

Velvet Deer Antler The 2000-Year-Old Medicine

By Alex Duarte, Ph.D. and John Abdo

In 1989, fitness expert John Abdo, who hosts a nationwide TV fitness show, visited the Institute of Physical Culture in Moscow for an intensive two week investigation of the training programs of Russian athletes. At that time, John met with former Soviet weight-lifting champion Victor Sheynkin and training expert Yuri Verhoshansky. Sheynkin, who weighed only 132 pounds, could snatch over 286 pounds and clean & jerk over 360 pounds (both overhead lifts) and had become a Soviet Olympic coach, while Professor Verhoshansky had master minded numerous strength and conditioning routines for Soviet athletes since the early 1950s.

Later, in the United states, John met with Dr. Alex Duarte, who has been a pioneer in the movement to persuade athletes to replace the use of steroids with natural, safer products capable of promoting strength, endurance, and improved recuperation from injury. John told Alex that the Russian experts had revealed that their athletes had experienced considerable improvement in performance with a natural, non-toxic substance called velvet deer antler.

John said that the Russians had given him two boxes of velvet deer antler and that, when he returned home, he had given these boxes to a friend who was 12 weeks away from a major world power lifting championship, and who then used them to help in breaking several world records. Further research led both John and Alex to make this extraordinary product available to Americans. What follows is their report on velvet deer antler.

What Is Velvet Deer Antler?

Deer antlers grow at incredible speed and, after several weeks, as the antlers reach their final size, the cartilage within them gradually converts into bone. In the final process, the antler's blood supply and nerves are lost. When the antlers have fully hardened, the stags rub them against trees or rocks to remove the skin that remains. As a result of this rubbing, the deer develop sharp bony weapons for combat against threats to their harem of females during the autumn rut or mating season.

Each Spring the antler cycle begins anew and the skin around the pedicle expands and grows, initiating new antler growth. The hard antler from the previous season is cast off and the growth of the new season's velvet crop begins. It is then that the velvet is harvested for its medicinal and performance qualities.

When the velvet deer antler has been removed, it is allowed to cool on tilted racks just before being frozen. It is then ready to be processed. If it is removed at the right time, while still in the cartilaginous state, almost all of the antler can be used for medicinal purposes.

Benefits Of Velvet Deer Antler

Reports from the Orient, Russia, and New Zealand indicate that velvet deer antler has been used for centuries to control blood pressure, increase hemoglobin levels, increase lung efficiency, improve recuperation from exertion, improve muscle tone and glandular functions, sharpen mental alertness, relieve the inflammation of arthritis, and heal stomach ulcers.

Chinese herbal doctors use deer antler as a balancing agent for the endocrine system and in the treatment of penile erection dysfunction in men. Oriental physicians claim it is especially beneficial for men suffering from enlarged prostate glands and watery semen. Oddly enough, velvet deer antler has also been used in the treatment of menstrual disorders. It contains both male and female hormones. In addition to cartilage components, enzymes, minerals, vitamins, anti-inflammatory prostaglandins and, in particular, IGF-1 (insulin-like growth factor)

History Of Medicinal Use

The first documented evidence of the use of velvet deer antler as a medicine was found on a silk scroll recovered from a Han tomb in the Hunan Province in China. The scroll is believed to be about 2,000 years old and recommends medical treatments and prescriptions for 52 different diseases using deer antler.

Velvet deer antler product called Pantocrine is manufactured by a Russian state pharmaceutical company to assist in the treatment of many different medical conditions (in hospitals) in which post-operative recovery of patients is a key factor. Velvet deer antler has become an elite medicinal food in Asia, New Zealand, and Korea - the world's largest consumer of the product.

Oriental Medicine

The most important animal in oriental medicine is the deer because it is the animal with the most Yang energy. Dr. Peter Yoon of Seoul, Korea claims that velvet deer antler is especially important in increasing the quality and quantity of blood production in the treatment of kidney disorders, anemia, high blood pressure, and even the elevation of low blood pressure.

Dr. Yoon and other doctors use velvet deer antler to treat impotence in men. Dr. Lee Sangin of Kyung Hee University in South Korea uses velvet deer antler to treat infertility in women and for liver problems and high cholesterol in both sexes. The medicinal use of velvet deer antler has been going on for 2,000 years, but it is only recently that scientific evidence has been developed to document its health benefits.

Growth Hormone Factors

In scientific studies analyzing the medical properties of velvet deer antler, Dr. Peter Fennessey, General Manager of the Invermay Research Center in Invermay, New Zealand found that antler extracts improved cell growth and also produced anti-tumor and anti-viral effects. During an investigation into the factors that make antlers grow, the Invermay group measured a natural hormone factor called "Insulin-like Growth Factor-1" or "IGF-1". High levels of IGF-1 were found in deer blood during the antler growth period as well as IGF-1 receptors in the antlers. Dr. Fennessey's team also discovered that the IGF-1 and IGF-2 (a related hormone) promoted growth in laboratory cell lines from mice.'

