

The Myth Of “All-In-One” Small Ruminant Feed And Mineral



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Sheep and goats are completely different species. They have a different number of chromosomes; sheep have 54 and goats have 60. They have different feeding preferences; sheep prefer to graze on pasture, while goats will browse and eat more twigs and brush. Another significant difference is their nutritional requirements. So, if these small ruminants are so different why does the feed industry promote an all-in-one sheep and goat mineral and all-stock feed?

Why People Like “All-In-One” Feed And Mineral

Using an “all-in-one” feed or mineral to feed two species of animals seems like a logical choice. Smaller farms that have both sheep and goats may pasture them together, which makes it easy to use one mineral or feed for both species. Even though this may seem easy, it is not the best nutrition for the animals and in certain cases, it can actually be detrimental.

Different Species Require Different Nutrition

As you can see in **Figure 1**, there are some similarities but also some very large differences in the nutritional requirements for sheep and goats. Copper is one of the most significant requirement differences between sheep and goats. Sheep have a very low requirement and excessive amounts of copper can be fatal to them. Copper toxicity often occurs over a long period of time when sheep consume copper above the required amount and the excess is stored in the liver. Signs of copper toxicity include dark urine due to the destruction of red blood cells, liver damage and jaundice.

If a mineral is offered with low copper for both sheep and goats, the goat’s nutritional requirements will not be met. It is because of these different mineral requirements, that there is no mineral that can be offered to meet the nutritional needs for both species. A separate sheep mineral and a separate goat mineral must be provided in order to provide proper nutrition.

“All-stock” feeds are another feeding strategy that are marketed as an “all-in-one” feed for sheep and goats. These “all-stock” type feeds

Figure 1 DAILY MAINTENANCE REQUIREMENTS			
Mature Ewe 176 lb.		Mature Goat 176 lb. (Non-Dairy)	
Dry Matter	2.86 lb.	Dry Matter	3.10 lb.
Ca	2.60 g	Ca	2.50 g
P	2.20 g	P	2.00 g
Na	0.90 g	Na	1.50 g
Cl	0.70 g	Cl	2.20 g
Cu	5.30 mg	Cu	31.00 mg
Se	0.05 mg	Se	0.18 mg
Zn	41.00 mg	Zn	24.00 mg

Source: Nutrient Requirements of Small Ruminants: Sheep, Goats, Cervids and New World Camelids. Pages 246-268 and 272-293. National Academies Press, 2007.

are manufactured out of convenience and are not nutritionally adequate to solely meet the needs of any given livestock species. They are made with little to no minerals or vitamins with a “least cost formulation” in mind, using low quality, cheap grains. It is because of these low nutritional values in all-stock feeds that they cannot be depended on to meet livestock’s nutritional requirements and should not be fed as a sole nutrition source.

Crystal Creek Solution

Crystal Creek® recognizes that each species of livestock must be fed to specifically meet their individual nutritional needs. Crystal Creek® understands that livestock owners may have several different species of livestock to feed at one time and have developed a high-quality Foundation Grain Mix that can have a granular or pelleted mineral source added to it to meet these needs. This grain mix includes corn, oats, roasted soybeans, molasses and a low inclusion rate of a mycotoxin binder. This premium grain mix can be top-dressed with a Crystal Creek® species-specific mineral to create a complete feed. Crystal Creek® offers granular mineral for sheep and a separate mineral for goats in granular or pellet form.

Diet Delivery Solutions

Since many farmers pasture their sheep and goats together, extra steps need to be taken to ensure

their health and nutritional requirements are met. Pasturing sheep and goats separately with a temporary electric fence is one solution. When completely separated, a free choice mineral can be offered for that particular species. If pasturing separately is not possible, separating them once a day and feeding a sheep grain mix and a goat grain mix that includes the adequate minerals and vitamins is another option. Two choices for implementing separate feeding times are:

1. Building two separate feeding paddocks or
2. Using headlocks at feeding to ensure each animal gets the correct grain mix and does not steal feed from slower eating animals.

Other benefits of gathering and feeding animals once a day include having an opportunity to observe the animals and make sure they are not sick or injured. It also helps with socializing and making handling and restraint easier.

In conclusion, sheep and goats can be pastured together, but additional measures must be taken to ensure each are receiving proper care and nutrition. Crystal Creek® offers a wide range of nutritional products for both sheep and goats. Visit our website at www.crystalcreeknatural.com to learn more about our products and services.

Source:

¹ Sargison, Neil. “NADIS Animal Health Skills - Copper Poisoning in Sheep.” Retrieved from: <https://www.nadis.org.uk/disease-a-z/sheep/copper-poisoning-in-sheep/>

