

# Nothing But The Best

by REX A EWING

One and a half pounds. That's how much new bone and muscle a well fed weanling can add to it's body mass every day under optimal conditions. That's nearly eight milligrams—or one million new body cells—per second, give or take a couple hundred thousand cells.

The question is: what should we be doing to ensure construction is sound, orderly and efficient? Most of it, of course, is up to the horse. The blueprints are built into its DNA structure, and the colt will follow those instructions as closely as it can with the materials provided. And therein lies the key.

Even before it is born, a foal begins the process that molds it into the individual it will be for the rest of its life. And every day the mold sets a little harder. As the horse matures, changes become increasingly more difficult. By it's third birthday the dye is cast and any further changes in the horse's potential are impossible.

It is the horseman's responsibility to provide the young horse with the best environment possible to achieve it's God-given potential. This includes proper shelter; good clean water; plenty of exercise; and, perhaps most importantly, the right nutrition.

A good feeding program for the foal begins with the mare. For the first 12 months of the foal's life (11 of them in the womb) its nutritional requirements are provided solely by it's mother. The foal is the mare's highest responsibility. If necessary, she will render her own body tissues to provide for her offspring.

What does the mare (and by extension, the foal) need? Good hay and grain is an ample start. Hay is high in protein, beta carotene, and calcium.

Grain provides carbohydrates and phosphorus. Unfortunately, the processing of these feeds drives out most of the vitamin E and the B vitamins. Often trace minerals are lacking. Even calcium and phosphorus can be below optimum levels. Let's face it: these feeds were not grown in virgin soils! The ground on which they were harvested was more than likely the substrate for a hundred other such crops, each one taking away more minerals than man or nature ever put back.

A lot has been written lately about the dangers of supplements, and dangers there are. There are right and wrong ways to do anything. (By analogy, if you hand out guns to a large group of people, it is a statistical certainty that a given percentage will shoot themselves in the foot.) But the fact is, unless mares and foals can be kept on nutritious, green pasture most of the year, supplementation is the only real option for producing the kinds of horses most of us need to stay in the business. The trick is to not overdo it.

By the second trimester of pregnancy, a mare should have access to a good mineral supplement. No one nutrient should ever be fed to the exclusion of others. A growing horse needs more nutrients than we could ever hope to discuss here, and in the right proportion. Minerals are the building blocks of a healthy skeleton—the horse's foundation, an the anchor for it's muscles. Look at the source of phosphorus, as well. Monosodium phosphate is more easily assimilated than dicalcium phosphate. Be careful with calcium! A great deal more harm has been caused by feeding too much calcium rather than too little. A good mineral supplement will have at least as much phosphorus as calcium.

In most cases, a good vitamin supplement can be beneficial. Vitamins are necessary for a wide

range of bodily activities, and their presence is absolutely essential for proper tissue formation. Dry vitamins are preferable to liquid vitamins for the simple fact that liquid vitamins begin to oxidize (lose potency) the moment they are exposed to air. Be wary of so-called "complete feeds". Vitamins and minerals are not agreeable bedfellows. Generally, a feed that was complete the day of its manufacture is far from complete by the time it is fed.

Yeast culture should be another consideration. It's a natural product that possesses the further virtue of being inexpensive. Yeast culture increases the natural microbial activity in the horse's gut, which in turn increases food efficiency. More fiber is converted to energy and more nitrogen is converted to amino acids. Absorption of phosphorus is also enhanced by adding yeast culture to the diet.

By the time it's a month old, a nursing foal will begin to eat solid food in earnest. Providing a creep feeder for the foal at that time will benefit both the foal and the mare. A creep feeder is simply an enclosure within the mares' pen that only a foal can enter. Be sure to build it high enough: hungry mares have exceptionally elastic necks!

Usually the foal can be enticed into the creep feeder by spreading a little hay around the ground

both inside and outside the feeder. The mares, of course, will eat all the hay outside, but sooner or later an adventurous foal will go inside to check out what its mother is doing acrobatically to get to. Once one goes in, the others will be quick to follow.

Start the foals slowly. They won't eat much at first, in any case. Feed one or one-and-a-half pounds of grain per foal each day, plus a little hay. Clean the feeder every morning and replenish it with fresh grain. When the foals readily clean up the grain every day, it's time to begin supplementation. Increase the grain ration as well, but never to more than three or four pounds a day.

There are a number of good supplements available for nursing foals and weanlings. What applies for the mothers applies equally as well for the babies. Don't feed too much of any one thing. At best it's wasteful, at worst, dangerous. When in doubt, consult a veterinarian or a nutritionist.

Watching foals grow into strong, feisty, bright-eyed horses is one of the greatest pleasures I know. And feeding them well, but wisely, can make the experience even more rewarding, for life!