Understanding Diet and Nutrition: For the Adult Wildlife Patient

Nutrition Gone Wild

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Wildlife require balanced diets for optimal health and wellbeing. With proper nourishment, the animals in your care can reach their full potential, enabling them to perform both physical and mental activities with vigor and tenacity.

The diet you select for the animals in your care may affect not only their health, but also their behavior. Complete nutrition, including food items that may be found in the wild, can decrease an animal's level of stress while they are in captivity.

The following information provides the basics of nutrition for most adult animals. Keep in mind that due to differences in an animal's natural history, age, sex, species, activity level, metabolism, and health needs, diets can vary considerably.

Proteins

Called "the building blocks for life," proteins are part of every cell, tissue, and organ, and are essential to health. Protein helps boost energy and regenerate muscles.

When food proteins are digested, they are turned into smaller sub-components of the protein, called amino acids. A "complete protein" provides all of the essential amino acids an animal needs to maintain good health. Complete proteins are animal based and include meat, poultry, fish, and eggs.

An incomplete protein is low in one or more essential amino acids. Incomplete proteins are found in vegetables, cereals, and soy. Many mammals and birds are opportunistic carnivores (meaning they prefer to eat meat but will eat anything to survive), and require some amount of animal-based protein to thrive.

Carbohydrates

Carbohydrates, a general term for fibers and starches, provide the fuel that keeps an animal on the go. Carbohydrates ("carbs") turn into glucose, a pure form of energy vital to an animal's energy metabolism. As in humans, an animal's body can use glucose immediately or store it in the liver and muscles for when it is needed. Also like humans, ingestion of excessive amounts of carbohydrates can lead to obesity. While carbs add bulk, variety, and taste to the diet, many animals do not tolerate high amounts and can display signs of protein deficiency. The source of the carbohydrates, and the way in which they are prepared, are important factors in how well the animal's system digests and utilizes the food that is offered.

Fiber

While not considered a nutrient, fiber is necessary to aid digestion. Fiber is derived from plants (fruits and vegetables) and grains prepared in a certain way (bran). In some species, too much fiber may impede food absorption and not provide the correct nutrient balance needed to sustain their activity and growth.

Fats

Fats provide more than twice the energy of proteins or carbohydrates. Derived from both animal fats and vegetable oils, fats are essential to cell membrane structure, for the production of some hormones and for the absorption and utilization of some vitamins. Fats promote healthy skin and coat and provide the body with insulation and protection for internal organs.

Fats are composed of smaller units called fatty acids which contribute to an animal's health in different ways. A group of fats called "essential fatty acids" must be provided in the diet of some mammals because they cannot be synthesized in sufficient amounts. These include specific types of omega-6 and omega-3 fatty acids, which are sometimes given as supplements to help prevent inflammation, arthritis, and dry skin.

Vitamins and Minerals

Vitamins and minerals are nutrients that every living body requires for normal growth and development. Minerals and most vitamins cannot be synthesized in the body and, therefore, must be provided in an animal's diet. Each species needs a precise balance of vitamins and minerals for optimal health.

Vitamins are organic substances found in plant and animal sources. Minerals are inorganic elements that come from the earth. Animals acquire all the vitamins and minerals they need from the foods they eat, which is why eating a complete and balanced diet is essential for good health. In addition, consider rotating the types of foods you feed, allowing the animals in your care to ingest a wider variety of different nutrients from a range of foods.

Water

While not an "essential nutrient," water is vital for life to exist—it is involved in every function of the body and is found in every cell, tissue, and organ. Water makes up about two-thirds of the body weight of most animals. All captive animals need access to clean, fresh water in order to maintain good health.

Complete nutrition, along with proper husbandry, exercise, and preparation for return back into the wild are all part of a balanced approach to animal wellness. A biologically appropriate diet includes considerations for an animal's natural history, age, sex, species, activity level, metabolism and health needs. For more resources visit: www.rmwalliance.org

Resources

International Wildlife Rehabilitation Council: Courses, books, and online resources available. Visit: www.theiwrc.org
National Wildlife Rehabilitation Association: Symposium & continuing education opportunities. Visit:www.nwrawildlife.org
Rocky Mountain Wildlife Alliance: Online resource center, courses, handouts, & podcasts. Visit: www.rmwalliance.org
Online forums and Facebook groups: Many groups exist online, one favorite is: www.facebook.com/groups/WildlifeRehab
Veteran Wildlife Rehabilitators: Utilize local rehabilitators and veterinary nutritionists.
Books: Wildlife Feeding and Nutrition and Wildlife Rehabilitation: A Comprehensive Approach. Many species-specific books available too through www.theiwrc.org/shop