



**Table S1.** Means (M), standard deviations (SD) and univariate effects of the different antioxidant enzymes and GSH/GSSG ratio by concentration in the liver. The results with different letters mean that they are statistically different from each other ( $p < 0.05$ ).

ENZYMES	Liver					F	p
	CTRL	MP-100	MP-200	BP-100	BP-200		
	M ± SD	M ± SD	M ± SD	M ± SD	M ± SD		
SOD	1.51 ± 0.25 <sup>a</sup>	1.75 ± 0.23 <sup>a</sup>	1.64 ± 0.28 <sup>a</sup>	1.74 ± 0.16 <sup>a</sup>	1.64 ± 0.29 <sup>a</sup>	1.267	0.302
CAT	939.43 ± 157.90 <sup>a</sup>	829.75 ± 115.53 <sup>a</sup>	669.21 ± 154.64 <sup>b</sup>	826.82 ± 152.03 <sup>a</sup>	714.80 ± 72.99 <sup>b</sup>	5.599	0.002
GR	1.55 ± 0.30 <sup>a</sup>	1.48 ± 0.28 <sup>a</sup>	1.20 ± 0.36 <sup>a</sup>	1.28 ± 0.25 <sup>a</sup>	1.21 ± 0.23 <sup>a</sup>	2.493	0.061
GST	0.25 ± 0.05 <sup>a,b</sup>	0.22 ± 0.03 <sup>a,b</sup>	0.21 ± 0.04 <sup>a</sup>	0.21 ± 0.01 <sup>a</sup>	0.26 ± 0.02 <sup>b</sup>	3.842	0.011
GSH/GSSG	6.21 ± 1.05 <sup>a</sup>	5.79 ± 0.53 <sup>a,b</sup>	4.54 ± 0.62 <sup>c</sup>	5.08 ± 0.65 <sup>b,c</sup>	4.51 ± 0.46 <sup>c</sup>	9.485	<0.001
Hydroperoxides	65.49 ± 6.09 <sup>a</sup>	72.25 ± 7.21 <sup>a</sup>	77.10 ± 6.45 <sup>a</sup>	74.47 ± 10.34 <sup>a</sup>	94.55 ± 9.72 <sup>b</sup>	8.831	<0.001

**Table S2.** Means (M), standard deviations (SD) and univariate effects of the different antioxidant enzymes and GSH/GSSG ratio by concentration in the kidney. The results with different letters mean that they are statistically different from each other ( $p < 0.05$ ).

ENZYMES	Kidney					F	p
	CTRL	MP-100	MP-200	BP-100	BP-200		
	M ± SD	M ± SD	M ± SD	M ± SD	M ± SD		
SOD	1.84 ± 0.18 <sup>a</sup>	1.54 ± 0.16 <sup>b</sup>	1.65 ± 0.14 <sup>a,b</sup>	1.77 ± 0.19 <sup>a,b</sup>	1.84 ± 0.12 <sup>a</sup>	4.692	0.005
CAT	6499.8 ± 932.9 <sup>a,b</sup>	6758.0 ± 1716.5 <sup>b</sup>	6275.0 ± 1126.4 <sup>a,b</sup>	4351.0 ± 1279.6 <sup>a</sup>	4514.7 ± 1442.1 <sup>a,b</sup>	4.526	0.007
GR	2.68 ± 0.54 <sup>a</sup>	3.64 ± 0.52 <sup>b</sup>	4.85 ± 0.82 <sup>c</sup>	3.31 ± 0.53 <sup>a,b</sup>	3.75 ± 0.94 <sup>b</sup>	13.055	<0.001
GST	0.58 ± 0.15 <sup>a</sup>	0.55 ± 0.09 <sup>a</sup>	0.77 ± 0.07 <sup>b</sup>	0.66 ± 0.09 <sup>a,b</sup>	0.83 ± 0.11 <sup>b</sup>	8.005	<0.011
GSH/GSSG	3.96 ± 0.61 <sup>a</sup>	3.93 ± 0.39 <sup>a</sup>	3.83 ± 0.37 <sup>a</sup>	4.14 ± 0.56 <sup>a</sup>	4.09 ± 0.39 <sup>a</sup>	0.422	0.791
Hydroperoxides	81.1 ± 14.6 <sup>a</sup>	107.9 ± 9.4 <sup>b,c</sup>	117.6 ± 8.2 <sup>b</sup>	98.8 ± 12.8 <sup>a,c</sup>	101.3 ± 6.8 <sup>b,c</sup>	7.803	0.001

**Table S3.** Means (M), standard deviations (SD) and univariate effects of the different antioxidant enzymes and GSH/GSSG ratio by concentration in the heart. The results with different letters mean that they are statistically different from each other ( $p < 0.05$ ).

