



FELINE NUTRITION

The domestic cat – *Felis catus* – has descended from the North African Wildcat – *Felis Sylvestris lybica* – and remains extremely closely related and similar to this species in size, shape, behaviour and physiology.

Like all cats, our domestic cats are carnivores, and are adapted to a hunting lifestyle. They are highly-tuned and successful predators, and as such have evolved to be dependent on a meat diet, and cannot thrive or survive without meat in their diet – they are OBLIGATE CARNIVORES.

Hunting animals like the cat, have no need for special enzymes or metabolic pathways for digesting and converting plant-based nutrients into what they need, as it is already present in the animals that they prey on! However, this adaptation as a strict carnivore, does mean that cats have a number of special dietary requirements that do not apply to many other animals (e.g. humans and dogs), so feeding a properly balanced diet to a cat can be much more challenging.

SOLITARY HUNTERS

Cats are naturally **specialised solitary hunters**, just like their wild ancestors. As they hunt alone, they generally choose prey small in size that they can manage to capture on their own, most commonly small mammals such as rodents. The average mouse only contains about 30 kilocalories, so cats must hunt, kill and eat around ten mice a day in order to meet their daily energy and nutrient requirements. Therefore, cats would naturally consume **frequent small meals** throughout both the day and night, and feral cats can spend up to 12 hours a day looking for and obtaining food.

As domestic cats now rely on their food to be fed by owners (especially those with no outdoor access) – many cats are restricted to a feeding schedule that is convenient for the owners. This often means being fed two large meals per day, which is both **behaviourally and physiologically unnatural for cats**.

Even those cats that are fed ad libitum (they have unrestricted access to food at all times), allowing them to eat little and often as they please, their modern lifestyle may lead them to overeat for various reasons, leading to obesity and associated health problems. Furthermore, most cats are fed their food in a bowl in the same location day in, day out, meaning little or no exertion is needed in order to obtain food. Cats are programmed to search for, capture and kill their food, which involve both **mental and physical exertion**, and by removing such opportunities we often end up with bored, anxious, frustrated and stressed cats.

If you have any questions about your pets, call us on 01325 620968 or ask a member of our team



Stanhope Park Veterinary Hospital

In order to tackle these problems, **cats are best fed little and often**, with their daily food ration divided into at least five portions, whilst utilising **puzzle feeders** and timed feeders to provide the food portions. Puzzle feeders are objects which hold food and must be manipulated by the cat to release the food. This helps meals to last longer, increasing physical exertion to obtain the food and providing a fun “brain-teaser” for **mental stimulation**.

As **obligate carnivores**, cats have a **high protein requirement** in their diets, and a number of animal-derived nutrients are obligatory in their diets such as the **amino acids taurine and arginine; vitamins A, D and B3 (niacin), and the polyunsaturated fatty acids arachidonic acid and docosahexaenoic acid**, although these may not be absolutely essential in all life stages.

The precise energy and nutrient requirements of cats vary depending on various factors such as **age** (e.g. increased nutrient demand during growth, and a reduced digestibility in older cats); **activity levels; neutering status; pregnancy** etc. Although home-prepared diets may be used for feeding all life stages, ensuring all macro- and micro-nutritional needs are adequately provided in such foods can be problematic, and there are also risks associated with the feeding of raw foods (e.g. transmission of infectious diseases).

Commercially available complete dry or wet foods are formulated to meet the specific nutritional requirements of cats at their specific life stage, and have been rigorously tested and researched by the pet food manufacturers to ensure they are satisfactory.

FOOD PALATABILITY

The factors that influence the palatability of food for cats are complex, but include **texture; odour; taste; and temperature**. The odour of food is particularly important to cats, having an extremely well-developed sense of smell. Odour is also enhanced when food is slightly warmed, so cats tend to prefer food that is around **body temperature** (35°C). The sense of smell and taste combine to give the perception of the flavour of a food, and foods with a high level of protein and fat are generally much more palatable for cats.

Cats can taste substances that are salty, sour or bitter, but unlike humans and dogs, they are not able to perceive sweet tastes. This is a simple adaptation of a species that is dependent on meat rather than plants for its survival. Texture is also important for cats, who generally prefer the texture of meat.

