



# Windmill Veterinary Centre

This folder includes information on Pet Care, Nutrition, and more.

We look forward to seeing you and your kitten.



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## ***PRACTICE WELCOME***

At Windmill Veterinary Centre it is our aim to provide the best, safest and most ethical services to our clients and their pets. One of these services is to offer owners information on what they can do to help keep their pet healthy throughout its life.

We hope you will find this booklet helpful. If you would like further information on any of the topics covered or on a matter that has not been included, please do not hesitate to ask. We can provide "handouts" and direct you to useful websites on a very wide range of health and behavioural issues to meet the individual requirements of our clients and their pets.

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## **CARE OF YOUR NEW KITTEN**

Now you have your new kitten! You may have questions or concerns, now or in the future. We are here to help you!

*Do not feel that you can only come in or phone us when your cat needs to see a Vet!* Our Veterinary Nurses (RVNs) have considerable experience in animal health care and behaviour, diet, training, etc. so please do not hesitate to ask them! Naturally if they feel a Vet should be consulted, they will say so.

Hopefully you have a healthy kitten, and you want him to remain so. By checking your kitten regularly in the following ways you will quickly be aware of any problems, and equally as important, get your kitten used to being handled (try to get other people to do this as well so that being examined by a stranger does not bother him).

### **Feel your kitten**



Get to know what your kitten feels like, by running your hands gently all over him, and continue to do this throughout your cat's life; you will then notice any lumps or bumps that may appear. It is best to see a Vet to check on any lump, although many will cause no concern.

Get your kitten used to daily grooming. At first you may need to keep it very brief, as the kitten is likely to get excited, bite the brush and generally be silly! Try distracting him with a treat in one hand whilst brushing, or perhaps another member of the family can do that. Grooming and handling are essential for any cat, even short-coated ones, and our staff can advise on the best sort of brush or comb for your cat.

### **Eyes**

Eyes need wiping sometimes, if they get a bit mucky in the corners, and you can use very weak salty water to do this. If they are runny or red for more than a day or so the cat should see a Vet.

Weak saline (salt and water) solution is a good First Aid treatment for cuts and scratches, sore pads, etc. The usual dilution is 1 teaspoon salt dissolved in a pint of water. Do not use antiseptics such as TCP, which are too strong and never use 'Dettol' types as these are toxic to cats.

### **Smell your cat's ears!**

Smelling inside your cat's ears can often tell you if they have an infection or not! A healthy ear is pale pink inside and has a sweetish smell, not a "yuck"! Ears can

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be gently wiped out with cotton wool to remove dirt, but a blackish "gunge" may signify the presence of ear mites for which treatment would be needed.

### **Get your kitten used to a cat carrier!**

Many cats become very upset and stressed when they are put into a cat carrier, crying loudly or even losing control of bowels and bladder. This usually because the cat only associates the carrier with what it regards as unpleasant experiences - car travel, the Vet or a cattery. The result is that by the time the cat arrives at the Vet's surgery, it may well be already in a state of panic, making it difficult for the Vet to carry out a satisfactory examination and the owner is distressed to see their pet so upset.

However, much can be done to overcome the cat's dislike of the carrier. Many owners will say the cat "disappears" as soon as the carrier is brought out from its storage space! The carrier should be familiar to the cat, ideally just regarding it as another bed, and not something strange that only appears once in a while. Put some nice cosy bedding in the carrier and leave it where the cat can go in and out at its own choice, perhaps putting a few tasty treats inside too. As their confidence improves, shut the cat in the carrier for brief periods of time without going anywhere. Finally, get them used to going on brief car journeys in the carrier, for example just around the block.

Once at the surgery, we suggest that you use our Cat-Friendly consultation area, where it is calm and quiet. We aim for the cat to be able to move around the consultation room, sit on the window sill and chill out.

Clearly it will be easier to familiarise a kitten in this way, but even an older cat may lose a lot of its fear of travel if it is given a chance to "enjoy" using a carrier.

