21	1.2	1.3	32	1.5	1.4
<i>M</i>	1.2	1.2		1.3	1.3		1.3	1.2
<i>SD</i>	0.2	0.3		0.2	0.3		0.4	0.4
<i>SEM</i>	0.1	0.1		0.1	0.1		0.1	0.1

TRIGS									
Football			Cycling			Control			
Subject	PRE	POST	Subject	PRE	POST	Subject	PRE	POST	
			11	1.1	1.2	22	1.6	2.3	
1.0	1.0	1.2	12	1.3	1.1	23	0.8	0.8	
2.0	3.1	2.1	13	1.9	1.4	24	0.7	0.6	
3.0	1.3	1.6	14	2.8	2.5	25	0.8	1.3	
4.0	0.8	0.7	15	1.0	1.8	26	1.0	0.9	
5.0	1.0	1.0	16	1.0	1.0	27	0.8	0.6	
6.0	2.3	3.0	17	1.1	1.1	28	0.5	2.0	
7.0	1.0	1.0	18	0.3	0.4	29	1.3	1.5	
8.0	1.2	1.1	19	1.4	1.9	30	2.9	1.1	
9.0	1.3	2.0	20	1.1	1.0	31	1.0	1.2	
10.0	1.5	1.1	21	1.3	0.9	32	1.3	1.5	
<i>M</i>	1.4	1.5		1.3	1.3		1.1	1.3	
<i>SD</i>	0.7	0.7		0.6	0.6		0.7	0.5	
<i>SEM</i>	0.2	0.2		0.2	0.2		0.2	0.2	
Hazard Ratio									
Football			Cycling			Control			
Subject	PRE	POST	Subject	PRE	POST	Subject	PRE	POST	
			11	4.2	3.5	22	6.2	5.8	
1.0	3.9	3.9	12	3.8	3.6	23	2.9	2.6	
2.0	5.9	5.3	13	4.7	5.0	24	3.2	3.6	
3.0	3.9	3.8	14	6.5	7.0	25	2.6	3.1	
4.0	3.8	3.3	15	4.7	4.9	26	4.4	4.0	
5.0	3.3	2.9	16	4.8	4.2	27	3.6	3.6	
6.0	7.0	6.8	17	2.6	2.5	28	4.0	6.0	
7.0	5.5	5.0	18	2.7	2.6	29	4.7	5.0	
8.0	4.5	4.4	19	4.0	4.3	30	5.8	5.3	
9.0	6.5	6.8	20	5.1	4.4	31	3.6	4.2	
10.0	2.8	2.6	21	4.2	3.2	32	4.7	4.4	
<i>M</i>	4.7	4.5		4.3	4.2		3.9	4.2	
<i>SD</i>	1.4	1.5		1.1	1.3		1.0	1.1	
<i>SEM</i>	0.5	0.5		0.3	0.4		0.3	0.3	
Glucose									
Football			Cycling			Control			
Subject	PRE	POST	Subject	PRE	POST	Subject	PRE	POST	
			11	5.2	4.1	22	2.9	3.7	
1.0	3.8	4.5	12	5.0	5.4	23	4.7	5.2	
2.0	5.4	4.3	13	5.3	5.1	24	3.8	4.0	
3.0	5.5	5.0	14	4.7	4.8	25	4.8	5.4	
4.0	3.7	3.7	15	6.4	6.1	26	6.2	6.0	
5.0	4.3	3.3	16	4.6	4.4	27	5.5	4.2	
6.0	5.0	4.9	17	5.3	5.3	28	4.7	3.9	
7.0	4.4	4.1	18	3.7	4.2	29	5.2	5.8	
8.0	4.9	4.8	19	3.9	4.0	30	4.4	4.1	
9.0	4.7	4.6	20	4.6	3.9	31	5.4	5.2	
10.0	5.3	4.8	21	4.2	4.7	32	5.2	5.3	
<i>M</i>	4.7	4.4		4.8	4.7		4.8	4.8	
<i>SD</i>	0.6	0.6		0.7	0.7		0.9	0.8	
<i>SEM</i>	0.2	0.2		0.2	0.2		0.3	0.3	

