Table 1. GLMs output investigating bat preference for different concentrations of nutrients and defensive metabolites. One independent GLM was run per treatment. P-values less than 0.05 are bolded.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Response variable | Predictor variable | Coefficient | SE | CI 95%  (Low, High) | z | P-value | MarginalR2 |
| GLM 1:  Amount of food eaten in the first trial (1.1) | High nutrients (intercept) versus low nutrients | -1.23 | 0.44 | [-2.09, -0.37] | -2.79 | **0.005** | 0.558 |
| GLM 2:  Amount of food eaten in the second trial (1.2) | 2% piperine versus (intercept) versus 0.1% piperine | 1.91 | 0.60 | [ 0.72, 3.09] | 3.16 | **0.002** | 0.714 |
| GLM 3:  Amount of food eaten in the third trial (1.3) | High nutrients, 2% piperine (intercept) versus low nutrients, 0.1% piperine | -1.78 | 0.42 | [-2.60, -0.96] | -4.23 | **<0.001** | 0.690 |

Table 2. GLMM output estimating the effect of sugar excretion by bats fed on different piperine concentrations. The bat identity and trial date were included as random effects in the models. P-values less than 0.05 are bolded.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Predictor variable:  Treatment | Coefficient | SE | CI 95%  (Low, High) | z | P-value |
| Control, intercept | -1.76 | 0.09 | [-1.98, -1.58] | -18.85 | **<0.001** |
| 0% piperine | 0.03 | 0.03 | [-0.03, 0.09] | 1.04 | 0.297 |
| 0.5% piperine | 0.05 | 0.03 | [-0.01, 0.11] | 1.49 | 0.135 |
| 1.5% piperine | 0.03 | 0.03 | [-0.03, 0.09] | 1.05 | 0.292 |
| 2% piperine | -0.02 | 0.03 | [-0.08, 0.04] | -0.59 | 0.557 |
| Conditional R2 | 0.959 |  |  |  |  |
| Marginal R2 | 0.005 |  |  |  |  |

Table 3. GLMM output estimating the effect of protein excretion by bats fed on different piperine concentrations. The bat identity and trial date were included as random effects in the models. P-values less than 0.05 are bolded.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Predictor variable:  Treatment | Coefficient | SE | CI 95%  (Low, High) | z | P-value |
| Control, intercept | -4.12 | 0.16 | [-4.43, -3.80] | -25.93 | **<0.001** |
| 0% piperine | -0.03 | 0.12 | [-0.27, 0.20] | -0.30 | 0.766 |
| 0.5% piperine | 0.06 | 0.11 | [-0.16, 0.28] | 0.52 | 0.605 |
| 1.5% piperine | -0.10 | 0.12 | [-0.33, 0.13] | -0.82 | 0.410 |
| 2% piperine | 0.29 | 0.11 | [ 0.07, 0.51] | 2.59 | **0.009** |
| Conditional R2 | 0.697 |  |  |  |  |
| Marginal R2 | 0.053 |  |  |  |  |