

A TRULY INCREDIBLE FIND TO IMPROVE SEMEN

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NORTHWEST NOTES

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One of the absolute benefits of collecting stud dogs to do fresh side-by-side artificial inseminations as a breeding technique or collecting the stud dog for shipping fresh chilled semen as well as processing for frozen semen is semen analysis. Working in the world of human infertility for years, we ran three different semen analysis for men four days a week as it was crucial in even beginning the diagnosis of an infertility problem as well as in developing a plan to assist achieving pregnancy. It was imperative to know the sperm count, percentage of dead sperm, the percentage of moving sperm or motility, the percentage of sperm moving rapid and linear (forward progression), the percentage of sperm with abnormal heads, tails and necks (morphology), and PH. With a semen analysis, we would then have a good idea of how well the sperm could produce fertilization. In checking my stud dogs every time they are used, I can follow these same parameters of sperm function for them and honestly know what we have. I do the same if I'm doing a breeding for someone else, whether assisting them with a natural AI , helping to collect their dog for a look at the semen before a breeding is planned, to examine semen for a dog who seems to be 'missing pregnancies for females he's bred.

I was invited to the Philippines a year ago by their Labrador Club there and as part of my three hours of doing a seminar for them, they wanted me to show them

how to do a collection and artificial insemination. They said they had club members with dogs to use for a demonstration and I brought equipment for collecting and inseminating, enough to give a sample to everyone. As I explained the collection process and began collecting the male they had provided me, I said something like, “The semen is ejaculated in three parts or fractions; the first being clear and containing very few if any sperm, the second part a white, thick sperm-rich fraction and then a third fraction that is clear and cleans out the dog’s tract, and again, contains none or extremely few sperm. As I began collecting, the entire ejaculate was fairly clear and I said to the group, “This is not normal, and not what you want to see.” One of the seminar participants asked, “Is that why this stud dog has ‘missed’ so many bitches”????? It was very awkward for me as well as the president of the club as he owned the dog. I proceeded to do the insemination as that was what they wanted to see and the bitch they had brought was actually ‘in’ to be bred to this same stud dog..... (I received e-mails weeks later to tell me that she DID get pregnant!) With so very few sperm, putting it all the way up to the cervix and keeping my third finger in place for up to fifteen minutes blocking fluid escape, did allow for what sperm there were to have the chance to make it through....

There are many reasons for changes in sperm quality including bacterial and viral infections, injury to the scrotum, excessive heat, pain, etc. Microscopic semen evaluation and even culture and sensitivity are critical to examine sperm that don’t meet normal parameters. (Measure of values that would or should produce pregnancy)

SPERM SHOULD BE WHITE IN COLOR

65 MILLION sperm per ml (or cc)

TOTAL SPERM should be 200-400 million

TOTAL MOTILITY greater than > 70%

RAPID AND LINEAR MOVING SPERM greater than > 80%

MOVEMENT SHOULD BE 'FAST'

NORMAL HEADS, NECKS,& TAILS (NORMAL CELLS) > 80%

Months ago, I was collecting a dog to do a side-by-side or fresh semen insemination for a good friend, as the male was shorter than the female. The collection did not seem to have the normal three fractions, missing a second part that was thick and white. It was not clear to the eye, and there were sperm in the collection, and upon examining under the microscope (With a drop on a warm slide and using a cover slip), there were indeed sperm problems: The sperm count was very low; there was a higher than normal percentage of curled tails and sperm swimming in circles (would NOT be able to swim well through the cervix and then to the eggs; also needed to penetrate the egg 'shell' itself). There were dead sperm and movement was not rapid, with very few moving in forward progression. Once I saw there was not a good second fraction, I did collect a large volume of fluid so it could be centrifuged to a smaller amount of fluid and concentrating the sperm before inseminating as far forward as possible and at the cervix. Two breedings of this type were done and a small litter was produced. A semen culture was done within a few days by a veterinarian and that showed no bacterial infection.

In using one of my own boys whom I collected regularly, I came to a time frame within a couple of months when his count and motility wasn't as it should have been for him; this was a dog who had produced very well and hadn't been sick or injured in any way. I couldn't understand how following a litter of twelve, this was happening. In buying most of my artificial insemination equipment from INTERNATION CANINE SEMEN BANK in Sandy, Oregon. I knew of a product called Fertility Supplement (CF-Plus). It was originally marketed as a very effective arthritis medication for dogs. Their paperwork states they have used it on occasion in dogs that have had reproductive problems exhibited by soft testes and low sperm count in the male and abnormal estrous cycles in the female. Each tablet contains 300 mg of Perna Mussel, 100 mg of Brewers Yeast, and 100mg of Alfalfa. I ordered the product and began giving it to this breeder-friend's dog 'as suggested' and, I put my dog on the same initial dose as well; I then tested each dog's semen again in three weeks. The improvement in sperm count, motility and even in the reduction of abnormal sperm was UNBELIEVEABLE ! The sperm rich fraction of the semen collected after using the product looked very normal and was extraordinary in being thick, white and separated from the first and third parts as was normal for these two dogs. My one dog is now on the maintenance dose.

