

# MD's Choice, Inc. Presents: Gluquestrian™

## Indications:

**Gluquestrian™** is a therapeutic nutritional supplement to supply the additional nutrients required in the production of connective tissues and fluids to any age from neonatal to geriatric. It can also be part of a preventive health program.

**Gluquestrian™** supports the animal's ability to produce healthy connective tissues and is not designed to replace appropriate, short-term pain relief or other pharmaceutical therapies. **Gluquestrian™** contains MSM at a level that supplies additional elemental sulfur, but it is well below the anti-inflammatory level.

## Active Ingredients:

(Per Average, Adult, Maintenance Dose):

Glucosamine Sulphate 2KCL	4,668 mg
MSM (methylsulfonylmethane)	2,336 mg
Amino Acid Chelated Manganese	1,000 mg
Ascorbate (Vitamin C)	32 mg

## Contraindications:

**Gluquestrian™** contains only basic nutrients that have no known interactions with pharmaceuticals or negative impact on a particular metabolic or disease state. In vitro testing has demonstrated that, in supraphysiological amounts, glucosamine has altered insulin response in cell cultures.

Relief from symptoms should not be viewed as confirmation of a diagnosis. Veterinarians should always supervise the use of nutritional supplements.

## Administration:

**Gluquestrian™** is a highly concentrated, palatable loose powder. May be top-dressed or mixed in regular ration. While the powder is soluble, Glucosamine is not stable in liquid and should not be mixed with water more than 5 min. prior to administration.

## Storage:

Store at -17.8° - 30°C (0°-86°F) Protect from moisture & light.

## Dosage:

Individual dosage is based on many characteristics such as age and weight and severity, location, and duration of the problem.

The average adult (up to 1200 #) maintenance dose is 1 teaspoon (5 g; scoop included) twice daily.

The preventive dose is approximately half of the maintenance dose.

A double dose would be indicated during the loading period (for 4-6 weeks for average horse, or until symptoms are resolving). Doubling the maintenance dose of performance horses two weeks prior to increased activity is also appropriate.

## Species:

Equine: **Gluquestrian™** 500g powder (60 d avg maint.)  
**Gluquestrian™** 1000g powder (120 d avg maint.)

**Companion Animal:** **Arthrosamine™** chewables 35, 60, 120 ct  
**Human** (or Companion Animal): **Arthrosamine™** 120 ct Caps

"I recommend these products for all the patients I see with arthritis. I also require the purchase of a bottle following every surgery that involves a joint. It reduces recovery time. We also purchase product for use in our home for myself, my husband [Jim Blackford, D.V.M., M.S., DACVS] and our personal animals. LeeAnne Blackford, D.V.M., DACVS, Blackford Veterinary Surgery Referral, Knoxville, TN



## Features and Benefits:

- Veterinarian Founded and Formulated:  
David F. Davenport,  
DVM, MS(AgEcon), MS(Nutr), CNS  
J. Eric Martin, DVM
- Highest quality Human-Grade ingredients
- Structural changes through nutritional supplementation take weeks, not days, to be seen.
- Most bioavailable & active ingredient forms
- Professionals are available to answer questions & help you solve problems.
- Successfully used in the treatment of OCD, Arthritis of traumatic and degenerative origins, and Navicular Syndrome
- Beware of "one size fits all" doses. The amount of nutrients needed by an individual is based on weight, age, and severity of the problem or deficiency.
- If the product does not address the needs of your patient we offer a **100% customer satisfaction guarantee!**

  
**AccessButler.Com**

Guaranteed effective against NAVICULAR Syndrome within 8 to 12 wks call for specific dosing information!

Note: see back side for more details & testimonials.

  
**MD's CHOICE™**  
NUTRITIONAL PRODUCTS

## A brief history of joint supplements

It was found over 50 years ago, that over time, eating ground up connective tissues could help relieve problems associated with arthritis. People began to consume gelatin and cartilage (shark, chicken, bovine, or Perna muscle) and these helped some. Studies found that chondroitin sulfates were contributing most of the beneficial effects. About 30 years ago the research began focusing in on the much smaller Glucosamine Sulphate.

