

CAT AND KITTEN SUPPLEMENT

Kitten Development and What You Can Do.....	1-3
Weaning and Feeding Kittens.....	3-4
Birth Process and Possible Complications.....	4-6
How to Sex a Cat.....	6
How to Trim a Cat's Nails.....	7-8

Kitten Development and What You Can Do

A great amount of time and effort is required to properly socialize kittens between the ages of 4-12 weeks. Daily socialization sessions are important in shaping the kitten's future personality and emotional growth.

Combine simple play with restraint exercises. This familiarizes a kitten to having its paws touched (front and back), mouth opened and ears touched. Combining this with regular grooming sessions and body massages helps prevent skin sensitivity or aversion to touch. Acquaint kittens to different sights, sounds and textures.

Neonates

Neonatal kittens should be pink, firm, plump and generally healthy in appearance.

Temperature - Normal rectal temperature for newborns is 96-97 F.

Eyes and Ears – Closed, but can still hear (poorly) and respond to bright light with a blink reflex.

Muscles – Healthy kittens will curl their bodies and limbs inward.

1 to 2 weeks

Temperature – Normal rectal temperature has gradually increased to 100 F.

Eyes and ears – Open at approximately 11-15 days.

Muscles – Kittens can use their front legs to stand and walk shakily.

What you can do – You can engage in gentle handling and cuddling at this point. These sessions should be very short (1-2 minutes) and great care should be taken in the handling process.

- 1) Rub the hair coat gently with your hands, and gently finger the webbing in between the toes. Rub ears and muzzle.
- 2) Invert the kitten so it is facing the ceiling and gently rock back and forth, up and down.

2 to 3 weeks

Vision – Poor even after the eyes open, but continues to develop until 3-4 weeks of age. If the eyes fail to open and the lids look sticky, the lids should be very gently wiped with dampened cotton and a little eye ointment (you can get this from the shelter) smeared on them to ease their opening.

The eyelids should never be pulled apart.

If the eyelids still haven't opened by 14 days, contact the shelter.

Muscles – The rear legs can now support the body. Kittens are crawling.

Temperature – Able to maintain their own body temperature within the normal range (100.5-102.5 F).

Teeth – Deciduous incisors erupt, followed by deciduous canines.

What you can do – Be careful not to startle the kitten with sudden movements or loud sounds. The

living area should have 2 areas, one for sleeping and the other for a litter box (away from the sleeping and feeding area). Provide 5 minutes of handling exercises; the purpose is to stimulate the kitten, not to alarm it:

- 1) Gently roll the kitten over on its back for 5-10 seconds and then draw it close to you, stroking and cuddling it.
- 2) Grooming – Softly and gently brush the kitten’s coat a few strokes, touch the ears and mouth and clip nails (pages 7-8).

3 to 4 weeks

Muscles – By 21 days, kittens can walk with a fairly steady gait. Kittens can sit and have reasonable control of toes.

Eyes and Ears – Vision and hearing normal. Blink response disappears due to the development of accurate pupil control. The infant is now able to use visual clues to locate and approach the mother. Ears should be completely open by 17 days.

Teeth – Deciduous incisors and canine teeth erupt.

What you can do – Do not permanently remove the kitten from its mother or littermates at this time. It is critical to the kitten’s development that it continues with this social interaction.

- 1) It is important to provide a stable home environment to balance the excess stimulation a kitten is experiencing. This would not be a good time to move the queening box.
- 2) The kittens will start to investigate their immediate environment. Safe, simple toys can be added for them to discover at this time.
- 3) The kittens can be introduced to other people at this time, but this interaction should be carefully controlled. The interaction should be limited to 5 minutes of time spent in gentle massage and cuddling.
- 4) The main caregiver should continue grooming and handling exercises: holding, cuddling and stroking the kitten’s body, including ears, tails and muzzle.

4 to 5 weeks

Teeth – Deciduous premolars erupt.

Muscular – Kittens are walking normally. They are climbing. Social play is prevalent.

