



Adult Cat

NUTRITION FOR PREGNANT AND LACTATING CATS AND THEIR NURSING KITTENS

Female cats (queens) need optimal nutrition to successfully conceive, deliver and wean healthy kittens.



Queens that are under- or overweight may fail to become pregnant, have small litters, experience difficult parturition, or produce less milk during lactation, which may negatively impact kitten health and growth.

Although the nutritional requirements of queens during estrus are the same as adult maintenance needs, pregnancy and lactation are associated with specific nutritional requirements that can affect queen and kitten health.

Key Messages

BREEDING QUEENS

What and how to feed prior to breeding and during estrus and mating

- Queens should be in ideal body condition (body condition score [BCS] 5/9) **prior to mating** for optimal conception, appropriate kitten birth weight and reduced kitten mortality.
- Queens may be switched to a highly digestible, high-quality, nutritionally complete and balanced food designed for growth or pregnancy and nursing (e.g., kitten or all life stages formula) at or before breeding.
- Changing food prior to breeding helps:
 - Avoid digestive upset or reduced food intake during the critical time of egg fertilization (conception) and embryo implantation in the lining of the uterus
 - Improve any marginal nutrient stores that could negatively affect conception rate and fetus survival during early gestation
 - Increase energy intake

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Key Messages (continued)

- When changing foods, gradually introduce the new diet over 7 days to minimize digestive upset.
- Food intake should be monitored to avoid excessive calorie intake during this early stage.

What and how to feed pregnant cats

- Healthy queens typically gain weight steadily throughout their 63- to 65-day pregnancy, or gestation, which is different from dogs.
- Food intake may fluctuate slightly throughout gestation due to changes in pregnancy-related hormones. However, by the time kittens are about to be born, a queen should be consuming 25% to 50% more calories than she would at maintenance.
- Feeding a high-quality, complete and balanced formula suitable for growth and reproduction (e.g., kitten or all life stages formula) will supply all the necessary nutrients with no supplementation required.
- Feeding several meals daily or free choice during the final trimester will help ensure a queen is receiving enough nutrition despite increasingly limited abdominal space for food and digestion.

What and how to feed nursing queens

- Lactation is the most nutritionally demanding life stage, with calorie (energy) and nutrient requirements higher than for growth.
- Lactating cats require a highly digestible, energy- and nutrient-rich diet (e.g., kitten or all life stages formula) to help meet the demands of milk production, which peaks about 3 to 4 weeks postpartum.
- Nursing queens also require adequate water intake to support milk production, so they should have easy access to fresh, clean water. Feeding wet food also may help increase water intake.
- Feeding several times per day or free choice during the first 3 to 4 weeks after queening helps meet the higher energy demands of lactation.
 - Even with increased calorie intake, queens will continue to lose weight during lactation and should return to their pre-mating weight by weaning.
 - Milk production will begin to decline as kittens start eating semi-solid and solid food.

What and how to feed queens at and after weaning

- Queens naturally begin the weaning process when kittens are about 5 to 8 weeks old.
- Feeding a limited amount of food to the queen for 1 to 2 days before and during weaning can help decrease milk production.
- On the day before weaning, the queen and kittens should be separated. While all food should be withheld from the queen to help slow milk production, fresh water should still be provided. The queen and kittens are reunited that night, and the kittens allowed to nurse.
- On weaning day, permanently separate the queen from the kittens.
- Feed the queen about 25% of the amount and type of food fed prior to breeding on weaning day. Then, over the next 3 days, gradually increase the amount of food fed so that the queen is receiving 100% of her prebreeding maintenance level.

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Key Messages (continued)

KITTENS

Feeding nursing and weaning kittens

- All kittens should nurse soon after birth and within the first 6 to 8 hours to ensure transfer of antibodies present in colostrum, the first "milk" produced during lactation.
- Queen's milk is a complete food for nursing kittens, providing all the nutrients kittens need for rapid growth during the first few weeks of life.
- Kittens can be introduced to semi-solid food (i.e., gruel made of 1 part dry food and 2 parts warm water) when they are about 3 weeks old. Use the same food that the queen is eating.
 - Eating semi-solid food is a natural and gradual process, it is part of the nursing phase and begins the weaning process.
 - When kittens are 5 to 6 weeks old, the food:water ratio of the gruel can be reduced to about 2 parts dry food:1 part water.
- Weaning typically is completed when kittens reach 6 to 9 weeks of age.

Additional Resources

Case, L. P., Daristotle, L., Hayek, M. G., & Raasch, M. F. (2011). *Canine and feline nutrition: A resource for companion animal professionals* (3rd ed.). Mosby Elsevier.

Gross, K. L., Becvarova, I., & Debraekeleer, J. (2010). Feeding reproducing cats. In M. S. Hand, C. D. Thatcher, R. L. Remillard, P. Roudebush, & B. J. Novotny (Eds.), *Small Animal Clinical Nutrition* (5th ed., pp. 401–413). Mark Morris Institute.

Gross, K. L., Becvarova, I., & Debraekeleer, J. (2010). Feeding nursing and orphaned kittens from birth to weaning. In M. S. Hand, C. D. Thatcher, R. L. Remillard, P. Roudebush, & B. J. Novotny (Eds.), *Small Animal Clinical Nutrition* (5th ed., pp. 415–427). Mark Morris Institute.

Loveridge, G. G. (1985). Body weight changes and energy intake of cats during gestation and lactation. *Animal Technology: Journal of the Institute of Animal Technicians*, 37(1), 7–15.

Wichert, B., Schade, L., Gebert, S., Bucher, B., Zottmaier, B., Wenk, C., & Wanner, M. (2009). Energy and protein needs of cats for maintenance, gestation and lactation. *Journal of Feline Medicine and Surgery*, 11(10), 808–815. doi: 10.1016/j.jfms.2009.02.006

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