# **PUPPY CARE:**

## POSTPARTUM AND PEDIATRIC CARE:

Careful management of the pregnant bitch (prenatal period), birth of the pups (parturition) and the postpartum (neonatal) period is critical to assure the best possible outcome. In other words, YOU are in control of your puppies' destiny. Carefully handled, you can set a goal of raising 100% of your puppies. Unfortunately, the veterinary literature often reports a "normal" death loss of up to 40% in the first 4 weeks of life. The goal of this information is to arm you with ammunition you need to maximize your success rate. We cannot expect our bitches and puppies to thrive unless we manage their health, nutrition and environment carefully.

It is critical to keep the pups warm with supplemental heat at this point – we use a towel and heating pad on low and wrap the pup like a taco while doing the initial handling and drying. The umbilical cord can be clamped and tied with thread or dental floss, cut 3/4" from the abdominal wall, and treated with iodine to prevent infection. The placenta/umbilical cord can be left attached if the pups are being delivered quickly. The pups should be left with the bitch if possible during subsequent deliveries to nurse, as this nursing will stimulate uterine contractions.

If the pups must be separated from the mother, they should be kept warm by placing them in the chest pocket of a shirt turned wrong side out. (You or an assistant wears the shirt, not the bitch!) This avoids burns associated with external heat source misuse and your movement will keep the pup stimulated. If the pups seem reluctant to nurse or are crying, a rectal temperature should be taken and if it is under 97 degrees, they should be warmed up to 97 degrees prior to feeding. If the rectal temperature exceeds 99 degrees, this indicates overheating or illness.

Environmental temperatures should be checked with a thermometer. Puppies do not have the mechanism to maintain their own body temperature. The area should be 80 to 90 degrees the first week and dropped 5 degrees a week until weaning. Specialized whelping nests are available commercially which provide a controlled and safe heat source. Light bulbs, heat lamps, hot water bottles, towel wrapped heating pads, or incubators can be used with caution to keep the pups warm. Only half of the box should be warmed so as to allow the pups and mother to move to warmer or cooler areas to best suit their needs.

Once (or more daily if the pups are not thriving), at the same time each day, the pups should be weighed and have a rectal temperature taken, recording it to monitor for adequate nursing and weight gain. At least once a day, you should really LOOK and LISTEN to your litter. Pick up the puppies, roll them over, feel how they hold their body, their body condition, their attitude and their general appearance. Don't worry – Mom should let you do this and she won't reject them. After all, you tend to her needs and she looks to you for this.

Stools should be formed, light brown with a yellow–seedy appearance. Urine color should be assessed on a cotton ball at least once daily to monitor for adequate

nursing and dehydration. The urine should be pale yellow in color. If the urine is darker yellow in color, this signifies dehydration. If the pups fail to gain weight, are fussy or weak, the urine is dark, the stools are abnormal, or the pups do not have good body tone, contact your veterinarian.

The first week of life is the time of greatest risk for the newborn. The pups should be kept warm, free from drafts, away from other dogs, and the neighbors and their children. Healthy well-nourished pups should be quiet, eat and sleep (with some jerking during REM) 90% of the time, gain weight daily after the first 2 days, and show increasing strength and body tone.

Each pup should gain 2 to 7 grams per day per kilogram of anticipated adult body weight. By day 10 to 12 of age, their birth weight should double. This is an average of 1 to 3 oz per day per puppy as neonates.

Daily, you should also examine your bitch. Assess her appetite, water consumption, urination, stools, temperature, and attitude. Look at the color, character and volume of her vaginal discharge. Take note of any unusual odor. Feel each mammary gland for texture and temperature (they should feel soft to firm, never hard) and look at a few drops of milk from each nipple. Colostrum, the first milk, will be yellow and thick. After the first 2 days, the color and consistency should very closely resemble cows milk. Thick milk of any color other than white should be noted. Report any abnormalities to your veterinarian. DO NOT START MEDICATIONS without consultation as some medications can harm the pups.

# **POST-PARTUM EXAMINATION:**

Normal postpartum discharge is dark green for the first 1 to 2 days, then becomes bloody. There is usually a lot of discharge for the first 5 to 7 days. It should gradually decrease in volume and become thick and clear or gray by day 10. Abnormal, excessive or foul smelling vaginal discharge may indicate an infection, and you should consult your veterinarian. Postpartum complications include uterine infections, retained fetuses, retained placentas, poor return of the uterus to normal, mastitis, eclampsia (low blood calcium), and fetal death.

It is recommended to have the bitch and puppies examined within 24 hours of delivery to assure there are no retained pups, that the mammary glands are normal, and to have the puppies examined for defects or illness. The first day or two after whelping, the bitch may be reluctant to eat and have diarrhea. Drinking adequate fluids must be encouraged to assure adequate milk production. The mother's diet should be a high quality puppy or performance food to assure adequate consumption of calcium, protein, and calories. She will eat 2 to 3 times the amount she ate prior to breeding. Adding salt to her food and increasing the water availability will help assure adequate milk production. Do not administer any medications at this time without your veterinarians advice as many drugs can pass through the milk and affect the puppies.