Eyes and ears – Guided paw placing and obstacle avoidance develop between 3 to 5 weeks. Vision is markedly improved.

What You Can Do – Continue handling and socialization procedures.

5 to 8 weeks

Teeth – Entire set of deciduous teeth by 5 weeks.

Temperature – Normal range is 100.5-102.5 F.

Play – Play with objects and locomotor play rise markedly around 7-8 weeks of age.

What you can do – The kitten is totally dependent on the environment you provide to stimulate and develop it. Introduce the kitten to as many different people as possible – people of different shapes, sizes, colors, sexes and ages. Encourage the kitten to allow individual handling by different people: men, women and supervised children.

- 1) Introduce the kitten to other animals. Supervise the visits (about 5 minutes). These visits should be calm and pleasant. A traumatic incident at this stage could have a lasting effect.
- 2) Continue to add appropriate toys to the kitten’s environment.
- 3) Expose the kitten to mild sounds.
- 4) Expose the kitten to different areas and surfaces, allowing it to investigate.
- 5) The main caregiver should continue handling and grooming exercise

8 weeks plus

Teeth – Change from milk teeth to adult teeth starts at about 3 ½ months.

Sexual Maturity – Female cats become sexually mature between 4-12 months of age. Male cats become sexually mature around 7-10 months.

What you can do – Protect the kitten from experiences that could have a lasting negative effect.

- 1) Introductions to people are extremely important as the kitten develops the ability to form permanent relationships with humans at this time. Supervise the visits, but expose the kitten to as many different types of people as possible.
- 2) The kitten's environment should develop a sense of security.
- 3) Introduce the kitten to a carrier.
- 4) Introduce the kitten to louder noises gradually, such as a vacuum cleaner, washing machine and/or dishwasher. Play with the kitten as you introduce the noise in the background. Encourage kittens to explore, sniff and lick these noisemakers. Exposing kittens to a variety of unusual sounds helps them become accustomed to these noises. It will also minimize fearful, nervous reactions to noises later in life.

Only praise a kitten for positive reactions. Do not punish a kitten by forcing it to approach a scary situation and do not comfort it if it shows fear.

Adolescent – 13-16 weeks

General behavior – The kitten is fully developed, needing only experience. The kitten's mind can still be influenced. The kitten's flight instinct is developing and this may cause it to run from real or imagined threats.

What you can do – Be consistent with rules, continue grooming and socialization.

Weaning and Feeding Kittens

Generally, it is best to start weaning kittens at 3-5 weeks of age. Weaning should be a gradual process. If you are lucky enough to have the mother with her kittens, she will take care of the weaning process herself. You will want to be sure you are supplying enough food for the nursing mom as well as the weaning kittens.

How to Wean

Begin introducing 3- 5 week old kittens to semi-solid gruel, made from 1 part canned food to 3 parts hot water or kitten milk replacement formula. Make sure to serve the food at body temperature, (98-100 F.) Offer this mixture 3-4 times daily. Remove the gruel after about 15 minutes and discard.

Introducing Food

Dip your finger into the gruel and let the kitten lick at it, or smear a small amount on the kitten's lips. Be careful not to get any of the gruel in the kitten's nose. You may also touch a finger into the gruel and then place the finger into the kitten's mouth.

At around 5 weeks of age, the kittens should be reducing their intake of mother's milk. Once they are consistently eating the gruel, gradually decrease the amount of water used. Always provide plenty of fresh water in clean bowls.

All changes in amounts and consistency of food should be made gradually for healthy digestion.

Always provide plenty of fresh water in clean bowls. **Never give cow's milk.**

Some kittens take longer to wean than others. It is important to always watch the litter to ensure that each individual is eating healthy amounts of food. Check tummies for fullness after each meal.

3-6 weeks – Gruel 3 times a day. Dry food always available.

6-8 weeks – Canned food 2 times a day. Dry food always available.

Helping the Mother's Milk Supply Dry Up

The mom's milk can be "dried up" by withholding food for 24 hours, then adding it back slowly, increasing it by 25% each day for four days. Many moms will dry up as they wean their kittens. It will vary with each individual cat.