Insulin				Cycling				Control			
Football				Cycling				Control			
Subject	PRE	POST		Subject	PRE	POST		Subject	PRE	POST	
				11	2.9	2.0		22	5.6	6.0	
1.0	4.5	4.1		12	9.1	11.3		23	2.0	2.0	
2.0	25.6	12.5		13	9.6	7.6		24	2.0	2.1	
3.0	5.7	3.5		14	25.3	20.2		25	2.0	4.8	
4.0	2.0	2.0		15	21.7	21.1		26	17.1	21.3	
5.0	3.2	3.4		16	8.8	9.4		27	12.7	8.7	
6.0	5.0	3.4		17	7.7	5.8		28	14.2	16.9	
7.0	4.8	3.3		18	2.0	2.0		29	19.8	27.3	
8.0	4.0	12.1		19	2.2	2.0		30	11.3	9.3	
9.0	11.1	5.2		20	2.0	2.0		31	2.0	4.0	
10.0	9.2	4.1		21	2.3	2.1		32	8.0	8.4	
<i>M</i>	7.5	5.3			8.5	7.8			8.8	10.1	
<i>SD</i>	6.9	3.8			8.1	7.2			6.6	8.3	
<i>SEM</i>	2.2	1.2			2.4	2.2			2.0	2.5	
HbA1c				Cycling				Control			
Football				Cycling				Control			
Subject	PRE	POST		Subject	PRE	POST		Subject	PRE	POST	
				11	5.2	5.0		22	5.3	5.3	
1.0	5.9	5.5		12	6.3	6.0		23	6.1	6.0	
2.0	6.2	5.7		13	5.8	5.6		24	5.6	5.2	
3.0	6.5	6.1		14	5.3	5.1		25	5.8	5.6	
4.0	5.4	5.4		15	7.4	6.3		26	6.2	6.0	
5.0	5.1	4.9		16	5.3	5.3		27	5.5	5.5	
6.0	5.8	5.6		17	5.5	5.5		28	5.5	5.6	
7.0	5.9	5.5		18	5.4	5.2		29	5.3	5.8	
8.0	5.2	5.0		19	5.7	5.6		30	4.8	4.7	
9.0	5.6	5.3		20	5.0	4.8		31	5.5	5.6	
10.0	5.4	5.3		21	5.4	5.1		32	5.3	5.4	
<i>M</i>	5.7	5.4			5.7	5.4			5.5	5.5	
<i>SD</i>	0.4	0.3			0.7	0.4			0.4	0.4	
<i>SEM</i>	0.1	0.1			0.2	0.1			0.1	0.1	
HOMA-IS				Cycling				Control			
Football				Cycling				Control			
Subject	PRE	POST		Subject	PRE	POST		Subject	PRE	POST	
				11	0.7	0.4		22	0.7	1.0	
1.0	0.8	0.8		12	2.0	2.7		23	0.4	0.5	
2.0	6.1	2.4		13	2.3	1.7		24	0.3	0.4	
3.0	1.4	0.8		14	5.2	4.3		25	0.4	1.1	
4.0	0.3	0.3		15	6.1	5.7		26	4.7	5.7	
5.0	0.6	0.5		16	1.8	1.8		27	3.1	1.6	
6.0	1.1	0.7		17	1.8	1.4		28	3.0	2.9	
7.0	0.9	0.6		18	0.3	0.4		29	4.5	7.0	
8.0	0.9	2.6		19	0.4	0.4		30	2.2	1.7	
9.0	2.3	1.1		20	0.4	0.3		31	0.5	0.9	
10.0	2.2	0.9		21	0.4	0.4		32	1.9	2.0	
<i>M</i>	1.7	1.1			1.9	1.8			2.0	2.3	
<i>SD</i>	1.7	0.8			2.0	1.8			1.7	2.2	
<i>SEM</i>	0.5	0.2			0.6	0.5			0.5	0.7	

Pre-Training					Post-Training				
Football					Football				
Subjects	TB-LM (g)	TB-FM (g)	TB-FM (%)	Abdominal FM (g)	Subjects	TB-LM (g)	TB-FM (g)	TB-FM (%)	Abdominal FM (g)
1	68213	26402	26.9	2474	1	69188	25628	26.05	2479
2	54776	23359	28.7	2748	2	53957	22789	28.49	2642
3	51853	15126	21.6	2109	3	54066	14524	20.29	1919
4	55237	21886	26.9	1498	4	56586	20342	25.10	1468
5	51462	19641	26.3	1854	5	54975	17064	22.60	1625
6	59450	21367	25.3	2527	6	59553	21799	25.68	2493
7	48323	17563	25.5	1542	7	49131	17953	25.62	1649
8	70259	30318	29.0	2776	8	70586	29400	28.30	2804
9	65746	27752	28.6	2946	9	67569	26867	27.39	2994
10	67385	34877	32.8	3953	10	68221	34339	32.24	3849
<i>Mean</i>	59270	23829	27.2	2443		60383	23071	26.18	2392
<i>SD</i>	8034	6044	2.9	738		7795	6078	3.29	742
<i>SEM</i>	2540.416	1911.304	0.931	233.532		2465.000	1921.938	1.040	234.594
Cycling					Cycling				
Subjects	TB-LM (g)	TB-FM (g)	TB-FM (%)	Abdominal FM (g)	Subjects	TB-LM (g)	TB-FM (g)	TB-FM (%)	Abdominal FM (g)
11	57114	19406	24.1	1780	11	59435	17807	21.89	1636
12	57991	30057	33.0	3741	12	60158	29803	32.05	3835
13	64375	29209	30.0	3140	13	65678	27838	28.65	3082
14	67947	44731	38.3	4901	14	70737	42721	36.39	4724
15	58388	32544	34.5	3358	15	58485	32261	34.24	3088
16	68952	23647	24.5	2106	16	68871	24119	24.88	2194
17	66788	27680	28.1	3047	17	65875	28038	28.66	2789
18	54616	12751	18.0	1047	18	53203	12514	18.12	827
19	48079	25287	33.0	2251	19	49784	24721	31.78	2160
20	58321	30933	33.3	2679	20	58722	29828	32.33	2500
21	60883	17463	21.4	1851	21	60836	15843	19.84	1619
<i>Mean</i>	60314	26701	28.9	2718		61071	25954	28.08	2587
<i>SD</i>	6301	8603	6.3	1074		6353	8442	6.09	1093
<i>SEM</i>	1899.967	2593.925	1.886	323.698		1915.598	2545.500	1.836	329.539
Pre-Training					Post-Training				
Control					Control				
Subjects	TB-LM (g)	TB-FM (g)	TB-FM (%)	Abdominal FM (g)	Subjects	TB-LM (g)	TB-FM (g)	TB-FM (%)	Abdominal FM (g)
22	68740	31615	30.3	2612	22	65840	31415	30.98	2556
23	63454	16848	20.1	1502	23	64882	16728	19.63	1579
24	48021	17549	25.7	1755	24	46843	19313	28.02	1736
25	61510	18110	21.7	1307	25	62849	20117	23.21	1576
26	63686	30261	31.0	3089	26	65644	32342	31.87	3385
27	59997	28532	30.8	2799	27	58999	28834	31.38	2916
28	60506	26895	29.8	2988	28	57752	28927	32.26	3052
29	65656	41045	37.0	4226	29	65656	41045	36.96	4226
30	57965	40986	40.0	4044	30	54179	40143	41.06	3956
31	71452	14419	16.0	1627	31	70667	17030	18.55	1705
32	67712	32055	31.0	3198	32	66756	31091	30.62	3504
<i>Mean</i>	62609	27120	28.5	2650		61824	27908	29.51	2745
<i>SD</i>	6323	9393	7.1	1001		6825	8626	6.84	981
<i>SEM</i>	1906.487	2832.048	2.146	301.919		2057.731	2600.978	2.063	295.890

