weanlings and yearlings
rearing successful young stock

6 tips to help keep your young horse healthy and fit

1. **NUTRITION AND GROWTH** – Weanlings will achieve 60-70% of their mature weight and 90% of their mature height by 12 months of age if they receive adequate nutrition. From 6-12 months of age weanlings should gain approximately 0.5 kg per day. More rapid gain or uneven gain will predispose them to developmental orthopaedic diseases (see below). Weanlings do not necessarily need to get hard feed, however, we often hard feed weanlings and yearlings that are destined for yearling sales or early sale. It is important that if they are getting hard feed that it is specially formulated for growing horses. If weanlings are not being hard fed they still need to be getting a complete feed supplement that provide adequate minerals, amino acids and fatty acids.

2. **DEVELOPMENTAL ORTHOPAEDIC DISEASE** – These are a group of problems that arise in growing horses, and may be related to uneven or too rapid bone growth. Epiphysitis is swelling and pain associated with abnormal activity in the growth plates. It most commonly affects the knees and fetlocks. Osteochondrosis (OCD) is abnormal development of bone and cartilage in joints. This can result in inflammation and pain in the joints, and most often presents first as an eflus in the joint. Bone cysts are holes in the bone near the joint surface where bone has failed to develop properly. The stifle is the most common site for these lesions. All of these conditions require consultation with your veterinarian.

3. **SCREENING RADIOGRAPHS** – Radiographing weanlings/yearlings to check for OCD or bone cysts is highly recommended especially if the horse is heading for the yearling sales or has high resale or genetic/performance value. This is especially important in rapidly growing breeds such as thoroughbreds and warmbloods. For thoroughbreds destined for the Karaka yearling sales these should be done in July/August to allow time for treatment before sales. All other horses should be done after 11 months of age.

4. **CASTRATION FOR COLTS** – Castration of colts between 4-12 months of age is recommended if they are not destined for sales or stud. There is lower risk of complications both from surgery and from anaesthesia with younger colts. Colts that are castrated young do, however, tend to grow taller than entire males. It is also beneficial for breeders with limited space, as entire colts should not be housed with fillies or mares once they are weaned.

5. **VACCINATIONS** – Most weanlings will have had their vaccination program started at around four months of age. It is very important to stick to the schedule and make sure that the entire first series of vaccinations are given on time. All weanlings should be done for Strangles and Tetanus. Other vaccinations may be indicated based on the farm’s environment.

6. **PARASITISM** – Weanlings/yearlings are a very susceptible group for parasites. The parasites we worry most about are Strongyles and Tapeworms. Strongyles migrate through the body during their immature stages and can result in weight loss and intermittent signs of colic. These immature stages may not be killed by normal wormer paste. It is important to discuss a control program with your veterinarian. Tapeworms are easily controlled with worms that contain praziquantel. Tapeworms have been associated with intussusception (telescoping bowel) in young horses.

**hint:**

Platinum Performance is the ideal nutritional supplement for growing horses.

**news update**

It has been all go at the MVS Equine Hospital over the last few months. We have just finished a new stable block including facilities for our Nuclear Scintigraphy Unit. Since our last newsletter we have had two veterinary interns start with us, Sam Taylor and Rebecca McKenzie. Lisa Burch has returned from maternity leave to work part time in the office, whilst Richelle Cossill is presently on maternity leave.

The hospital is still busy despite it being the off-season and we have had many interesting and challenging cases.

**reminder**

**Vaccination reminder for Broodmares**

All in-foal broodmares should receive the following vaccinations:

- **Tetanus and Strangles** 4-6 weeks before foaling
- **Equine Herpes Virus 1 (EHV-1)** at 5, 7, and 9 months of pregnancy, or as otherwise directed by your veterinarian.

All dry broodmares should receive an annual booster of Tetanus and Strangles.

Different stud farms may use additional vaccinations, such as Salmonella and Rotavirus. It is important to make sure that your mare is appropriately vaccinated for the stage she is going to foal.

If your in-foal mare has never been vaccinated or you do not know her vaccine history you should contact your veterinarian immediately.

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**new products**

Nutritional joint supplements offer an additional way of trying to support your horses joints for competition and performance. Healthy joint fluid lubricates the joint and has better shock absorbing capabilities. LUBRISYN is an oral supplement containing Hylauronic Acid, a naturally occurring protein molecule normally found in synovial joint fluid and cartilage. CONTRAFLEX is another oral joint supplement that is designed to improve the absorption of joint related nutrients from the gut allowing higher concentrations to reach the joint. Both products are available over the counter at MVS Equine. Talk to your vet about what joint supplement might be suitable for your horse.
Stress fractures appear as a localised crack within the bone. Stress fractures have the potential to enlarge and become a complete fracture if exercise continues. Many complete fractures that result from stress fracture propagation are not repairable and require the humane destruction of the horse. Stress fractures are significant injuries and their accurate and early diagnosis is desirable to avoid such a potential event.

