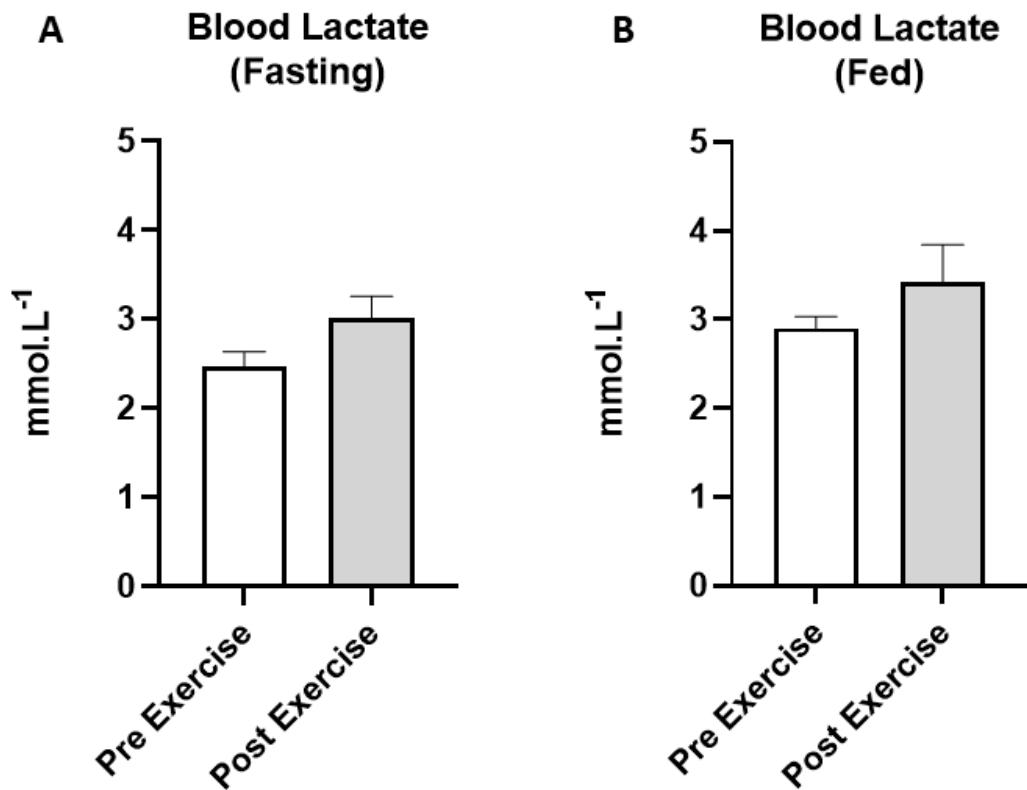


**Supplemental Material**



**Figure S1.** Blood lactate concentration in fasting (A) and fed (B) conditions of the rats before and after the exercise protocol. Data was analyzed by repeated *t* test. Results were considered different when  $p < 0.05$ .

**Table S1.** Results were expressed as mean  $\pm$  standard error or median (25–75 percentiles). Data were analyzed by two-way ANOVA (Bonferroni post hoc), or Kruskal-Wallis. Results were considered statistically different when  $p < 0.05$ .  $p1$ : statistical index for exercise (rest or exercise).  $p2$ : statistical index for fasting (fed or fasted).  $p3$ : statistical index for the interaction between exercise and fasting. Letters represent significant differences between each experimental group. Bold: significant differences.

