

MACRONUTRIENT SELECTION IN MAMMALIAN INSECTIVORES AT BUSCH GARDENS TAMPA BAY

Heidi Bissell, PhD

Zoo Dept., Busch Gardens Tampa Bay, 3605 E. Bougainvillea Ave, Tampa, FL 33612, USA

Abstract

This study determined macronutrient target of several mammalian insectivore species including 3-banded armadillo, aardvark, tamandua (lesser anteater), and greater anteater. These insectivores are often maintained on a commercial insectivore diet, which may or may not be appropriate for every species in this diverse and polyphyletic group. Animals were fed three experimental diets that varied in their proportions of calories from protein, fat, and carbohydrate. Quantities of each diet consumed were measured and the total amount of calories consumed of protein, fat and carbohydrate were calculated. Results indicate that the different species may have different macronutrient targets, with the generalists (armadillos) selecting higher carbohydrate diets than the termite- and ant-eating specialists. This indicates that these groups may have different evolutionary targets and perhaps also different nutrient requirements as well. A larger sample size is needed.