

Caring for Older Alpacas

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Ruminant Nutrition

Generally speaking, most traditional livestock do not experience old age. The alpaca industry, however, currently does not have a way to dispose of nonproductive animals. Farms and ranches that have been in business for at least ten years may only now have to deal with older alpacas.

Some of these animals may be either sold or given away as pets, or put out to pasture. In either case, these elder alpacas will most likely experience a health problem that is well documented in humans, but also described in pets: immune senescence.

Immune senescence is a weakening of the immune system as animals age. Generally, this translates into the inability to fight infections that a younger animal might shake off. In humans, these infections are too often fa-

tal. Although human medicine attributes this to changes in the traditional immune system (both innate and acquired), they have also connected it to stress (emotional, nutritional, and environmental). Elderly humans often succumb to life-threatening infection after losing someone dear, or experiencing other losses, such as monetary or physical impairment.

You're probably wondering what this has to do with alpacas.

Consider a nonproductive female that has been given away as a pet. She will also experience emotional loss: loss of herdmates, loss of human companions, and even well-meaning, but inept nutrition. She is much more likely to have a fatal infection than a much younger animal when faced with the same stresses.



This condition can occur in all mammals, if they survive their reproductive years. However, because stress is often the instigating factor, we need to examine the first barrier to infection: the gut microflora.

Many factors can reduce the ability of the gut microflora to defend against infection, but the biggest one is nutrition. Poor nutrition is often a

problem in elderly humans, but less obvious in alpacas.

When maintaining geriatric animals, consider the condition of their teeth. Is eating painful or ineffective? Also consider herd dynamics. Is the oldster penned with younger, dominant animals? They may prevent adequate feed intake. Then there is the diet itself. Be aware that as animals age, their digestion becomes less efficient, and they get less out of whatever they eat.

When older, nonproductive animals are part of the herd, their longevity can be prolonged by practicing good management:

- 1) Keep older animals in their own pen or pasture. This will keep competition to a minimum, and also allow the owner to keep better track of feed intake.
- 2) Keep quality grass hay and a vitamin and mineral mix out at all times, supplement with grain if the oldsters lose weight. Older animals which receive excess supplement may become obese. Obesity also decreases immune response. Try to maintain what would be considered a healthy weight in a younger alpaca.
- 3) Stay on top of parasite control. Parasites can steal valuable nutrients and further decrease immune status.
- 4) Feed a good quality probiotic. Probiotics strengthen the immune system and help the animal get more out of their feed.



The good news is that immune senescence is not inevitable, and there is some indication that it can be reversed. Be aware of the stresses in your older animals' lives: extreme weather, rapid alternations in temperature, poor diet, even the death of herdmates or being sold to a new farm or home. Any of these can trigger a potentially fatal infection.

If you have animals that may have been with you since the beginning, and want them to stay in the herd, whether for emotional reasons or because they still produce wonderful fiber. They will be around longer if you practice good management and keep stress levels to a minimum.

About the author:

Lark Burnham received a B.S. in Animal Science (1979), from Kansas State University and a M.S. in non-ruminant nutrition (1995) from Kansas State University, Manhattan, and a Ph.D. Doctorate in ruminant nutrition (2004) from Texas Tech University, Lubbock. Her special interests are comparative nutrition, the role of the micro flora in all mammals, fiber digestion, and probiotics. Lark currently works for Natur's Way, Inc., Horton, KS, which produces MSE probiotics.