



Domestic Carnivores:

Cats are renowned for being obligate carnivores, an intrinsic aspect of their physiology demanding a diet rich in meat to fulfill their nutritional requirements. In both the wild and domestic settings, cats exhibit a natural inclination towards hunting and consuming prey animals, primarily characterized by high protein content, moderate fat levels and negligible carbohydrate presence. While they may sporadically diversify their diet with fruits, honey or grains to address supplementary nutritional needs, cats lack the digestive mechanisms for efficient carbohydrates processing in large quantities, particularly when unprocessed. This is evident from their lack of salivary amylase production, and little taste perception for carbohydrates. Instead, cats are instinctively drawn to animal fats and proteins, particularly focusing on essential amino acids like alanine, proline, lysine and histidine.

Unique Nutritional Requirements of Cats:

Cats stand apart from dogs and humans in their dietary essentials. They possess a heightened demand for protein, deriving their energy exclusively from amino acids sourced through consumed protein, a metabolic process termed gluconeogenesis. In stark contrast to omnivores and herbivores, which can derive energy from dietary starch and glycogenic amino acids, cats rely solely on meat protein. Despite the presence of amylase secretion in their pancreas and the ability to digest small quantities of starch, their physiology is designed to maintain their blood glucose levels through gluconeogenesis. Furthermore, cats harbor a greater need for dietary nitrogen than any other mammal. Lacking the capacity to store nitrogen, their liver operates perpetually at elevated protein processing levels, necessitating a continuous intake of meat protein to sustain optimal nitrogen levels (Wortinger, 2007).

Essential Amino Acids:

Among the 22 amino acids, cats must acquire 11 essential amino acids from their diet, as their bodies cannot synthesize these in adequate quantities. This list includes taurine, arginine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, threonine, tryptophan and valine. Notably, taurine emerges as a critical nutrient for feline health, and animal protein sources, particularly offal, serve as its best natural reservoirs (Wortinger, 2007).

Feline Feeding Behaviours:

The feeding behaviours of domestic cats closely mirror those of their ancestors, the *Felis silvestris libyca*, a small African wildcat primarily inhabiting desert environments. These felids are renowned for their proclivity to hunt and consume multiple small prey throughout the day and are considered crepuscular with peak hunting activity occurring in the early morning and evening.

Domestic cats, much like their wild forebears and other carnivores, engage in a repertoire of behaviours that include searching, hunting, capturing prey, followed by postprandial grooming and rest. Notably, cats differ from dogs in their solitary hunting tendencies and preference for frequent, smaller meals. In the wild, a cat may consume between 10 to 20 meals daily, with each meal roughly equivalent in size and caloric value to a mouse (approximately 30g and 23kcal) (Wortinger, 2007). To reach their daily calorie requirement, cats must hunt continuously throughout the day. A feral cat's diet is comprised largely of small rodents (40% of the diet), with the remainder being small rabbits, insects, frogs, lizards and birds. Large wildcats, such as lions and tigers, have different feeding behaviours and tend to eat larger prey and eat less frequently.

Domestic cats exhibit a discerning palate due to their highly developed olfactory senses, rendering them sensitive to variations in food texture, aroma and flavour. Even minor alterations in their diet can lead to cats rejecting their food. This behaviour can be seen during the consumption of live prey. Cats typically have a preference to eat the prey from the head, with the texture dictated by the direction of hair growth (Wortinger, 2007).

The temperature of their food also plays a role, as cats generally prefer their meals to be around 38 degrees Celsius, mirroring the typical body temperature of freshly caught prey. The predatory drive of the cat is very strong, and they will even stop eating to make another kill to optimise their food availability. This drive can be stimulated in a domestic cat by providing enrichment through interactive toys and food puzzles so they can express this natural behaviour. A lack of stimulation can cause boredom, destructive behaviour and anxiety.

Water Intake:

Cats, originally desert-dwelling creatures, are biologically attuned to sourcing a significant portion of their hydration needs from their diet. Their wild counterparts, thriving on a prey-based diet, receive approximately 70 - 75 percent of their water intake from their food. Modern domestic cats have retained their evolutionary adaptations for desert living, resulting in reduced thirst levels, limited water consumption and concentrated urine production (Wortinger, 2007).

In contrast to the wildcat diet, dry kibble typically contains less than 10 percent water. While some domestic cats compensate appropriately with an increased water consumption, many owners' purchase water fountains and other such devices to encourage their cats to drink enough water. Canned food more closely approximates the natural diet of cats and can better meet their moisture requirements (Pierson, 2013).

Feeding Schedules:

Establishing set feeding times for cats on a domestic setting can present challenges. Many cat owners opt for "ad libitum" feeding with dry kibble, which in theory allows cats to eat small meals regularly throughout the day. However, ad lib feeding practices may lead to weight control issues and cannot be achieved with canned food. The potential for food contamination arising from the extended exposure of canned food is a significant concern in terms of food hygiene, and canned food can only be left out for a maximum period of 4 hours.

Implementing a structured feeding schedule for cats may necessitate consistent training efforts. Timed feeding, involving portion-controlled meals administered two to three times a day, offers a viable alternative to monitor and maintain daily calorie intake effectively.

ZIWI Peak Cat Food: The Optimal Choice

Considering these distinct feline dietary characteristics, ZIWI Peak cat food stands as an exceptional choice for feline nutrition. Here's why!

Rich in Animal Protein & Organ Meat:

ZIWI recipes are formulated with a focus on animal protein and organ meat, ensuring the correct nutrient and amino acid profile for obligate carnivores.

Exceptional Digestibility:

ZIWI boasts an impressive digestibility rating of 95.6%, as confirmed by Massey University in New Zealand.

Complete and Balanced:

All ZIWI recipes adhere to AAFCO standards, guaranteeing comprehensive and balanced nutrition for All Life Stages. ZIWI can be safely fed as a complete diet from 6 weeks of age.

Adequate Moisture Content:

ZIWI canned food incorporates moisture, aligning with a species-appropriate approach to fulfil cats' daily hydration requirements.

No Undesirable Ingredients:

ZIWI recipes do not include grains, potatoes, and sugars.

References:

Pierson, LA 2013, "Feeding Your Cat: Know the Basics of Feline Nutrition", www.catinfo.org

Wortinger, A 2007, "Nutrition for Veterinary Technicians and Nurses", Blackwell Publishing Professional, Iowa