MINI-GOAT NOTES

Miniature Dairy Goat Association Newsletter

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Current Numbers

MDGA has 509 members

Registrations to Date:

Mini Alpine 875 (39 Grade)
Mini LaMancha 3925 (193 Grade)
Nigerian 365
Mini Nubian 7218 (304 Grade)
Mini Ober 443 (10 Grade)
Mini Guernsey 13
Mini Saanen/Sable 168 (28 Grade)
Mini Togg 124 (4 Grade)

Letter From the President

It is with great pleasure and enthusiasm that I accepted the nomination of President for 2017. I would like to welcome all of our new members to the Miniature Dairy Goat Association and thank our renewing members for their continued support.

A little about my background: I have been an avid equestrian since the young age of 10 and a competitive Team Penner and Ranch Sorter for the past 20 years. My passion for horses now pales compared to the passion I have for my dairy goats. I am currently in my 4th year as a Mini LaMancha breeder and still have so much to learn. I am also the president of the South Central Goat and Sheep Producers in Glasgow, KY, Secretary for the Southern KY Team Penning Association, and sit on the Accounting Advisory Committee for Daymar College in Bowling Green, KY. By day I am a Sr. Tax Accountant and by evening and weekend and am 100% a FarmHer.

One of my main objectives this year is to encourage our members to become engaged in our organization and their local area. While the membership is not a voting body, the engagement opportunities are there in lots of ways. What would you like to contribute to MDGA? Would you like to start a local networking group in your area? Would you like to be a part of a committee? Would you like to be part of a live show by volunteering or even a show manager? Would you like to do research and write an article on a topic of interest? Would you like to be a mentor for someone just getting started in dairy goats? These are all great ways that you can engage

Floppy Kid Syndrome or White Muscle Disease - Know the Difference

by Jill K Hoenmans

With kidding season in full swing, breeders are often faced with kids that “need help.” Kids born with a Selenium deficiency are often unable to stand at birth, can have contracted tendons, and, in general, do not thrive. This is know as White Muscle Disease (WMD) - not to be confused with a similar condition known as Floppy Kid Syndrome.

Floppy Kid Syndrome (FKS) is most often seen in kids who are bottle raised - and usually within 5-10 days of birth, although it can occur sooner than 5 or later than 10, depending on the situation. Unlike WMD, FKS isn't caused by a Selenium deficiency, although any mineral or vitamin imbalance can contribute to the problem. Kids raised by their dams are rarely allowed to “over-eat,” getting frequent small means that their systems can easily process. There are always exceptions; does with high milk production and fewer kids nursing, can provide more milk than a newborn can safely handle, just as a breeder feeding by bottle can over feed. That bacteria build up in their systems can reach toxic levels,

the people in your area and educate them on why you enjoy your Miniature Dairy Goats.

I eagerly anticipate the progress we will see in the upcoming year and encourage you to take a moment to ask yourself how you can be a part of that progress.

In recognition of the individual and collective contributions I would like to say a very sincere THANK YOU to the past and current board members and officers that make the Miniature Dairy Goat Association my first choice for my miniature dairy goat registration and recognition.

Very truly yours,

Dee Daniels
Buck Creek Stables
Smiths Grove, KY

“Start where you are. Use what you have. Do what you can.” – **Arthur Ashe**

G6S - What’s it all about?

by Jill K Hoenmans

Imagine spending time and resources to build up a herd you feel has great potential, and then, you learn about a genetic disorder that could potentially cause an early death to one of your precious animals. Imagine your relief as you begin testing your herd, and your foundation animals come up Normal (genetic disorder doesn't exist in them.) Now picture the sinking feeling as you test the final group that includes weanlings you have brought into your herd from other breeders - breeders who have been around for years.

This was my introduction to the genetic disorder known as G6S. During my second round of testing - I split into 2 groups because of the costs - I had 2 weanling does test as Carriers; both were purchased from outside breeders. One of these was a mini Nubian. Both left me heartbroken as I agonized over

resulting in kids that are depressed, appear weak, lacking energy or even “comatose.” Since the first thought is to increase feeding to provide energy, many breeders only exacerbate the problem by trying to force more milk. Treating with Selenium does not fix this, but early detection and treatment is essential to save a kid with FKS.