Effects of fasting exercise on plasma biochemical profile, glycogen, lactate, triglycerides storage and muscle immunocontent of HSP70 and SIRT-1							
	Rest		Exercise		$p1$	$p2$	$p3$
	Fed (n=8)	Fasting (n=8)	Fed (n=7)	Fasting (n=7)			
Serum Glucose (mg.dL $^{-1}$ )	91.3 $\pm$ 8.53	90.9 $\pm$ 11.3	91.2 $\pm$ 10.7	79.8 $\pm$ 9.03	0.15	0.12	0.15
Serum Total Proteins (g.dL $^{-1}$ )	12.5 (11.8 - 12.7) <b>a</b>	13.4 (11.7 - 14.2) <b>a</b>	12.2 (11.7 - 12.9) <b>a</b>	10.9 (10.7 - 11.6) <b>b</b>	-	-	<b>0.01</b>
Serum Lactate (mmol.L $^{-1}$ )	8.27 $\pm$ 1.38	8.53 $\pm$ 1.29	7.91 $\pm$ 1.51	7.76 $\pm$ 0.81	0.25	0.89	0.67
Serum Total Cholesterol (mg.dL $^{-1}$ )	83.8 $\pm$ 17.8 <b>a</b>	104.4 $\pm$ 36.4 <b>a</b>	86.4 $\pm$ 23.7 <b>a</b>	46.9 $\pm$ 7.74 <b>b</b>	<b>0.01</b>	0.31	<b>0.01</b>
Serum Triglycerides (mg.dL $^{-1}$ )	193.7 $\pm$ 77.6	248.7 $\pm$ 107.2	173.7 $\pm$ 89.6	69.9 $\pm$ 11.5	<b>0.01</b>	0.43	<b>0.02</b>
Gastrocnemius Glycogen (mg.g of tissue $^{-1}$ )	0.37 (0.21 - 2.34)	0.27 (0.19 - 0.68)	0.43 (0.34 - 2.73)	0.27 (0.16 - 0.36)	-	-	0.23
Soleus Glycogen (mg.g of tissue $^{-1}$ )	1.41 $\pm$ 0.69	0.40 $\pm$ 0.18	1.36 $\pm$ 0.76	0.58 $\pm$ 0.38	0.77	<b>0.01</b>	0.58
Hepatic Glycogen (mg.g of tissue $^{-1}$ )	73.4 (60.6 - 80.2) <b>a</b>	57.3 (38.3 - 77.3) <b>a,b</b>	29.3 (24.1 - 62.3) <b>b</b>	47.5 (34.2 - 54.4) <b>a,b</b>	-	-	<b>0.03</b>
Heart Glycogen (mg.g of tissue $^{-1}$ )	0.04 $\pm$ 0.02	0.04 $\pm$ 0.03	0.03 $\pm$ 0.02	0.04 $\pm$ 0.01	0.96	0.35	0.39
Gastrocnemius Lactate (mg.g of tissue $^{-1}$ )	4.16 (1.33 - 6.42)	3.28 (0.84 - 5.41)	1.29 (0.87 - 4.65)	5.54 (2.74 - 6.29)	-	-	0.29
Soleus Lactate (mg.g of tissue $^{-1}$ )	2.50 $\pm$ 0.76	2.00 $\pm$ 0.79	2.53 $\pm$ 1.52	2.65 $\pm$ 0.35	0.36	0.60	0.39
Hepatic Lactate (mg.g of tissue $^{-1}$ )	0.94 $\pm$ 0.23	1.13 $\pm$ 0.31	1.22 $\pm$ 0.33	1.13 $\pm$ 0.56	0.30	0.71	0.31
Gastrocnemius Triglycerides (mg.g of tissue $^{-1}$ )	2.38 $\pm$ 0.84	2.37 $\pm$ 0.52	2.78 $\pm$ 0.79	2.61 $\pm$ 0.56	0.27	0.77	0.78
Soleus Triglycerides (mg.g of tissue $^{-1}$ )	2.93 (2.60 - 3.56) <b>a</b>	2.34 (2.20 - 2.94) <b>b</b>	2.56 (2.35 - 2.72) <b>a,b</b>	2.42 (2.01 - 3.01) <b>b</b>	-	-	<b>0.04</b>
Hepatic Triglycerides (mg.g of tissue $^{-1}$ )	14.7 $\pm$ 3.29	13.2 $\pm$ 2.33	13.2 $\pm$ 4.65	14.0 $\pm$ 4.15	0.83	0.79	0.41
Heart Triglycerides (mg.g of tissue $^{-1}$ )	4.67 $\pm$ 0.38 <b>a</b>	5.25 $\pm$ 0.51 <b>b</b>	5.46 $\pm$ 0.62 <b>b</b>	4.52 $\pm$ 0.44 <b>a</b>	0.88	0.33	<b>0.00</b>
Gastrocnemius HSP70 (AU)	0.30 $\pm$ 0.09	0.30 $\pm$ 0.09	0.42 $\pm$ 0.10	0.48 $\pm$ 0.17	<b>0.00</b>	0.56	0.48
Soleus HSP70 (AU)	0.40 $\pm$ 0.06	0.29 $\pm$ 0.05	0.52 $\pm$ 0.04	0.49 $\pm$ 0.16	<b>0.00</b>	0.05	0.25
Gastrocnemius SIRT-1 (AU)	0.25 $\pm$ 0.13	0.28 $\pm$ 0.11	0.38 $\pm$ 0.04	0.48 $\pm$ 0.27	<b>0.01</b>	0.26	0.52
Soleus SIRT-1 (AU)	0.38 $\pm$ 0.07	0.28 $\pm$ 0.13	0.40 $\pm$ 0.09	0.48 $\pm$ 0.19	<b>0.02</b>	0.87	0.05