Consumer Advisory

- Be an educated consumer.
- Ingredient quality is extremely important.
- Be sure that you are buying the proper building blocks in the supplements you purchase.
- Be sure that when you use a daily supplement, you are providing nutrition, not drugs.
- Is the product formulated by professionals to address structural problems or is it designed to cover pain or other symptoms?
- Structural changes through proper supplementation takes weeks to be seen, not days.
- Nutritional support can most definitely help maintain and heal.
- The amount of nutrients needed by an individual is based on weight, age, and severity of the problem or deficiency.
- Beware of "one size fits all" doses.

Note on General Equine Reproductive Nutrition

Providing optimal nutritional input will enhance reproductive performance. High quality protein intake concurrent with energy intake to maintain a body condition score (BCS) of 5.5 - 7.5 is critical for reproductive success. Due to increased nutrient requirements for breeding stallions and mares in late gestation, a high quality (nutrient dense) feeding program must be utilized to maintain an appropriate BCS. Supplementation should not be used to try to make a poor ration excellent. In addition to protein and energy needs, vitamin and mineral intake needs to be optimized. Mares in the last trimester of gestation need approximately 85% more calcium and phosphorus than in the first two trimesters.

There are several basic molecules that are present in many different reproductive cells and tissues. Most of these are not available in a purified, supplemental form. Others that may be available are either not economical or are not absorbed efficiently. Supplying large amounts of a purified nutrient may not positively affect the desired systems and can have negative effects. There are some anecdotal accounts of both Chondroitin Sulfate and injectable PSGAG s causing a decrease in stallion reproductive performance. No verification of these theories is in the literature, but a reaction to these larger molecules by some individual stallions may explain these reports.

Also Available...



Total Mobility EQ™

The strongest hoof supplement on the market, scientifically formulated to promote strong, healthy hooves. It also contains an effective ingredient to help your horse s joints. Its wide range of proven ingredients, several of which contribute sulphur, feed

the many complex tissues required for your horse s total mobility. Each average maintenance serving contains 25 mg Biotin, 2500 mg Lysine, 3200 mg Methionine, 30 mg Manganese (amino acid chelate), 12,000 IU Vitamin A, 4,700 IU Vitamin D3, and 200 IU Vitamin E, making it a premium hoof supplement. There is also 5100 mg Glucosamine Sulphate 2KCl, a maintenance-level joint supplement.

Gluquestrian™



A unique joint supplement that doesn t simply mask joint pain, it actually REBUILDS and HEALS joint tissue! When used regularly, it is an extremely effective treatment for Navicular Syndrome, arthritis, spavin, laminitis, joint injuries and many other joint related problems.

It has been used by professionals and competitors around the world for prevention, maintenance, therapy, and treatment foal through geriatric. It is the *ONLY* joint supplement on the market that is backed by a RESULTS BASED GUARANTEE.

Contains 4,668 mg Glucosamine Sulphate 2KCl, 1,000 mg Ascorbate (Vitamin C), 2,336 mg Methylsulfonylmethane (MSM), and 32 mg Manganese (amino acid chelate) per serving.

GI

GI Support™

Delivers essential nutrients to the digestive tract, supplying an energy source for enterocytes, clearance of hepatic fat and support for normal intestinal flora (bacteria). Treats ulcers, diarrhea, and eating disorders. Helps heal and prevent damage caused by

products such as bute and bromelain, which are hard on the digestive tract. Available in equine, canine, feline and human formulas. Safe for all ages.

Contains L-Glutamine, Choline Bitartrate, L-Arginine, Acetyl L-Carnitine, N-Acetyl-D-Glucosamine, and FOS (Fructoligosacchirides).

For individual consultation or to find a dealer in your area, call 1-800-628-0997



For more information on our animal products, visit

WWW.vetsupplements.com

Foal Male Caller Valuable Information about Equine Reproduction for Stallions and Mares For more information, visit www.foalmaker.com

Facts about Vitamins, Minerals & Trace Minerals

Several vitamins and minerals are associated with increased reproductive performance in both males and females. The form that minerals are supplied in is critical. All of the minerals listed below have reported toxic effects on reproduction when exposure is to the inorganic forms and beneficial effects when exposure is from organic forms.

<u>BIOTIN</u> has been heavily researched in many species with respect to its effect on female reproductive performance parameters and gamete development. The most well documented effects are on sow conception rates and return to estrus post parturition. Many effects of biotin on prenatal development have also been established.

<u>BORON</u> is a good example of a nutrient that is beneficial to the spermatogenic cycle, embryonic, and fetal development when provided in an organic form. However, with exposure to an inorganic form, testicular damage & mutagenic effects are common. Boron is involved in the production of many sex hormones.

<u>CHROMIUM</u> deficiency can cause a decrease in sperm count, but exposure to inorganic forms can cause severe testicular damage, improper testicular development, or neoplasia. Many positive effects on female reproductive efficiencies and lactation improvements have been found.

<u>FOLIC ACID</u> plays critical roles in the normal reproduction of cells. A deficiency of folate has been associated with defects in pre-implantation embryos and the neural, skeletal, digestive and urinary tracts of developing fetuses.

<u>MANGANESE</u> plays a large part in attachment and conception. Exposure to inorganic Mn causes reduced male fertility.