ENZYMES	Heart					F	p
	CTRL	MP-100	MP-200	BP-100	BP-200		
	M ± SD	M ± SD	M ± SD	M ± SD	M ± SD		
SOD	1.6 ± 0.3 <sup>a</sup>	1.5 ± 0.2 <sup>a</sup>	1.3 ± 0.3 <sup>a</sup>	1.6 ± 0.3 <sup>a</sup>	1.3 ± 0.3 <sup>a</sup>	1.952	0.128
CAT	6.40 ± 0.90 <sup>a</sup>	9.29 ± 2.48 <sup>b</sup>	10.85 ± 1.07 <sup>b,c</sup>	11.89 ± 1.12 <sup>c,d</sup>	13.79 ± 1.28 <sup>d</sup>	25.041	<0.001
GR	0.0005 ± 0.0003 <sup>a</sup>	0.0014 ± 0.0002 <sup>b,c</sup>	0.0011 ± 0.0002 <sup>b</sup>	0.0016 ± 0.0004 <sup>c</sup>	0.0022 ± 0.0004 <sup>d</sup>	31.918	<0.001
GST	0.0086 ± 0.0012 <sup>a</sup>	0.0085 ± 0.0014 <sup>a</sup>	0.0077 ± 0.0015 <sup>a,b</sup>	0.0062 ± 0.0011 <sup>b</sup>	0.0060 ± 0.0012 <sup>b</sup>	7.822	<0.001
GSH/GSSG	5.34 ± 0.62 <sup>a</sup>	4.86 ± 0.81 <sup>a</sup>	5.27 ± 0.32 <sup>a</sup>	5.19 ± 0.66 <sup>a</sup>	5.29 ± 0.198 <sup>a</sup>	0.683	0.610
Hydroperoxides	80.76 ± 5.23 <sup>a</sup>	89.47 ± 1.36 <sup>b</sup>	99.01 ± 7.08 <sup>c</sup>	94.23 ± 4.72 <sup>b,c</sup>	123.99 ± 4.89 <sup>d</sup>	63.366	<0.001

**Table S4.** Means (M), standard deviations (SD) and univariate effects of the different antioxidant enzymes and GSH/GSSG ratio by concentration in the seminal vesicles. The results with different letters mean that they are statistically different from each other ( $p < 0.05$ ).

ENZYMES	Seminal vesicles					F	p
	CTRL	MP-100	MP-200	BP-100	BP-200		
	M ± SD	M ± SD	M ± SD	M ± SD	M ± SD		
SOD	1.14 ± 0.09 <sup>a,c</sup>	0.81 ± 0.18 <sup>b</sup>	1.029 ± 0.27 <sup>a,b</sup>	1.36 ± 0.14 <sup>c</sup>	1.75 ± 0.09 <sup>d</sup>	31.635	<0.001
CAT	1.22 ± 0.09 <sup>a</sup>	1.15 ± 0.11 <sup>a</sup>	1.12 ± 0.21 <sup>a</sup>	0.89 ± 0.15 <sup>b</sup>	0.74 ± 0.22 <sup>b</sup>	12.437	<0.001
GR	7.22 ± 1.89 <sup>a</sup>	7.50 ± 2.17 <sup>a</sup>	5.46 ± 0.69 <sup>a,b</sup>	4.09 ± 0.98 <sup>b</sup>	3.99 ± 1.07 <sup>b</sup>	10.232	<0.001
GST	0.012 ± 0.0011 <sup>a</sup>	0.011 ± 0.0023 <sup>a</sup>	0.012 ± 0.0022 <sup>a,b</sup>	0.009 ± 0.0024 <sup>b,c</sup>	0.0078 ± 0.0025 <sup>c</sup>	6.600	<0.001
GSH/GSSG	5.29 ± 1.69 <sup>a</sup>	4.99 ± 0.96 <sup>a</sup>	5.07 ± 0.99 <sup>a</sup>	5.19 ± 1.11 <sup>a</sup>	4.61 ± 1.28 <sup>a</sup>	0.452	0.771