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*A Tradition of Leadership and Excellence in Equine Medicine*

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**The heat is on!!!!**  
**Allen B. Riggs, D.V.M.**

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As you know, summers in Florida can be very long, hot and humid. It is August and we still have a few very hot months left before cool weather begins. Luckily, when we get hot we can escape to the air conditioning for relief. Unfortunately for some of our horses, the heat can be a real problem and they have no way to escape it. If you have been in Florida for very long, I am sure that you are familiar with the “non sweater.” Horses are animals that cool themselves primarily by sweating. As their body temperature rises with heat or work, horses begin sweating to regulate their body temperature. Horses that cannot sweat may have temperatures that reach 106 degrees or even higher after strenuous exercise.

What causes it? Anhidrosis is defined as the inability to sweat in response to the appropriate stimuli, and it can range from partial to complete. We really don't know why horses stop sweating, but one theory is that there is insensitivity and a down regulation of the beta-2 receptors on the sweat glands. Whether this is a result of a failure of the chemical message from the nerves to the sweat glands or the sweat glands themselves have become fatigued from over stimulation and cannot respond to the chemical message is not known.

What do I look for? Besides the obvious, horses may produce a little sweat limited to behind the ears, throatlatch, under the main or around the girth. They may sweat normally during the cool months during exercise but stop when it gets hot and humid. They may show exercise intolerance and refuse to work, or they may pant. Some horses will only graze in the cool part of the day and spend the hot part of the day in the shade or playing in the water. Most “non sweaters” will have a dry and thin hair coat, and develop alopecia (hair loss) around the face and neck. High temperatures respond very quickly to an alcohol or cold-water bath. Horses that have a respiratory virus or bacterial infection can also pant and have a high temperature, but the temperature will not respond as quickly and your veterinarian will be able to determine the cause of the temperature.

What can I do? Ask 10 people what to do about anhidrosis and you may get 10 different answers. I have found that there are many remedies out there. Beer, twice a day (for the horse not the owner!), acupuncture, acupressure,

chiropracture, salt, electrolytes, iodinated casein, thyroid treatment, ACTH, vitamin E and more labels than you care to read in the magazines, feed and tack stores. Diet can also play a role in heat production. A diet high in concentrates produce more heat when digested than diets that are high in fats. Not all remedies work for all horses. Some horses just respond better to some products. There are over-the-counter products that work.

What does all this mean? Use common sense. Exercise in the coolest parts of the day. If your horses are kept in a barn, supply fans to keep them cool. Always supply plenty of fresh water. Add salt or electrolytes. You may even add a water spray or mist system that horses can stand under when they want.