PRE Training			
Football			
Subject	est Duration (mi)	Last WL (Watts)	VO _{2submax} (kg/ml/min)
1	8.08	250	26.2
2	5.42	175	22.73
3	5.87	175	19.7
4	7.22	225	30.8
5	7.52	225	28.1
6	4.75	150	20.1
7	7.08	225	25.6
8	4.60	150	21.3
9	9.23	275	26.2
10	6.95	200	26.4
<i>M</i>	6.7	205.0	24.7
<i>SD</i>	1.5	42.2	3.6
<i>SEM</i>	0.5	13.3	1.1

POST Training			
Football			
Subject	est Duration (mi)	Last WL (Watts)	VO _{2submax} (kg/ml/min)
1	9.72	275	30.33
2	6.62	200	24.6
3	9.57	275	29.05
4	7.93	225	33
5	8.25	250	29.76
6	8.22	250	32.28
7	8.35	250	27.65
8	5.53	175	24.14
9	9.47	275	28.36
10	8.97	250.0	30.17
<i>M</i>	8.3	242.5	28.9
<i>SD</i>	1.3	33.4	2.9
<i>SEM</i>	0.4	10.6	0.9

Cycling			
Subject		Last WL (Watts)	VO _{2submax} (kg/ml/min)
11	4.42	150	15
12	7.32	225	28.1
13	7.78	225	24.6
14	8.85	250	30.2
15	5.72	175	19.3
16	8.27	250	25.05
17	7.90	225	25.3
18	5.87	175	24.5
19	5.87	175	22.5
20	7.77	225	25.4
21	6.83	200.0	26.1
<i>M</i>	7.0	206.8	24.2
<i>SD</i>	1.3	33.7	4.1
<i>SEM</i>	0.4	10.2	1.2

Cycling			
Subject		Last WL (Watts)	VO _{2submax} (kg/ml/min)
11	8.15	250	27.9
12	8.67	250	32
13	9.10	275	28.2
14	11.95	325	35
15	6.15	200	22.4
16	8.95	275	26
17	9.18	275	25.9
18	8.13	250	27.5
19	7.42	225	28.3
20	8.08	250.0	30.1
21	8.48	250.0	26.4
<i>M</i>	8.6	256.8	28.1
<i>SD</i>	1.4	31.8	3.3
<i>SEM</i>	0.4	9.6	1.0

PRE Training			
Control			
Subject		Last WL (Watts)	VO _{2submax} (kg/ml/min)
22	7.52	225	28.1
23	7.08	225	28.8
24	7.53	225	35.9
25	7.67	225	24.8
26	7.08	225	25.1
27	8.33	250	28.8
28	8.95	250	28.3
29	4.82	150	15.7
30	8.28	250	23.3
31	9.20	275	27.7
32	6.72	200	21.2
<i>M</i>	7.5	227.3	26.5
<i>SD</i>	1.2	32.5	5.4
<i>SEM</i>	0.4	9.8	1.6

POST Training			
Control			
Subject		Last WL (Watts)	VO _{2submax} (kg/ml/min)
22	7.52	225	28.1
23	6.08	200	24.1
24	7.53	225	32.0
25	7.85	225	25.8
26	8.08	250	24.8
27	8.33	250	28.8
28	9.45	275	27.6
29	4.82	150	14.6
30	8.58	250	22.8
31	9.20	275	27.0
32	6.72	200.0	21.2
<i>M</i>	7.6	229.5	25.7
<i>SD</i>	1.4	36.8	5.2
<i>SEM</i>	0.4	11.1	1.4