### **MICROCHIPPING your cat**

An Identichip is a tiny chip injected under the skin on the back of the neck, which carries a unique number, similar to a car registration number. Once inserted it is there for life, and your details are registered with Identichip (you must remember to advise them if you move). Should your kitten go missing and be taken to a rescue centre, Veterinary Centre or Police Station he will immediately be scanned, and you should be quickly reunited. Unlike a collar disc, the Identichip cannot drop off! If you intend to get your cat a "Pet Passport",

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having the Identichip is the first requirement. It can be inserted at any time in a cat's life; discount is given for doing it at the same time as a vaccination. Microchips have many other uses! Cat flaps and cat feeders can be chip-programmed, to allow your cat access, and stopping other cats taking over!

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## **FEEDING CATS**

Feeding your cat the appropriate amount of a well balanced diet is vital to the maintenance of overall health and well being, and just as important as eating a well balanced diet is for us. In order to understand how and what to feed cats, it is necessary to discuss how the nutritional requirements of the cat have developed through the process of evolution.

With respect to diet and health the two most important evolutionary facts are:

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**First**, cats are obligate carnivores and second, they are of desert origin. While some may find the fact that the domestic cat is an obligate carnivore disturbing and/or objectionable, it is important to bear in mind the practical consequences - cats cannot be vegetarians and feeding a Vegan diet is considered to be detrimental to the cat's health!

Through evolution cats have become dependent on the specific forms of nutrients found only in animal tissue. Examples include certain fatty acids and vitamins (especially Vitamin A and niacin). These nutrients are not found in plant tissue in forms that can be used by cats. Equally important, as an obligate carnivore, cats require high levels of dietary protein with the appropriate balance of amino acids (the building blocks from which proteins are made).

Most mammals including humans and cats use the protein in food to build and maintain tissue and carry out biological reactions. However, unlike other mammals, cats have evolved in such a way as to be "obliged" to also use protein as a source of daily calories! By comparison, humans have evolved to use carbohydrates for the same purpose. Once again, high levels of the correct types of protein which cats need can only be found in animal tissue. In fact diets containing plant protein are not digested as efficiently, and could be harmful or even fatal if fed as the only source of protein because they contain inappropriate levels of certain critical amino acids.

The **second** evolutionary fact unique to the domestic cat is that its ancestors were of desert origin. Subsequently there are many aspects of cat life that are different than other mammals. On a practical basis, because their desert origin allows them to conserve water more efficiently cats can drink less water per day than a dog of similar size. Fresh drinking water should of course always be provided. However, do not be alarmed if it is not always used. In fact some cats fed moist foods

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get most of their water directly from the food and their owners rarely see the cat actually drink!

In addition to these unique nutritional requirements, it is also important to consider the normal feeding behaviour of the domestic cat. Left to their own devices cats are "nibblers" and they will eat small meals frequently throughout the day and night. In fact, depending on the individual and the type of food, some cats will eat from 12 - 20 meals a day! This is especially true for dry foods, whereas moist foods (tinned or canned) are usually consumed quickly as larger meals. Furthermore, as anyone that has ever owned a cat can attest, they can be "finicky"! This simply reflects the fact that a cats eating behaviour is influenced by the texture, odour, temperature, and flavour of food. Whereas dogs may be content eating one particular flavour of food, recent studies reveal that cats do in fact become "bored" and prefer a variety of flavours! This explains why so many popular cat foods are available in different flavours. Also food temperature influences odour, and like us cats prefer food that "smells good". Since warm food has more odour or smell it is more readily eaten. This is useful when cats are ill, they can be encouraged to eat simply by warming the food.

Raw feeding: WSAVA (World Small Animal Veterinary Association) consider that feeding raw food to cats and dogs has many risks, and should not be undertaken without careful consideration. A major risk is bacterial contamination of the food, which can be passed to family members handling the pet. Strict hygiene is important, the bacteria can be on the pet's coat and around the mouth, so just stroking the cat or allowing the cat to sit on chairs or in beds could transfer the infection. Any person with a compromised immune system and children (who often play with the pets and then put their fingers in their mouths, without washing their hands) will need to be advised of the health risks to themselves.

With the unique nutritional requirements and feeding behaviour of the domestic cat in mind, it is easy to appreciate practical recommendations for feeding. First, fresh clean drinking water should be available all the time.

### **Feeding kittens**

Early in life kittens need to eat often! They need relatively larger quantities of food because they are growing rapidly, but have limited space in their tiny stomachs!

