THE GROWING FOALS

By Dr. William Tyznik

A great deal of smoke surrounds the area of growing horses. With the rather rapid increase of the equine population during the past twenty years, there has been a commensurate proliferation of mysticism and misconceptions about feeding the young horse.

It is obvious that most buyers are paying higher prices for bigger horses. To achieve this goal, horses need to be fed more dense rations to meet the additional requirements. Excesses of nutrients have been accused of causing everything from enlarged joints to contracted tendons. These problems are not unique to horses; in fact, many of the same difficulties present in horses have in some form occurred in other species. The claim that we are feeding horses "too well" is unfounded because horses cannot grow beyond their inherent potential. Since responses from improved dietary regimens are realized, we would assume that we have not been feeding foals at a level to reach their potential. Most of the difficulties that are present seem to be caused by mismanagement or improperly balanced rations. When feed intake is depressed in a growing foal, fewer difficulties with skeletal development are present because fewer nutrients are needed to meet the requirements. Too often, horses are being grown in confinement which detracts from the development of muscle and bone density. In addition, the lack of exercise will result in tendon contraction. If foals are being "pushed" to achieve their potential, exercise is imperative. Young foals, like humans, become lethargic when the food is ample. Under these situations it may be necessary to force exercise. More difficulties are present when foals are grown individually than when grown as a group. Halter horses are more adversely affected than are performance horses.

When a ration is bolstered in one nutrient, leaving the others as a constant level, imbalances occur which invariably cause difficulty. Most of the joint problems have been attributed to calcium and phosphorus imbalances. No doubt exists that these minerals are significant. However, recent work in the species would indicate that cartilage which precedes bone development is different from bone and may in fact be more seriously affected by trace element insufficiency . The ever-increasing use of alfalfa in rations of young horses seems to be creating insufficiency of copper. An inadequate copper intake will cause "knuckling-over" in newborn foals as well as skeletal angulation. Manganese is another element that may well be involved. The difficulty that further presents itself is the rather extensive interaction of the elements so that the simple process or absence of a mineral is not the entire story since other minerals will interfere with absorption and utilization.

I firmly believe that we need to grow horses rapidly during the first few months of their life which is the period when growth is rapid and efficient. Foals will reach 80% of their mature height during ther first 12 months of age. It, therefore, seems logical that we should capitalize on this period in time. Foals

properly fed will not become fat until they reach six months of age. Young foals can and are being given free access to balanced concentrate feeds without difficulty, provided they have ample space to exercise as well as adequate amounts of forage. What happens to a young foal will in no small way affect the adult horse and its performance.

From time to time we hear of young foals that die of ruptured stomachs due to concentrated feeds of high density. This problem will also affect adult horses. In every instance that this occurs, horses have become over hungry and then bolted their feed which caused rapid fermentation, gas production and death. Horses that are adapted and have feed in front of them at all times are not nearly as susceptible.

Foals generally develop feed intake problems problems at weaning. Some foals will lose up to thirty pounds in body weight in a period of three to four days. Foals should be provided with free choice hay, water and minerals. After the foal has stabilized from the shock of weaning grain should be introduced slowly to avoid digestive disturbances and possible death due to rupture of stomachs because of "bolting" of feed. Weanling foals should be provided with a 16% protein grain ration until they reach 2 ½ to 3 years of age. The only reason for not continuing a 16% grain ration after 3 years of age is cost of ration - protein is one of the costliest major nutrients.

Horses can be creep fed by providing an area that is protected from the mare but provides ready access to the foal.

Mare have not been selected for milk production so that there is a wide variation in the growth of foals. Creep feeding will tend to equalize size of yearlings. Creep feeders should be placed near a place that mares congregate. Creep feeders should be completely cleaned and new feed provided daily. The "old" feed should be given to the mares. All horses, including the foals, should be provided with free choice hay, water and loose salt.