Primates have apparent preferences regarding specific foods (1). Food choices are made based on two contributing factors: the nutrition content, and availability within its environment (3). According to the Optimal Foraging Theory, these particular factors are based on obtaining the most useful energy to sustain metabolism and perform physical activities, all while conserving energy as well. With this evolutionary built-in decision making system, it would be predicted that a primate, when given several options, will pick a food or collection of foods that contain more calories and essential nutrients. This experiment explores whether captive Rhesus Macaques, who are secure in their food source, correspond with Optimal Foraging Theory behaviors, or base their food choices solely on preference. It ultimately explores the role of food security and its influence on innate evolutionary systems controlling diet. In this experiment, Stevia Cubes were used as a sweetener. Some subjects preferred calories, others preferred taste. No data was currently living with food insecurity, as it may be possible to understand how body size, environment and activity can impact food choices of primates.

**Future Directions**

An individual’s food security status may ultimately change the way they perceive food. The impact that food security has on the choices primates (including humans) make about food, as well as the evolution of taste, can be analyzed. It is known through evolution that quantitative nutritional needs are different among living beings, depending on size, temperature, physical activity, and other factors. The individuality of nutrition can be further studied to understand how body size, environment and activity can impact food choices of primates.

An ever-evolving taste ability has allowed primates, like Rhesus Macaques and humans, to develop the ability to identify calorie dense foods can change, but it is still the primary motivation for the evolution of taste, which can be analyzed.

References


References


