

Equine Joint Care and Healing



A joint is a moveable union between two or more bones. Articular cartilage covers the surfaces between bones and synovial fluid lubricates the unions to reduce friction. This fluid is formed by a membrane protected by the capsular ligament surrounding the complex system that is a joint.

The horse's bones are made of minerals (supplied by the diet) and are not static. This means that if other body systems require a mineral that is not being given sufficiently in the food (such as calcium for a gestating or lactating mother), the bones will release the mineral into the bloodstream.

Minerals used by physical bodies are:

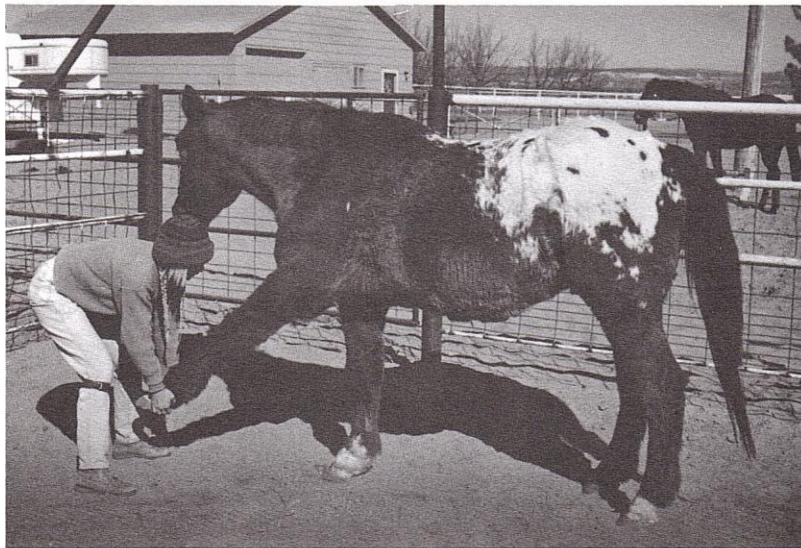
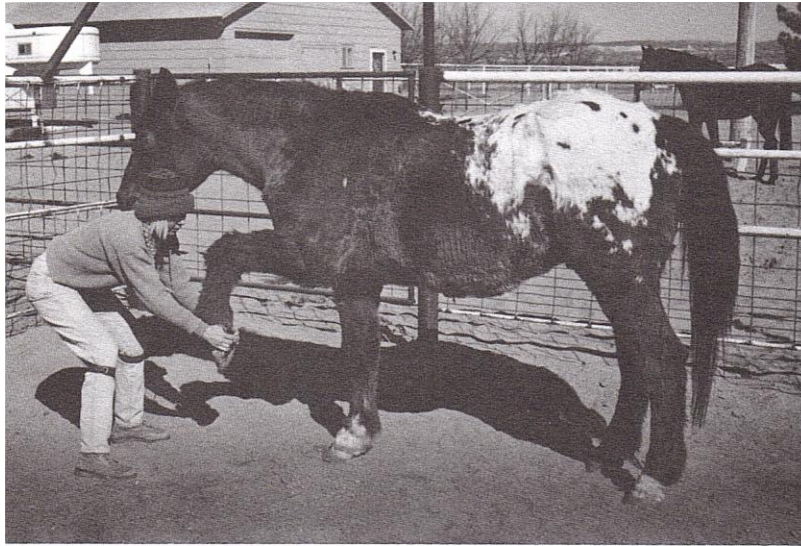
- *CALCIUM* is for bone formation, regulating nerves, formation of teeth, cardiovascular health (with magnesium), metabolization of iron.
- *PHOSPHORUS* is partnered with calcium in bones, present in every body cell, used in growth and repair, aids use of fats, starches, helps the kidneys.
- *POTASSIUM* is for structural, metabolic function, regulates water balance with sodium, keeps renal system healthy, helps dispose of body wastes.
- *SULFUR* is a constituent of proteins, essential to hair, skin, hooves, horns, etc., aids the liver and helps fight bacterial infections.
- *SODIUM* removes waste, transfers nutrients, is needed in fluid systems, digestion of fats and carbohydrates, prevents heat or sunstroke, is needed in nerve, muscle function and for growth.
- *MAGNESIUM* is for nerve, muscle function, enzyme systems, formation of bone, heart health, is an aid to digestion and an anti-stress factor.
- *IRON* is a heavy metal used in formation of hemoglobin (red blood corpuscles) and myoglobin (red pigment in muscles) and certain enzymes, it prevents fatigue.
- *ZINC* is a growth regulator, keeps reproductive systems healthy, regulates the body's pH balance, is for skin, muscles and blood.