<u>THIAMINE</u> is crucial to the viability and motility of sperm. Normal development in the uterus depends on the presence of thiamine.

<u>ZINC</u> deficiency has negative effects on testosterone levels and sperm development. Exposure to inorganic zinc causes harm to reproductive tissues.

The Benefits of Glucosamine Sulphate

Glucosamine is a very small building block type nutrient that is found ubiquitously in mammalian tissues. It is actively concentrated in some tissues such as connective tissues and all mucosal linings. Many important reproductive cells and structures contain large concentrations of glucosamine. Simply identifying a basic nutrient that is heavily involved with several stages of reproduction does not make it a good supplement. Most of the glucosamine containing structures mentioned contain the acetylated form of glucosamine linked together by sulphur bonds. However, this form has been shown to be highly utilized in the digestive tract, with little being absorbed. Any absorption of this form occurs via passive diffusion. Glucosamine Sulphate is, however, absorbed actively from the digestive tract using a glucose transporter. This active absorption has been documented to be over 90% efficient within 30 minutes in at least 3 species. The acetylation of Glucosamine Sulphate as well as its conversion to galactosamine is readily performed in most tissues.

Reproductive Structures that Heavily Use Glucosamine

- Lining of the uterus and cervix
- Zona pellucida of the egg
- Attachment site of sperm to egg
- Implantation site of the embryo into the uterus
- Cell to cell adhesion in early development of the cumulus mass
- Testes, sperm membrane, and seminal fluid
- Acrosomal end of the sperm
- Major Role in Acrosomal Reaction

The Science Behind MD's Choice™

MD s Choice has veterinarians, nutrition specialists, and academics among our founders, employees, board of directors and consultants. Among them are the following doctors, who do not simply endorse MD s Choice s products, they developed and formulated them and have their names right on the bottles.

Dr. David Davenport, DVM, MS, MS (Nutrition), CNS Dr. J. Eric Martin, DVM, MS (Nutrition) Dr. Michael R. Bishop, MD, PhD (Pharmacology and Biochemistry), FACOG



FoalMaker[™] for Stallions (patent pending)

A therapeutic nutritional supplement that provides the nutrients needed for optimal reproductive performance. FoalMaker for Stallions increases the dietary intake of specific vitamins and minerals associated with the spermatogenic process, provides synbiotics (pre-/probiotics) as support for the digestive tract and supports the often stressed connective tissues of active stallions with a chondroprotective structural nutrient.

A double blind, placebo controlled study using over 30 commercial stallions showed a 62.5% improvement in per cycle conception rates in treated stallions over their previous year s rates. A subset of treated stallions also showed an increase in total sperm per ejaculate. Foalmaker enhances fertility, improves conception rates, provides digestive tract support, joint and connective tissue support, and is highly palatable.

We saw sperm quality and volume increases in the treated horses over the control group, and experienced a definite increase in conception rate. When the stallion's sperm is stronger, it obviously results in better pregnancy rates. Now that we've seen the results this product offers, all our breeding stallions will be on this unique formula. ... Aside from the fact I don't know of any other product that does what this formula does, I would highly recommend MD's Choice's FoalMaker for Stallions to anyone with a breeding stallion, because I've seen enough benefits to easily justify the daily cost. - John Bennett, DVM, Shelbyville, TN

We saw significant increase in sperm count, with a 1,090 reading on the densimeter, with one of our stallions. I haven't spoken with anyone that had ever seen a reading above 1,000 (on any stallion). Further, that stallion had never been above 600 prior to using MD's Choice's formula, and he was normally in the 200 to 300 range on average. Because of this product he is now regularly between 900 and 1,050. . . . I highly recommend giving this unique product a try. - Bobby West, DVM, Wartrace, TN



- Enhances Fertility
- Improves Conception Rate
- Supports Digestive Tract
- Supports Joint & Connective Tissues
- Ultra Concentrated
- Highly Palatable



FoalMaker[™] for Mares (patent pending) NEW PRODUCT!

Since its formulation, FoalMaker has been studied and marketed as a stallion supplement. However, evidence suggests that it is also beneficial to mares. Anecdotal evidence indicates that some problem mares have successfully carried foals to term when supplemented with FoalMaker throughout the term of the pregnancy, no other changes having been made to their diet or treatment. In some instances, loss of a pregnancy has occurred when FoalMaker was withdrawn before foaling. Although this is far from hardcore scientific evidence, it suggests that the ingredients in FoalMaker have a positive effect on a mare s reproductive health.

Many of the ingredients in FoalMaker can indeed be linked to uterine health. By improving the uterine environment, implantation of the conceptus is greatly improved, meaning that

normal mares may become pregnant in fewer cycles, while problem mares are more likely to conceive. FoalMaker improves the uterine environment, by providing basic building blocks for the uterine surface mucosa. This could translate to improved implantation and sustained pregnancies. Conception may also be improved by affecting the ova side of the equation. Again, by providing the basic building blocks for overall health of the ova, the attachment sites between the sperm and the ova are greatly enhanced. This could result in improved conception rates on the mare side as well as the stallion side.

Supplementation with FoalMaker should begin 60 days prior to the breeding season to support all stages of the spermatogenic cycle in stallions and the heat cycle in mares.