



Rest & Recovery: Use of conditioning & layup facilities

Recovery from strenuous exercise is a vital aspect of any training program, whether it is a barrel horse or a football player. The daily wear and tear imposed on the musculoskeletal system, cardiovascular system, immune system, respiratory system and nervous system by the training and performance schedules of our athletes makes the down time just as important as the time spent preparing for competition. Strength, speed, and endurance all improve because of the body's response to stress imposed during training. This response occurs when the body is resting. It is important to think about and schedule time for recovery and controlled conditioning. This becomes even more important as horses age, develop wear and tear, and their ability to recover from strenuous exercise starts to diminish. The goal is to extend their athletic career and optimize their athletic potential.

Conditioning, recovery from an injury, and scheduled down time can all be done effectively at home given the appropriate time, knowledge, and equipment. Utilizing a rehab/conditioning facility with knowledgeable and trained staff can be a better option for those that don't have the ability or time to condition or rehab a horse at home. These facilities will typically have equipment that an owner will not have access to at home. This might include an equisizer, a cold spa, an underwater treadmill, a pool, an above ground treadmill, a track, a therapeutic laser, a vibrating/oscillating plate, pulsed electromagnetic field therapy, and numerous other devices. A combination of these modalities can be used

depending on the condition and goals of the individual horse and owner. Communication between your veterinarian and those customizing the conditioning or rehab plan is an important aspect of getting the most out of the time spent at one of these facilities.

When is an appropriate time to use a rehab facility? The most obvious time would be when a horse is recovering from an injury. Working with your veterinarian, the facility may be able to utilize specific modalities to facilitate the healing process or safely bring the horse back into condition. Another benefit in the recovery process is the use of aquatic therapies. Due to the reduced load on tendons and joints that buoyancy creates, the underwater treadmill can be utilized for conditioning a recovering horse long before it would be appropriate to start riding. A pool may also be used for cardiovascular and muscular conditioning, but free swimming is hard on the back and stifles and does not provide any proprioceptive feedback or ground reaction force that is vital for strengthening of bone, tendons, and ligaments. For this reason, it should be combined with appropriate ground work in most cases. Another great use for these facilities is utilizing the aquatic therapies to exercise the sound aged horse (underwater treadmill) while reducing impact on the joints and decreasing inflammation (cold spa). Of course, any age horse would benefit from such a program.

How do you know if your healthy horse needs a break or it can handle the work load? Sometimes it is obvious if a horse is wearing down and needs a break. You may see a slight decrease



in performance, endurance, or willingness to perform. These symptoms could also be a sign of a medical issue, so it is best to consult your veterinarian on the best course of action. This is an area where science is starting to help us accurately measure a horse's ability to recover from exercise using biometric data. Cardiovascular, respiratory, and muscular recovery can be measured on an individual basis to determine if the horse is being worked too hard or not hard enough. Using heart rate, respiratory rate, and lactate recovery data; a unique conditioning plan can be made that is appropriate to the discipline, the goals for the horse, and the horse's current athletic ability and fitness level. Over time, the conditioning program will change depending on how the horse responds to changes in exercise.

Fatigue is a common cause of musculoskeletal injury. While you may need to utilize a rehab center in the case of such an injury, it makes sense for the horse owner to work with their veterinarian and rehab facility personnel to prevent these injuries when possible. The timely use of biometric testing, controlled conditioning, aquatic therapy, and various other available modalities can help keep you on the road to the next race instead of sitting it out due to injury.

For more information on rest and recovery in your equine athlete please visit bveh.com