

Goatvetoz Winter Newsletter

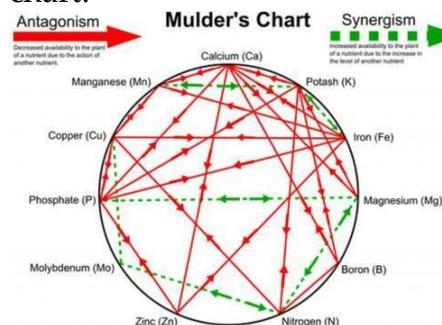
Goat Veterinary Consultancies - goatvetoz

Winter 2023

Zinc Deficiency

Zinc is a trace mineral but needed in much more than other trace minerals like iodine or cobalt. Goats require 45-75 parts per million of zinc in their diet. The type of zinc is also important as some sources of zinc are very poorly absorbed. Zinc methionine or organic zinc is absorbed better than inorganic zinc such as zinc oxide or zinc sulphate.

Zinc deficiency is not often a straight lack of zinc. Generally it is the interaction between other minerals and zinc. These interactions are very complex and it is best to get veterinary advice. These interactions are summarized in Mulder chart.



High calcium can be responsible for zinc deficiency so feeding dry goats like wethers a lot of

lucerne (alfalfa) can lead to zinc deficiency. Lucerne is great for milking goats and growing kids but wethers are best fed grassy lucerne or oaten hays, not just to prevent zinc deficiency, but also to prevent urinary calculi (many calculi have calcium).

High sulphur in the diet can cause the formation of zinc sulphide that is not an absorbable form of zinc. Excess copper can also cause zinc deficiency e.g. algal prevention blocks or excess copper bolus use.

Clinical signs include:

- Loss of appetite
- Weight loss
- Hair loss
- Thickening of the skin

Zinc is needed for Vitamin A function so goats may need some additional Vitamin A. Vitamin A is in all green feed so if only feeding stored feed, add in some carrots or green browse. Talk to your vet about testing and treatments.

Basic first aid kit

-Cetrigen spray (purple spray) is another first aid kit idea - antiseptic and fly repellent for small wounds but never use in the eye.

-a multivitamin B injection to stimulate appetite or if a goat is not eating and hence not making B Vitamins in their rumen. It can use for just thiamine if needed.

- thiamine injection for polio or any nervous signs

- Calcium Magnesium Phosphorus and dextrose/glucose pack (made for cows)

- a worm drench ideally a combination drench (unless a milking goat) that you know works in your goats and your worms based on a DrenchCheck (i.e. worm egg counts before and 14 days)

- activated charcoal for any poisoning

- variety of sterile syringes

and needles plus a good drench gun of size needed depending on size of your goat - we have 4 single dose drench guns of different sizes

However many of these drugs are "off label" for goats as not registered for goats - even the worm drench as needs to be given at a higher dose rate than on the label Therefore you need a vet's prescription.

Should I give my goats fruit and vegetables?

A complex subject and not easily answered - some are poisonous e.g. avocados,. Some are great sources of vitamin A like carrots.

Firstly lets list poisonous fruits & vegetables:

- Avocados
- Garlic & onions
- Rhubarb leaves
- Tomato leaves
- Green potatoes

Spinach is high in oxalates and these can cause problems in large amounts. Firstly they can bind calcium making goats calcium deficient. Generally not a problem unless also on tropical pastures with high oxalate levels. Oxalates can cause "Big Head" in horses where excess fibrous tissue is laid down to compensate for poor bone density due to low available calcium. Old goats on tropical pastures can get this as well. Also male goats can get oxalate stones, although these are less common than other types.

Citrus fruit can cause rumen upsets as they are acidic and rumens don't like too much acid. Many dairy cows are fed large amounts of citrus fruit waste but this is in a balanced ration. So citrus

may not be good for does that are already getting grain (which makes rumens more acidic). However they may help prevent stones in wethers and bucks which should not be getting much grain anyway & the citrus can help acidify the urine making stones less likely to form.

Be careful with the diameter of the vegetables e.g. cut carrots lengthwise and never feed stone fruit with the pits inside. Circular foods like pits or carrot rings, can cause choking or bloat if stuck in the oesophagus.

Pumpkin and carrots are excellent sources of vitamin A. One cup of carrots can provide the daily vitamin A needs of a goat. Dry hay that is no longer green and grains have very little vitamin A.

Do you get my Tweets?

Do you use twitter on your mobile phone? See all my tweets at www.twitter.com/goatvet

If you have decided to leave Twitter you can follow me on Tumblr. I have also now joined Threads to try it.

CAE testing

Sometimes goat owners tell me that they don't want to test their goats for CAE because they are afraid of what will happen if one of the goats is a positive. My reply is as follows:

The CAE ELISA test is one of the most accurate test around with 95 to 98% accuracy in various studies. This is because for CAE, once your goat gets infected and develops antibodies for CAE it is infected for life. Other ELISA tests pick up antibodies but may have fought off the infection but with CAE, the virus is protected within the goats own cells so antibodies don't work.

The sooner you find a CAE carrier, the sooner you can stop spread within your herd by isolating it behind double fences or solid wall. You won't be forced to destroy your goat although some owners may choose to do so to protect their other goats.

There may be a false positive but these are rare. In my experience it can be due to stress of transporting the goat to the vets to get the blood sample taken rather than having the vet come to the farm. Also goats that are ill from another disease like an eye infection, should not be tested until well again. A home bred goat that tests positive when everyone else is negative, can be retested.