When we are young, we have a relatively healthy concentration of human growth hormone. In our teenage years, most of us are slim and lean, with low body fat and good musculature. The reason human growth hormone generates lean body mass is its influence on IGF-1. As we age, our growth hormone levels decrease along with IGF-1, which causes muscular atrophy. Velvet deer antler is a natural source of growth factors, which can improve muscular development.

Accelerated Wound Healing

Scientists can only speculate about Dr. Fennessey's findings, which may explain (to some degree) the anabolic properties of velvet deer antler. If there are high concentrations of hormone like substances in

blood, tissues, and bone, accelerated tissue repair after trauma such as intense exercise can be induced by velvet deer antler. But the most important consideration is the cartilaginous concentration of the antler itself. Researchers such as Dr. John F. Prudden discovered (more than 35 years ago) that cartilage contains an element called N-Acetyl-Glucosamine, which has been demonstrated to accelerate wound healing significantly.²⁻⁵

Cartilage also contains glycosaminoglycans, the up-regulators of cartilage production and turnover.⁶⁻⁷ It is also a very powerful regulator of synoviocytes, which regulate the integrity of the joint fluid.⁸⁻⁹ Perhaps this is the primary reason that arthritics are helped so much by shark cartilage and velvet deer antler.

In 1974, two Russian doctors found that Pantocrine (the Soviet version of velvet deer antler) improved the performance of average, healthy sportsmen (athletes). Unadministered athletes on the exercise cycle performed 15 kg/m of dynamic work, whereas those given Pantocrine increased dramatically to 74 kg/m of dynamic work. This is truly a remarkable increase in performance. Another Russian scientist, Dr. Taney, showed in 1964 that the mental capacity of young men (as indicated by a mathematical test) improved significantly following the administration of velvet deer antler.¹⁰

Another ingredient found in velvet deer antler cartilage is Chondroitin Sulfate A, an extremely powerful anti-inflammatory agent shown by Dr. Lester Morrison (over 10 years ago) to reverse atherosclerosis and dramatically improve circulation. Dr. Morrison conducted a six year study demonstrating that Chondroitin Sulfate A reduces the incidence of fatal heart attacks and strokes by more than 400%!

Modulating The Immune System

One of the most important discoveries about cartilage in the last 30 years comes from the work of Dr. Arthur Johnson of the University of Minnesota in Duluth. Dr. Johnson discovered that cartilage contains a small molecular weight protein which has the unique ability to modulate the immune system. This means that, if the immune system is depressed, this particular protein can dramatically improve it. And, if the immune system is overactive, it can reduce its activity until it reaches the normal range. Velvet deer antler has been shown to be capable of modulating the immune system.

Dr. Koltun's Findings

For twelve years, Dr. Arkady Koltun, M.D., Ph.D., Chairman of the Medical Committee for the Russian Bodybuilding Federation, conducted research into anabolic agents that can improve performance, strength, and musculature in Russian athletes. In studies with Russian kayakers, weighlifters, bodybuilders, and power lifters, Dr. Koltun found that velvet deer antler is myotropic (increases muscular strength). He also found that it has powerful neurotropic (nerve strengthening) properties and is beneficial in treating infectious diseases, fatigue, and hypertension.

Dr. Koltun revealed that Pantocrine has induced significant increases in endurance in his athletes. After using Pantocrine in the pre-Olympic festival in Russia, two of Dr. Koltun's top kayakers and a world-recordholder in canoeing achieved remarkably improved results. These sportsmen not only stabilized their racing time one week before competition, but dramatically increased their speed in rowing. All received gold medals and established new world records. Dr. Koltun went on to describe an interesting phenomenon that occurs in athletes that are overtrained, even in young athletes. He explained that when athletes train too hard they develop an electrolyte imbalance in the heart muscle, in which there is a loss of recovery and endurance. He calls this condition "Myocardial Dystrophy" and explained that electrocardiograms show dysphasic and extreme negative T-wave readings, which is an image of ventricular repolarization of the cardiac ventricles.

Improving Recovery Time

Dr. Koltun contends that sportsmen (and women) with myocardial dystrophy have a problem with myocardial repolarization and that this, in turn, significantly limits their performance. But there is a good prognosis for them if they lay off their training activity for two weeks. When Pantocrine was given along with inosine and vitamin B-6, he was able to decrease the time of recovery to ten days. In other words, the

athletes' recovery time was dramatically reduced. This allowed the athletes to participate in many competitions, with short recuperation periods in between.

