

My Herbal Feed

Disclaimer: We are not veterinarians, nor do we claim to be experts in animal science. We are just explaining how we feed our animals. It is purely your choice to decide what you feed your animals!

My pygora know when it's Saturday—it's special feed day. If I'm late, the natives get restless. Many goat owners are surprised my pygoras will even eat my pumpkin mix, but my guys just love it! I don't measure amounts; I'm like my grandmother who never used recipes. Although, I can give you the ingredients and you can experiment as to how your goats receive this mixture.

Never suddenly change a goat's diet, it is very hard on their digestive system and stresses the immune system making them more susceptible to parasites, diseases and infections. This circumvents the reason for administering medicinal herbs and natural vitamin supplements in their feed. We will not give our pygoras anything we will not eat ourselves. We slowly phased in the ingredients over time as the pygoras became acclimated to the mix.

First, we wanted to find out if the goats were interested in the taste of the herbs and spices. Second, we observed to see if they had any adverse effects. So, we started using just the powder forms before we added fresh raw herbs. The herbs I use in "My Herbal Feed" are multipurpose, after we give you the ingredients, we will explain the function of these herbs and spices. This is the basic ingredients:

- Grain and/or Pellets
- Black Oil Sunflower Seeds (BOSS)

- 15 oz. Canned Pumpkin or Puree of Pumpkin
- Powdered Garlic
- Fresh Crushed Garlic
- Powdered Ginger Root
- Fresh Chopped Ginger Root
- Powdered Cinnamon
- Powdered Cloves
- Finely Chopped Unsalted Brazil Nuts
- Wheat Germ
- Unsalted Pumpkin Seeds
- Dollop of Honey (Optional)
- Baking Soda

We make two plastic dish pans of this mix every week, one for the boys and one for the girls. This review is to feed 4 goats per pan. Fill the bottom of both pans with the grain or pellets you usually use; a mixture of both is fine. How much you use depends on the feed you normally use, reproductive season and age of your pygoras.

Split a small can of canned pumpkin used for pies over the grain/pellets and stir to check out the consistency. Pumpkin is high in vitamin A, C and potassium and fiber (20%). Pumpkin is very good to control intestinal parasites and aids in digestion. Be very careful with the amount of Vitamin A intake since it is toxic in large amounts. One half a cup of canned or baked pumpkin has 450 times the recommended dietary allowance of Vitamin A for humans.

Next, we add the sunflower seeds. I use the Black Oil Sunflower Seeds (BOSS), the hulled black livestock seeds; in this case we use it for the copper content. We had the choice of sesame seeds, cashews or sunflower seeds to supply the needed copper--they all contain pretty much the same amount

of copper. Sunflower seeds are also high in fiber, polyunsaturated oil (Omega 6 and 9), iron, Vitamin C, zinc and was the most inexpensive choice.

Garlic was my first choice to start herb feeding. Instead of fresh garlic, I used garlic powder to see if they would eat it and to observe if they had any adverse affects. Garlic is out of the onion family and purportedly not good for goats and many other animals. Now, I add a whole bulb of crushed and finely chopped garlic to feed approximately eight adults goats per week. We don't fuss too much taking the peelings off the cloves, however, if you slightly crush the cloves first, the peels easily come off. You can infuse the crushed garlic in olive oil and refrigerate, but the active ingredients can be lost if stored too long. The olive oil will certainly enhance their fleece. On the other hand, garlic has the ability to irritate the stomach and cause flatulence.

The grandeur of garlic cannot be over emphasized. Garlic's Latin name is *allium sativum*. Garlic kills various, viruses, bacteria and intestinal parasites as well as fungal infections. Raw garlic should be chopped and/or crushed to release the allin, which is a mixture of three allicin molecules. The famous scientist Louis Pasteur (circa 1858) lauded garlic because of its high amounts of ally sulfide that strengthens the blood circulation, immune system and is one of the best natural antibiotics known to man. The secondary effect of garlic ingestion is the odor given off from breath and skin to repel insects.

Garlic is also purported to have the ability to neutralize the effects of certain poisonous plants. However, the rumen system of the goat is believed to be able to neutralize some poisons before it reaches the fourth stomach called the "true stomach." It's called the true stomach because it digests food similarly to human stomach with digestive acids rather than fermentation as is the case for the three former stomachs.

