Key Nutritional Factors

Ferrets are strict carnivores that eat whole, small prey items in the wild. They have a very short, simple gastrointestinal (GI) tract lacking a cecum and ileocolic valve. Ingesta have a rapid intestinal transit time of approximately three to six hours (Bell, 1999; Brown, 2004). Because of the relatively inefficient GI tract, ferrets thrive on highly digestible foods containing large amounts of protein and fat, with minimal digestible (soluble) carbohydrate and fiber (Bell, 1999; Brown, 2004). In nature, the only significant sources of carbohydrates are those obtained from ingesting the gut contents of prey items (Bell, 1999). Although the most appropriate diet for a ferret is whole prey or a balanced fresh or freeze-dried carnivorous diet, this is impractical. Ferrets raised on ranches are often fed pelleted mink diets, which consist of 30 to 35% meat-based protein and 20% animal fat. However, diets for mink depend heavily on fish; mink diets are less palatable to ferrets because mink are naturally fond of fish whereas ferrets are not (Bell, 1999). Because the exact nutritional requirements of pet ferrets are unknown, recommendations for the best food for this species cannot be adequately determined. When evaluating a diet, review the list of ingredients on the package: the crude protein of a maintenance diet should be 30 to 35% and based on high quality meat, not grains; the fat content should be 15 to 20% (Bell, 1999; Brown, 2004). A comparison of constituent nutritional values of some North American commercial foods used for ferrets has been previously published (Bell, 1999; Lewington, 2000). Commercial foods marketed specifically for ferrets mirror the formulations known to be successful in mink and cats (NRC, 2006, 1982; AAFCO, 2007). Guidelines for cat foods may be used when assessing the completeness and balance of foods intended for ferrets (AAFCO, 2007). Grocery store cat foods are very palatable because of their coating with animal fat and digest, but they are nutritionally inadequate for any stage of ferret’s life. Minimally stressed ferrets may live on these foods for years, but nutritional deficiencies may occur especially in breeding animals (Bell, 1999). Pelleted ferret food is the preferred diet, although premium dry kitten food is generally acceptable for meeting the ferret’s nutritional requirements for growth and reproduction (Kupersmith, 1998). Canned food should be avoided as the main diet because ferrets may be unable to consume enough protein and fat on a dry matter (DM) basis. Furthermore, periodontal disease may occur earlier if ferrets are fed a moist diet because of the lack of friction to help prevent plaque buildup on the teeth (Bell, 1999; Crossley and Aiken, 2004).

Ferrets reportedly consume 200 to 300 kcal (837 to 1,255 kJ) ME/kg body weight daily for adult maintenance (Table 70-1) (McLain et al, 1988). This amount equals about one-half to three-quarters cup of dry cat food containing about 400 kcal (1,674 kJ) ME per cup (standard eight-oz. measuring cup). This is about three times greater than the food intake of an average cat.

Energy needs increase for growth and reproduction (Table 70-1). Caloric requirements may be met by increased intake of an adult maintenance food or by consumption of a diet with increased caloric density. Increasing food intake works to a point, but foods with higher caloric density should be offered in demanding situations. Thus, growing and lactating ferrets should be fed cat foods formulated for growth and reproduction.

Water should be provided free choice.

Source: Feeding Small Pet Mammals by James W. Carpenter, Karen N. Wolf, Christine Kolmstetter