

**Table S1: Efficacy of the immune challenge**

Data were taken before and 24 hrs after injection of vehicle or LPS in Jan 2010. Data on IL-6-like bioactivity were collected 6 hrs after injection. Data are mean±1SEM, sample sizes given in brackets. \* = effect of time (before-after,  $p<0.05$ ). ‡ effect of treatment\*time interaction ( $p<0.05$ ). Statistics are determined from LMMs (for details see text). – effects could not be determined; significant effects are highlighted in bold. # log-transformed data; ^ square-root-transformed data.

|                                                                            | Control-before         | Control-after          | LPS injected-before    | LPS injected-after      | Effect of treatment                                         | Effect of time                                             | Interaction treatment*time                                  |
|----------------------------------------------------------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------|
| <b>IL-6 bioactivity (absorbance at 595 nm)#</b>                            |                        | 0.03±0.01<br>(20)      |                        | 0.076±0.011*<br>(12)    | <b>F<sub>(1,32)</sub>= 43.63,</b><br><b>p&lt;0.0005</b>     | -                                                          | -                                                           |
| <b>Body mass (g)</b>                                                       | 85.28±2.27<br>(19)     | 82.89±2.2<br>(20)      | 86.83±1.94<br>(12)     | 80.01±1.77*‡<br>(12)    | <b>F<sub>(1,34.26)</sub>= 687.68,</b><br><b>p&lt;0.0005</b> | p>0.8                                                      | <b>F<sub>(1, 34.26)</sub>=157.58,</b><br><b>p&lt;0.0005</b> |
| <b>Plasma oxidative damage (mM H<sub>2</sub>O<sub>2</sub> equivalents)</b> | 0.17±0.18<br>(20)      | 0.17±0.18<br>(19)      | 0.11±0.028<br>(7)      | 0.5±0.07*‡<br>(12)      | <b>F<sub>(1, 28.49)</sub>=11.12,</b><br><b>p&lt;0.002</b>   | <b>F<sub>(1, 23.24)</sub>=45.06,</b><br><b>p&lt;0.0005</b> | <b>F<sub>(1, 23.24)</sub>=46.47,</b><br><b>p&lt;0.0005</b>  |
| <b>Plasma non-enzymatic antioxidants (mM HOCl neutralized)#</b>            | 189.4±9.56<br>(20)     | 184.28±7.07<br>(20)    | 181.99±15.23<br>(7)    | 211.17±13.66<br>(11)    | p>0.4                                                       | p>0.2                                                      | p>0.14                                                      |
| <b>Glutathione peroxidase (U/l hemolysate)^</b>                            | 2320.69±112.13<br>(20) | 2055.08±101.97<br>(20) | 2645.07±230.07<br>(12) | 2094.84±120.17*<br>(12) | p>0.3                                                       | <b>F<sub>(1, 32)</sub>= 24.44,</b><br><b>p&lt;0.0005</b>   | p>0.14                                                      |