Weeks later, I brought my nine-and-a-half old champion home from a co-ownership type placement where he had been acting as a companion to a handicapped young man. A female had come here for him that was six years old and had never been bred. I collected the older dog to inseminate side-by-side (Prefer this for natural breedings as it reduces the chances of picking up infections from the

bitches). The collection was not divided well into three fractions as it always had been for this very good stud dog. The sample had a lower count and motility on a slide. I used it but decided to give an initial dose of CF Plus (1 tablet per each 15 pounds of body weight) for that day and two following days. I skipped one day from the first breeding and in the late afternoon after the third dose of CF Plus, I did another collection on this dog. And in that short time, his second semen fraction was clearly sperm-rich, with huge improvement in sperm count and motility ! We have a female on it now who has had irregular heat cycles.....

After seeing the remarkable improvement in these two stud dog's semen, I began looking into the ingredients and discovered a connection to the Perna Mussel Extract.

Perna Mussel is a tiny mussel from New Zealand and had been making huge waves in the arena of natural remedies for arthritic relief in humans, horses and dogs as well. Human arthritis victims had been claiming a lessening of joint inflammation and stiffness. Also called Green Lipped mussel, it is an edible shellfish and has been commercially available in the United States as a food supplement since 1975. Because the incidence of arthritic diseases along the coastal New Zealand regions was extremely low, researchers from Great Britain and the U.S. began a search for marine organisms in the attempt to make up more natural drugs to treat inflammations and cancers.

In arthritic conditions, the membrane surrounding the joint becomes thin and porous. The synovial fluid then seeps out through the porous membrane, resulting in pain and swelling. In addition to balancing the lubricating fluids of the body, the

richness of the mucous sugars concentrated in the Perna Mussel CONTRIBUTES TO ITS EFFECTIVENESS IN HEALING SOFT TISSUE, TORN TENDONS AND BRUISES. Fatty acids in the mussel are mostly polyunsaturated and Perna Mussel is rich in histine and aspartic acid, two of the acids that made up protein. Potential functions for this particular protein may be in assisting the binding of fluids for tissue repair.

The most important thing to note about Perna M natural minerals - zinc, copper and manganese as well as high levels of vitamin E and C. The brown mussel is a filter feeder and feeds on phytoplankton,zooplankton and suspended organic materials. These minerals are perfectly utilized by the mussel itself, thus assuring that the body will be able to absorb them in tiny molecules and more completely utilize them. PERNA aids the body in maintaining synovial fluid viscosity, important for lubrication in both in human and animal systems.

Good evidence indicates that controlling the production of inflammatory processes in the body may help in improving conditions such as : Arthritis, Asthma, Psoriasis, sports related injuries, inflammatory bowel disease, Lyme disease and connective tissue repair. In fact in a mouse model of airway disease, Perna Mussel extract improved lung function as compared with fish oil, with positive changes in mucus hypersecretion and airway responsiveness.

Another dramatic study was done for 'Painful or Difficult Menstruation'. One unexpected finding was that Perna Mussel extract *modified and had effect on spontaneous and oxytocin-induced contractions of the uterus. Oxytocin is traditionally thought of as a female hormone with a major role in giving birth and*

milk 'ejection' or let- down. Interestingly, Oxytocin has been shown in many types of animal studies (dog, rat, rabbit, monkey and man), to improve sperm numbers and sperm transport. At ejaculation, a burst of oxytocin is released into the circulation and stimulates contractions of the male reproduction tract aiding sperm release. Oxytocin stimulates contractions of the ducts of the testis causing a release of stored sperm and without effect on accessory sex organs. Perhaps the Mussel effects oxytocin production, stimulation or receptors for the dog.... However, because of the spontaneous oxytocin-related contractions of the uterus while using Perna Mussel, it should never be used during pregnancy. When the extract was fed to pregnant rats, it retarded fetal development and delayed the action of giving birth.

Mice with induced inflammation of the colon who received Perna Mussel extract had less weight loss, lower disease activity, and smaller tissue area losses than those given placebo treatments.

Studies have shown a very low incidence of adverse reactions, generally consisting of GI symptoms like diarrhea, gas, and nausea. In high dose studies, liver function abnormalities were noted in one patient.

Green Lipid Mussel is commonly made into a powdered or oil form and used as a supplement. Its unique properties help it to play a major role in the transfer of nutrients through the body, adding to the structural integrity of all body tissues. Its nutrients are responsible for elasticity of blood vessels and aids in the body healing naturally. Researchers since the 1970's believe that the properties of the mussel enhances cellular reactions and amino acid uptake and improve overall

semen quality and motility. My limited experiences with this product have shown remarkable changes in canine semen quality, improving sperm count, motility and even improving sperm structure.

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