Although we understand what types of food cats generally find most palatable, there can be considerable variation between individuals. Some of this is simply as a result of food experiences in early life – kittens will tend to eat and like the same foods that they see their mother eating, and may develop a strong preference to this. Some cats will also develop a strong preference for a particular type of food (e.g. wet/tinned food or dry food), when fed over a prolonged period of time. Nevertheless, most cats are inherently **“NEOPHILIC”**, which means that they like to explore and try new foods, and enjoy a variety.

If you have any questions about your pets, call us on 01325 620968 or ask a member of our team



Stanhope Park Veterinary Hospital

LIFESTAGE NUTRITION

When choosing a suitable diet for your cat, **consideration should be given to your cat's age**, in order to provide them with the optimum nutrition that they need at their particular life stage, to help ensure a long and healthy life.

NEWBORN KITTENS (BIRTH TO 4 MONTHS)

Newborn kittens will stay with their mother for around the **first 8 weeks of life**, initially relying on their mother's milk to help them grow and build up their immune system. During this time they will do little other than nurse and sleep. Kittens are usually completely weaned onto solid foods by around **8 weeks of age**, ready to leave their mother and go to their permanent homes, where their routine will follow a pattern of eat, sleep, run around like crazy, repeat! Therefore, the right nutrients are required to maintain their abundance of energy.

As your kitten will now be growing at an astonishing rate, **high quality protein** is vital to provide energy and the building blocks of cell and tissue growth. Amino acids such as **taurine**, along with **folic acid and fatty acids such as DHA**, aid in the development of the immune and digestive systems, heart function and vision quality.



JUNIOR (7 MONTHS TO 2 YEARS) and PRIME (3-6 YEARS)

As your cat approaches the one-year mark, you may notice some personality changes as adolescence followed by adulthood moves in, corresponding to the human age of **12-27 years (junior)** and **28-40 years (prime)**.



Technically, cats are considered to be adults at one year of age, extending through to 6 years, but age is not always a deterministic factor in how active your cat will be, as many cats will be very lively well into double-digit years. When feeding a young adult cat, consideration needs to be given to their **individual activity level**. Those cats that spend hours sprinting about and are highly active, will probably require a few extra calories on top of their general maintenance energy levels to keep them sustained, whilst those that like to laze around all day, will probably require fewer calories.

If you have any questions about your pets, call us on 01325 620968 or ask a member of our team



Stanhope Park Veterinary Hospital

MATURE (7-10 YEARS) and SENIOR (11-14 YEARS)

Cats in these categories are placed in the middle stages of life – the equivalent of **44-75 in human years!** At this stage, some cats can start to become a little finicky with their food choices, so you'll need to ensure your cat gets the nutrients they need and stays properly hydrated.

Specific nutritional requirements also shift during this life stage, either due to **general ageing changes**, or perhaps due to **medical issues**. Your cat's activity levels will likely start to decrease, so you'll need to keep an eye on their weight, avoiding calorie-rich food formulated for kittens and young adult cats.



SUPER-SENIOR (15 YEARS+)

During these golden years, your cat may start to seek more attention from you and become more affectionate, with **reduced activity levels**. As their behaviour changes, so do your cat's meal time needs.

A good senior feline diet provides **high quality protein**, with **controlled levels of fat and easily digestible carbohydrates** for energy. A **higher meat content** can also improve the palatability of the food, making it more appealing to older cats that may have a **decline in their senses of taste and smell**. Key minerals help support **ageing joints**, and vitamins, antioxidants and proteins, help to support the **ageing immune system**.

In addition to a nutrient-rich diet, it is more important than ever to ensure your elderly cat stays **well hydrated**, as many of these cats will suffer concurrent illnesses such as **Chronic Kidney Disease (CKD)** which can predispose them to dehydration.

As well as life stage nutrition, clinical nutrition may also be an important aspect of caring for your cat. This involves feeding a specific diet formulated to help treat a particular medical condition – such as Chronic Kidney Disease or Diabetes. Always speak to your vet or registered veterinary nurse before changing your cat onto a clinical diet, to ensure it is appropriate for their medical requirements.

Your vet or vet nurse can also help you to determine the best feeding schedule for your cat, including how much to feed them each day. Remember, choosing an appropriate high-quality complete diet for your cat, can go a long way to keeping them in optimum health.

If you have any questions about your pets, call us on 01325 620968 or ask a member of our team