

Popular Article

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Management of Pups

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Initial care after birth

- ✓ Establish a clear airway and stimulate respiration by removing the surrounding fetal membrane and clearing the mouth and nose of fetal fluid using a dry towel.
- ✓ Gentle compression of the of the chest usually results in the establishment of respiratory effort. Respiratory stimulation should be continued by rubbing the thorax.
- ✓ The umbilicus should be cut approximately **3 cm** from the fetal abdomen. The cord dries up on its own in a few days and the scab drop itself in about a week or a maximum of 10 days. Excessive bleeding can be prevented by the application of a ligature (tying off)
- ✓ Thermoregulation is poorly developed in young infants and they are unable to produce body heat to warm up. The recommended temperature is 77-86° F for the first few days.
- ✓ The puppies must always be housed in a warm, dark, and quiet place. Puppies under the age of 3 weeks can be housed in a cardboard box (2-3 feet in length and breadth, at least 11/2 foot high). Puppies of the same litter should be housed together.
- ✓ Encourage the puppy to suckle. Suckling normally occurs immediately after birth and at intervals of 2 to 3 hours for the first few days. It is important that puppies suck adequately during the first 24 hours of life to ensure absorption of maternal antibodies from the colostrum.

After Care

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✓ During the first few weeks of life, a puppy's primary activities are feeding, keeping warm, and developing social skills.



- ✓ A bitch milk provides everything the pups need during their first four weeks of life. Puppies generally nurse at least every **two hours** in their first week of life. As they develop and grow, the intervals between feedings increases.
- ✓ At around four weeks of age, puppies can begin to transition from nursing to eating solid food. When making the transition to solid food, a high-quality dry puppy kibble can be soaked in warm water or milk replacer and blended to the consistency of gruel. This can be made available several times a day.
- ✓ Gradually, the amount of milk replacer can be decreased until the puppies are eating dry kibble by about 7 to 8 weeks of age.
- ✓ The average birth weight of puppies depends on its breed. During the first weeks of life, a pup's body weight may double or even triple. Gaining 10-15 percent of birth weight daily is considered healthy.
- ✓ Neonatal pips are unable to stand at birth but they should be quite mobile, using their limbs to crawl. Standing may be seen from **10 days** after the birth and most puppies should be able to walk at 3 weeks of age.
- ✓ Pups are born with their eyes closed. Separation of the upper and lower lids and opening of the eyes occurs approximately **10-14 days** after birth. The cornea at this stage may appear slightly cloudy but this will disappear over the first 4 weeks.
- ✓ During their first few weeks of life, puppies are unable to urinate and defecate on their own. Bitch instinctively stimulate their babies to excrete waste through licking. If you are raising Puppies without a mother dog, dip a soft washcloth or a piece of gauze in warm water and gently massage the anal and urinary regions after feeding. The warmth, texture and movement mimic a mother dog's tongue. Puppies begin excreting on their own at about 3-4 weeks of age.
- ✓ Puppies should not be overhandled during their first two weeks of life, and care should always be taken not to upset the mother dog when handling. If you are hand raising pups, handle them only as much as is necessary to keep them warm, clean for feeding for the first two weeks of life.
- ✓ Starting at three weeks of age, try to gently handle the puppies in short sessions a few times every day this is around the time their vision and hearing are kicking in and their teeth are beginning to develop and is considered an important time for socialization.
- ✓ Most veterinarians recommend that pups should receive their first round of standard vaccinations at six weeks of age.



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Deworming schedule

✓ Several different types of worms may be seen in dogs and puppies: roundworms, hookworms, tapeworms, whipworms, and coccidia. The puppies need to first be dewormed when they are **4 weeks** old and again when they are **6** weeks old.

Puppy nutrition

✓ Puppies have nutrient requirements that are different from those of adult dogs. A nutritionally complete and balanced diet specifically formulated for puppies must be fed until adulthood.

