

CORTISOL LEVELS IN THREE SPECIES OF TUFTED CAPUCHIN MONKEYS LIVING IN DIFFERENT HABITATS

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Measures of cortisol metabolites are generally used as a method to assess stress in wild or captive animals. However, little is known about the natural basal levels of cortisol where animals are not chronically stressed nor depressed, or about the effects of environment features on those levels. Aiming to examine these matters, we collected fecal samples from three different populations of capuchin monkeys (*Cebus nigritus*, *C. libidinosus* and *Cebus sp*) from three sites with different ecology (Atlantic Rainforest at Carlos Botelho State Park; Caatinga/Cerrado ecotone at Boa Vista and at Tietê Ecological Park, reforested area in São Paulo - Brazil), during the rainy season, between January and March. The sites differ in temperature, rainfall, vegetation and specially availability of food. These ecological variables lead to different social organization on the three areas. Fecal cortisol metabolites (FCM) were measured by ELISA and compared between the sites. Results show no significant difference in FCM between sites, time of the day, or months, at least for this small period of three months. However, mean levels of FCM are significantly higher among males when compared to juveniles and females. Theses results point to the possibility of establishing a standard cortisol level for capuchin monkeys, controlling for differences between age and gender.

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