

# ZIWI Peak Ferret Nutrition



Ferrets are obligate carnivores, meaning that they are obligated to eat meat products as their primary food source. They are fairly similar to the domestic cat in regards to dietary requirements, but there are some small differences.

## **Gastrointestinal Tract:**

They have a very short intestinal tract, which allows food to pass through so quickly it sometimes does not allow for efficient absorption. A cat's small intestine is approximately 8 - 10 times the length of its own body, whereas in comparison, the ferret's small intestine is only around 5 times the length of its body. This short small intestinal tract results in rapid intestinal tract transit time, meaning that food is passed through very quickly. They have a very limited number of enzymes for digesting starch and carbohydrates, also referred to as "brush border" enzymes, which only exist to break down the small amount of carbohydrates that might be found within the stomach of their prey. Their large intestine is very short, and due to this, they have an almost insignificant bacterial microbiome in comparison to dogs and cats.

Carbohydrates are therefore considered completely inappropriate for the digestive system of a ferret, as they do not have the length of GIT or digestive processes to break down carbohydrates and utilise them.

## **Feeding Behaviours:**

Similar to cats, the natural feeding behaviour of ferrets is consuming small but frequent meals. They are crepuscular, meaning they hunt at dawn and dusk. They would need to hunt small prey regularly during these active hours in order to achieve their daily caloric needs, perhaps requiring 10-20 feeds throughout the course of the day.

## **Dentition:**

Their dentition is highly specific in its design to assist the function of shearing meat. Similar to cats and dogs, there is no grinding function in the jaw and molars (an omnivorous/herbivorous trait). The molars are located in the back of their jaw where leverage and muscular force is the greatest, in order to crack bones apart as opposed to grinding food. Ferrets are also geared with a "lock jaw", which prevents the loss of bite force during predation.

## **Nutrient Recommendations:**

Due to these biological characteristics, a ferret's diet must be composed primarily of high quality meat sources, and not carbohydrates.

The fat content should be a minimum of 15%, but ideally over 20%. The ideal protein content of ferret diets is between 30-40%. Kits (ferret young) cannot grow properly on a diet containing less than 30% protein and less than 20% fat. Kits should be eating a diet of ideally 35-40% protein and over 20% fat.

In addition to this, protein quality is just as important as the percentage concentration. Their protein sources must have a high bio-availability due to their rapid gut transit time, and therefore need to be meat-based sources. However, meat "meals" in kibble contain indigestible protein for the ferret, such as feathers and hooves, and can result in a diet deficient in essential amino acids.

In regards to taurine, an essential amino acid in feline diets, experts recommend that ferrets should also be fed a diet with the same concentration of taurine that cats receive. The calcium to phosphorus ratio (Ca:P) in a ferret diet should be at least 1:1, and at most 1.7:1, which is very similar to feline requirements.

## **Digestibility:**

The digestibility of the ferret diet must be above 85%, and ideally 90%. Typical cat kibble is approximately 75% digestible.

Infectious and metabolic diseases are prevalent in ferrets, particularly in kits or pregnant/lactating ferrets, when carbohydrates (such as grains) are the major source of protein. Ferrets struggle to absorb calories from carbohydrates, so when fed a carbohydrate based diet, this can induce a calorie deficiency in the ferret.

All of the ZIWI Peak cat food recipes are over 95% digestible, are fortified with taurine and other essential vitamins and minerals, and do not use meat meals in their products. Therefore, ZIWI Peak cat recipes meet these requirements for ferrets.

## **Fish:**

According to the SA ferret rescue groups ferrets begin to emit an unpleasant odour from their skin and coat when fed a diet containing a considerable amount of fish. Therefore, the ZIWI Peak Mackerel and Lamb, Hoki, and Mackerel recipes are not recommended.