

Animal Nutrition, Diet Prep, and Feedings at Willow Park Zoo

Erica Brothersen, Dr. Kimberly Sullivan

Department of Biology, Utah State University, Logan, UT, USA, 84321 (eica.brothersen@gmail.com)

Meeting nutritional requirements is extremely important in maintaining acceptable performance of neonatal, growing, and breeding animals. From a practical standpoint, an optimal nutritional program should ensure adequate intakes of amino acids (both traditionally classified essential and nonessential), carbohydrates, fatty acids, minerals, and vitamins by animals through a supplementation program that corrects deficiencies in basal diets. Additionally, dietary supplementation with certain nutrients can regulate gene expression and key metabolic pathways to improve fertility, pregnancy outcome, immune function, neonatal survival and growth, and possible breeding. Overall, the proper balance of protein, energy, vitamins and all nutritionally important minerals in diets is needed to make a successful nutrition program. Also crucial to the nutrition program for animals is water. Animals may have health problems resulting from substandard quality water. Consuming water is more important than consuming food. Diets vary immensely between species but can also vary hugely among species. Factors such as environment, age, gender, size, and general health will all influence nutrient needs.



Assorted Diets

Porcupine: 15g assorted cut fruit 15g assorted cut vegetables 30g rodent chow	Raven: 2 TBLS assorted fruit 2 TBLS assorted vegetables
Bald Eagle: 45g trout	Bob Cat: 15g Fish or Carnivore Diet 2 TBLS Feline Diet Supplement
Swainson Hawk: .08g Birds of Prey Diet	Emu: 2 cups assorted vegetables
Lynx: 30g Fish or Carnivore Diet 2TBLS Feline Diet Supplement	Screech Owl .05g Birds of Prey diet



We are currently researching the negative effects of fruits on animal diets. We are learning that Westernized farming has altered the sugar content in many varieties of fruit. With an increased sugar content, animal behavior and nutrition has suffered. We are looking into cutting fruit out of many animal diets and supplementing with the appropriate vegetables.