Dr. Koltun also mentioned that one of the most significant attributes of velvet deer antler is the discovery of Dr. Ivan Kinia, who co-authored several studies from the Siberian institution known as Blagoveshenska in 1989. It was shown that among the main bioactive substances in deer antler are the anti-inflammatory prostaglandins, which are especially effective in people who suffer from arthritis.

Testimonials For Velvet Deer Antler

In the December 1992 issue of the popular New Zealand journal Silver Horn, there was a story about Joyce who had suffered from arthritis for a number of years and who found it difficult to knock on someone's door because of the pain it caused. Now, Joyce can knock down your door, after taking velvet deer antler for two years. As she puts it: "I couldn't even close my right hand to make a fist before, but now I have no difficulty in doing so. I'm 62 years old. I've always taken vitamins, but once I started taking the velvet, the swelling and pain in my hands subsided. It's a miracle!"

The same article also featured the story of Shelly Thomson, who had been suffering from Multiple Sclerosis. During the two years that Shelly has been taking velvet deer antler, she has not suffered a single multiple sclerosis attack. In fact, she's playing squash as well as rearing two young children. According to Shelly: "It's not a cure by any means, but by taking antler regularly, I've certainly reduced the aches and pains and I have heaps more energy."

L. Brake, age 56, of Wichita, Kansas says that: "I believe your antler product has helped to lower my blood pressure...! I also enjoy sexual enhancement benefits as a side effect. I think anyone can benefit from velvet deer antler!"

S. Wintersteen, age 27, from Gary, IL says: "I am involved in playing and coaching many sports while trying to get in four solid weight workouts every week . . . velvet deer antler has increased my energy levels and workout capacity and I truly believe it prevents my body from breaking down..."

According to E. Downey, age 35, from Anchorage, Alaska: "Initially, I started using antler to increase my energy levels; this it does. But I've also noticed that I am able to maintain an erection after I ejaculate, which is something I haven't been able to do for a long time. Antler definitely builds endurance, you know, that staying power!"

Composition Of Velvet Deer Antler

Tests show that velvet deer antler is composed of 50% amino acids including:

tryptophan	lysine	aspartic acid
threonine	valine	serine
leucine	isoleucine	glutamic acid
phenylalanine		glycine
histidine		alanine
arginine		cysteine
proline		methionine
hydroxyroline		tyrosine

It also includes chondrocytes, chondroblasts, glucosamine, glycosaminogcans, chondroitin sulfate A, and anti-inflammatory prostaglandins.

Side Effects And Contraindications

Korean doctor Peter Yoon says he has not seen any severe toxic side effects with the product. Dr. Yoon says that if too much velvet deer antler is taken, mild upset stomach may occur, which disappears if use of the product is stopped. According to Dr. Koltun, people with circulation problems, congenital heart disease or angina (heart pain) should not take velvet deer antler.

References

1. The Deer Farmer, Sep.1992, P.2, Article by John Falloon, Pile Wellington, New Zealand, Trevor Walton, Editor
2. Houck JC, Vickers K. The Inhibition of Inflammation and Acceleration of Tissue Repair by Cartilage Powder Surgery 1962;51: .
3. Prudden JF, Wolarsk R, Balassa, L. The acceleration of healing. journal of Surgery, Gynecology and Obstetrics 1969
4. Prudden JF, Allen J. Clinical Acceleration of Healing with a Cartilage Preparation, a Controlled Study, JAMA 1965;192: .
5. Pnudden, JF, Mishihara, G. The acceleration of wound healing with cartilage-1. Surgery, Gynecology and Obstetrics 1957;Sept: .
6. Ghosh P, Smith M, and Wells C Second line agenda osteoarthritis. in Dixon, JS and Furst, DE, EDA Second Line Agents in the Treatment of Rheumatic Disease, Marcel Dekker, New York, p. 383, 1992
7. Roden L. Effect of hexosamines on the synthesis of chondoitin sulfuric acid in vitro. ArkKeml1956; 10:3.
8. Karzel, K and Domenjoz, R. Effects of hexosamines derivatives and uronic acid derivatives, glycosaminoglycan metabolism of fibroblast cultures. Pharmacology 1971 ;5:337.
9. Setnikar I, Cereda R, Pacina MA et al. Antireactive properties of glucosamine sulfate. Arzsn Forsch 1991;41 (2):157.
10. The Deer Farmer, ibid
11. Rejholec V. Long term studies of antiosteroarthritic drugs: an assffsment. Seminars in Arthritis and Rheumatism 1987;1 7:35-63.
12. Morrison LM, Schjeide OA. Absorption, distribution metabolism and excretion of acid mucopolysaccharides administered to animals and patients in coronary disease. CC Thomas, Springfield, p.109.

taking any medication, or if you have or suspect you might have a health problem. You should not stop taking any medication without first consulting your physician.