Whole cartilage and its large components (chondroitin sulfates and collagen) can not be absorbed well by the body. While large molecules such as these can be injected and work very well, when taken orally more than half usually ends up in the manure. Chondroitin sulfates have a large range in size. Some are 50 times larger than others. Only 8-10% of the lowest molecular weight ones have been shown to get from the gut into the blood intact. What is fed must be digested by the gut and the pieces that do get into the blood must be broken down further to get into the joints.

Glucosamine Sulphate is the basic building block of connective tissues and fluids. Studies have shown in humans, rats, and dogs, that when Glucosamine Sulphate is given orally, within 30 minutes 87-97% is actively taken from the gut into the blood. Further, within 4 hours the chondrocytes (joint cells) have actively taken it from the blood. When linked together with sulfur, chains of glucosamines become several different types of connective tissues and joint fluid. [A lack of sulfur will cause the production of connective tissues to stop.] Also an enzyme can slightly change the shape of the glucosamine into galactosamine, the basic building block of the chondroitin sulfates. In one clinical study, where Glucosamine Sulphate was fed to horses, 77% of Navicular disease and 100% of Spavin cases returned to normal function.

N-acetyl-glucosamine has been proven to not have active uptake from the gut in vitro.

There are no studies that show if Glucosamine HCl is actively absorbed, or how much of it actually gets into the blood or the joints. Whatever portion does make it into the joints must undergo changes before it can be used in connective tissues. The HCl must be removed and a sulphate added. Furthermore, Glucosamine HCl is not stable in liquids. Published experiments have shown that over half of the Glucosamine HCl added to a liquid solution will breakdown within 27 hours. Within 4 days, these new and different "breakdown products" form completely different molecules that were 20 times larger than what was originally in the solution.

MD's Choice does not use ingredients that mask pain. Many companies use ingredients with pharmacological activity, under the name of nutrition. Ongoing supplementation of such ingredients should not be confused with nutritional support. The following are mentioned due to their common addition to many supplements and their serious impact on, or conflict with other drugs and their potential to cause positive results on competitive drug screenings.

Glutamic acid (glutamate) is an excitatory amino acid (EAA). When this amino acid is added to a brain experimentally it causes seizures. Higher than normal concentrations are present in the brain of human seizure patients. It is also being considered as an antidepressant drug. This amino acid is also naturally released by joint nerves to signal pain. It is used as an experimental marker to determine the amount of pain induced in experimental models. The more glutamate that is released, the more pain that is felt in a joint. Glutamic acid is added to some joint supplements because the amine group in glucosamine can be donated by glutamic acid. However, providing extra of a particular AA does not mean that more connective tissue will be made.

Bromelain is an enzyme found in pineapples. Bromelain can enter the body intact via digestions of the GI tract's lining. In human cancer patients, it has been shown to stimulate the body's immune system to kill somatic cells. People who handle bromelain have become allergic to it.

Yucca contains steroid saponins. Boswellia, white willow's bark, and snake root are all herbs containing chemicals that act as NSAID's. Steroids and NSAIDS have been shown to slow the production of glycosaminoglycans (GAG's). Devil's claw contains several chemicals that are similar in structure to steroids. This herb has been reported to cause abortions by stimulating uterine contractions.

## Testimonials:

"Your product works quickly, it is very palatable, and it is very cost effective. Gluquestrian™ does NOT have any filler or any unnecessary bullsh-- in it! I have had great results with your product... and the ones that start on it stay on it! This is an excellent product." - J. Bennett, DVM, Lytle Creek Farms

"We've seen dramatic response in horses with significant joint pathology. We love the fact it's so easy to give and you know you get 100% consumption. We've tried most all other oral joint products... Gluquestrian™ is the only one we use, because it really works!" - Charlene Cook, DVM, Central Georgia Equine Services

"Many of our older patients required a quality joint supplement. After discovering and implementing Arthrosamine™ in our treatment process, results were physically noticed, pain was either reduced or completely removed and healing occurred. This product is the best joint formula available and people are regularly benefiting from MD's Choice's nutritional developments and their understanding of the science of real nutrition. Keep up the good work." - Michael Bishop, MD, PhD (Pharm & BioChem)