At eight weeks they need about 5 meals a day.

By **6 months** the need for food is decreased as kittens are about 75% "grown-up" and can be fed **2 meals a day**.

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A good quality kitten food has advantages over adult cat food since it has been specially formulated. Because of their rapid growth any nutritional "mistakes" made during kittenhood will have more severe consequences. Kitten foods are specially formulated to provide the nutrients needed to meet the demands of rapid growth in a compact form when tiny stomachs limit food intake! Since growth is almost complete by 6 months, kittens can be switched to "adult" cat food at 6-8 months of age.

Contrary to popular myth, kittens and adult cats do not need milk. In fact after weaning, kittens often lose the ability to digest milk sugar (lactose) by about 12 weeks of age. Therefore, while small amounts may be tolerated, too much can lead to intestinal upset and diarrhoea because it is not digested properly!

When in doubt, the best source of help is your Vet or Veterinary Nurse!

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## **VACCINATION IN CATS**

Recent advances in medical science have resulted in an increase in the number and type of vaccines that are available for use in cats. Currently cats can be vaccinated against several different diseases:-

**Feline panleukopenia (= feline infectious enteritis; feline parvovirus)**  
**Feline herpes virus type 1 (= FHV-1; feline rhinotracheitis virus)**  
**Feline calicivirus (= FCV)**  
**Feline leukaemia virus (= FeLV)**  
**Rabies**

(Rabies vaccine is, however, reserved for those cats that are travelling abroad or have entered the UK from abroad.)

### **When should my kitten be vaccinated?**

Generally kittens are vaccinated for the first time at between 9 and 12 weeks and a second dose given 3-4 weeks later. A kitten will not be fully protected until 7-10 days after the second vaccination. Under specific circumstances your veterinary surgeon may advise an alternative regime.

### **How often should booster vaccinations be given?**

Booster vaccination is generally carried out yearly. Some parts of the vaccination require less frequent boosting. All cats should be boosted regularly to maintain their protection, adult cats are also susceptible to these infections particularly as they grow old and their immune system becomes less efficient.

### **Which are the most important vaccinations to have?**

This is a difficult question and will depend on individual circumstances including the area you live in and the lifestyle of your cat. Your veterinary surgeon will be able to advise you of the most appropriate vaccinations to give your cat.

#### **Feline panleukopenia infection**

This is an uncommon disease that causes a severe and often fatal gastroenteritis. Vaccination provides a high level of long lasting protection.

#### **Feline respiratory virus infection**

Disease is caused by FHV-1 or FCV and is commonly termed 'cat flu' whilst not usually very serious it is a common disease in unvaccinated cats and can cause long-term problems. Vaccination is less effective as immunity is not long lived. Cats at high risk may need to be vaccinated twice yearly to provide better protection.

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### **Feline Chlamydial infection**

This tends to be a particular problem in colony cats. Chlamydiosis is a bacterial infection causing a painful inflammation and swelling of the conjunctiva (the membrane around the eye) and has been associated with infertility in queens. Infection in colonies of cats can last for long periods, as protection against re-infection is relatively short lived. Vaccination can help to prevent infection becoming established in a colony and can be used in conjunction with treatment where infection is already present.

### **Feline leukaemia virus infection**

Whilst the majority of cats are able to combat this infection a significant proportion (about 30%) will become persistently infected by the virus. The vast majority of persistently infected cats will die from tumours or due to the immuno-suppression caused by the virus. Current vaccines provide a good level of protection and do not interfere with routine testing for the virus in breeding colonies. Because the virus tends to take many months before it causes disease infected cats can appear completely normal. For this reason your veterinary surgeon may suggest that your cat has a blood test to make sure it is not infected before vaccination. Despite vaccination a few cats will still become infected with the virus.

REGULAR VACCINATION IS AN IMPORTANT PART OF ROUTINE HEALTH CARE FOR YOUR CAT AND HELPS TO ENSURE YOUR CAT REMAINS FIT AND WELL.

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## **FREE TO ROAM OR STAY AT HOME?**

One of the key things you need to decide is how much freedom to roam your neighbourhood you want to allow your new kitten. We enjoy the independent nature and 'tiger spirit' of cats. An indoor cat will live a safer life, particularly if you live near busy roads. However you will have to provide an indoor environment that provides a happy, healthy and interesting life, a substitute for the outdoor challenges your cat would find.

