

Goat Production:
Care and Management
of Newborn Kids

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Introduction

High survival and performance of newborn kids significantly increase the success of goat industry. The objective of good care and management of newborn kids is to minimize their death and enhance performance. In most situations, does take care of their newborn kids and minimum attention may be required from owners. Does with good mothering ability, ability to raise kids with no or minimum problem, and experience clean their kids by licking immediately after kids are born. Moreover, does nourish their kids by producing and letting kids suckle colostrum and milk. Additionally, does keep their kids nearby and protect them from other aggressive animals in the herd. Does bleat from time to time to communicate and get kids' attention. Similarly, kids in a good health condition stand up, seek for teats, and suckle in about half an hour or so after they are born. All these actions of does and kids play a very important role to develop maternal bond - attachment between does and their newborn kids. Early development of maternal bond is crucial for the survival and growth of newborn kids.

Importance of Colostrum and Milk for Kids

Well-fed does provide enough colostrum (the very first milk that contains disease-preventing proteins, immunoglobulins, other than nutrients and water) for the first 2 to 3 days. Adequate colostrum ingested by newborn kids within 24 to 48 hours of age provides passive immunity (ability to fight against diseases and parasites) for the first few months of kids' life. The water and nutrients present in colostrum provide necessary energy to kids to remain warm and active. After 2 to 3 days, colostrum gradually changes to normal milk. Milk is the only source of food for young kids until they develop rumen to digest other feedstuffs, especially roughage (forage, hay, and other plant material containing high fiber content). Rumen is one of the compartments of ruminant stomach where microbial digestion takes place. Kids' rumen starts developing by 3 to 4 weeks of age and completes by 8 to 9 weeks of age. Does that have a well-developed udder will produce enough milk for their kids if they are receiving sufficient quality feed. Newborn kids that receive good maternal care and nourishment survive better and grow well in their early life as well as remain strong and healthy. Strong and healthy kids perform better later in life compared to weak and poorly-fed kids.

Although many does in a herd will take care of and raise their kids with minimum problems, owners should still keep their eyes on newborn kids and their mothers, and be prepared to provide support when needed. Common situations in which newborn kids may need extra support and care are listed below.

Situations in which Newborn Kids may Require Extra Support and Care

1. **Very cold weather conditions at birth** – Kids lose energy very rapidly to cope with the cold environment. As a result, they become weak and may die.
2. **Maiden does** – These does do not have experience in taking care of newborn kids, and may abandon their kids easily.
3. **Does in poor health condition** – These does may show indifference to their newborns and/or may not be able to produce enough colostrum and milk required by the kids.
4. **Multiple births** – When three or more kids are born, even an experienced doe may not be able to provide enough care and nourishment to all kids.
5. **Weak newborn kids** – These kids may not be able to stand up and suckle on their own.
6. **Does with poor mothering ability** – These does may not provide enough care, and also may abandon their kids.
7. **Risk of predator** – Newborn kids may be taken away or killed when kidding facility is not well protected from the possible attack by predators.
8. **Poor sanitation and hygienic condition** – Under such condition, there is a high risk of infectious diseases and parasites. Newborn kids, especially weak and poorly-fed, easily succumb to pathogens (disease causing organisms).
9. **Crowded condition** – Aggressive animals in a herd may approach and attack the newborn kids easily. Also, such a condition may harbor more pathogens and make the environment more stressful than a less crowded condition.

To avoid kid loss from any of the above situations, owners should keep breeding records and plan to be around the pregnant does during the time of kidding with necessary supportive knowledge, skills, and materials. Listed below are common care and management practices to increase the survival and growth of newborn kids. However, one must understand that help should be provided based on necessity. If everything is going well, intervention may not be required.