GLUCOSE - AUC																	
SSG						Cycling						Control					
Subject	PRE-Training				SUM	Subject					SUM	Subject					SUM
	Pre-30	30-60	60-90	90-120			Pre-30	30-60	60-90	90-120			Pre-30	30-60	60-90	90-120	
1	2.4	2.8	2.5	2.1	9.8	11	3.7	4.9	3.5	2.3	14.3	22	2.5	3.6	3.2	2.3	11.6
2	3.4	4.5	4.9	4.8	17.6	12	3.5	5.2	5.5	5.1	19.3	23	3.2	3.5	2.5	1.9	11.1
3	3.3	4.4	4.6	3.4	15.7	13	3.9	5.0	5.0	4.6	18.5	24	2.8	3.7	3.6	3.2	13.2
4	2.3	2.3	2.2	2.6	9.5	14	3.3	4.1	3.9	3.4	14.6	25	3.1	3.8	3.2	2.2	12.3
5	3.4	4.3	3.9	2.9	14.5	15	4.2	5.6	5.9	4.6	20.3	26	4.2	5.5	5.4	4.8	19.8
6	2.8	2.9	2.5	1.8	10.0	16	2.9	3.0	2.1	2.0	9.9	27	3.6	3.4	2.3	2.1	11.3
7	2.5	2.4	1.8	1.6	8.3	17	3.4	3.6	2.7	2.0	11.7	28	3.0	3.2	2.8	2.5	11.5
8	3.0	3.9	3.9	2.9	13.7	18	2.7	2.9	2.3	2.3	10.1	29	3.5	3.8	3.1	2.6	13.0
9	3.2	4.1	3.7	3.4	14.5	19	2.8	3.2	2.8	2.4	11.1	30	2.5	2.6	2.5	2.7	10.3
10	3.5	4.2	3.4	2.6	13.6	20	3.2	3.7	2.9	2.3	12.0	31	3.4	4.7	4.3	2.9	15.3
						21	2.9	3.7	3.3	2.8	12.7	32	3.3	3.9	3.6	2.9	13.7
M	3.0	3.6	3.3	2.8	12.7	M	3.3	4.1	3.6	3.0	14.1	M	3.2	3.8	3.3	2.7	13.0
SD	0.4	0.9	1.1	0.9	3.1	SD	0.5	0.9	1.3	1.2	3.7	SD	0.5	0.7	0.9	0.8	2.7
SEM	0.1	0.3	0.3	0.3	1.0	SEM	0.1	0.3	0.4	0.3	1.1	SEM	0.2	0.2	0.3	0.2	0.8
SSG						Cycling						Control					
Subject	Post Training				SUM	Subject					SUM	Subject					SUM
	Pre-30	30-60	60-90	90-120			Pre-30	30-60	60-90	90-120			Pre-30	30-60	60-90	90-120	
1	2.7	2.3	1.5	1.4	7.9	11	3.0	3.5	2.6	1.7	10.8	22	2.7	3.0	2.1	1.6	9.4
2	3.0	3.5	3.0	2.6	12.0	12	3.8	4.3	3.4	3.0	14.5	23	3.4	3.9	3.6	2.6	13.4
3	3.0	3.6	3.1	2.0	11.7	13	3.4	4.7	4.0	3.1	15.2	24	2.6	3.3	2.8	2.2	10.9
4	2.3	2.3	2.2	2.6	9.5	14	3.2	3.6	3.0	2.6	12.3	25	3.8	4.8	3.9	2.6	15.1
5	2.4	2.8	2.2	2.1	9.4	15	4.3	5.8	5.9	5.3	21.3	26	3.4	3.4	3.3	2.5	12.5
6	3.0	3.2	2.6	2.0	10.7	16	2.7	3.1	2.5	1.7	9.9	27	3.1	3.1	2.1	2.0	10.3
7	2.7	3.0	2.3	1.7	9.6	17	2.8	2.8	2.2	1.4	9.1	28	3.3	4.2	3.5	3.2	14.2
8	3.3	3.8	2.7	1.9	11.7	18	2.8	2.5	1.5	1.2	7.9	29	4.5	5.4	4.8	4.1	18.8
9	3.3	3.8	3.0	2.3	12.4	19	2.5	2.6	2.1	1.9	9.1	30	2.6	3.3	3.1	2.8	11.7
10	2.8	2.8	2.0	1.9	9.5	20	2.7	3.1	2.6	2.4	10.7	31	3.2	4.1	3.5	2.4	13.2
						21	2.8	3.1	2.4	1.8	10.1	32	3.7	4.6	3.4	2.3	14.0
M	2.8	3.1	2.4	2.0	10.4	M	3.1	3.5	2.9	2.4	11.9	M	3.3	3.9	3.3	2.6	13.0
SD	0.3	0.6	0.5	0.4	1.5	SD	0.5	1.0	1.2	1.2	3.9	SD	0.6	0.8	0.8	0.7	2.6
SEM	0.1	0.2	0.1	0.1	0.4	SEM	0.2	0.3	0.4	0.4	1.2	SEM	0.2	0.2	0.2	0.2	0.8

