

Bottle Feeding

by Ed Frawley

**This is the kind of bottle we use at Leerburg. Be sure to ►
poke a bunch of holes in the nipple.**



I have bred over 350 litters of GSDs in the 30 plus years of my breeding career. Over those years we have done our share of caring for newborns that need help. We have also come up with our own newborn puppy formula that I think is the best we have seen.

You can make our formula at home.

The problem with commercial formula that you buy at your vet is that it only has about 1 or 2 calories per CC. In my opinion this is not enough nutrition to provide for adequate growth.

We have used this formula many times and it works better than any others that I have tried.

If you are hand raising puppies and they develop medical problems you will need to contact your vet. Please do not email me and ask what to do. It would be inappropriate for me to guess at the medical needs of your sick puppy.

Here are some general rules for bottle feeding puppies:

Always boil your water before using - allow time to cool.

Burp your pups after feeding.

A pup may have little bubbles by his mouth but there should not be milk running out of his mouth.

When the bottle is held upside down the milk should drip out - NOT FLOW OUT in a stream - pups that get milk in their lungs will get pneumonia and more than likely die.

Calorie intake needs to be adjusted according to growth of puppies. A general rule of thumb (unless someone has a better idea) is 1 CC per OZ. of body weight every 3 hours.

You must have an accurate scale to weigh pups if you are going to get the best success. Use a kitchen food scale. The ones with grams is what we use in our kennel. It is easy to see any weight gain or loss. Keep a record that you can easily refer to.

Another article to consider - **Save Your Puppy's Life.**

Bottle Feeding Recipe

- 10 oz. of canned evaporated milk OR whole goat's milk (not pasteurized cow's milk - this will cause scowers - dogs cannot drink normal cow's milk. Dogs cannot drink 1%, 2%, Skim, or Whole milk.) Whole goat's milk is by far the best to use. Walmart sells both evaporated milk, whole goat's milk and evaporated goats milk. Make sure you are using EITHER evaporated milk OR whole goat's milk. Do NOT use sweetened condensed milk!
- 3 oz. sterilized water (baby water OR boiled water that is then cooled). This is NOT needed if using whole goat's milk.
- 1 raw egg yolk.
- 1 cup of plain yogurt (avoid skim or fat free if at all possible).
- 1/2 Tsp Karo Syrup or Corn Syrup (NOT HONEY!)

**If you cannot find Karo or Corn syrup where you live, you can do a Google search for "substitute for Karo syrup" and get some options. When I Googled "substitute for Karo syrup", here is what I came up with - 1 c Karo can be subbed with 1 c white sugar and 1/4 c hot water (Cook it to dissolve in the water best you can get it to. Depending on the recipe, if you need the sugar to be completely dissolved you might need to add a bit more water.)

Place ingredients in a blender and blend or use a wire whisk. Be careful to not over blend and create a milk shake full of bubbles and then tube bubbles into the puppy.

Keep cool and discard leftovers after 7 days.

Warm formula to body temperature (dogs are around 101 degrees). Discard any un-used formula. This is a thick mixture - use a stomach tube to tube feed or enlarge the hole in the nipple for easy access for the pup

Weight Conversion Chart for Tubing Puppies

1/2 ounce formula = 15cc

1 ounce formula = 30cc>

1 ounce = 28.3 grams

<i>Puppy</i>	<i>Weight</i>	<i>*Formula Amount</i>	<i>Puppy</i>	<i>Weight</i>	<i>*Formula Amount</i>
1 oz. =	28.3 grams	15cc daily	21 oz. =	594.3 grams	150cc daily
2 oz. =	56.6 grams	15cc daily	22 oz. =	622.6 grams	165cc daily
3 oz. =	84.9 grams	15cc daily	23 oz. =	650.9 grams	165cc daily
4 oz. =	113.2 grams	30cc daily	24 oz. =	679.2 grams	180cc daily
5 oz. =	141.5 grams	30cc daily	25 oz. =	707.5 grams	180cc daily
6 oz. =	169.8 grams	45cc daily	26 oz. =	735.8 grams	195cc daily
7 oz. =	198.1 grams	45cc daily	27 oz. =	764.1 grams	195cc daily
8 oz. =	226.4 grams	60cc daily	28 oz. =	792.4 grams	210cc daily
9 oz. =	254.7 grams	60cc daily	29 oz. =	820.7 grams	210cc daily
10 oz. =	283.0 grams	75cc daily	30 oz. =	849.0 grams	225cc daily

11 oz. =	311.3 grams	80cc daily	31 oz. =	877.3 grams	225cc daily
12 oz. =	339.6 grams	90cc daily	32 oz. =	905.6 grams	240cc daily
13 oz. =	367.9 grams	90cc daily	33 oz. =	933.9 grams	240cc daily
14 oz. =	396.2 grams	105cc daily	34 oz. =	962.2 grams	255cc daily
15 oz. =	424.5 grams	105cc daily	35 oz. =	990.5 grams	255cc daily
16 oz. =	452.8 grams	120cc daily	36 oz. =	1018.8 grams	270cc daily
17 oz. =	481.1 grams	120cc daily	37 oz. =	1047.1 grams	270cc daily
18 oz. =	509.4 grams	135cc daily	38 oz. =	1075.4 grams	285cc daily
19 oz. =	537.7 grams	135cc daily	39 oz. =	1103.7 grams	285cc daily
20 oz. =	566.0 grams	150cc daily	40 oz. =	1132.0 grams	300cc daily

*Note: Use 1/6 of daily formula amount per tubing. Pup should be tubed about every 3-4 hours.

