Village LLC/International Canine Semen Bank-WI

N11591 Columbia Drive Lomira WI 53048 Phone 920-269-4072 Fax 920-269-2345 www.veterinaryvillage.com vv@k9stork.com

Drug and Nutritional supplements that may be indicated to improve fertility in the valuable stud dog:

There are a handful of drugs and nutritional supplements that may have application.

Avoid testosterone, female hormones, anabolic steroids, corticosteroids and chemotherapeutic drugs unless there is significant health benefit and they are prescribed by a veterinarian.

The following drugs MAY be indicated and prescribed by a veterinarian to improve male fertility:

- 1. Antibiotics for evidence of prostate or urinary tract infection.
- 2. Antibiotics if mycoplasma is suggested.
- 3. Thyroid therapy if thyroid testing suggests supplementation is indicated.
- 4. Medications to reduce the size of the prostate if benign prostatic hypertrophy is suspected or has been diagnosed. These drugs include megestrol acetate and finasteride.

The following supplements have been suggested based on anecdotal evidence to improve male fertility:

1.Glycosaminoglycans. This is the most common nutraceutical category used for improving sperm quantity and quality. It is found in many formulations by many manufacturers. Many, like International Canine Semen Bank's CF- Plus^R, contain perna (green-lipped) mussels as the primary active ingredient. Anecdotal reports suggest improve semen quality in bulls, horses, and dogs. The theory of the mechanism, according to Dr. Roger Kendall is enhanced cellular reactions and amino acid uptake.

There is no documentation to support the use of this product in the dog. The dosage for this application has not been determined; there are dosage regimens for the use of these products for other purposes such as improving joint mobility. Unless there is an allergic response, it is unlikely this product would cause any harmful side effects.

- 2. Anti-oxidants. These typically include Vitamins C, E, beta carotene, and selenium among others. These are available from many manufacturers over-the-counter. They appear to act by removing free radicals, thus protecting the cells. In addition, greater sperm numbers in the ejaculate have been reported. There is no documentation to support the use of this product. There are anecdotal reports that semen concentrations are improved, that there are fewer head and acrosomal abnormalities when used, and semen tolerates cooling and freezing better when patients are on this type of product. Some components can be harmful if used in excess, so care should be taken when this is prescribed.
- 3. Fatty Acid supplements. These are available from many manufacturers over-the-counter. The reports indicate anecdotally that there is improvement in semen morphology when the dog has a high percentage of proximal droplets.
- 4. L-Carnitine. This nutritional supplement alters fat metabolism. This is available from several manufacturers and is found in some senior dog diets. Anecdotally, it has been reported to improve sperm motility. The mechanism of action has not been determined. It is included in

Village LLC/International Canine Semen Bank-WI

N11591 Columbia Drive Lomira WI 53048 Phone 920-269-4072 Fax 920-269-2345 www.veterinaryvillage.com vv@k9stork.com

some commercially available dog foods to aid in weight loss so should be used with care to avoid excessive weight loss in the patient. The components and ratio of omega 3 to 6 fatty acids should be assessed to ensure it is found in an anti-inflammatory ratio.