### **Safety Tip**

Try to keep your cat indoors at night - this is the most dangerous time for fights and accidents.

### **The indoor cat**

Cats can live a happy and fulfilled life as 'indoor cats', but only if provided with a stimulating environment - places to play & explore and either a companion (another cat) or a human to entertain them!

There are many types of cat 'play stations', climbing frames and scratching posts available and toys such as 'Kitty Kong' and pretend mice which can give them a lot of exercise as they throw & chase them around. Cats can get bored and destructive, so make sure that you are ready for an 'indoor cat'.

### **The outdoor cat**

Your kitten should not be allowed outside until at least a week after it has finished their first course of vaccinations at about 13-14 weeks old. Accompany your kitten outside, allowing it to explore the new environment, until it can find its way back to the house. It is best not to leave your kitten outside alone until it is six months old and has been neutered. Cats like to come and go as they please, so you may find fitting a cat flap a good idea. If you do decide to fit a cat flap and there are a lot of other cats in the neighbourhood you might consider paying extra for a microchip-access flap, to stop other cats entering your house.

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## **FLEA CONTROL**

### **Where does my cat get fleas from?**

The most common flea found on cats and dogs is the cat flea (*Ctenocephalides felis*). Rarely rabbit fleas or hedgehog fleas are found on cats.

The most important source of cat fleas is newly developed adult fleas in pupae in your house. Adult fleas live and feed on animals but the female lays eggs that fall off into the environment. Under favourable conditions these eggs develop first into larvae and then into pupae. The pupae contain adult fleas, which lie in wait for a suitable animal host. Modern carpeted centrally heated homes provide ideal conditions for the year round development of fleas. The highest numbers of flea eggs, larvae and pupae will be found in areas in the house where pets spend most time such as their beds, the furniture and so forth. Even though fleas may be in your house you probably won't see them; the eggs are too small to see without magnification and the larvae which are just visible migrate deep down into carpets, furniture or cracks in floors away from the light.

### **What effect do fleas have on my cat?**

Many cats live with fleas but show minimal signs. The following problems can occur:-

- Some cats develop an allergy to flea bites. If these cats are exposed to fleas they groom or scratch excessively and develop skin disease.
- Adult fleas live on animals and feed on blood. In kittens and debilitated animals this may cause anaemia.
- The flea acts as the intermediate host for the tapeworm (*Dipylidium caninum*). Tapeworm eggs, which are shed within tapeworm segments in cat faeces, are eaten by flea larvae that develop into infected fleas. Eating infected fleas during grooming infests cats. Any cat with fleas is likely also to have a tapeworm infestation.

### **How can I get rid of fleas on my cat?**

A variety of flea treatments are available and some will seem more effective than others! Many of the 'shop-bought' ones are lower in potency than prescription flea treatments. Please ask if you would like our advice. It is also important to treat your home to eradicate developing eggs, pupae & larvae; again we can supply a suitable spray to do this with.

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**Despite treating my cat for fleas he still has them. Is there a 'super' flea?**

There is no evidence of fleas developing resistant to insecticides in the UK. Apparent failure of treatment almost always results from inadequate treatment of the home, or exposure to other infested environments. Consider treating garden sheds, cars and in the summer favoured outdoor sleeping spots. Bear in mind that your cat may be going into other people's houses. A lot of these problems can be overcome by using a really effective and persistent product on the cat to kill adult fleas in addition to treating your home.

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## **MANAGING THE SICK CAT**

Follow your Vet's advice and instructions very precisely. Take your cat for re-inspection if requested to do so. If your cat's condition worsens unexpectedly then contact your Vet for advice.

### **A suitable place for your cat**

Your cat should be somewhere that is warm and dry, peaceful and quiet. There should be sufficient light for you to observe him. It may be necessary to provide an additional heat source such as a heat pad, a heat lamp or a hot water bottle. These should be used with care to avoid burns or overheating. Easily washable cat friendly bedding is advisable such as Vetbed. A litter tray should be provided within easy walking distance of your cat's bed.

### **Feeding your cat**

Your sick cat needs to have both food and water. When cats are ill they will often stop eating and drinking and it is important to monitor your cats intake so that you know when intervention is necessary.