Water

✓ Puppies receive the water they need via the mother's milk prior to weaning and, after this time they should be given access to fresh drinking water in a suitable container appropriate for their size. If puppies do not receive an adequate water intake, they will show signs of dehydration such as neck skin that stays tented when gently pinched, lethargy or a dry mouth.

Protein and amino acids

- ✓ Protein provides amino acids which are the building blocks for growth. Puppies require significantly more protein than adult dogs and this is particularly important during the rapid growth phase i.e., up to 14 weeks of age.
- ✓ There are 10 essential amino acids for puppies which means they must be supplied in the diet because the puppy cannot synthesize them.

Lysine

✓ This is an amino acid used for the synthesis of protein so is vital during growth when new tissues are being generated. An insufficient dietary supply of lysine will result in poor growth and a reduced food intake. Too much lysine in the diet can cause signs of arginine deficiency muscle tremors and vomiting.

Tryptophan

✓ This amino acid is a precursor of niacin (vitamin B3) in dogs and is also required for the production of serotonin and melatonin which act to balance mood and sleep patterns.

Methionine

✓ Methionine the is often the **first limiting** amino acid in diet formulation. It is an important precursor for both cysteine and taurine and is involved in the production of



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the antioxidant molecule glutathione and carnitine A deficiency of methionine can lead to an immediate reduction in food intake, severe weight loss and skin problems.

Fat and fatty acids

- ✓ Fat is an important source of energy for fueling growth, as such, puppies have a higher daily fat requirement when compared to adult dogs to provide energy for this demanding life stage.
- ✓ Docosahexaenoic acid (DHA) and eicosatetraenoic acid (EPA) (omega-3 fatty a There is evidence that they are required for the normal development of the brain and nervous system of the puppy as it grows in the womb.

Linoleic acid (LA) and arachidonic acid (AA) (omega-6 fatty acids)

✓ Puppies need a supply of LA to develop and maintain a healthy skin and coat.

Vitamins:

Vitamin D

One of the major roles of vitamin D is in the formation of healthy bones. Too little vitamin D results in rickets, characterized by bowed and extremely painful limbs. Unlike humans. dogs cannot convert vitamin D to the active form using sunlight and are, therefore, reliant on their diet to provide this nutrient.

Vitamin A

Required for healthy vision, also involved in protein synthesis and is, therefore, critical for animals during growth. A deficiency of vitamin A in puppies has also been shown to result in deafness.

Weaning

Weaning is the gradual reduction of a puppy's dependency on his mother's milk and care. Weaning begins between 2 and 3 weeks of age and is ideally completed by about seven to eight weeks of age.

Number of meals per day

A young of puppy meals has per a day small stomach and is therefore it is essential to offer small meals frequently to ensure that they can meet their high calorie requirements. When introducing a new food to your puppy, blend it gradually with the existing diet in increasing amounts over at least 4 days until the new food replaces the old. This process should prevent food rejection and gastrointestinal upset.

Precautions to be taken with some foods

Raw meat: Raw meat is potential source of parasites and pathogenic bacteria for the puppies



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and as well as owner.

Table scraps: Table scraps are not nationally balanced. They should never be more than 10 percent of the diet.

Eggs: Eggs are an excellent source of protein. However, raw eggs contain an enzyme called **avidin**, which decreases the absorption of **biotin**. This can lead to skin and hair coat problems. Raw eggs may also contain Salmonella.

Milk: Some puppies cannot tolerate milk and, in these cases, it should be avoided.

Liver: Liver contains high biological value protein, fats, carbohydrates, minerals and vitamins. However, raw liver is a potential source of parasites and pathogenic bacteria. Overfeeding liver may also cause vitamin A toxicity.

Bones/Cowhide: Bones help to keep tartar from building up on dogs' teeth; however, the dangers of bone chewing are digestive upsets, intestinal blockages and perforations.

Chocolate, coffee, tea: Contain caffeine, theobromine, or theophylline, which can be toxic and affect the heart and nervous systems. Chocolate and candy should never be fed to puppies.

Onions, garlic, raisins and grapes are potential toxins if eaten in large quantity.