We cannot place lactating moms up for adoption since they cannot be spayed until the milk is gone. When the shelter is full, this can create space issues. It is helpful if the mothers return to the shelter with their milk supply dry. Another option is to return the infants at their scheduled time and to keep the mom at your home for another 1-2 weeks as her milk dries up.

Mastitis

Mastitis is an inflammation of one or more of the mother cat's mammary glands. Mastitis usually occurs within 6 weeks after giving birth, if it is going to occur at all. Symptoms of mastitis include fever, listlessness, loss of appetite and neglect of the young. Affected mammary glands are usually swollen, hot and painful to the touch. You can feel firm nodules within the tissue of the teat. The cause is often from a bacterial infection in the mammary gland and may require antibiotic treatment. If the cat will tolerate it, place damp, warm towels over the affected glands to encourage drainage.

Birth Process and Possible Complications

Impending Birth

As your mom (called a "queen") nears her time for giving birth, she will exhibit a few signs that will give you clues to the impending arrival of kittens. The first stage of labor lasts from 12-24 hours, and may include the following symptoms:

- **Nesting** – She may start snooping around in closets and secluded areas for an appropriate place to bear her kittens. The time is ripe for you to prepare an area for her in a private place, with a box or basket lined with soft towels. She may decide instead to give birth on the cold, hard floor of your bathroom, but at least you have tried to accommodate her needs.
- **Increased affection** – She may suddenly become very loving and want to be near you at all times. Don't be surprised though, if a previously affectionate cat becomes withdrawn and seeks solitude. Either personality change may be completely normal.
- **Decreased Activity** – Mom may decide she'd rather sleep most of the time. She may also lose interest in food.
- **Soft Stools** – Mom's stools may become soft or loose a day or two before she's ready to give birth.
- **Milk Discharge from Nipples** – Your cat's nipples will have become enlarged and pink about the third week of pregnancy; 24 hours or so before birth, she may show a milky discharge. This discharge may come even earlier in cats that have given birth several times.
- **Drop in Temperature** – The normal temperature in cats is between 100.4 F-102.5 F. A dramatic drop in her rectal temperature is a sure indicator that birth is imminent.

The Birth Process

During the birth process, rhythmic uterine contractions gradually increase to push the fetus out of the uterus and into the birth canal. The kittens are born one at a time. The placenta is usually expelled at the same time as the kitten, or within 24 hours after birth. The kittens are born within their amniotic sacs, which the mom will remove. If she ignores the kitten and it is still in its sac, it will be up to you to assist (details in next section). It is a good practice to count the placentas to make sure all are expelled. If a placenta is retained, veterinary intervention is needed.

The mother cat will stimulate the kittens to breathe by washing them with her rough tongue. She will also sever the umbilical cord by chewing on it approximately one inch from the kitten's body. At this time, she may eat the placenta. The kittens will immediately gravitate toward a nipple, latch on, and commence to nurse.

There is often a 10-60 minute delay between births, although longer periods of time are not uncommon. If there is a delay of over four hours and you are sure there are remaining kittens, the mom should be examined by a veterinarian.