- *SILICON* is essential to all cutaneous structures.
- *COPPER* is a general metabolite and converts iron into hemoglobin.
- *MANGANESE* is for calcium balance, bone and enzyme systems, used in formation of thyroid hormones.
- *ALUMINUM* is a biocatalyst.
- *COBALT* is used as a part of blood formation.
- *IODINE* is for thyroid hormone production.
- *NICKEL* is for RNA, DNA, enzyme synthesis.
- *MOLYBDENUM* is a growth promoter.
- *VANADIUM* is for cholesterol synthesis, steroid function.
- *SELENIUM* is synergistic with vitamin E, essential to all muscle functions and fertility.
- *CHLORINE* helps liver function.
- *CHROMIUM* is for sugar metabolism and aids growth.

Minerals enhance or depress each other, balance is important. Excess or lack of one mineral can prevent absorption of another. Deficiencies and overdoses of *nutrients* have the same symptoms! It is always ideal to provide all needed nutrients within the foods themselves, but in these days of overused land, chemical fertilizers and such, the foods we can find are often lacking. Any time an animal shows signs of a depraved appetite (eating or chewing unusual things), suspect a mineral imbalance. Hair analysis and blood work can offer clues to what is deficient or being overfed, but investigation into the diet and testing of food can tell you as much. Most universities can do tests on feedstuffs or direct you to someone who does the testing and the results can help you make dietary changes.

Joints are made moveable by the tendons, ligaments and muscles of the body. Muscle health depends upon movement as well as nutrition. The physical body must be active. Stretching is a vital part of an animal's self-health care. We can encourage our horses to stretch by VERY gently moving their legs, one at a time directly away from the body (in the plane of movement they use when walking about) with absolutely *no force*. We can do *retraction* by bending the leg joints carefully and *protraction* by opening the joints outward. Inflammation around an

injured joint is the body's way of creating a "natural splint" to hold the joint in place. The soft muscle structures hold the bones and joints in place and riders work stretching exercises to increase the range of motion of the legs to increase the stride at various gaits.





When a joint is stressed or injured, there are several non-invasive, natural techniques to support its immediate healing. You can use YUCCA ROOT, fed in the mash or pellets, one tablespoon of dry powder daily (yucca is nature's "steroid").

Externally – you can make a strong COMFREY brew to bathe sore joints (use root decoction or leaf infusion) or make an infused oil to rub into the joints.

MOXABUSTION is a therapy that uses a "Moxa stick" to stimulate, move energy (Chi, Chinese for the life-energy; Ki, Japanese for this energy) and add energy to heal. The Moxa stick is made of compressed herbs – always mugwort, sometimes with other dried plants – and works like a big stick of incense. You light one end of it and get it smoldering. As you use it, you knock ashes off and blow gently on it to keep the end lit. When using Moxa, keep a bucket of water handy, use an ashtray or big seashell to set the stick on and to knock ash into. When finished, you use a special cap or a tightly squeezed chunk of foil to put the fire out. Store the stick in a safe, dry place where it cannot ignite something if not properly extinguished. Use Moxa only on short-haired mammals... I use it on people, horses and certain dogs. **BE CAUTIOUS. BE AWARE.** Moxa will burn. Do not touch anyone or anything with the stick.



It is especially for musculo-skeletal problems (such as spasm and joint disorders) where the animal's Ki is blocked or is deficient... chronic problems are improved by the herb's ability to add energy. Hold the stick with the burning end toward the animal about 2 to 6 inches from his skin (wherever he is comfortable). Keep the Moxa moving slowly in a circular pattern over small, specific areas; in sweeping, big gestures over large areas to be cleared and/or *slowly* toward (no closer than the two inches) and away from the point.

Use Moxabustion for tight muscles, aching joints, scars and old injuries and before stretching, before massage. Keep your free hand on the animal's body where Moxa is applied to help you sense the heat and to move with him if he shifts about. Use fire precautions, be *aware* of the burning Moxa.

Do not use on pregnant animals. Do not use over open wounds, burns, punctures, abscesses, or if area swells more after application. Do not use on unconscious individuals or over numb areas. Do not use over the genitals, eyes, face, mammary areas, umbilical areas, or on the very young. Moxa is for "cold" conditions; cold ears, shivering, cool body, food is not moving, blood is stagnant, lymph not moving, etc. It is not for "hot" conditions; fever, hot ears, body sweating, etc. Moxa has sedative properties. If an animal rejects Moxa treatment – DO NOT force it. It is not appropriate for that being at that time.

WATER is a deep healer:

Water can produce heat in the body and it can remove heat.

Water is the foundation of all healing, whether as a carrier of a memory or as a physical component.

Cold Hosing has been the traditional, very effective way to remove heat from the horse's legs and prevent inflammation or bruising after workouts or injuries.

