

HAND-REARING ORPHAN PUPPIES

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Reasons For Hand-Rearing

Bitch milk should always be considered the “gold standard” for supplying optimal nutrition to the puppy. Unfortunately, there are occasions – the death of the mother, abandonment, refusal or simply the inability of the mother to care for her young – where pups must be reared on a milk alternative. In these cases, the breeder must step in and serve as a substitute for the bitch to ensure that the pup(s) receive adequate nutrition for growth and development.

Hand-rearing newborn puppies becomes necessary for many reasons. Puppies in the following categories should be hand-raised:

1. **Pup(s) weighing 30% less than littermates.** This requires a good scale for weighing: a small postal or food scale is sufficient.
2. **Pup(s) that are still losing weight 48 hours after birth.** It is normal for puppies to lose some weight the first day of life. After that, no weight loss should be ignored. Again, the small scale for weighing is important.
3. **Any pup that is crying or flaccid.** Some crying after birth is normal due to soreness from the birth process. This should stop in a few hours.
4. **Pups with a mother that is incapable of (or unwilling to) nurse.**
5. **The “Corner Pup”.** The breeder as well as the mother often discards the banished puppy. It is better to hand-raise this pup as its future might be glorious!

Mechanics of Hand-Rearing

Hand-rearing puppies requires extreme dedication by the breeder. However, the results can be very rewarding. Below is a list of supplies that all breeders should keep on hand in case the situation arises.

Equipment

- Several #5-French feeding tubes (these and the syringes can be obtained from your veterinarian)
- Syringes
- Nipples and bottles for pups as they mature
- Weighing scale and notebook for recording weights
- A table to allow comfortable feeding

Notebook. The first thing a breeder will need to do is organize the notebook. Record a description of the pup(s) and body weight. At each feeding, record the following information for each pup: milk intake (volume or weight), if the pup urinated or defecated, how vocal the pup is, and how well the pup nursed.

Timing. Newborns need to be fed every 3 hours for the first week of life. Once the puppy has doubled its birth weight, change to four-hour intervals. Normally, this occurs by day 7, but some pups can require up to 10 days.

Environment. All equipment used in feeding puppies must be kept scrupulously clean, including the handler's hands. New latex gloves are ideal, but thorough hand washing is also sufficient. All water used in formula mixing should be obtained from a clean, reliable source. Many different types of box structures can be used to house the pup(s); however, a medium-sized plastic aquarium makes an ideal incubator for orphans. An aquarium can be easily cleaned and disinfected and will readily accept a suction-type thermometer to monitor environmental temperature. A heat source can be placed outside the aquarium under one-half the unit to supply heat as needed. The ideal heat source for orphan puppy incubators are rheostat-controlled, rubberized pads. Standard heating pads can also be used, but care must be used to ensure the puppies can crawl off the pad. There is no setting on human heating pads that is totally safe for puppies. Heat lamps dehumidify the air and can lead to dehydration. Maintain the incubator at 85°F for the first two weeks, then, gradually lower it to 75°F.

How to Hand-Feed

Although more time consuming, the ideal method to feed pups is suckling from a bottle. This is especially true for the less experienced breeder. Tube-feeding, while quicker, should not be performed by inexperienced hands. This technique, however, is a must in pups too weak to nurse.

Bottle-feeding can often satisfy the nursing urge and hopefully reduce the amount of genitalia suckling by littermates. While this is a common practice in hand-reared puppies, it can lead to health problems, such as rectal prolapsed. When bottle feeding puppies, remember to let the pups nurse; don't force-feed. Force-feeding can cause the puppy to aspirate milk into the lungs, which can induce pneumonia. Most puppies will freely nurse when they feel comfortable.

It is best to position the pup belly-down, with its head slightly raised and front paws extended forward. Some breeders find it helpful to loosely wrap the puppy in a soft towel. The towel will provide contact with the pup's paws and allow it to "knead" as if nursing the bitch. There is no perfect replacement bottle or nipple for puppies. Many of the commercially available bottles and nipples for pets are designed more for kittens than puppies. To properly nurse, a nipple that fills the pup's mouth is required. Puppies often have individual preferences, so it is a good idea to buy several different types of nipples and experiment. When the right nipple is found for the pup, use that one each time. It will be helpful to record this information in the notebook in case someone else needs to fill in for the primary caregiver.

Tube-Feeding

Breeders are often unfamiliar with intubating orphan puppies. Anyone attempting to raise newborns by hand should seek out an experienced breeder or veterinarian for instructions on this technique. It will be critical for the breeder to tube-feed a puppy should one become sick or weak, so it is important to learn from an experienced individual.

Some tips to remember include the following:

1. Always lubricate the tube with water or milk replacer
2. Use a permanent mark on the tube to identify the correct depth for tube placement
3. Keep several tubes on hand
4. Feed slowly; if a pup regurgitates milk through the nose, it is being fed too rapidly or excess formula is being offered.

Hand-reared puppies should be retained as a litter until they are at least 6 weeks of age. This time will allow their immune systems to develop, along with social skills.

Grooming And Stimulation

In addition to providing nutrition, the breeder must also provide the pup(s) with the grooming and stimulation normally provided by the mother. Hand-reared puppies should be cleaned (not washed) periodically. This can be done using a warm (not hot), damp (not wet), clean cloth. Gently wipe the pups from head to toe. This may cause the puppy to urinate or defecate.

Puppies need stimulation for about the first 3 weeks of life to urinate and defecate. The bitch usually provides this stimulation when she grooms the puppies multiple times throughout the day. However, you must now serve that role as well.

Prior to each feeding, the puppy should be stimulated to urinate or defecate by gently rubbing a damp cotton ball in the genital region. Although each puppy will not urinate or defecate before each feeding, be persistent. The number of excretions (urine or fecal) should be recorded in the notebook.

Hand-reared pups, if healthy, will develop at a rate very similar to bitch-reared pups, although they may grow slightly slower. Because of this, the breeder should monitor the puppy's development along with the other information on a daily basis. The breeder should not restrict how much information is recorded. The more detail that is captured, the more likely the breeder (or veterinarian) will be able to assess if something is going wrong. When the pup(s) are able to steadily stand and walk (21 to 24 days old), the breeder can begin the weaning process, as described for bitch-reared puppies.

Weaning Puppies (by Russ Kelley, MS)

The weaning process for both bitch-reared and hand-reared puppies is best started at around four weeks of age. Using the bitch's food or a puppy formula and water (or milk replacer), make a gruel for the puppies to "play in". This description accurately describes what takes place! Initially puppies generally get much more food on them than they eat. This is not a concern as the bitch will clean them up when they return to nurse. This routine should be done once or twice daily.

Slowly, the puppies will make progress and usually by 5 weeks of age, they will be eagerly ingesting the gruel. When the puppies have mastered eating gruel from a pan, the breeder can begin to decrease the amount of water added to the diet. This will help the puppies adjust to eating dry kibbles. By week 7,

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the puppies should be completely weaned and consuming only dry kibbles. Soaking the food in warm water allows it to soften and lets the pups utilize it easier.

Water

It is important to begin offering water to pups at about age 5 weeks. They will not consume a large amount at first, because they are still getting their hydration from the bitch's milk. Encourage the pups to play in the water at first. This will lead to active drinking in a few days.