Potential Problems

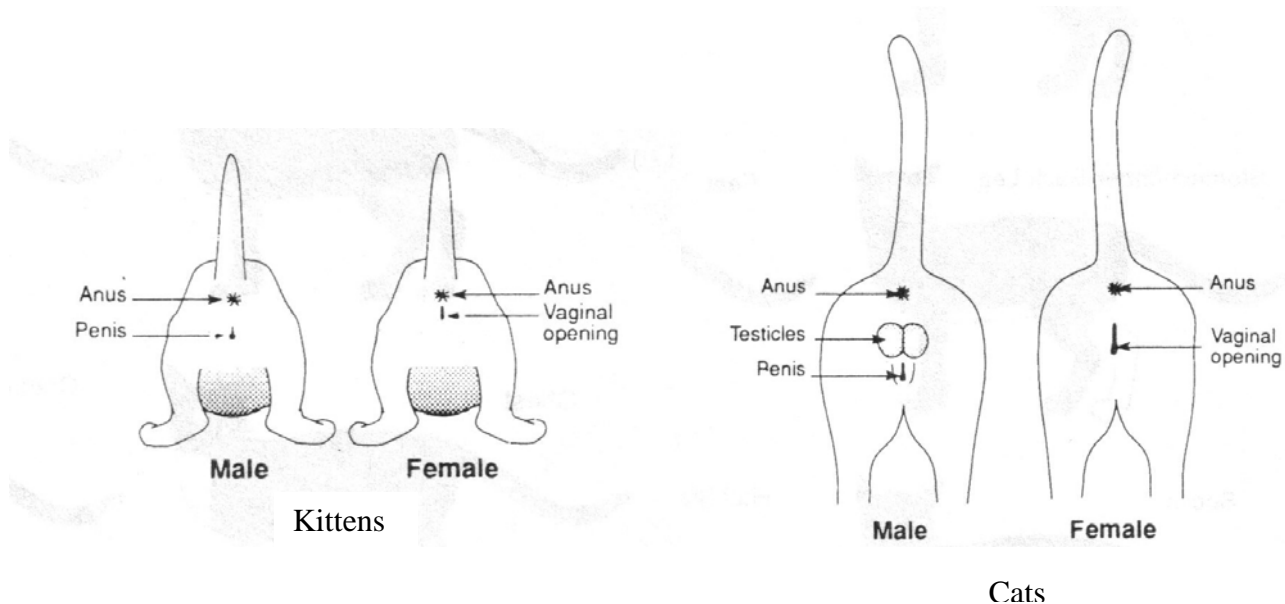
Cats may sometimes be prone to certain problems, either during pregnancy or after parturition. The following are a few conditions to be aware of, so that you can spot the symptoms if they should occur and take proper action. For any actions that require veterinary assistance, please contact the shelter first to determine when and where to take the cat(s).

- **Spontaneous Abortion** – There is not much that can be done, but a veterinary check is necessary to ensure that any remaining fetuses are still alive or that all the kittens and placentas have been expelled from the uterus.
- **Stillborn Kittens** – Sadly, this sometimes happens. All you can do is to remove the baby from the area so the mother can continue uninterrupted with birthing the other kittens. (Don't forget the placenta.)
- **Difficulty in Birthing** – If part of a kitten presents itself out of the vaginal opening, but nothing else happens, you may have to assist with the birth. As she contracts, gently tear/remove the sac from the head or feet, and then gently grasp the head or feet, using a downward direction (toward the mom's feet) and apply gentle traction to retrieve the kitten at the same exact time the mom experiences a contraction. If after two or three contractions and your attempt to manually retrieve the kitten does not produce results, immediately contact your vet because this probably means that the kitten is physically lodged in the birth canal. Further or repeated attempts could damage the kitten or cause the mother extreme pain and distress, so contact your vet immediately and be prepared to take the mom (and any born kittens with her) to the vet immediately for assistance.
- **Kitten Stuck in Amniotic Sac** – Gently using your fingers, tear at the sac above kitten's nose and mouth to allow air and gently rub the kitten along her backside to stimulate circulation. This must be performed continuously until the kitten is responsive and starts to move or cry out. If you are confident that a kitten is breathing but his attachment to the placenta is still intact, tie the umbilical cord off tightly with a piece of thread or dental floss. Place one knot about an inch from the kitten's abdomen and a second one just a little bit beyond. Sever the cord between the two. Do not tie the cord if it is thick or irregular in diameter. A loop of intestine may have herniated through the abdominal wall and may still be inside the umbilical cord. If you're not sure, call your veterinarian rather than make a serious misjudgment.

