

Determining Kitten Age

Feline Outreach, Rescue & Education

Weight alone is not an accurate indicator of age

- Baseline for healthy kittens
 - Newborn 3-4 ounces
 - One week 8 ounces
 - Four weeks 1 pound
 - Continuing gain of 4-6 ounces per week
- Prior to 2-3 weeks of age, other indicators are needed
 - Umbilical cord wet Less than 12 hours old
 - Umbilical cord dry At least one day, less than 5 days
 - Eyes open 7-10 days
 - Ears upright About 3 weeks
 - Tail up, walking About 4 weeks



Teeth are the most accurate indicator of age from 4 weeks to 6 months

- Teething Schedule
 - Deciduous or primary teeth all in by 8 weeks
 - Incisors 2-4 weeks
 - Canines 3-4 weeks
 - Premolars 5-7 weeks
 - Permanent all in by 6 months
 - Incisors 3-4 months
 - Canines 3.5-5 months
 - Premolars 4.5-6 months
 - Molars 5-6 months
- Eruption times vary and are affected by breed, nutrition and general health.



Kitten Feeding Chart

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Age in weeks	Weight	cc (ml) per day	Daily feedings
1	4 oz.	32 cc	6-8
2	7 oz.	56 cc	4-6
3	10 oz.	80 cc	3-4
4	13 oz. Kitten may start weaning	104 cc	3
5	1 pound	128 cc	3
6+	Should be eating solids, but may still nurse	variable	3

FYI: 15 cc = approx. 3 tsp. or ½ oz.

- Feedings should be tailored to each specific situation.
- “Daily” means feedings evenly spaced over entire 24 hour period.
- Avoid “homemade” formulas; only use over very short term until a quality kitten milk replacer can be obtained.
- Do NOT confuse “Cat Milk” with milk replacement or formula; it is meant as a treat or supplement for older cats and does not contain the nutrients necessary to support kittens.

Reasons Your Kitten May Not Nurse Well...and What to Do About It

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1. Kitten is dehydrated, hypothermic or hypoglycemic. Treat immediately before feeding.
2. Kitten is not hungry. This is especially true with new intakes of healthy kittens older than 2 weeks. If otherwise healthy, wait an hour and try again.
3. Formula/bottle/nipple are too cold or hot. Test the temperature on your wrist. It should feel slightly warm. Warm nipple as well as formula.
4. Formula doesn't taste good. Be sure the formula is fresh; <24 hours old, preferably <12 hours. Smell the powder in the can; should smell sweet, not rancid.
5. Nipple opening is not the right size. Use scissors or razor blade to cut. When held up-side-down, formula should drip out slowly with no pressure on bottle.
6. Kitten needs extra support. Feed in a prone position (on stomach) with head slightly raised. Place kitten on towels, warm rice sock, etc. Place fingers lightly on the cheeks and chin.
7. Bottle is too rigid. Kitten unable to suckle with enough force. Loosen the cap slightly to allow air in to replace the formula as kitten suckles. Tiny air bubbles should be visible rising in the bottle.
8. Kitten is not fully 'awake'. Very young kittens are more likely to nurse when 'asleep', but those >2 weeks old need to be 'awake'. Pet them, stimulate them before feeding.
9. Kitten needs to burp, defecate or urinate. Burp kittens after feeding and during 'feeding breaks'. Stimulate kittens in an upright position to urinate and/or defecate. Use soft toilet paper as it absorbs more than cotton balls.
10. Physical deformity (i.e. cleft palate) - hopefully noticed during intake exam. Depending on the situation, tube feeding may be an option until kitten is old enough for corrective surgery.
11. Illness, i.e. URI, Panleukopenia. Diagnosis and treatment ASAP. May need to tube or syringe feed.
12. Old enough to eat solids. Determine age of kitten and offer wet food. Some kittens skip wet food completely and go from the bottle to small, dry kibble, so offer both and plenty of clean water.
13. Kitten needs to learn what bottle is; squeeze just a tiny drop of formula onto tongue.



Additional Tips

- Use a warm, damp washcloth to imitate mother's licking to clean kitten several times a day – especially after feeding and around the mouth and anal areas.
- Weigh the kitten at least once daily and keep accurate records of weight, food intake times and amounts and elimination. Note also the color and consistency of urine and feces.
- Formula can be used as a vehicle for supplements like Nurti-Cal, L-lysine, Fort-Flora, etc. Do not put medications in the formula as the proper dose may not be consumed if the kitten doesn't eat well. Many medications will also negatively affect the taste of the formula making the kitten less willing to eat.
- Keep all supplies and the kitten's environment scrupulously clean.
- Feed a quality kitten milk replacer formula; do not feed 'Cat Milk' as it is intended only as a treat and does not have the nutrition or calories required for feeding kittens.

Poop Page

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Color	Notes	Action
Brown	Normal	No additional action needed
Mucous	Clear (possibly slight yellow or white) slimy substance. Bowel irritation. Possible parasites, coccidia, etc.	Needs attention
Bloody - red	Red blood seen in stool or irritation at rectum or anus. Bowel irritation. Viral or bacterial infection.	See vet ASAP – immediately if lots of blood
Black	Tarry; possibly with large gelatinous clots. Bleeding in upper GI tract. Exception is meconium which is very dark – possibly with greenish tinge.	See vet immediately if not meconium. Meconium is seen at 1 st defecation when kitten is 1 or 2 days old.
Orange	May indicate liver or gallbladder issue	See vet
Yellow	With a foul smell may indicate coccidia. Can be bacterial overgrowth/imbalance.	See vet
Greenish	Severe bacterial infection.	Needs treatment
Gray	Overfeeding; lack of probiotics.	Reduce food intake and/or frequency; add probiotics
White	Severe bacterial imbalance or lack of flora. Life-threatening!	Give probiotics and seek veterinary care immediately

Consistency Notes:

- Any stool softer than toothpaste consistency is cause for concern. Kittens with liquid diarrhea are at risk of dehydration and death. Seek treatment immediately.
- Kittens straining to defecate or who have not defecated for more than two days may be constipated and need to be seen by a veterinarian.

