

Great Expectations

Uncertain about what to expect when your horse is expecting? The *PHJ* delivers details about your mare's first and second trimesters in the first of a three-part series.

★ By ABIGAIL BOATWRIGHT ★

You're not biased, but in your mind, you have the perfect Paint mare. She's sweet, possesses great conformation and is a knockout in your chosen discipline. You wish you had a barnful just like her, so it was an easy decision to breed her to a stellar stallion. Now that your mare is pregnant, what do you do? If you are new to equine gestation, the next 340 days can be overwhelming. The *Paint Horse Journal* enlisted the help of two experts—equine reproduction veterinarian Kurt Harris, D.V.M., of Whitesboro, Texas, and veteran Paint breeder Ann Stockstill of Winona, Texas—to share tips to help beginner breeders navigate equine pregnancy.

Over the next three issues, you'll learn how to modify your horse's care during each trimester, what to expect before, during and immediately after birth, and how to prepare for your new arrival. This article focuses on care during your mare's first and second trimesters.

★ Three Keys ★

During the first trimester of your mare's pregnancy, the fetus grows from a tiny egg less than ¼ inch in diameter to seven inches long by day 100. By the end of that first trimester, the unborn foal sports a bit of lip hair, ears about ½-inch long and hooves only ¼ inch in size.

The fetus continues to grow steadily during the second trimester. By day 240, the foal has whiskers on its face and muzzle and a sprout of a mane and tail. The final trimester is where the most rapid growth occurs.

"By the end of the second trimester, the fetus is only about the size of a small dog," Harris said. "It has much more to grow in the last trimester."

During your mare's first and second trimesters, consider the following three components to help your mare produce a healthy foal.



ABIGAIL BOATWRIGHT

1. Nutritional Building Blocks

• Protein •

Stockstill says the key to healthy foals and a normal pregnancy is nutrition. A normal, healthy fetus requires appropriate broodmare nutrition, and protein is one of the most important parts of a pregnant, and later nursing, mare's diet.

"A mare with a protein deficiency can stunt a developing fetus or produce a foal with a low birth weight or slow growth," Stockstill said. "A protein level that is too high can also result in developmental diseases."

To find the right balance of protein during a pregnant mare's first two trimesters, consider increasing the amount of protein in her feed by 8 or 9 percent. After consulting with her veterinarian, Stockstill orders a custom feed mixture containing 14 percent protein for her broodmares.

"You should also have your hay tested to determine the amount of protein it contains," Stockstill said. "That will help you determine which feed your horse needs. I feed hay that tested at 12–16 percent protein, along with the 14 percent protein feed."

Harris says balance is the most important part of a pregnant mare's diet.

"A properly balanced diet will help you avoid a protein deficiency," Harris said. "A 14 percent protein content is good—that is the highest I would feed a gestating mare."

• Calories •

Just as essential to the mare's diet, caloric content should be considered when choosing a feed for your pregnant mare, Harris says.

"For a gestating mare, caloric content and a good source of protein are both important to keep up with the foal's growth," Harris said.

• Fat •

Also important for a healthy pregnancy, fat content is another nutritional percentage included in a mare's feed. Stockstill's custom feed blend includes 6 percent fat content.

Consider your mare's body condition and base the fat content of her diet on the individual horse, Harris says. For example, some performance Paint mares are easier keepers and will need less fat than perhaps a Thoroughbred mare in the same barn.

"The nutritional requirements during the final trimester are critical due to the foal's rapid growth," Harris said. "But the mare needs to be in good body condition throughout the pregnancy."

• Minerals •

Stockstill says mares in the earlier stages of pregnancy should receive calcium at a rate of .2 percent and in late gestation, adjust that number to .4 percent. She feeds mineral blocks specifically formulated for pregnant mares through the first part of gestation, and another one for lactating mares near the end of the pregnancy to achieve these proportions. However, the mineral supplement you choose depends on your area and your specific horse, so consult your veterinarian before you feed a supplement.

"You need to make sure the mare is getting an adequate mineral intake of phosphorus, calcium and selenium," Stockstill said. "My veterinarian suggested the supplements I use for my horses. You should check with your vet to get his recommendations."

Once you've developed a balanced diet for your pregnant mare, Stockstill suggests keeping her diet consistent throughout the pregnancy and lactation, increasing portions of hay if necessary.

"Basically, you want to make sure they've got a correct balance of minerals and enough feed, but you don't want to overfeed," she said. "So rather than increase grain, I might give them some alfalfa with their feed, along with plenty of grass hay. Once you find a good feed, try to stick with it throughout the pregnancy. Just pay attention to the minerals."

Harris agrees, suggesting .25 percent calcium during the early part of pregnancy and .5 percent later on. He says most developmental diseases are a result of an incorrect balance of phosphorus and calcium.