Raising Orphaned Puppies

Chilling

Newborn puppies cannot regulate their body temperature very well. They quickly become chilled, or hypothermic, if their mother, their siblings, or their environment does not keep them warm. It will be necessary to provide a heat

source for your puppy for the first few weeks of life. Suitable heat sources include hot water bottles, incubators, and heat lamps. Whichever heat source you use, make sure the puppy doesn't become overheated or burned. In addition, avoid drafts by placing the puppy's box away from windows, doorways, and air-conditioning vents.

During the first 4 days of life, aim to keep the air temperature in the box at puppy-level between 85°F and 90°F. Gradually decrease the temperature to about 80°F degrees by days 7-10. If you are raising a litter of puppies, the temperature can be a little lower, as the puppies will huddle together and keep one another warm.

The normal rectal temperature for a newborn puppy is 95-99°F. If its rectal temperature is below 94°F degrees you are dealing with a potentially life-threatening case of hypothermia. The puppy needs to be warmed immediately. Take care not to overheat the puppy or warm it too quickly; this can be fatal in a weak puppy.



An orphaned pup on day 1 of using the above formula.



The same orphaned pup on day 10 of using the formula.

Dehydration in puppies

Newborn puppies quickly become dehydrated very quickly if they are not nursing. They can also become dehydrated if their environment is too hot and dry.

Two indicators of dehydration are loss of elasticity in the skin (the skin stays tented when gently pinched up) and decreased saliva production (the gums and tongue feel tacky or dry).

In addition to providing adequate nutrition, you may need to humidify the puppy box or whelping room if the puppy is small or weak. Be careful not to make the box too hot and humid; this can also cause respiratory distress.

A home humidifier should be adequate.

In some cases you may have to do sub-q fluids. But that is a topic covered for another article on my web site titled **SAVE YOUR PUPPY'S LIFE**.

Hypoglycemia in Puppies

Hypoglycemia quickly develops in a newborn that is not nursing frequently.

As hypoglycemia worsens, the puppy becomes progressively more depressed and weak.

Without treatment it may develop muscle twitches or seizures and then it will become unresponsive and comatose.

If it is showing any of these signs place a few drops of corn syrup on its tongue. This simple procedure is often

sufficient to revive a hypoglycemic puppy. Also watch for signs of hypoglycemia over the next several days, as you adjust your puppy's feeding schedule.

Feeding puppies

I am not a fan of baby bottles made for puppies. Rather I prefer human baby bottles.

If the pup has a good sucking reflex try those.

Take time to check the hole in the nipple before using the bottle the first time. The hole is the right size if, when you turn the bottle upside down, milk replacer drips from the nipple with only a gentle squeeze of the bottle.

If, when you upend the bottle, you must squeeze it firmly to get milk to drip from the nipple, the hole needs to be enlarged. Otherwise, the puppy will become discouraged or exhausted when nursing and may even refuse to nurse.

To enlarge the hole, heat a needle and then pierce the tip of the nipple a few times. If the puppy is weak and has a poor suck reflex, it is necessary to feed the puppy through a tube inserted into its stomach. Your veterinarian will instruct you on how to place the tube and maintain it for feeding.

Orphaned Puppies Need Help Defecating

Mothers stimulate their puppies to defecate (pass stool) by licking or nuzzling around the puppy's anus. To prevent your orphaned puppy from becoming constipated, you'll need to mimic this action using a soft cloth or cotton ball moistened with warm water. Gently stimulate the puppy's anal area after feeding for the first 2 weeks of its life.

The Newborn Puppies

The first 36 hours of a puppy's life is the critical period nutritionally.

Healthy puppies will nurse right away and then every few hours. The pups must nurse from their mother within 12 hours of birth to receive her antibodies against disease.

After 12 hours, their stomachs will not absorb antibodies. After this first 12 hours, if the mother does not have enough milk, or if her litter is too large, then the pups' diet can be supplemented with our home made milk replacer. Cow's milk is nutritionally inadequate for puppies.

Orphan puppies less than one week old must be stimulated to urinate and eliminate. This is accomplished by gentle massage of the abdomen and genital area with a piece of cotton wool or tissue, dampened with warm water.



A newborn Leerburg puppy from a litter of 10. His brothers and sisters would crowd him out so he couldn't eat his share. He was maintaining his weight, but not gaining like his littermates. He had a strong suck reflex, so we decided to try to bottle feed him.



That same pup relaxing after a swim with his new family.

Weaning Pups

We feed our pups an all-natural diet. That means no commercial food except the Honest Kitchen dehydrated food mixed with meat and supplements. Do your pup a favor - feed it all-natural and don't do yearly vaccinations. Educate yourself and extend the life and health of your dogs. I have written a great deal on this subject, Visit my article page and read about **vaccinosis** and the **raw diet**.

We start to add raw hamburger to our bottle feeding formula at about 4 to 4 1/2 weeks of age.



After several days of just lapping our puppy formula from a bowl we add raw hamburger - like you see in the photo above.



If the pups are small you may have to mash the raw hamburger into the formula.

An **Extensive article and Q&A section from Leerburg Kennels on Feeding a a Raw Diet** - a must read if your considering an all-natural diet (which everyone should be).