



## **Lambs and Minerals: How to Promote Interest in Minerals and Get Your Lambs on the Right Track**

by Kathy Taft Boyden

So, how do we ensure that our sheep get what they need? How do we get them to take in adequate levels of minerals? That has been a great challenge for us here on our farm and the impetus for countless hours of research and pondering. Most of us are in the practice of offering free choice mineral and vitamin supplements to our Icelandics in order to allow animals to make up any imbalances or deficiencies that are not in their diet. But, what should we do when we know that our animals aren't taking in adequate minerals?

Let us just start with acknowledgement that many/most minerals mixes either taste bitter or metallic, meaning not palatable, and this is problem number one, I believe. ( Normally, naturally occurring bitter or metallic mineral flavors occurring in plants are mixed up with many other flavors in one plant, so there is no single, overwhelming, or stand alone mineral flavor. The ground up rocks (limestone, magnesium, phosphates, etc), along with sulfated trace elements, all contribute to the bitter, metallic, off -putting taste of mineral mixes. Manufacturers of these commercial mixes try to “sweeten” the mixes in order to make them taste better with the addition of molasses, soy meal, wheat middlings, etc. Still, many farms struggle with mineral refusal by their sheep.

There are other possible reasons for mineral refusal:

**-- The sheep are getting excellent nutrition from nutrient dense forages and really do not need supplemental minerals.**

**-- The drinking water has elevated iron and/ or manganese and/or sulfur. □ As water is absolutely necessary to life, livestock will still drink highly mineralized water.□ What this means, though, is that they may not be able to tolerate any more of a mineral overload. □ This is why it is strongly suggested to test water at your farm along with soils and forages.**

**-- Like water, soils that with mineral imbalance can produce forages that also lack proper mineral balance. □ These forages could then have excessive levels of some minerals, like potassium and iron, that could throw off intake of mineral premixes.**

**-- With change of seasons and levels of precipitation and temperature, levels of minerals in the forages will fluctuate causing normal ups and downs in the intake of minerals by livestock. Animals may crave / binge on minerals at some times and then not touch the minerals for months at other times of the year.**

**-- Mineral requirements of sheep and other livestock will fluctuate at different times of the year according to various stages of growth, gestation and lactation.**

There is one other thing to consider when thinking about minerals and Icelandic sheep (or other livestock): animals are creatures of habit and much of what they consume is learned behavior. Just look at the grazing habits of your particular ewes and then watch their lambs. Most times, the lambs will be searching out the same plants as the mother and grazing at the same height off the ground, etc. So, if ewes aren't showing interest in the minerals, then often the lambs will not. It is also important for animals to have a good first impression of the mineral. If the first impression is bad (caused nausea, for example), it is quite possible for that reaction to be imprinted in the nervous system to avoid that substance later on.

Improving mineral intake in the flock can be attempted a few different ways, by basically making the mineral mix more palatable. As we know, sheep are followers and each flock has its lead/alpha sheep. So, if we can get the lead sheep to be interested in the minerals, others will follow his / her example.

**-- Take away the free choice salt lick. □ Mix your mineral premix 50/50 with the salt and offer this for a couple of weeks. □ Eventually, reduce□ the salt percentage downward to 25% and then 10% over the next few months. After some time one would hope to be able to go back to offering the mineral mix free choice and the salt separate**

from that, free choice.

-- Add 10-20% dried molasses if your premix doesn't already have that as an enticement. □ Do this for 1-2 months, then gradually reduce and eliminate. □ Personally, I don't recommend adding molasses during summer months as it can cause more fly issues.

-- Try adding kelp and salt to the premix in 1/3 to 1/3 to 1/3 ratio. □ Keep this out for a while and then move the percentage of premix up to 50% and reduce kelp and salt to 25% for another while. □ After that, try offering a blend of kelp and salt separate from a 50/50 blend of premix and salt. □ Keep reducing the amount of salt added to the premix until the premix is just offered by itself and salt by itself on the side.

--Alfalfa meal could be tried using the same method as #3.

Finally, I would like to talk about lambs and really getting them

into minerals from the beginning. It is my belief that if we can get the lambs really interested in minerals from day one, then they will be in the habit of taking what they need and continue this habit through the rest of their lives. I think that I have come up with a good plan finally to encourage mineral sampling by the lambs. I have always provided minerals in low bins that the lambs can access, but in past years it has been just a couple things, mineral mix and then salt and a bin for kelp. The lambs have all seemed to sample from these.

Last year, though, I decided to really embrace the concept of individual minerals. I used around a dozen small plastic bins mounted in a line on the back wall inside my ewe barn. These bins were protected from the elements so that they would not get wet, and I made sure that they were kept clean by checking on them a few times a day. In the bins, I offered several different mineral mixes with different levels of calcium to phosphorus ratios and different copper levels, etc. I also had bins for plain sulfur and dolomite, Azomite and Desert Dynamine, kelp, Redmond salt and Sea-90 salt. What I saw happen was quite amazing. Each feeding time, as soon as the ewes were busy eating, the lambs would line up at the mineral cafeteria, pushing and shoving each other in order to get their turn sampling from the mineral buffet. It really was remarkable, and the more that it caught on, the more interest there was. There is the proof that livestock emulate the behavior of their teachers. The older lambs were teaching the younger ones how to enjoy the minerals. My adult ewes still did not take in much at all other than salt, but the lambs learned to have interest in minerals. I will continue using this method this year and years forward. My intention is to extend this concept

further this grazing season by building a covered mineral cafeteria on skids that we can move along with our grazing rotation.

For those of you who feel that your sheep are reluctant to take their minerals, I urge you to try this plan in your lambing barns. It is quite inexpensive to set up the bins and only takes a short amount of time to get it going. Good luck!

In the last five years, I have spent a great deal of time researching and thinking about minerals for Icelandic sheep. It seems to be the general consensus that our beautiful, regal breed of sheep needs more than the common mineral to stay in the best of health. We know that they need more copper and selenium than the “normal” breeds of sheep. In addition to more copper and selenium, it is quite likely that our Icelandics need a higher concentration of most minerals to maintain superior health. The soils of their native Iceland are highly mineralized due to volcanic activity, so it would be logical that the feed intake would have higher concentrations of minerals than what we have here in America.