To encourage your cat to drink fresh water should be available all the time. Normal healthy cats often do not drink very much because the food that they eat contains a high proportion of water. If your cat stops eating he will need to have fluids. If it is not possible for your cat to be given fluids by mouth your Vet will hospitalise your cat to give him the care that he needs. If you are trying to give fluids by mouth this most easily achieved using a syringe. Giving little and often works best. Your Vet will advise you about what fluids to give.

To encourage your cat to eat, offer palatable, high energy, highly digestible food little and often. Choosing a favourite food will often meet these requirements. Sometimes cats can be tempted by strong smelling foods such as pilchards. Warming food to body heat often makes it more attractive. Hand feeding can encourage some cats to eat. Your Vet will advise you if there are any foods that your cat should not be given. If your cat cannot be tempted to eat voluntarily your Vet may suggest giving liquid food via a syringe but this is often not well tolerated. An alternative is to hospitalise the cat and feed it via a tube.

### **Grooming and cleaning your cat**

Ill cats often stop grooming themselves in which case you will need to do this. Any discharges from the eyes, nose or mouth should be gently wiped away once or twice a day using balls of cotton wool and warm previously boiled water. If the coat becomes soiled or matted this should be combed out or carefully cut

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off if necessary. Daily brushing or combing of your cats coat will make your cat feel better.

### **Giving medicines**

Give your cat any prescribed medication at the dose and frequency stated by your Vet and complete the full course of treatment. A separate advice leaflet is available about medicating cats. If you are having difficulty in giving tablets to your cat contact your Vet to see if she can prescribe a liquid formulation instead which you could then give with a syringe. Alternatively she may suggest crushing tablets and mixing them with a little water so that they can be given by syringe.



Never give your cat any drugs other than those prescribed for him by your Vet. NEVER give your cat Paracetamol because this is poisonous for cats.



### **Disinfectants**

Do not use any phenol-based (eg Dettol) disinfectants in the room, which your cat is in as these are toxic to cats.

### **Monitoring your cat**

Keep a close eye on your cat and note how much he is eating and drinking and if he is urinating and defecating and if he develops any new abnormal signs such as vomiting, diarrhoea, sneezing or coughing. You will then be able to report this to you Vet, which will help her to assess how your cat is progressing.

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## **WORMING TREATMENT**

### **What are tapeworms and roundworms?**

Tapeworms and roundworms are two of the most common intestinal parasites of cats. Tapeworms are long flat worms composed of many individual segments whereas round worms are much shorter and have rounded bodies.

Roundworms produce microscopic eggs which are shed in the faeces of infected cats, whereas tapeworms release mature segments (which again contain eggs) from the end of the worm into the faeces. These segments sometimes look like grains of rice and are mobile. They can occasionally be seen on the hair around the anus of the cat or in the faeces.

### **How can my cat get roundworms?**

Roundworms are very common, particularly in young cats and kittens. The two most common species found are *Toxocara cati* and *Toxascaris leonina*. With both of these worms, eggs passed in the faeces can be ingested (eaten) by another cat leading to transmission of infection. In addition, the eggs may be eaten by another animal ('intermediate host') such as a small rodent (for example a mouse or rat), and a cat can be infected by preying on (eating) the infected intermediate host. For *Toxocara cati* there is another important route of transmission to kittens, which is through the milk of the queen (mother). From earlier infections with roundworms, a queen will have some larvae remaining dormant in certain tissues in the body and when she gives birth to a litter of kittens these larvae migrate to the mammary glands and are excreted in the milk. This process causes no harm to the queen, but means that kittens are very commonly infected with roundworms from a very young age. Roundworm infections are *extremely* common, and it is safe to assume that all kittens will be infected.

### **How can my cat get tapeworms?**

There are a variety of different tapeworms that can infect cats, but the two most common are *Dipylidium caninum* and *Taenia taeniaformis*. The eggs of *Dipylidium* shed within the tapeworm segments in the faeces are eaten by flea larvae, and then other cats become infected with this tapeworm by ingestion (eating) an infected flea during grooming. As flea infections are so common in cats, this tapeworm is also common and it should be assumed that any cat with fleas will also have *Dipylidium* infection.

