Hand Rearing Puppies

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The period from birth to weaning is the most hazardous time in any mammal’s life. This is particularly true in the life of a newborn puppy. Reports indicate that overall losses approach 30 percent during this time. Although deaths result from a variety of reasons, most of the problems in rearing puppies from birth to weaning age result from errors in either nutrition or management. The causes may stem from being deprived of the bitch’s care due to her death, failure of the bitch to lactate, her failure to accept her puppies, uterine or mammary infections, or having too large a litter to adequately care for.

Success in hand rearing the orphaned or deprived puppy can be a rewarding and enriching experience. One must first appreciate fully all the functions performed by the bitch which are necessary for the puppies’ existence. A reasonable reproduction of each must then be made.

The following basic principles must be followed closely for the first two to three weeks. In hand rearing puppies one must:

—Provide an adequate environment.
—Provide a nutritionally adequate formula and develop a satisfactory feeding program.
—Follow a rigorous daily routine.

Adequate Environment

The most underestimated point in hand rearing puppies is the importance of proper temperature control, isolation, and freedom from disturbance. When possible the bitch will build a warm nest sheltered from the elements and secluded from man and noise. This should be duplicated.

Newborn puppies have a poorly developed temperature-regulating mechanism and chill easily, especially during the first weeks of life. The temperature should be maintained between 85 and 90 F during the first five days with a reduction to 80 F at 7 to 10 days of life. The temperature may be further reduced to 75 F by the end of the fourth week. Regardless of the method used, it is important to maintain an even environmental temperature. Specially-designed brooders may be constructed using thermostats or small electric space heaters.

Separating puppies is desirable during the first two weeks of life because orphan puppies often suckle or disturb one another. Puppies should be left alone between feedings as much as possible because sleep is as important as nutrition.

Adequate Formula and Feeding Schedule

The statement, “The bitch not only supplies the perfect formula, but dispenses it in proper amounts, at the right time, uncontaminated, and at body temperature;” is an accurate one. The challenge in hand rearing puppies is to approximate those conditions. The selection of an adequate diet has been simplified in recent years with the development of good commercial bitch milk replacers such as Esbilac (Borden Co.). In an emergency, a temporary replacer made by combining 1 cup milk, 3 egg yolks (no albumin), 1 tablespoon corn oil, 1 drop high quality liquid vitamins, and a pinch of salt, can be used. The added ingredients to the milk are necessary in that bitch milk contains 21 percent solids compared to 12 percent in cows milk.

The commercial diets should be reconstituted and a homemade replacer should be blended thoroughly before being fed to the puppies. The food should be warmed to 95 to 100 F before feeding.

Feeding Methods

Feeding methods include spoon feeding, bottle feeding, dropper feeding, and tube feeding.

Spoon feeding and dropper feeding are essentially the same. Care must be taken when pouring the food into the puppy’s mouth so that it won’t be aspirated into the lungs. The puppy’s head must not be elevated when feeding by these methods. Dropper feeding is generally less messy than spoon feeding.

Bottle feeding is done with doll-sized bottles with high quality nipples. Some commercial kits are available with satisfactory bottles and nipples.

The most satisfactory, easiest, cleanest, and fastest method of feeding is the gastric intubation method. The only equipment needed is a no. 8 or 10 catheter and a plastic syringe (12 ml. size).

Place the tube alongside the puppy to estimate the distance to the stomach. As the puppy grows, the amount of tube inserted will need to be lengthened. Before inserting, fill the syringe and tube completely with formula eliminating all air. To facilitate passing the tube, moisten it with formula.

Hold the puppy horizontally with head slightly extended, but not raised. The tube will enter the esophagus easily in this position. Insert the tube gently—do not force. If the puppy struggles, withdraw and re-insert the tube. Once the tube is in the stomach, gently discharge the formula in the syringe, being careful not to inject it too quickly. The tube is then immediately withdrawn with the entire procedure taking less than two minutes.

Feeding only three times daily has proven sufficient, although a four-times daily schedule is also used. The important point in the schedule of feeding is regularity. If you choose a three-times-daily routine, adhere to feeding every eight hours, not 10 one time and six the next. The
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same is true with the four-times-daily feeding schedule—that is—be regular.

Follow a Rigorous Daily Routine

During approximately the first 18 days of life, the puppy relies almost entirely on instincts and reflexes which are stimulated by the bitch. Urination and defecation must be stimulated before and after feeding. This may be accomplished by a gentle massage of the abdomen with a piece of cotton dipped in water. The puppy should be awakened thoroughly before feeding by massage and stoking. This is also a form of passive exercise which stimulates muscle development and circulation.

The puppy should be free from fecal contamination and kept clean at all times. Often the skin and hair become extremely dry because of artificial heat. Occasional application of baby oil is then necessary.

Grooming is necessary, but should not be overdone. Remember, when a puppy is not eating it should be sleeping.

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If the puppy gains its first milk, colostrum, from the bitch, its immunity is like any other puppy’s. If, however, the puppy is deprived of the colostrum, a distemper vaccine should be administered after two weeks. Also, as with bitch-reared puppies, examination for intestinal parasites is necessary starting at two weeks of age.

Summary

Hand rearing puppies as outlined will result in puppies equivalent to those reared by the average bitch. This program is designed not to replace the bitch, but to be used as an emergency procedure.