In 2016, I experienced this first hand with an orphaned kid. Due to complications, the dam was unable to nurse after 3rd day and he was switched to bottle. Within a few days, he exhibited signs of depression, lack of interest in his bottle, and lack of energy. Normal body temp, clear lungs and otherwise no symptoms (and his brother acting normal) had me stumped. Since bowel movements weren't noticeable, I used warm soapy enemas to see if a bit of constipation was the culprit - and began researching. I was able to find quite a bit on both WMD and FKS (see below for references) and within 24 hours of initial symptoms, and a few treatments to clean out his digestive tract, I had a new game plan. Milk was replaced with warm water and electrolytes for 24 hours, and CD antitoxin was administered as well. About 48 hours after the initial onset

their future. That is when learning about, educating and providing others the resources and list of tested animals became important to me.

Most breeders of dairy goats quickly become familiar with all the possible illnesses and diseases that can affect them. Testing for CAE and other transmittable diseases is common practice in all breeds. For those who have mini Nubians (or any animal that has any Nubian blood in its pedigree) there is another concern; the genetic disorder known as G6S.

G6S is short for N-acetylglucosamine-6-sulfatase. It’s a naturally occurring enzyme that helps maintain connective tissues throughout the animal's body. When we refer to G6S in regards to carriers and affected animals, we are referencing a mutation that stops the production of the enzyme before it’s completed, causing a substance called glycosaminoglycans to accumulate in the liver and brain. This creates the progressive specific neuron-generative disease we refer to as G6S. Symptoms seen in a G6S affected animal include slowed growth, lack of muscle mass, blindness, deafness and eventually death caused by liver failure. Most don't live beyond a year.

G6S was identified in Nubians during research for the human version, called Sanfilippo IIID. Similar to the effect in goats, affected babies appear normal at birth but soon stop growing, develop neurological difficulties and then die. When the same defect was found in Nubian goats, researchers used Nubians as models for identification and possible treatment, and goat breeders have benefited from this research with the genetic testing.

G6S is an autosomal recessive trait. it involves only one gene, it isn’t sex-linked (both males and females inherit equally) and two copies of the defective gene

of symptoms, hard feces began to pass followed by a bit of diarrhea - and behavior swung around completely to include crying for his bottle and interacting with his brother. At this point, milk was offered in small feedings (2 oz every 2 hours) as I waited to see if symptoms reappeared, and ensure bowel movements returned to normal. Within 36 hours, he was back on a normal routine with no after effects or problems.

Unlike WMD, there is no proven way to prevent FKS other than managing milk intake at an early age - when their little systems are easily over whelmed. When dam raising, ensuring plenty of space that encourages activity and allows a doe to properly “limit” intake by moving away from greedy kids is a good idea. Bottle raised kids should not be allowed to “eat their fill” until their systems have a chance to kick in gear - feeding small meals often, as nature intended is the best prevention.

References:

"Floppy kid" Syndrome Andres de la Concha and Ramtin Juste Texas A&M University Agricultural Experiment Station, San Angelo

must be present for a kid to be "Affected."

There are now two (2) ways to test for this genetic deficiency - though blood and hair follicles. Unfortunately, many mini Nubian goat breeders don’t know about it. Tested goats are given the designation Normal, Carrier or Affected. Once tested, they never have to be tested again, and offspring of "Normal" parents are automatically "Normal by Parentage."

If a Normal goat is bred to a Carrier, there is a 50 percent chance of the offspring being Normal and 50 percent Carriers. Two Carriers can produce 25 percent Normal, 50 percent Carrier and 25 percent Affected kids. The offspring of Carrier goats should always be tested. Affected adult goats are rarely bred because most are obviously ill before reaching breeding age.

Since it is a genetic trait, testing and careful breeding make it possible to eradicate from a herd quickly, however the testing must happen in all foundation animals with carriers being culled or their offspring tested until the defective gene has been eliminated. Fortunately, testing can be done as early as at birth, since the anomaly is either present or not - having inherited the genes from both parents or not. Testing via blood is done at Texas Veterinary Medicine Diagnostic Lab (TVMDL.) Testing via hair follicle is done at UC Davis Veterinary Genetics Laboratory (VGL.)