In contrast, the eggs of *Taenia taeniaformis* are eaten by rodents (rats and mice) so other cats become infected during hunting by eating an infected

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rodent. Infection with this worm is less common therefore, but should be expected in any cat that actively hunts.

**Can these worms infect humans?**

It is possible for humans to be infected with both *Toxocara cati* and *Dipylidium caninum*, the latter is very rare however, as it requires ingestion (eating) of an infected flea. *Toxocara cati* is more of a concern, particularly in children, where ingestion of the eggs may result in migration of the worm larvae through the body and potential damage. This is much more of a risk with the dog roundworm (*Toxocara canis*) but can still occur *occasionally* with *Toxocara cati*.

Due to the potential human health hazard, as well as the possible ill-health to the cat, regular worming of cats is important. In addition, careful disposal of litter from litter trays is important, and ideally the tray should be disinfected daily with boiling water.

**What should I use to worm my cat, and how frequently?**

A variety of products are available to treat roundworms and tapeworms in cats and they come in a variety of forms. For the best advice on the type of worming preparation most suitable for your cat, you should seek the help of your veterinary surgeon.

As kittens can be infected with roundworms from a very young age it is important that worming is started early and repeated regularly. Tapeworms are more likely to be a problem in adult cats and at this age less frequent but still regular worming is required.

A suitable protocol for worming cats of all ages is:-

<b>Kittens from 4 to 16 weeks of age</b>	Treat <i>every month</i> with a product active against roundworms.
<b>Cats 6 months of age and older</b>	Treat <i>every three months</i> with a product active against <i>both</i> roundworms and tapeworms.  The precise frequency of treatment will depend on likely exposure to tapeworms in particular (for example whether fleas are present and whether the cat hunts).

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## **TOXOPLASMOSIS**

### **What is toxoplasmosis?**

Toxoplasmosis is a disease caused by infection with the organism called *Toxoplasma gondii* (*T. gondii*), a microscopic single-cell organism which is one of the most common parasites of animals. Although virtually all warm-blooded animals, including man, can be infected with this organism, it is an extremely well adapted parasite and rarely causes significant disease to the individuals which it infects.

### **How is Toxoplasma transmitted?**

Cats are usually infected by eating the organism present in the tissues (meat) of another infected animal (an 'intermediate host'), which is usually a rodent. The organism replicates locally in the intestinal tract of the cat, and also replicates within the body. The replication in the intestinal tract results in shedding of oocysts (eggs) in the faeces, but an immune response rapidly develops which halts both shedding of eggs and replication of the organism in the body. Despite the immune response, infection still persists in the form of microscopic cysts present in some tissues of the body, although this does not usually result in any disease.

The oocysts (eggs) shed in the faeces are very resistant, and can contaminate the environment for several years. Other animals become infected by eating these eggs and then, as with cats, the organism replicates in the body and cysts develop within certain tissues. Cats are particularly important, as they are the only animal in which *T. gondii* replicates in the intestinal tract, resulting in shedding of eggs in the faeces, and therefore cats are essential to the life-cycle of the organism.

While cats are usually infected by preying on infected rodents (or more rarely by ingestion of oocysts from the environment), humans are most commonly infected through the food chain. Sheep, cattle and pigs grazing on contaminated pastures, or fed oocyst-contaminated food, can also develop the encysted form of the organism in body tissues and if infected meat is not cooked adequately enough, or if poor hygiene precautions are adopted during handling of uncooked meat, humans can become infected. Ingestion of oocysts, for example during gardening in contaminated soil, is a less common but still important source of human infection.

### **How common is Toxoplasma in cats?**

The proportion of cats infected with *Toxoplasma* varies according to their life-style. Because of the way in which the organism is transmitted, infection is

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much more common in stray, feral, farm cats, and others which engage in a lot of hunting or are fed a lot of raw meat. As many as 60% of these cats may be infected with *Toxoplasma*. In contrast, infection is uncommon in pet cats which do little or no hunting, and which are fed primarily or exclusively commercial cat foods.