INSULIN - AUC						Cycling						Control					
SSG						Cycling						Control					
Subject	PRE-Training				SUM	Subject					SUM	Subject					SUM
	Pre-30	30-60	60-90	90-120			Pre-30	30-60	60-90	90-120			Pre-30	30-60	60-90	90-120	
1	13.0	33.8	31.5	17.5	95.8	11	9.6	25.6	21.8	10.5	67.5	22	12.9	33.6	43.1	30.9	120.5
2	24.5	73.1	105.8	93.0	296.3	12	14.6	31.9	46.3	53.8	146.5	23	3.5	7.6	8.9	7.9	28.0
3	5.7	14.6	23.7	24.6	68.7	13	12.8	16.2	17.5	23.2	69.7	24	4.6	10.2	14.5	16.8	46.0
4	8.3	12.1	9.9	9.4	39.7	14	33.6	51.9	52.6	47.7	185.7	25	4.7	11.5	15.1	11.9	43.1
5	4.4	17.4	26.1	19.3	67.1	15	23.0	64.4	112.5	105.5	305.4	26	22.7	51.1	73.3	79.3	226.3
6	8.2	15.1	16.2	14.2	53.7	16	24.0	36.2	21.3	12.9	94.3	27	29.9	43.7	29.0	24.1	126.8
7	13.9	24.3	19.2	13.2	70.6	17	15.3	35.7	32.4	13.7	97.1	28	21.6	35.2	35.3	27.5	119.5
8	14.3	30.5	49.0	55.4	149.2	18	17.4	27.2	17.4	15.4	77.4	29	53.0	76.0	63.0	66.0	258.0
9	16.7	33.4	33.6	26.3	110.0	19	4.3	7.5	8.6	11.5	31.8	30	14.5	27.8	28.5	27.1	97.9
10	13.1	22.8	20.6	14.0	70.4	20	11.1	20.3	16.2	12.2	59.8	31	5.0	13.2	16.6	15.3	50.0
						21	6.6	16.8	18.7	16.5	58.5	32	14.7	31.3	36.8	29.0	111.7
M	12.2	27.7	33.5	28.7	102.1	M	15.7	30.3	33.2	29.3	108.5	M	17.0	31.0	33.1	30.5	111.6
SD	5.9	17.8	27.6	26.1	75.0	SD	8.5	16.5	29.5	29.3	78.4	SD	14.7	20.8	20.5	22.3	74.1
SEM	1.9	5.6	8.7	8.3	23.7	SEM	2.6	5.0	8.9	8.8	23.6	SEM	4.4	6.3	6.2	6.7	22.3

SSG						Cycling						Control					
Subject	Post Training				SUM	Subject					SUM	Subject					SUM
	Pre-30	30-60	60-90	90-120			Pre-30	30-60	60-90	90-120			Pre-30	30-60	60-90	90-120	
1	8.1	13.4	12.8	13.8	48.0	11	4.7	11.5	13.7	11.9	41.7	22	18.3	55.3	48.5	15.4	137.5
2	16.1	42.5	56.3	54.3	169.0	12	19.2	45.4	61.0	61.0	186.6	23	3.5	6.6	13.6	53.8	77.5
3	4.4	12.6	20.6	21.9	59.5	13	5.1	12.6	41.7	49.4	108.7	24	5.2	13.3	31.1	28.8	78.3
4	6.7	12.4	11.8	9.6	40.5	14	29.9	50.4	40.6	33.9	154.8	25	8.0	17.6	20.2	13.1	58.8
5	7.5	12.5	11.2	11.8	42.8	15	23.2	55.9	91.5	91.8	262.4	26	29.8	57.2	68.0	48.7	203.7
6	6.7	14.2	14.0	10.6	45.5	16	25.6	48.5	39.0	24.0	137.0	27	31.4	46.5	26.7	16.2	120.7
7	11.1	22.7	20.2	13.9	67.9	17	14.4	37.1	33.6	12.3	97.4	28	55.2	86.8	59.5	68.2	269.6
8	10.2	27.5	28.5	15.8	82.0	18	12.2	21.9	17.1	10.2	61.4	29	60.1	88.8	81.3	75.8	305.8
9	14.8	30.6	37.3	29.4	112.1	19	4.0	10.3	9.8	7.5	31.6	30	12.0	21.9	29.1	28.5	91.4
10	10.6	18.7	12.4	8.6	50.3	20	1.0	4.8	8.6	10.6	25.0	31	4.7	11.5	18.2	20.8	55.2
						21	7.1	14.0	12.4	10.1	43.6	32	12.1	54.0	60.6	22.6	149.2
M	9.6	23.3	22.5	19.0	71.7	M	13.3	28.4	33.5	29.3	104.6	M	21.8	41.7	41.5	35.6	140.7
SD	3.7	14.1	14.6	13.9	40.7	SD	9.9	19.2	25.6	27.4	75.1	SD	20.1	29.6	23.0	22.3	85.2
SEM	1.2	3.2	4.6	4.4	12.9	SEM	3.0	5.8	7.7	8.3	22.7	SEM	6.1	8.9	6.9	6.7	25.7