Care and Management of Newborn Kids

The following are some suggestions that have been found successful in caring for and management of newborn kids:

- 1. Minimize the chance of injury and infection** – Keep the pregnant does in a separate clean shed or new pasture around the kidding date so that the chance of injury and infection is minimized.
- 2. Be prepared with necessary materials and supplies, and also to help kids –**
 - Necessary materials and supplies – Feeding bottle, supplementary colostrum, heating lamp, towel or rag, soap, water, lubricants, gloves
 - Be prepared to help kids – Trim nails and clean hands with soap and water; use gloves before touching kids or does.
- 3. Make sure newborns are breathing** – Remove any material from around the mouth and nose to clear the airways, and clean and dry newborn with clean towel or rag.
- 4. Keep the newborns warm and dry** - Provide clean, dry, and soft bedding. When the bedding gets wet, change it or add more bedding. If it is very cold, wrap kids with warm towel or rag. If kids are in a pen, heating lamp can be used to increase the temperature.
- 5. Spray tincture of iodine (7%) on and around the navel** - It will minimize the chance of infection.
- 6. Do not take the kids away from does** - While cleaning, drying, and performing other activities with the newborns, keep the newborns close to their mothers – it is extremely important to develop maternal bonding.
- 7. Help the weak newborns stand up and suckle** - It is crucial that newborns suckle and ingest enough colostrum soon after birth. If the newborn is weak and/or the mother is not very much interested in her newborn, that may be a sign that help is needed for subsequent suckling as well.
- 8. Bottle feed colostrum to kids if does are not producing enough or suckling is hindered** - If kids are not able to stand up and suckle, the does should be milked and fed to the kids. Give only a small amount at a time based on kids' appetite. Extra colostrum should be refrigerated and fed later by warming it to around 38°C just before feeding. If there is more colostrum than required at a given time, then it can be preserved by freezing and used when needed in the future for other kids. Bottle should be cleaned properly before and after feeding. In addition, if a particular doe is not producing enough colostrum, then colostrum should be collected from other does nursing about the same time as the doe in question. Frozen colostrum, if available, can also be used in such situation. In fact, quantity of colostrum to be fed at a time depends on the appetite of the kid. Colostrum feeding must start soon after kids are born (within half an hour or so) and feeding should be repeated 4 to 5 times a day. Kids will get enough disease-preventing proteins if 140 – 175 g colostrum per kg of live weight is fed within 24 hours of birth. Overfeeding should be avoided because it may upset kids' digestive system. The best thing to do is to satisfy kids' appetite, but not to force them to drink. Avoid feeding colostrum from does suffering from Brucellosis, Johne's disease, Caseous Lymphadenitis, and Caprine Arthritis Encephalitis.

9. **Keep the premises clean, well lighted, and ventilated** - This will minimize the chance of infection because clean, ventilated, and well-lit environment is detrimental to disease causing organisms. Also, animals will be comfortable and less stressed under such conditions.
10. **Make sure premises are safe from predators** – Make sure the facility is well fenced to prevent the access of any predators. Also, provision of guard dogs along with a close supervision of the herd will be very useful.

Care of Does

The following are some suggestions that have been found useful in caring for does:

1. Provide enough diet to pregnant does based on their body weight, condition score, and stage of pregnancy. Also, provide supplemental feed to does in the late pregnancy if necessary to increase udder development and colostrum production.
2. Separate the does in advance pregnancy from rest of the herd and move them to a clean and safe place. Move does to kidding pen or paddock around five days before the kidding date.
3. Be watchful around kidding time and help the doe if she strains too much for longer than an hour. One can make arrangements with a veterinarian for the necessary help, or if one has the requisite skill and knowledge be prepared to help the doe to kid, if necessary.
4. Does normally give birth to twins (and sometimes triplets). So, one should not leave until the doe has given birth to all kids.
5. After kidding is over, placenta may take few hours to few days to come out. In most cases, it will come out within 3 to 4 hours. Consult a veterinarian if placenta does not come out by 3 days. It is good to bury the placenta when it is out, and not to let the doe eat it.
6. Provide enough warm water and nutritious feed to the recently kidded doe.
7. If there is internal parasite problem in the herd, monitor the doe's anemic condition with FAMACHA card and examine fecal samples to find out parasite load. De-worm the doe as required based on the results of examination. Parasite attack increases around kidding, so newly kidded does should be monitored closely and treated quickly if required.

Minimizing Problematic Kidding

In addition to the above mentioned does caring techniques, it is worthwhile to consider the following points to maximize kid survival.

1. Feed pregnant does well and maintain the condition score around 3; do not overfeed or underfeed.
2. Select does with good mothering and reproductive ability and use them for continuous breeding.
3. Do not breed small does with a large buck - this will result in big fetus and may cause problematic birth.

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