

Gut size variation among *Bufo spinulosus* populations along an altitudinal (and dietary) gradient

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To date, digestive flexibility has been studied in dozens of vertebrate species. However, practically all of these works has ignored the importance of intraspecific physiological variability across populations inhabiting different habitats. Here, we compare the digestive tract gross morphology of three populations of the Andean toad (*Bufo spinulosus*), inhabiting along an altitudinal gradient and feeding on different food items. Results support a core prediction of digestive theory, i.e., intestinal length increases in parallel with the content of indigestible material in the natural diet. The present study suggest how variation in the abiotic environment associated with altitude (e.g., temperature, water availability, soil quality) can change biotic conditions (e.g., vegetation cover, prey availability), affect feeding behavior of individuals (e.g., width and composition of trophic niche), and, ultimately, individuals' digestive features (e.g., gut morphology).