Matsuda ISI

SSG	Pre		Post		CYC	Pre		Post		CON	Pre		Post	
	9.6	13.9	10.2	19.9		8.3	7.4							
	1.4	3.6	3.3	2.9		22.0	9.9							
	6.4	10.7	4.6	4.6		17.2	14.7							
	22.6	22.4	2.1	2.8		17.1	8.2							
	10.5	17.5	1.3	1.4		1.7	2.1							
	10.2	13.4	6.2	5.2		3.8	5.7							
	10.8	13.0	5.8	7.5		4.0	2.3							
	6.0	5.1	15.7	19.3		2.0	1.3							
	4.1	6.8	20.9	24.4		5.1	5.8							
	5.6	12.2	14.9	24.6		13.2	9.5							
M	8.7	11.8	8.5	11.3		9.4	6.7							
SD	5.8	5.7	6.7	9.6		7.4	4.2							
SEM	1.8	1.8	2.1	3.0		2.3	1.3							

NRF2

CON	pre	post
25	0.29	0.39
23	0.31	0.32
27	0.18	0.39
22	0.44	0.36
32	0.52	1.23
28	1.17	1.42
26	1.30	1.16
24	3.57	0.95
31	1.23	1.34
M	1.00	0.84
SD	1.06	0.47
SE	0.35	0.16

CYC	pre	post
19	0.33	0.35
16	0.39	0.56
15	1.37	0.54
12	0.59	0.76
14	1.13	1.97
13	1.53	1.40
17	0.56	2.42
21	1.31	1.26
11	1.41	0.97
18	1.50	2.31
20	0.86	0.59
M	1.00	1.26
SD	0.49	0.76
SE	0.15	0.24

SSG	pre	post
9	0.91	0.51
8	0.18	0.60
1	0.64	1.03
3	0.31	0.40
4	0.88	0.53
7	3.81	2.62
5	0.72	0.32
10	0.59	0.38
2	1.65	0.82
6	0.30	0.57
M	1.00	0.78
SD	1.07	0.68
SE	0.34	0.22

NRF1

CON	pre	post
25	0.34	0.77
23	0.78	0.93
27	0.65	0.38
22	0.79	0.28
32	1.78	2.20
28	0.67	1.21
26	1.22	0.54
24	0.61	0.52
31	2.17	2.00
M	1.00	0.98
SD	0.61	0.69
SE	0.20	0.23

CYC	pre	post
19	0.31	0.31
16	1.91	1.65
15	0.23	0.60
12	2.01	1.27
14	1.53	1.37
13	0.95	1.07
17	0.93	2.48
21	0.80	0.61
11	0.76	0.66
18	1.13	1.20
20	0.44	0.45
M	1.00	1.12
SD	0.60	0.63
SE	0.19	0.20

SSG	pre	post
9	0.34	0.70
8	0.49	1.17
1	0.55	0.23
3	0.60	0.56
4	0.93	0.51
7	1.75	1.44
5	1.65	0.61
10	1.85	0.79
2	1.41	0.67
6	0.43	0.25
M	1.00	0.69
SD	0.60	0.37
SE	0.19	0.12

MEF2A

CON	pre	post
25	0.15	0.52
23	1.09	1.31
27	0.49	0.12
22	0.33	0.09
32	0.88	0.54
28	0.90	1.50
26	0.15	0.05
24	0.56	0.18
31	4.45	1.95
M	1.00	0.69
SD	1.34	0.71
SE	0.45	0.24

CYC	pre	post
19	0.14	0.07
16	1.61	2.14
15	0.24	0.55
12	2.72	2.12
14	0.40	0.74
13	3.54	1.25
17	0.46	0.73
21	0.36	0.60
11	0.38	0.54
18	0.63	0.73
20	0.51	0.43
M	1.00	0.90
SD	1.19	0.69
SE	0.38	0.22

SSG	pre	post
9	0.39	1.58
8	0.59	2.11
1	1.63	0.58
3	0.63	0.65
4	0.56	0.22
7	1.81	2.83
5	1.10	0.60
10	2.77	1.88
2	0.35	0.13
6	0.17	0.06
M	1.00	1.06
SD	0.83	0.96
SE	0.26	0.30

Tfam

CON	pre	post
25	0.81	1.56
23	1.25	1.74
27	2.60	0.63
22	1.28	0.68
32	0.79	0.65
28	0.53	0.62
26	0.79	0.29
24	0.29	0.32
31	0.66	0.92
M	1.00	0.82
SD	0.68	0.51
SE	0.23	0.17

CYC	pre	post
19	0.43	0.45
16	2.07	1.34
15	0.36	1.19
12	3.51	2.74
14	1.81	0.40
13	0.93	0.76
17	0.22	0.77
21	0.47	0.24
11	0.51	0.33
18	0.64	0.46
20	0.06	0.24
M	1.00	0.81
SD	1.05	0.75
SE	0.33	0.24

SSG	pre	post
9	0.42	1.33
8	1.26	1.44
1	1.31	0.75
3	1.62	0.77
4	0.40	0.17
7	0.72	1.29
5	1.13	0.33
10	1.63	1.00
2	1.10	0.36
6	0.39	0.01
M	1.00	0.74
SD	0.48	0.51
SE	0.15	0.16

COXI

CON	pre	post
25	0.80	1.44
23	1.48	1.91
27	2.34	0.73
22	1.97	0.65
32	0.73	0.71
28	0.44	0.60
26	0.28	0.02
24	0.32	0.45
31	0.64	1.79
M	1.00	0.92
SD	0.75	0.64
SE	0.25	0.21