Another, effective way to use water as therapy is to flood the legs, shoulders and hips with a "coating" of slow moving water from a hose.

Start by breaking the surface tension of the water/skin/coat by wetting the area to treat and rubbing it well with your hand to thoroughly wet the skin under the hair. Then start the flow of water from the hose with just enough pressure to stream it like a coating over the horse's body.

Stand your horse over a grass or herb stand or under trees to make the water doubly useful and not to be wasted where it gathers on the ground.

Let the flowing water cover as much of the leg/shoulder/hip area as possible – "sheeting" over the joints and limbs like a hug. The water should be as cold as possible for this application and should be used in looping patterns for as long as needed to thoroughly cool the body before the wrapping (which is when the circulation is stimulated).

The water should flow out in a continuous sheet.

Flowing water moves Lymph and stimulates circulation of Chi (Qi or Ki), the energy that moves through the Meridians of the body. These meridians are channels where the acupoints are found (for acupressure and acupuncture).

The cold, moving sheet of water over the body has another profound effect when the water is stopped and the area is wrapped properly.

The circulation of blood increases and great warmth is produced.

This effectively creates lymph drainage where the capillaries ooze serum through their walls. This lymph nourishes tissues and takes up worn out materials and toxins which then are separated out by the glands to be excreted.

By flowing the water over the limbs and body in this specific way (repeated, very slowly at least 11 times), the lymphatic system is engaged and blood circulation prepared for deep heating and cleansing after wrapping.

Wrapping the horse's body after the flowing cold water therapy is essential to the treatment process.

Immediately after the cold water flow, wrap the *wet* body in towels – completely covering the treated areas. Use blanket/bandage clamps or pins (or even clothes pegs) to hold the towels snug against the body. For limbs, wrap over the towel with polo wraps. On the body, cover the towel with an old comforter or a horse blanket.

Leave the horse tied with a hay net to munch or you can stand with him, rubbing the covered areas to stimulate even more circulation and warmth.

During cold weather, a similar effect to the flowing water can be obtained by soaking a towel in very cold water; wringing it slightly and wrapping it around the area for treatment. Hold the wet towel there until it starts to warm; then soak in cold water and reapply. Do this for 5 minutes, then wrap with dry towels and proceed as outlined above. Much heat will then be produced deep within the tissues.

The body wraps are left in place for 20 to 30 minutes.

Fomentations are large towels soaked in hot water; often with the addition of herbal infusions for specific treatments.

It is the penetrating heat from the wet towel that causes extra circulation. This movement of blood helps to carry away the fluids of edema, toxins within tissues from injury or disease and relaxes the muscle fibers. It is especially useful for joint pain and injury.

Boil water and keep it in an insulated container to maintain the heat. Because you will wring out the soaked towel with your hands, scalding of the horse is prevented (you can tell how hot it is by your touch – be cautious, for your sake, too).

You can add Epsom salts for drawing properties and the magnesium in them relaxes muscles.

Calming and healing herbs can be added as the water is boiled, then strained out before the water is used.

Soak the towel in the liquid, wring out to just wet, not dripping. Apply to the horse's body where needed (especially for chronic, old injuries and deep soreness – acute conditions respond best to cold at first). As the towel cools, soak it again and repeat until the water is no longer hot.

Do not wrap (ace bandage, polo wrap, standing wrap) over a joint unless you are an expert. Other ways to support joint healing include red light therapy; magnets in special boots; applications of magnesium oil directly to the joint; Homeopathic Rhus Tox and/or Byronia given orally and very warm apple cider vinegar rubs.

Oral supplementation for joint health includes Hyaluronic Acid, Green Lipped Mussel extract, Diatomaecious Earth, Cetyl Meristate, MSM, Glucosamine, Chondroitin, ACV, Meadowseet herb, Devils Claw herb and Boswelia.

Any time a horse develops joint issues, you must look immediately for the cause and work to eliminate it. Pounding him into hard footing, jumping or running a youngster, working or playing in deep mud, even a hoof trimmer who pulls the leg away from the body and stresses the joints can all inflict real damage.

POULTICES are moist agents used to draw out impurities and pain.

The base of a poultice will be Kaolin clay, bran, shredded carrots or oatmeal, any of which must be well saturated with hot water and allowed to cool to a useable temperature. Activated charcoal powder is added to draw out septic conditions. Powdered fenugreek helps disinfect and heal. Epsom salts will draw out abscesses, foreign objects and pain. Chamomile will draw out splinters, etc. (For embedded

thorns and such, cover the area with Icthammol ointment and a pad and bandage, change it daily) All menthol/ mint/wintergreen agents will help reduce swelling.

