|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | 6MAF | | | 18MAF | | |
| Parameters | | | Diet | Stress | Diet x Stress | Diet | Stress | Diet x Stress |
| Plasma | | |  |  |  |  |  |  |
|  | | Cortisol levels | - | <0.001 | - | - | - | 0.041 |
|  | | Glucose levels | - | <0.001 | - | - | <0.001 | - |
|  | | Lactate levels | 0.031 | <0.001 | - | - | <0.001 | - |
| Liver | | |  |  |  |  |  |  |
|  | | Glucose levels | <0.001 | - | - | <0.001 | - | - |
|  | | Glycogen levels | <0.001 | - | - | - | - | - |
|  | | Lactate levels | - | 0.032 | 0.006 | - | 0.006 | 0.02 |
| Telencephalon | | |  |  |  |  |  |  |
|  | | 5HIAA levels | - | - | 0.045 | - | - | - |
|  | | 5HT levels | - | - | 0.005 | - | - | - |
|  | | 5HIAA/5HT levels | - | 0.035 | - | - | - | - |
| Hypothalamus | | |  |  |  |  |  |  |
|  | | 5HIAA levels | - | - | - | - | - | 0.038 |
|  | | 5HT levels | - | - | - | - | - | - |
|  | | 5HIAA/5HT levels | - | - | 0.011 | 0.001 | - | - |
| Humoral immune parameters | | |  |  |  |  |  |  |
|  | | Lysozyme activity | - | - | - | - | - | - |
|  | | Peroxidase activity | 0.04 | - | - | - | - | - |
|  | | ACH50 activity | - | - | - | - | 0.008 | - |
| 5HIAA, 5-hydroxyindole-3-acetic-acid  5HT, Serotonin  ACH50, Alternative complement pathway | | | | | | | | | |

**S1 Table**. P-values obtained after two-way analysis of variance of parameters assessed in Senegalese sole after 6 and 18 months of feeding the experimental diets (6 and 18MAF). Diet (C, V50 and V100) and stress condition (ACUTE stress or no stress) were the main factors. Diet x Stress is the first order interactions between factors. All values are significantly different unless noted by a dash.