- **Unresponsive Kitten** – If after removal of the sac and stimulation the kitten is still not breathing, you can cradle the kitten in your hand, using your first two fingers to gently cradle the head and your other hand to securely but gently cradle her body (she should be laying upside down with her belly-side up). Next, perform a downward swing motion (as if you are shoveling), this allows for fluid to clear the lungs and kitten should gasp for air as you perform this motion. It may be necessary to perform this procedure a few times until you hear the kitten gasp or show signs of movement. Make sure that her nose and mouth are clear of mucous or fluid as it appears by gently wiping it away with a cotton ball or soft gauze pad. Remember, these methods must be performed GENTLY, but with enough gentle force to stimulate breathing and circulation. The kitten’s mouth, gums and tongue should “pink” up. Once kitten is responsive, immediately place her next to her mother for warmth and she will take over.
- **Tangled Umbilical Cord** – Occasionally the kittens come so fast mom can’t keep up with severing the umbilical cords and the kittens become entangled. If this occurs, tie the umbilical cord off tightly with a piece of thread or dental floss. Place one knot about an inch from the kitten's abdomen and a second one just a little bit beyond. Sever the cord between the two. Do not tie the cord if it is thick or irregular in diameter. A loop of intestine may have herniated through the abdominal wall and may still be inside the umbilical cord. If you're not sure, call your veterinarian rather than make a serious misjudgment.
- **Postpartum Hemorrhaging** – Although some bleeding after giving birth is normal, excessive hemorrhaging is an emergency and calls for veterinary intervention.
- **Purulent Discharge** – A foul-smelling discharge from the vagina or the mammary glands signifies the need for a veterinary visit.
- **Eclampsia** – This is relatively rare in cats, and occurs either late in pregnancy or, more commonly, within the first three weeks after delivery. It is thought to involve calcium loss in the mom, either by lack of sufficient calcium in the diet, or poor utilization of the calcium present. Symptoms include restlessness, irritability, progressing to a stiff gait, poor coordination and/or vomiting. Eclampsia can be fatal if not treated in time.

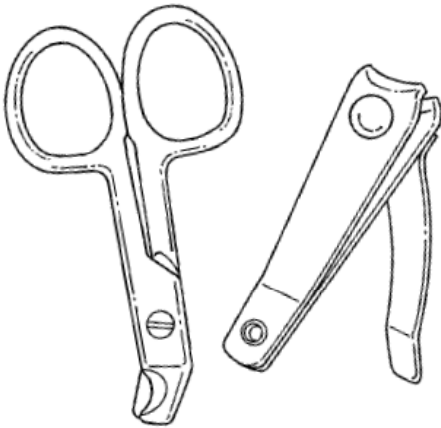
This is not a complete list of things that could go wrong, but the chances are that your pregnant cat will have a completely normal pregnancy and delivery.

How to Sex a Cat



How to Trim a Cat's Claws

Trimming a cat's claws every few weeks is a vital part of maintaining the animal's hygiene. Regular trimming not only protects the health of a cat's handlers, but also guarantees the well-being of adopters' couches and arm-chairs. But if the idea of trimming a cat's claws has you biting your nails, know that all it takes is some patience, a little help from a more experienced person, and plenty of practice to sharpen your skills.