CYC	pre	post
19	0.39	0.54
16	2.64	1.87
15	0.37	1.41
12	2.01	2.12
14	2.38	0.88
13	0.95	1.82
17	0.56	1.77
21	0.63	0.56
11	0.54	1.30
18	0.22	0.74
20	0.31	0.27
M	1.00	1.20
SD	0.91	0.59
SE	0.27	0.18

SSG	pre	post
9	0.44	0.86
8	1.46	2.43
1	1.15	0.94
3	1.41	2.08
4	0.30	0.20
7	1.01	2.94
5	1.51	0.62
10	1.66	1.31
2	0.99	0.64
6	0.08	0.05
M	1.00	1.21
SD	0.55	0.97
SE	0.17	0.31

COXII

CON	pre	post
25	0.72	1.13
23	0.43	0.72
27	1.73	0.57
22	1.30	0.50
32	1.03	0.95
28	0.45	0.53
26	1.15	0.23
24	0.79	0.81
31	1.40	1.49
M	1.00	0.77
SD	0.44	0.38
SE	0.15	0.13

CYC	pre	post
19	0.37	0.46
16	1.36	1.29
15	0.39	0.96
12	2.05	2.36
14	2.55	0.88
13	1.09	1.38
17	0.48	1.03
21	0.70	0.48
11	0.64	1.67
18	1.00	1.42
20	0.36	0.36
M	1.00	1.12
SD	0.74	0.57
SE	0.22	0.17

SSG	pre	post
9	0.30	0.80
8	0.88	1.30
1	0.81	0.56
3	1.34	1.57
4	0.39	0.27
7	0.84	1.67
5	1.75	0.67
10	1.84	2.08
2	1.65	1.43
6	0.19	0.04
M	1.00	1.04
SD	0.62	0.67
SE	0.19	0.21

COXIII

CON	pre	post
25	0.34	0.94
23	0.87	0.86
27	1.08	0.39
22	0.92	0.27
32	2.79	0.81
28	0.38	0.37
26	1.03	0.48
24	0.87	0.69
31	0.73	0.80
M	1.00	0.62
SD	0.72	0.25
SE	0.24	0.08

CYC	pre	post
19	0.31	0.30
16	2.36	1.79
15	0.24	0.66
12	1.70	1.25
14	1.86	0.89
13	1.72	1.11
17	0.50	1.12
21	0.63	0.62
11	0.44	0.80
18	0.60	1.16
20	0.63	0.40
M	1.00	0.92
SD	0.78	0.41
SE	0.24	0.12

SSG	pre	post
9	0.46	0.99
8	1.19	2.32
1	0.70	0.45
3	1.07	1.00
4	0.54	0.26
7	1.16	2.52
5	1.44	1.27
10	2.03	0.94
2	1.22	0.59
6	0.21	0.18
M	1.00	1.05
SD	0.53	0.80
SE	0.17	0.25

COXIV

CON	pre	post
25	0.78	1.40
23	1.27	1.73
27	1.70	0.55
22	1.60	0.62
32	0.83	0.94
28	0.43	0.48
26	0.33	0.25
24	0.89	0.61
31	1.17	1.46
M	1.00	0.90
SD	0.48	0.52
SE	0.16	0.17

CYC	pre	post
19	0.40	0.59
16	2.76	1.87
15	0.38	1.26
12	2.07	2.89
14	2.23	0.85
13	1.18	1.57
17	0.64	1.57
21	0.61	0.51
11	0.16	0.65
18	0.23	0.53
20	0.33	0.38
M	1.00	1.15
SD	0.95	0.77
SE	0.29	0.23

SSG	pre	post
9	0.43	1.07
8	1.22	2.14
1	1.01	0.79
3	1.52	1.81
4	0.37	0.23
7	0.89	1.89
5	1.78	0.55
10	1.99	1.52
2	0.57	0.43
6	0.22	0.10
M	1.00	1.05
SD	0.62	0.74
SE	0.19	0.23

COXV

CON	pre	post
25	0.82	1.35
23	1.35	1.59
27	1.59	0.51
22	1.06	0.48
32	0.84	0.86
28	0.41	0.57
26	1.03	0.58
24	0.87	0.67
31	1.04	1.16
M	1.00	0.86
SD	0.34	0.41
SE	0.11	0.14

CYC	pre	post
19	0.44	0.49
16	2.69	1.94
15	0.29	0.79
12	1.85	1.28
14	1.65	0.78
13	1.55	0.93
17	0.66	1.11
21	0.59	0.47
11	0.38	0.66
18	0.49	0.83
20	0.41	0.40
M	1.00	0.88
SD	0.82	0.44
SE	0.25	0.13

SSG	pre	post
9	0.62	1.31
8	1.42	1.98
1	0.67	0.46
3	1.24	1.03
4	0.50	0.28
7	1.04	2.40
5	1.39	0.87
10	1.84	1.24
2	0.93	0.47
6	0.34	0.30
M	1.00	1.03
SD	0.47	0.72
SE	0.15	0.23

SIRT1

CON	pre	post
25	0.62	0.62
23	1.18	0.61
27	0.58	0.41
22	0.15	0.23
32	0.95	0.65
28	0.86	1.37
26	1.89	1.80
24	1.58	4.37
31	1.18	1.09
M	1.00	1.24
SD	0.53	1.27
SE	0.18	0.42

