**Table S4.** The association between tryptophan (TRP), kynurenine (KYN), and 3-hydroxykynurenine (3HK) concentrations in the hypothalamus and bone properties in 5/6 Nx rats.

|  |  |  |  |
| --- | --- | --- | --- |
|  | TRP | KYN | 3HK |
| *Bone biomechanics* |
| Stiffness | r = 0.532p = 0.023 | r = -0.156NS | r = -0.414NS |
| Yield load | r = 0.461NS | r = -0.026NS | r = -0.441NS |
| Displacement at the yield load | r = -0.076NS | r = 0.012NS | r = -0.061NS |
| Ultimate load | r = 0.408NS | r = -0.025NS | r = -0.189NS |
| Displacement at the ultimate load | r = -0.178NS | r = 0.067NS | r = 0.173NS |
| Work to fracture | r = 0.182NS | r = 0.013NS | r = 0.061NS |
| *Bone geometry* |
| Tibial weight | r = 0.383NS | r = -0.255NS | r = -0.094NS |
| Tibial length | r = 0.174NS | r = -0.236NS | r = 0.226NS |
| Anterior-posterior periosteal diameter | r = 0.243NS | r = -0.246NS | r = -0.063NS |
| Medial-lateral periosteal diameter | r = 0.240NS | r = -0.133NS | r = -0.078NS |
| Anterior-posterior endosteal diameter | r = 0.014NS | r = -0.465NS | r = 0.243NS |
| Medial-lateral endosteal diameter | r = 0.203NS | r = -0.493p = 0.038 | r = -0.202NS |
| Wall thickness | r = 0.477p = 0.045 | r = 0.339NS | r = -0.237NS |
| Cortical index | r = 0.165NS | r = 0.531p = 0.023 | r = -0.051NS |
| Cross-sectional area | r = 0.531p = 0.023 | r = 0.235NS | r = -0.158NS |
| Cross-sectional moment of inertia | r = 0.571p = 0.023 | r = -0.214NS | r = -0.051NS |
| Mean relative wall thickness | r = 0.189NS | r = 0.594p = 0.009 | r = -0.185NS |
| *Bone mass density* |
| Archimedes’ density | r = 0.174NS | r = -0.289NS | r = -0.030NS |

NS, not significant.