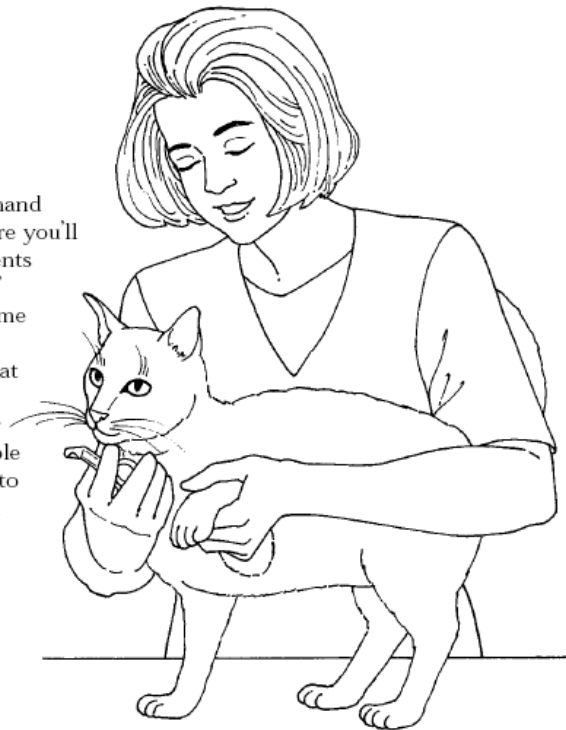


1: Stay On the Cutting Edge

There are plenty of tools available to trim a cat's claws; use whichever one works best for you and the animal. Some people prefer a special pair of scissors modified to hold a cat's claw in place, others prefer human nail clippers, and still others choose plier-like clippers or those with a sliding "guillotine" blade. Whatever your tool of choice, be sure the blade remains sharp; the blunt pressure from dull blades may hurt an animal and cause a nail to split or bleed.

2: Take Paws, Part I

If you approach a cat with a sharp object in one hand while trying to grab a paw with the other, odds are you'll come up empty-handed. Because cats' temperaments and dispositions vary greatly, there is no "perfect" way to handle a cat while trimming his claws. Some cats do well with no restraint at all, but most cats need to be held firmly but gently to make sure that no one gets hurt. Try resting the cat in the crook of one arm while holding one paw with the other hand. Or, place the animal on an examination table and lift one paw at a time. You may even be able to convince a particularly sociable cat to lay back in your lap.



Illustrations by Susie Dudoerth

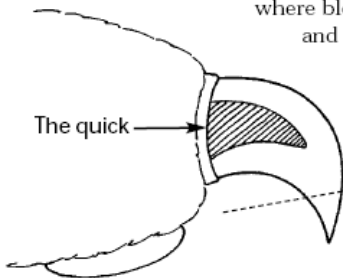
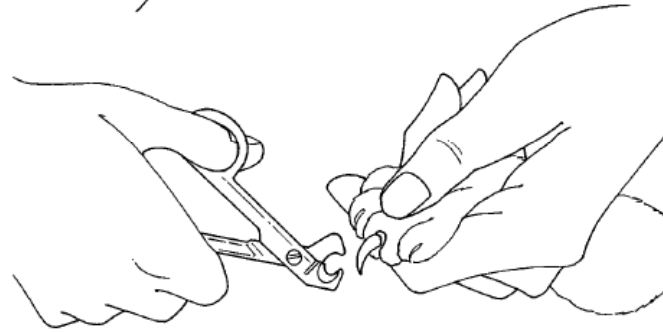


3: Take Paws, Part II

If you've got a helper, ask him to hold the cat while you clip the nails, or just ask him to rub the cat's nose or offer up a special treat. If you're having a difficult time trimming a cat's rear claws, try gently scruffing the cat and laying him on his side, then have someone else trim the claws.

4: Take a Little Off the Top

Now that you're in position and the cat's in position, put the claw in the right position, too. Take a paw in your hand, curl your fingers into a fist, and use your thumb to gently press down on the joint just above the claw. When the claw extends, quickly but carefully snip off the sharp tip and no more. Don't get too close to the pink part of the nail called "the quick," where blood vessels and nerve



endings lie. Just like the pink part of a human fingernail, the quick is very sensitive; cutting into this area will likely hurt the animal and cause bleeding. If this happens, apply a little pressure to the very tip of the claw (without squeezing the entire paw, which would only increase the blood flow) or dip the claw in a bit of styptic powder, then leave the cat alone, being sure to check on him occasionally.

Note: When working with a long-haired cat, be sure the fur is clear of the clippers or you may pull the animal's fur, hurting the cat and hurting your chances of ever trimming his nails again.

5: Take it One at a Time

If you aren't able to trim all 20 nails at once, don't worry. Few cats remain patient for more than a few minutes, so take what you can get, praise the animal for cooperating, then be on the lookout for the next opportunity—maybe even a catnap—to cut things down to size.