CYC	pre	post
19	0.39	0.40
16	0.37	0.38
15	2.26	0.51
12	0.32	0.22
14	0.83	0.98
13	0.89	1.30
17	0.21	1.02
21	1.16	0.96
11	1.90	1.53
18	1.52	1.95
20	1.14	1.16
M	1.00	0.95
SD	0.71	0.56
SE	0.22	0.17

SSG	pre	post
9	0.90	0.98
8	0.29	0.48
1	0.52	1.47
3	0.36	0.69
4	0.86	0.57
7	2.72	2.56
5	0.58	0.69
10	0.36	0.47
2	2.33	2.19
6	1.08	0.32
M	1.00	1.04
SD	0.85	0.78
SE	0.27	0.25

p53

CON	pre	post
25	0.98	1.03
23	1.17	0.94
27	1.09	1.06
22	1.61	0.95
32	1.29	1.27
28	1.01	1.26
26	0.19	0.18
24	0.62	1.81
31	1.04	1.33
M	1.00	1.09
SD	0.40	0.44
SE	0.13	0.15

CYC	pre	post
19	1.13	1.32
16	1.06	0.96
15	1.12	1.40
12	1.14	0.72
14	1.66	2.09
13	0.37	0.89
17	1.28	1.00
21	1.28	1.08
11	0.22	0.26
18	0.25	0.13
20	1.48	1.67
M	1.00	1.05
SD	0.49	0.56
SE	0.15	0.17

SSG	pre	post
9	1.44	1.26
8	1.25	1.16
1	1.19	1.15
3	1.07	1.11
4	1.21	1.30
7	0.81	2.32
5	1.61	1.49
10	0.64	1.41
2	0.12	0.30
6	0.65	1.03
M	1.00	1.25
SD	0.44	0.50
SE	0.14	0.16

AKT

CON	pre	post
25	0.33	1.32
23	1.03	0.64
27	0.86	0.55
22	0.20	0.13
32	2.38	0.55
28	0.28	0.35
26	1.97	1.01
24	1.11	0.66
31	0.85	1.36
M	1.00	0.73
SD	0.75	0.42
SE	0.25	0.14

CYC	pre	post
19	0.47	0.95
16	1.20	1.12
15	0.21	0.40
12	0.48	0.30
14	2.47	0.75
13	0.84	1.61
17	0.23	0.68
21	0.56	0.40
11	1.29	2.43
18	2.24	1.73
20	1.01	1.18
M	1.00	1.05
SD	0.80	0.69
SE	0.24	0.21

SSG	pre	post
9	0.63	1.30
8	0.72	1.13
1	0.36	0.20
3	0.12	0.06
4	4.19	1.26
7	0.62	2.92
5	0.32	0.18
10	0.14	0.12
2	2.19	2.45
6	0.71	0.45
M	1.00	1.01
SD	1.26	1.01
SE	0.40	0.32

PGC-1 α

CON	pre	post
25	1.00	1.10
23	0.97	1.08
27	0.98	0.62
22	0.32	0.53
32	1.09	1.73
28	1.97	1.59
26	0.66	0.86
24	0.72	0.65
31	1.29	0.59
M	1.00	0.97
SD	0.46	0.44
SE	0.15	0.15

CYC	pre	post
BRJO	1.18	0.94
DALI	0.99	1.79
PAJE	0.61	0.70
DANE	0.82	0.61
PEIV	1.00	1.11
JAHO	1.24	0.76
RABL	1.15	1.31
ROPO	1.22	1.07
CHCO	1.04	0.47
BRLE	0.71	0.26
ADYA	1.05	1.30
M	1.00	0.94
SD	0.22	0.44
SE	0.07	0.13

SSG	pre	post
9	1.63	1.28
8	0.95	1.96
1	0.88	0.87
3	1.29	1.94
4	0.92	0.61
7	1.23	1.11
5	1.05	1.17
10	1.23	0.75
2	0.54	0.50
6	0.28	1.91
M	1.00	1.21
SD	0.39	0.56
SE	0.12	0.18

GLUT4

CON	pre	post
25	1.09	0.98
23	1.05	0.89
27	0.63	0.71
22	0.59	0.69
32	0.75	0.48
28	0.40	0.72
26	2.37	1.85
24	1.72	1.37
31	0.39	0.55
M	1.00	0.91
SD	0.66	0.44
SE	0.22	0.15

CYC	pre	post
19	0.85	0.90
16	0.94	0.89
15	0.68	0.57
12	0.45	0.45
14	0.74	0.69
13	0.62	0.62
17	0.97	0.55
21	0.72	0.62
11	1.76	1.72
18	1.61	1.26
20	1.67	1.87
M	1.00	0.92
SD	0.43	0.39
SE	0.13	0.12

SSG	pre	post
9	1.15	1.12
8	1.23	1.34
1	0.75	0.63
3	1.16	1.06
4	0.62	0.66
7	0.82	1.29
5	0.84	0.91
10	0.52	0.71
2	1.50	1.50
6	1.40	3.99
M	1.00	1.32
SD	0.33	0.99
SE	0.11	0.31