### **What disease does *Toxoplasma* cause in cats?**

Although *Toxoplasma* is a relatively common infection, it usually causes no disease in infected cats. Rarely, cats fail to develop an adequate immune response to the organism which may allow it to continue to replicate and cause damage to tissues. When this happens a variety of different clinical signs can develop including ocular (eye) disease, respiratory disease, diarrhoea, hepatitis and nervous signs. It is important to remember that *Toxoplasma* is a rare cause of disease though.

### **How can you diagnose and treat toxoplasmosis?**

Toxoplasmosis is difficult to diagnose in cats. Blood tests are available which will show whether a cat has been exposed to the organism, but these tests do not necessarily mean that *Toxoplasma* is the cause of any disease (as most exposed cats do not develop disease). When toxoplasmosis is suspected in a cat, this can be treated with a course of an appropriate antibiotic.

### **How important is *Toxoplasma* in man?**

Around 30% of the adult population in the UK have been exposed to *Toxoplasma*. As with infection in cats, the vast majority of people infected with this organism experience no clinical disease at all, or possibly just mild and transient 'flu'-like signs. However, as with cats there are also some individuals where significant disease does occur and one situation is particularly important. If a pregnant woman acquires *Toxoplasma* infection during her pregnancy, the infection may be transmitted to the foetus, and sometimes causes severe damage. This is only a risk though, if the woman acquires the infection during her pregnancy. A woman who has previously been exposed to the organism carries no risk of transmission to a foetus if she subsequently becomes pregnant.

### **How can human infection be avoided?**

Although cats are essential to complete the life-cycle of *T. gondii*, numerous surveys have shown that people who own cats are not themselves at a higher risk of acquiring infection. There are several reasons for this:-

- Many pet cats will never be exposed to *Toxoplasma* and therefore cannot pass infection on to humans.
- Even if a cat does become infected with *Toxoplasma*, it will only shed the oocysts (eggs) in its faeces for a short period (approximately 10 days)

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after initial exposure. Following this there is no further significant oocyst shedding and therefore again no further risk to humans.

- Although humans can be infected through exposure to, and ingestion of oocysts in the environment, a more common source of infection appears to be infected meat.

Following a few sensible environmental and meat hygiene measures can greatly reduce the risk of human infection:

- Cook all meat thoroughly to at least 70°C throughout.
- Wash hands, utensils and surfaces carefully after handling raw meat.
- Wash all vegetables carefully.
- Wear gloves when gardening in soil potentially contaminated by cat faeces.
- Empty cat litter trays daily, dispose of litter carefully, and disinfect with boiling water. If this is done every day, even if a cat is excreting oocysts, they will not have become infectious(which takes more than 24 hours from when they are passed in the faeces) by the time the litter is changed.
- Discourage pet cats from hunting, and avoid feeding them raw/undercooked meat.
- Cover any children's sand pits/boxes to prevent cats using them as a litter tray.

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## **NEUTERING**

### **Why should I have my cat neutered?**

#### ***Males***

Neutering, or castration, offers a number of advantages, especially if performed at an early age (6-9 months). Following puberty, at approximately 8-9 months old, the male cat develops a number of often undesirable behavioural changes. He will become territorial and start to mark areas, often in the house, by spraying urine, which will by now have developed a particularly strong (and difficult to remove) odour. He will start to enlarge his territory by straying ever farther from the house, particularly at night. It is for this reason that many cats involved in road traffic accidents are non-neutered males. By increasing his territory he will come into contact with other cats and so fight for dominance. Inflicted fight wounds can result in severe infections and abscesses. Since diseases such as FIV and FeLV - which can cause AIDS like syndromes and cancers in cats, can be spread through bites it comes as no surprise to find that those cats most commonly affected by such incurable viruses are non-neutered tomcats. Finally, but not least, neutering prevents the siring of often unwanted litters.

*The longer a tomcat is left to spray and fight, the less likely neutering will stop it.*

#### ***Females***

Neutering, or spaying, in female cats also offers several advantages. Most obviously, it will prevent the prospect of unplanned litters. Once puberty is reached, on average at around 7 months old, the queen will be "calling" for approximately 1 week in every 2-3 weeks during most of the year until she is mated. During calling she may display unsociable behaviour, which is often manifest as loud and persistent crying, and frequent rubbing and rolling on the floor. Such behaviour and her scent will attract pestering tomcats from miles around. This will all be eliminated by neutering. Finally, spaying will remove the risk of uterine infection, and may reduce the future risk of breast cancer developing.