Stress fractures are typically the result of the repetitive force of galloping. They can, however, in rare cases develop without going faster than a trot.

Stress fractures generally cause lameness. Although, horses may not become lame until the crack is creating instability in the affected bone. In some cases they exhibit intermittent signs of lameness. With rest these horses often resolve their lameness rapidly.

The cannon bone is the most commonly affected site in training thoroughbreds. Stress fractures are seen in a variety of other sites including the humerus, tibia, scapula, pelvis and spinal vertebrae.

diagnosis
The gold standard diagnostic method for stress fractures is Nuclear Scintigraphy. Scintigraphy is an extremely sensitive imaging modality for identifying stress fractures and is able to show up stress fractures that radiographs cannot demonstrate.

treatment
Stress fractures are typically treated by resting the affected horse. This will consist of a graduated schedule starting with box rest and progressing to a yard and then paddock rest. A 12-16 weeks rest period is typically advised. Bone heals well at most stress fracture sites.

The major problem with stress fractures is that they can be present with only an intermittent lameness or one that improves rapidly with rest. On occasion horses will break down with a major complete fracture that began as a stress fracture. These horses may have never had obvious clinical signs of lameness or the lameness was not detected. Horses in training should be monitored closely for any signs of lameness. Early identification of stress fractures will reduce their potential for catastrophic consequences.

Clinical signs
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This does not mean, however, that the stress fracture is healed.

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Nuclear Scintigraphic Imaging is a long established diagnostic method that provides the examining vet with Physiological Function Information regarding the horse’s anatomy and pathology.

Scintigraphy will often be used to provide early diagnosis of a variety of medical conditions and for the staging of a disease during its development. As a modality Scintigraphy provides a complementary diagnostic process to work alongside the more familiar mainstream diagnostic imaging methods such as x-ray and ultrasound.

In simple terms Technetium is injected intravenously into the horse. When the technetium has reached an optimum uptake level, the horse is imaged using a gamma camera and computer system to provide the vital diagnostic information to the vet.

At present Nuclear Scintigraphy is primarily used in veterinary practice as a diagnostic tool to find problems in the skeletal system of horses. This bone scanning technique has fast become the gold standard in the diagnosis of a variety of common problems in equine athletes, typically stress fractures, limb injuries and back and pelvic problems etc.

The improved diagnosis of stress fractures has been of great benefit in reducing the mortality from these injuries by preventing them from developing into catastrophic fractures. Scintigraphy is not only more sensitive in the detection of stress fractures than radiography, but it allows images of areas that cannot be radiographed, such as the pelvis. Because of its sensitivity it also allows monitoring of the healing process so that horses may be returned to training at the correct time.

This service has previously had restricted access for equine patients in the upper North Island. We are proud to have this service now available at our hospital.

Artificial lighting for dry broodmares
Horses by nature are seasonal breeders. They start to come into season as the day length becomes longer. In the Southern Hemisphere the normal ovarian cycle peaks in January/February. For thoroughbreds in particular this is after the breeding season is over. This also affects polo and sport horse mares that are enrolled in embryo transfer programs before the peak of their competition season. Many dry mares may not cycle properly well into the breeding season. There are different methods that have been used to try to “hurry” these mares up. One of the most effective methods is artificial light exposure.

Recent information has shown that dry mares under lights are quicker to cycle and get in foal, and have a higher overall pregnancy rate for the season compared with mares that were not under lights. Currently only 35% of dry thoroughbred mares in New Zealand are being managed with artificial lighting.

Lights are used to create an artificially lengthened day for dry mares during the winter period. Mares need to be exposed to a 14-hour day for 60-80 days prior to the start of the breeding season. The suggested start date is 15th July. It is recommended that the artificial light be added at the end of the natural day. For example on 15th July the natural day length is 8 hours 46 min in the Waikato so the mares would need to have 5 hours and 15 minutes of light added at the end of the day.

The intensity of the light that is recommended is 200-watt incandescent light bulb for stalls. Lighting can be done in paddocks or yards. It is important in these cases that light exposure is sufficient in all areas of the paddock. It is important to confer with your veterinarian when attempting to set up a lighting program for your mares. If you are unable to logistically use lights, there are other alternatives for bringing mares into season earlier. These can be discussed with your veterinarian closer to the breeding season.