EARLY FOOD SELECTION, SOCIAL FACILITATION AND FOOD QUALITY IN WILD YOUNG JAPANESE MACAQUES (*MACACA FUSCATA YAKUI)* AT YAKUSHIMA ISLAND (JAPAN)

L. Tarnaud[1], Y. Negishi[2]

[1]*Laboratory of Ecoanthropology and Ethnobiology, National Museum of Natural History of Paris, France,* [2]Institute of Sciences, Kagawa Nutrition University, Japan

Presenter's Email: laurent.tarnaud@free.fr

Primates must learn what, when and where to eat. The present study concerns the foraging ontogeny of 10 young Japanese macaques (Macaca fuscata yakui) less than one year of age, inhabiting a natural environment. To determine how youngsters select edible solid foods, feeding occurrences by the mother and her offspring, and their synchronization, were systematically recorded. In each context (independent or synchronized foraging), the quantity of food ingested by the infants was estimated. Because youngsters seek additional nutritional resources, the protein and lipid content of the main food items was analyzed in addition to their fiber content (ADF). The mother-offspring feeding events for solid foods were generally synchronized. Food items eaten by the youngsters were generally similar to those synchronously selected by their mother, and the quantity of the food ingested during co-feeding was higher than when eating alone. But a substantial divergence in foods selected by the mother and their offspring emerged after weaning (over 20% of feeding occurrences). This divergence was not explained because youngsters were selecting a food similar to this selected by the closest elder. Youngsters also preferentially selected solid foods rich in protein but low in fiber. Thus, young Japanese macaques were socially influenced to select solid foods mainly during co-feeding. This social influence appeared comparable to social facilitation. However, youngsters also displayed independent foraging, suggesting that they seek dietary information by themselves to meet their protein requirements.

Keywords: Food selection, Young, Social facilitation, Nutrient quality