*There is no medical reason for letting your cat have a litter before she is neutered.*

### **When should I have my cat neutered?**

In most cases, for the reasons stated above, it is desirable to neuter before puberty, and it is customary to operate on kittens at an early age. The actual

age chosen will depend upon the preference of your veterinary surgeon - many individuals will neuter both male and female cats at around 5-6 months old, however some operate at 2-3 months of age. Cats can be neutered at any age. It is possible to neuter when pregnant. Please contact the surgery for further details regarding our neutering policy.

**What does the operation involve?**

Both male and female cats will have to undergo a general anaesthetic. This will involve a period of starvation (usually overnight) before the operation, however most animals can return home on the day of surgery, providing they have fully recovered from the anaesthetic.

In male cats both of the testes are removed in their entirety through a small incision in the scrotum. Stitches are rarely required in the skin.

In female cats the operation is performed through a relatively small incision made either in the flank, or in the midline of the abdomen. Both ovaries are always removed along with the entire or majority of the uterus. Normally, skin stitches will be placed, which will be removed after around 10 days, unless absorbable material has been used.

**What surgical complications could arise?**

In general, complications are rare during neutering of kittens, however, as with all surgical procedures, there is always a small risk: -

<p>Anaesthetic collapse</p>	<p>It is possible that <b>any</b> individual animal could have an untoward reaction following the administration of a drug. Such cases are impossible to predict, but are thankfully rare.</p> <p>One potential danger arises from the cat not being starved correctly before being presented for anaesthesia. It is essential that all instructions to this effect are strictly followed.</p> <p>In addition, <b>any</b> signs of ill health should be reported to your veterinary surgeon prior to an operation.</p>
<p>Internal haemorrhage</p>	<p>This can occur through a ligature slipping after the abdomen has been closed.</p>
<p>Post-operative infection</p>	<p>This may occur internally or around the</p>

	incision wound. In most cases the infection can be controlled with antibiotics.
Sinus formation	Although rare, occasionally the body will react to certain types of suture material used during surgery. This results in a weeping wound which may even appear some weeks after surgery was performed. Often a further operation is required to remove the offending material.

**What adverse affects might neutering have on my cat?**

In the vast majority of cases no adverse affects are noted following neutering. However, some neutered animals have a tendency to put on excess weight by storing surplus fat. Such pets require a balanced diet and should not be over-fed.

In certain cats, notably Siamese, the hair that grows back over an operation site may be noticeably darker, due to a difference in the skin temperature. This darker patch may grow out with the following moult as the hair is replaced.

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## ***A message from the Practice Team***

Veterinary Medicine has, in recent years, become increasingly sophisticated. We are able to diagnose and treat many conditions that a few years ago would have remained undetected with often-fatal consequences, especially for older pets. The down side of these advances is cost. Cases, especially where a referral for 'consultant' treatment is made, can cost over £5,000.

One of the most distressing situations we find ourselves in is where a pet's problem is curable but (understandably in some cases) the cost is too high for the owner and the animal has to be put to sleep. A less serious situation is when the owner has to opt for the less than best treatment available for the pet, owing to money constraints.

That's where pet insurance comes in as veterinary fee cover can help you to avoid such situations, but when choosing an insurance company, there are a few things you should look out for: -

- ❖ Be careful to check that the amount of veterinary fee cover is adequate; over time a single illness can cost many hundreds or thousands of pounds.
- ❖ Check that there is no limit on how long you can claim for each illness; chronic conditions can go on for life, not just 12 or 24 months.
- ❖ Check that your pet will still be covered in later years when he or she needs it most and the premium in those years will still represent good value.

What won't be covered: Like your household and car insurance, pet insurance also has a small excess, which you will have to pay on each claim. Vaccinations and routine treatment such as neutering and worming are also excluded.

Pensioner and multi-pet discounts: Some insurers offer special discounts, pensioners and pet owners with several pets can make big savings.

Like the British Small Animal Veterinary Association, this practice endorses the concept of pet insurance and we thoroughly recommend it to our clients. Our only interest is to ensure that we never have to compromise the quality of veterinary care on the basis of cost.

Please feel free to ask one of the Practice Team.