Ground ginger was our second choice to phase into the feed and in a lot of ways is very similar to garlic, although ginger in itself is almost as useful as garlic in its own right. As with garlic, I started adding a small amount of powder ginger to see if they had any adverse effects. I now add both, ground and fresh ginger. Fresh ginger can be finely chopped and indefinitely stored in sweet sherry. We buy about 2 pounds at a time, zoom it up in the blender add sherry to cover and refrigerate.

Ginger increases saliva in the mouth that dramatically increases the digestive enzymes therefore helps with digestion, heartburn, gastrointestinal problems, inflamed bowels, gas, mouth ulcers and gum infection, insect bites/stings, lice, ringworm, dandruff, relaxation of tight and sore muscles and as anti-inflammatory even for arthritis!

Ginger is a cleansing agent for bowels and kidneys. Since goats have four stomachs, it made sense to add ginger to relieve abdominal or intestinal distress. It also improves the circulation, immune system, and stimulates proper heart and respiratory function. Any malaise they may have from the other herbs will be appropriately taken care of by ginger. Although both garlic and ginger are excellent for all around health maintenance, it can inhibit blood coagulants like aspirin, so if wounded they can bleed more than usual.

Raw Unsalted Brazil Nuts are extremely high in selenium. In fact, Brazil Nuts contain 4,500 times more selenium than any other nut on earth. Six to eight Brazil Nuts are equivalent to one ounce. We add 4-6 finely chopped Brazil Nuts per pan each week. We find them at the health food store for eight dollar a pound. They already get selenium if you use pellets or free-choice salts so too much can be toxic. You find naturally high amounts of selenium especially in the plain areas but usually not around coastal areas of the United States.

Next, we phased in powdered cinnamon, and cloves to strengthen the immune system while also protecting the body from bacteria and viruses hence they are considered antibiotics. If the does are pregnant you may want to give just a small amount or eliminate cinnamon and cloves just in case and perhaps cut down on the ginger.

Wheat germ is the embryo of the wheat seed that contain large amounts of carbohydrates and proteins to bolster muscle health. It is concentrated with a number of essential nutrients to include Vitamin E, folic acid, phosphorus, thiamin, zinc, magnesium, essential fatty acids as well as an excellent source of fiber. We started to use it for its Vitamin E content but found it to be a cornucopia of nutrients that will not hurt your goat. We elect not to use the wheat germ oil since it becomes rancid very quickly. Wheat germ cereal should be refrigerated after opening and will last approximately 4 months in the refrigerator.

Unsalted pumpkin seeds are rich in carbohydrates, amino acids and unsaturated fatty acids. Additionally, they contain many of the B Vitamins, C, D, E and K as well a calcium, potassium, niacin and phosphorous. They are known to treat prostate, bladder and urethra function ailments, but I used them for purging intestinal parasites. Intestinal parasites are a very serious disease for goats that can be fatal, using nonprescription, natural seeds as a preventative is very important for their overall health. Goat and other animals have built up resistance to antibiotics; goats will not build up any resistance to pumpkin seeds when administered on a frequent basis.

A small amount of honey is optional and omitted if this is being fed to the young or pregnant does. The healing power of honey is phenomenal especially for infection in wounds but unfortunately if used topically on the goats it would attract all kinds of insects. The reason for its anti-infection properties from topical application comes from its ability to absorb fluid to prevent further infection. Honey is the only edible food yet found in tombs of the Egyptians—if they wanted immortality honey would have been the ticket. Honey will also increase their electrolytes and make my concoction more palatable and desirable.

After stirring this concoction well, we add a good sprinkling of baking soda and stir again. This is to neutralize the acidity of the feed. Goat's rumen system digests grains at a pH between 5.5 to 6 and hay over a pH of approximately 6. We obtained some litmus paper to test the pH; the test indicated the mix has a pH around 5, so a shot of baking soda is good for the feed to be in the acceptable pH range for goat rumen digestion.

One grain they did not care for was ground flax seeds. I haven't yet found these herbs in any large quantities at the store but I'm rather reclusive so I don't shop much. When shopping for them, I usually go to the Mexican food area because it is cheaper and I can find at least the ground garlic, cinnamon, and ginger inexpensively. *Bon Apétit!*