

**Table S8:** Correlation factors between testicular metabolite content and Area Under Curve (AUC) of IPGTT and IPITT. The correlation was obtained using the Spearman r with Approximate p-value (n = 35). \* p < 0.05; \*\* p < 0.005; \*\*\* < 0.0005; \*\*\*\* p < 0.0001.

		Ala	Glu	Gln	Val	Leu	Ile	AMP	Adenosine	Lac	Acetate	Succinate	Creatine	GSH	Betaine	Taurine
AUC ipGTT	r value	-0.1489	0.07085	0.3093	0.02353	-0.262	-0.3294	0.3853	-0.3676	0.1325	-0.4471	<b>-0.5059 *</b>	<b>-0.7285 **</b>	-0.0382	<b>0.5180 *</b>	-0.0486
	P (two-tailed)	0.5797	0.7937	0.2421	0.9345	0.3244	0.2127	0.1414	0.1618	0.6224	0.0844	0.0479	0.0019	0.8910	0.0418	0.8584
AUC ipITT	r value	0.0000	-0.1403	0.3589	-0.0898	-0.0309	-0.4312	0.3473	-0.3974	-0.0737	-0.3297	-0.1810	-0.3586	-0.1781	0.2121	-0.1372
	P (two-tailed)	>0.9999	0.6015	0.1712	0.7400	0.9099	0.0965	0.1866	0.1278	0.7848	0.2112	0.4995	0.1713	0.5066	0.4271	0.6092