"Most commercial feeds designed for broodmares are balanced for calcium and phosphorus levels," Harris said. "But you need to take into account the grass and soil where you keep your horse. You also need to have your roughage analyzed."

Harris says a ratio of calcium to phosphorus in the mare's diet should be at least 1.1:1 for optimal fetal development.

"If you have too much or too little phosphorus, you could

Meet the Parents



Chicos Dance To Win is a 2005 black tobiano mare by Summerschicobandito and out of Dandys DS Trip Bar. "Dance" is owned and bred by Stockstill. Her sire, "Chico," excelled in roping and cattle events, collecting more than 1,000 APHA performance points, along with won two world championship titles in steer stopping, five Registers of Merit and Superiors in heading, heeling, tie-down roping and steer stopping.

In 2010, Stockstill bred Dance to Wimpys Shining Step, a 2005 palomino Quarter Horse stallion. Sired by National Reining Horse Association nearly \$3 Million Sire Wimpys Little Step (QH) and out of the Shining Spark daughter Shining Arrangement (QH), Wimpys Shining Step has earnings in NRHA competitions.

have problems," Harris said. "Calcium and phosphorus comprise about 70 percent of the mineral content of the body and 30 to 50 percent of the minerals in the mare's milk."

Zinc levels in the mare's diet above 200 parts per million are also suggested by Harris.

Meet the Experts



Ann Stockstill has owned and bred horses since 1992, and she's had Paints for nearly as long. The Winona, Texas, resident now owns more than 100 Paints and produces an average of 30 foals each year at her farm, Coyote Creek Ranch. Her tobiano stallions include APHA world and reserve world champions Summerschicobandito and Chicos Bandelero.

Dr. Kurt Harris, D.V.M., is an equine veterinarian with more than 25 years of experience. He works at JEH Equine Reproductive Specialists in Whitesboro, Texas, where the clinic uses the latest technology to serve mares and stallions with reproductive challenges.



2. Veterinary Care

Schedule regular veterinary checkups throughout your mare's pregnancy. As a novice breeder, developing a positive relationship with a veterinarian who specializes in equine reproduction will give you a greater understanding of your mare's health and could reduce complications.

• Ultrasound •

Stockstill recommends scheduling an ultrasound exam 14 days after your mare has been bred or exposed to a stallion.

"During this ultrasound exam, vets like to check for twins," Stockstill said. "A mare pregnant with twins is at a higher risk for complications, so it's good to know what's going on inside. Most twins spontaneously abort within the first six weeks, and up to 80 percent abort later on

in the pregnancy. When that happens, serious complications for the mare can occur, so catching twins early in an ultrasound is important."

Harris says the 12- to 14-day checkup is very important because if a mare has twins, action needs to be taken within a few days of that ultrasound.

"If we suspect twins, we will need to pinch off one of the embryos within that week," Harris said.

• Vaccination •

Ask your veterinarian to help develop a vaccination schedule for your pregnant mare. Stockstill schedules rhinopneumonitis vaccinations for the fifth, seventh and ninth months of pregnancy—this helps prevent abortion due to Equine Herpes Virus-1. Four to six weeks before your mare's due date, schedule five more vaccinations: tetanus, Eastern and Western encephalomyelitis, influenza, inactive EHV-1/EHV-4, and West Nile Virus. Your veterinarian might suggest more vaccinations pertinent to your area.

For example, for Texas residents, Harris recommends including a rabies vaccination six weeks before your mare's due date—depending on where your mare lives—along with an additional rhinopneumonitis vaccination during the mare's third month of gestation.

• Deworming •

A regular deworming program is important to maintain the health of your mare and unborn foal. Stockstill maintains her regular deworming program—done every three months—throughout a mare's pregnancy, with a booster dose 24 hours before foaling. Make sure the dewormer you choose is safe for pregnant and lactating mares—this information is listed on the dewormer's label in most cases.

3. Exercise in Moderation

If your mare has been loafing in the pasture before pregnancy, you might reconsider pulling her out for a strenuous ride, Stockstill says. But if she was fit prior to breeding and you've maintained your mare's condition, you can continue to exercise her lightly. Your veterinarian can help determine an optimal exercise schedule for your mare.

"We had a mare that was in training before she was bred," Stockstill said. "We bred her in March, and we took her to the World Show in July. After the show she wasn't ridden. She didn't have any problems.

"Some people say if a mare is in shape, you can ride her until the last six weeks of pregnancy and it won't hurt her. I don't do that personally, but I think you have to use your own judgment." **PHJ**

Abigail Boatwright is a special contributor for the Paint Horse Journal. To comment on this article, email feedback@apha.com. Stay tuned for parts two and three of this series in the November and December issues.