So, what do you do? Do you test? If so, do you test all or just bucks? Some breeders will give you rationale for only testing bucks - after all, if the buck is normal, the worst case is a carrier offspring from an untested carrier doe - right? Do you disclose to buyers that status? Do you let a buyer pay to have an animal tested?

Health Problems of Young Kids
Suzanne W. Gasparotto, Onion Creek Ranch, Lohn, Texas 2/13/11

Weak Kids or Floppy Kids
Suzanne W. Gasparotto, Onion Creek Ranch, Lohn, Texas 2/13/14

Floppy Kid Syndrome (fading kid syndrome)
Christine B. Navarre, DVM, MS, DACVIM Extension Veterinarian, LSU AgCenter Department of Veterinary Science
M.S. Gill, DVM, MS, DABVP Professor, Farm Animal Health Maintenance LSU School of Veterinary Medicine

V-Show Deadline

Virtual shows are an opportunity to get your animals seen and judged when you cant make it to a live show. Current show is accepting entries - Deadline is June 30!

Don't forget, you can show your MDGA registered Nigerian Dwarves & Mini wethers!

http://miniaturedairygoats.net/vshow_page.html

As a breeder, I have always felt a moral and professional responsibility to my buyers and fellow breeders to share what I know - about my animals and about what testing may show on theirs (in the case of a purchase of an outside animal.) In my case, I knew my bucks were all Normal - either by testing them or having tested their sire/dam - and so, I bred my two carrier (1 mini Nubian and 1 standard Nubian) does and gambled that I might get normal kids. Of course, it required the kids being tested, an added cost. The twin does from the mini were Carriers. The twin buck/doe kids from the Standard were normal. This experience really brought home to me the gamble involved with breeding unknowns or carriers.

Raising dairy goats comes with lots of challenges. Fortunately, this one can be addressed by testing foundation stock, and making decisions about your breeding program based on knowledge.

References:

FAQs on G6S diagnostic testing, TVMDL, http://tvmdl.tamu.edu

Clavijo, A., F. Sun, L. Sneed (2010) Diagnosis of caprine mucopolysaccharidosis type IIID by real-time polymerase chain reaction-based genotyping. Journal of Veterinary Diagnostic Investigation 22:622-627.

Hoard, H.M. et al. (1998) Determination of genotypic frequency of caprine mucopolysaccharidosis IIID. Journal of Veterinary Diagnostic Investigation 10: 181-183

A Genetic Defect and its Management, Dagny Vidinish

Links:
www.g6sdata-mn.com

From the Recipe Box

CHEESECAKE

Crust
2 c graham cracker crumbs
1/2 c melted butter (goat butter)
1 tbsp. sugar

Filling
1 cup sugar
2 pounds chevre (or cream cheese)
2 large eggs, beaten
1 tsp. vanilla extract
2 tbsp. corn starch
1 cup sour cream (goat sour cream)

combine graham cracker crumbs, butter, and sugar, mix well. press into springform pan (I don't have a springform pan so I just use a large pie pan or something like that). mix all filling ingredients together EXCEPT sour cream well until smooth and light. fold in sour cream, pour in crust.

this is the most important part - the baking temps. if you change this you might get a nasty bubbly mess so do exactly as written here or change at your own risk!!!

bake in preheated oven at 450 degrees for ten minutes. then reduce temperature to 200 degrees and bake another 45 minutes. after baking, turn off oven and leave door cracked and let sit for two to three hours. at this point you should be able to remove sides from springform pan or you can simply refrigerate as-is.

I like cherries on my cheesecake, garnish as desired.
enjoy!
Catherine Sizer
www.newlandnubians.com

Have a recipe to share? Send your suggestions!

Have a topic you think we should cover?
Have something you want to include?
We want your input!

Upcoming Issues: Showing; Why it benefits you! - How Is Your Milk? - Spotlight on Members - Show Results - Milk Test: Why and Who! - Evaluations? Do We REALY Want an Appraisal Program!?