Table 1. Output of a set of GLMs investigating bat preference for different concentrations of nutrients and defensive compounds. One independent GLM was run per treatment. P-values less that 0.05 are bolded.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Response variable | Predictor variable | Coefficient | SE | CI 95%  (Low, high) | z | P-value | Conditional R2 |
| Amount of food eaten in the first trial | High nutrients, intercept | 0.06 | 0.30 | [-0.54, 0.66] | 0.19 | 0.846 | 0.558 |
| Low nutrients | -1.23 | 0.44 | [-2.09, -0.37] | -2.79 | **0.005** |  |
| Amount of food eaten in the second trial | 2% piperine, intercept | -1.65 | 0.43 | [-2.49, -0.81] | -3.86 | <0.001 | 0.714 |
| 0.1% piperine | 1.91 | 0.60 | [ 0.72, 3.09] | 3.16 | **0.002** |  |
| Amount of food eaten in the second trial | High nutrients, 2% piperine intercept | 0.21 | 0.28 | [-0.33, 0.75] | 0.76 | 0.47 | 0.690 |
| *Low nutrients, 0.1% piperine* | -1.78 | 0.42 | [-2.60, -0.96] | -4.23 | **<0.001** |  |

Table 2. Output of GLMM 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.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Predictor variable:  Treatment | Coefficient | SE | CI 95%  (Low, high) | z | P-value |
| Control, intercept | -1.79 | 0.10 | [-1.98, -1.60] | -18.60 | <0.001 |
| 0% piperine | 0.04 | 0.03 | [-0.03, 0.10] | 1.15 | 0.250 |
| 0.5% piperine | 0.05 | 0.03 | [-0.01, 0.11] | 1.60 | 0.110 |
| 1.5% piperine | 0.04 | 0.03 | [-0.02, 0.09] | 1.16 | 0.247 |
| 2% piperine | -0.01 | 0.03 | [-0.07, 0.04] | -0.46 | 0.644 |
| Conditional R2 | 0.961 |  |  |  |  |
| Marginal R2 | 0.005 |  |  |  |  |

Table 3. Output of GLMM 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.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Predictor variable:  Treatment | Coefficient | SE | CI 95%  (Low, high) | z | P-value |
| Control, intercept | -4.12 | 0.16 | [-4.43, -3.82] | -26.36 | <0.001 |
| 0% piperine | -0.03 | 0.12 | [-0.26, 0.20] | -0.26 | 0.791 |
| 0.5% piperine | 0.06 | 0.11 | [-0.16, 0.28] | 0.56 | 0.575 |
| 1.5% piperine | -0.09 | 0.12 | [-0.32, 0.14] | -0.79 | 0.430 |
| 2% piperine | 0.29 | 0.11 | [ 0.08, 0.51] | 2.66 | 0.008 |
| Conditional R2 | 0.698 |  |  |  |  |
| Marginal R2 | 0.053 |  |  |  |  |

|  |  |  |
| --- | --- | --- |
|  | High-nutrient option (5 g of trial, wet weight) | Low-nutrient option (5 g of trial, wet weight) |
| Protein | 76 mg (70 mg from protein powder, 5.2  mg from wheat germ, 3.8 mg from banana) | 7.1 mg (0 mg from the protein powder, 5.2 mg from wheat germ, 1.9 mg from banana) |
| Carbohydrates | 95.6 mg (12 mg from wheat germ, 83.6 mg from banana) | 53.8 mg (12 mg from wheat germ, 41.8 mg from banana) |
| Lipids | 4.66 mg (3.9 mg from the oil,  0.76 from banana) | 4.28 mg (3.9 mg from the oil, 0.38 from banana) |