Constructing a Nebulizer

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Nebulizers provide an excellent, low-cost method of treating general URI's or pneumonia by directing moisture and/or medications directly into the lungs. You can build your own nebulizer for about \$50; less than the cost of one nebulizing treatment at a veterinary office. Please note, human nebulizers may also be configured for use with animals to vaporize medications directly. The nebulizer below uses distilled water vapor to deliver moisture and medications to the kittens.

You will need...

Humidifier: *COOL* mist humidifiers are available at most drug stores. Never use a warm mist humidifier as it can be dangerous for the kittens. The vapor opening needs to be of a size and shape that a funnel will cover and seal completely.

Funnel: Measure the diameter of the vapor vent on the humidifier to be sure the funnel will completely cover the opening. Plastic is best; larger ones can be found at hardware and automotive stores.

Tubing: Take your funnel with you when purchasing the tubing to make sure it will fit snugly on the end without adhesives; you will be removing the tubing to clean and sterilize. Buy 3-4 feet of flexible, reinforced tubing that will not crimp; available at home improvement stores.

Protection for work surface

Epoxy: Purchase water *PROOF*, not water resistant epoxy. This can be found at home improvement stores.

Disposable container and stick for mixing/spreading epoxy

Carrier and Cover: The nebulizer tubing will run into the carrier or plastic container to contain the mist. Putting the carrier in a plastic garbage bag left slightly open will cover it sufficiently without being airtight. You can also use toweling to drape over the openings. If using a plastic container, cut a hole the size of the tubing and use the lid. Drill or cut several additional holes to allow for adequate air.

Putting it all together

1. Cover your work area to protect from any dropped epoxy. Be sure all items are clean; wash with warm soapy water, rinse and dry well.
2. Fit the funnel upside down over the vapor opening and draw around the edge. Remove the funnel. Mix the epoxy according to package directions.
3. Using the stir stick, apply the epoxy around the circle you marked as a reference. Apply it thickly enough so the funnel will sink into it and seal well. Allow the epoxy to dry for 24 hours.
4. Decide where you will be placing the carrier and nebulizer and cut the tubing the desired length. Press one end of the tubing over the funnel; place the other end in the carrier.



Using the Nebulizer

NOTE: Before nebulizing any animals, allow the nebulizer to run (filled with distilled water) for 10 minutes in order to rinse away any possible leftover fumes or contaminants from construction. Medications used with this type of nebulizer are added to distilled water. The water vapor provides moisture and carries the medications into the kitten's lungs.

1. Fill the nebulizer with 'nebulizer solution'. There are many possible mixes for this. The most effective ones include prescription medications available from your veterinarian. Talk with your rescue group coordinator or veterinarian about prescriptions available to you. Be cautious about human vaporizer products and check with your veterinarian about which may be safe to use with kittens. Even if medications are not available to you, nebulizing with plain, distilled water can still be helpful.
2. First place a warming device such as a Snuggle Safe, rice sock or warm water bottle, wrapped in toweling, in the carrier.
3. Clear away as much of the kitten's nasal discharge as possible, then place him/her in a small carrier or other container; place the carrier in an open plastic trash bag or cover with a heavy towel.
4. Insert the hose end into the carrier between the door wires; choose an area where the wires may be close enough together to hold the hose in place. For other containers, place the hose through the circular hole previously cut into one of the sides toward the top. The tube should fit as snugly as possible into the hole. Be sure you also have an additional hole cut out for extra air.
5. Turn on the nebulizer and wait a moment to check the air flow; you will see the mist. Set the mist outflow on the lowest setting so there is just enough mist to see. The kitten should remain as dry and warm as possible.
6. Once the air/mist flow is appropriate, drape another towel over the door of the carrier.
7. The amount of time for nebulizing will depend on the condition of the animal and ranges from 5 minutes to 30 minutes, 1x/day to 'as needed'. Until you become more experienced with the effects of nebulizing, consult your veterinarian to decide upon the amount of treatment.
8. Remove the kitten, gently wipe its nose to remove any nasal discharge and dry its fur to remove the excess moisture.
9. Immediately after nebulizing it is often useful to perform 'coupage' on the animal. This is simply a gentle, yet firm, thumping on the rib cage area directly behind the elbows. This vibration often helps to loosen mucus which may be in the lungs. A few minutes of this is usually enough; the kitten may or may not cough during this time.

NOTE:

*If there are multiple kittens in the same litter, they can all be nebulized together.

*If there is more than one litter needing nebulization, use a different carrier, towel coverings and hose to avoid cross contamination between animals.

Cleaning the Nebulizer

- After the kitten(s) are done with all of the nebulizing, usually 7-10 days, remove the hose from the funnel and soak it in a mild bleach solution for 10 minutes. Rinse well, several times, to be sure that no bleach remains. Let dry completely and store in a sealed bag or box.
- Empty all remaining liquid from the nebulizer reservoir and rinse well with water several times. You may want to do this with distilled water to prevent mineral build up. Be sure to rinse the filter, too.
- Let the reservoir and filter dry completely before replacing the tank cap, cover the funnel opening to prevent contaminants from drifting into the nebulizer; a piece of plastic wrap works well. Store for future use.
- Change the filter according to manufacturer's suggestions or more often if needed.