#### TAILDOCKS AND DEWLAWS

Taildocks and/or dewclaw removal, if standard for your breed, are done between 3 and 5 days by your veterinarian.

From day 3 to day 16, we recommend the Early Neurologic Stimulation program by Carmen Battaglia be instituted to help the pups grow up as tolerant welladjusted adults. (A handout covering this information is available.)

By days 10 to 14, the pups ears and eyes are usually opening. If bulging of the eyelids (Neonatal Ophthalmia) is noted prior to the eyes opening, you should seek veterinary care at once. At this time, the pups become more aware of their surroundings. By 3 weeks, the pups are becoming active.

Often, a runt pup is noted in the litter. It may help to direct the pup to nurse on one of the mammary glands between the back legs as these have the most milk. Nutritional supplementation may also be indicated. (see handout on tube feeding) Frequently, this pup will catch up by weaning time, and often this pup has the most spunk. This pup should not be destroyed.

# LITTER REGISTRATION:

This is the time to remember to submit litter registration papers to the AKC or other registry organization in order to receive the individual puppy registration papers back in time for the puppy's adoption.

## SICK NEWBORNS:

The most common concerns we see in the newborn are fading pups (failure to thrive), diarrhea and constipation. The first place to start is to assess the situation. Evaluate the puppy's environment: are they too warm, too cold, dry, clean? Do the pups have a normal temperature (96-99 degrees)? Are they gaining weight? How are their urine and stools? Do they feel dehydrated? How is their body tone? Is mom feeling her best? If she is sick, has infected mammary glands, a uterine infection, or is not eating well, she cannot adequately care for the pups.

Once you have done the assessment, it is now time to address the situation. Correct any environmental issues. Supplement feed with a bottle or tube if the pups are weak, thin, weka, dehydrated, or not nursing ONLY IF they have a rectal temperature over 96 degrees. If they have diarrhea, feed 1-2 cc of active culture yogurt and a couple of drops of KaoPectate. If they continue to have diarrhea, you may need to reduce their intake of milk for 1 to 2 feedings and/or substitute an electrolyte solution. If they are constipated, stimulate stool passage by rubbing the rectal area with a warm wet cotton ball and give a few drops of Karo syrup orally. Pediatric simethicone drops can be used under veterinary direction if excess gas is noted.

Should this not resolve the problem within a few hours, or if the pups cry or mew excessively, fail to gain weight, fail to suck, have bloody urine, have labored breathing, have ongoing diarrhea, abdominal distension and pain, slough the toes or tail tip, or do not appear to be thriving, seek veterinary advice.

#### **HAND-RAISING PUPPIES:**

Unfortunately, not all puppies are lucky enough to be raised exclusively by their mothers. The first 24 to 48 hours are the most critical for the puppy to nurse. This is when the colostrum, the first milk, is produced. Colostrum contains high levels of antibodies critical to the pup's ability to resist infectious diseases (bacterial or viral). Without this, the pups will be more vulnerable to contagious diseases.

If the pup is unable to nurse from it's mother, the second best option is to find another lactating bitch that will accept the pups. This surrogate mother can usually increase her milk supply within a few days to respond to the increased demand.

Plasma, available commercially, may be given to sick pups. This is useful in providing antibodies and proteins to pups, and will support pups with a wide variety of illnesses. A total dose of 15 cc is required over a 24 hour period.

NO PUPPY SHOULD DIE OF STARVATION OR DEHYDRATION! If necessary, you may need to bottle or tube feed the pups. Pasteurized goat's milk or commercially available bitch milk substitutes make excellent supplements. In an emergency, a formula of 1 cup cow's milk, 1 egg yolk and 1 tablespoon Karo syrup can be used temporarily. Puppies can ingest 20 cc (4 teaspoons) of formula per 16 oz of body weight per feeding. Pups can be fed with an appropriate sized bottle if they will suck effectively. If not, they must be tube fed with a soft feeding catheter. With veterinary assistance, most owners can be taught how to place the tube. This should not be attempted without instruction as there are associated risks such as inhalation of the formula. The pups should not be fed or allowed to nurse if their rectal temperature is not between 96 and 99° F.

Whether bottle or tube feeding, pups should be fed at least 4 times daily, preferably every 3 to 4 hours. Less frequent feedings or cow's milk formulas will guarantee diarrhea, weight loss and unthrifty pups.

For the first 2 weeks of life, after feeding, the pups should be stimulated to urinate and defecate by rubbing the area between the back legs with a warm wet cotton ball. This simulates the mother's clean-up efforts.

At three weeks, or if the pups are orphaned at this age, a gruel of Eukanuba Weaning Formula® or high quality softened small breed puppy food can be made and the pups handled as if they were being weaned. Orphaned pups should be immunized at a younger age than other pups. Hand-raising pups is time-consuming and an enormous amount of work but can be very rewarding when successful.