

3.2.2.3.7.6 Pygeum for a lean prostate

While saw palmetto extract is the far better known herbal medication to reduce the size of an enlarged prostate, pygeum may in many cases be superior for the treatment of the condition. Benign prostatic hyperplasia or benign prostatic hypertrophy is a non-cancerous tissue growth of the prostate. Among the early symptoms of the condition are prolonged dribbling after urination, as well as a decrease in the strength of the urinary stream. The enlarged prostate will also interfere with ejaculatory power.

Practically all men experience an enlargement of the prostate as they age. Early symptoms usually set in after the age of 40. As the enlargement of the prostate gets worse, the most disturbing symptom is a persistent difficulty to pass water. This can become very uncomfortable and painful.

A standard treatment for an enlarged prostate over the past decades has been to remove surgically a substantial part of the prostate. That gets rid of the urination problem but unfortunately, nerves passing along the prostate often get cut as well. This will almost certainly mean a rather abrupt end to a man's sex life. That vital organ's function will, after the operation, primarily be that of a channel through which urine flows with little obstruction.

Not an appealing perspective for a large number of men.

Next on the scene arrived Proscar, an oral medication with the generic name finasteride. Proscar has been proven to often shrink an enlarged prostate. It does so by interrupting some hormonal processes that are at the root of benign prostate hyperplasia, the conversion of testosterone into dihydrotestosterone.

The conversion of testosterone into dihydrotestosterone is effected by the enzyme 5-alpha reductase. Proscar inhibits 5-alpha reductase and thereby the conversion of testosterone into dihydrotestosterone, thus interrupting the chain that leads to cell growth in the prostate. But even though nerves are not cut as they often are in the case of surgery, all is not well at the sex front for those on Proscar. Studies have proven what many men experienced when on Proscar: erections are hard to achieve and maintain.

The best studied among the three herbals is saw palmetto. There is no doubt that saw palmetto works. It does so in pretty much the same manner as Proscar: by inhibiting the enzyme 5-alpha reductase. Unfortunately, saw palmetto is comparable to Proscar in another aspect. Personal experience suggests that saw palmetto also interferes with the erectile function. There will just be less sensation in the male organ, comparable to what happens to the sensation of one's legs if one sits for a long time.

Pygeum africanum and nettle root are less studied. While both will also result in making passing urine easier for men with enlarged prostates, most probably by effecting a reduction of the size of the gland, the mechanism by which this happens is not precisely known.

The endocrine system works via receptor sites. In principle, one can interfere with hormonal processes in two manners: either by interfering with the hormones themselves, or by interfering with receptor sites. Phytoestrogens, for example, often have effects on women, which usually would be attributed to testosterone, the quintessential anti-estrogen. This is thought to happen because phytoestrogens are weaker than a woman's body's own estrogens. When phytoestrogens bind to estrogen receptor sites, they inhibit a woman's body's own stronger estrogens from binding to these sites, thus tilting the estrogen testosterone balance in favor of testosterone. In women, even a slight tilt towards testosterone will usually result in an increased sexual appetite.

It has been speculated that pygeum africanum and other herbals used in the treatment of an enlarged prostate work by interfering with the binding sites for dihydrotestosterone. We are not aware of scientific studies that would have dealt with the effect of pygeum africanum on erectile functions.

Alternative option: tongkat ali

Please see the left side bar for links to tongkat ali articles written by Serge Kreutz. While Serge Kreutz has been the only Western researcher who has covered tongkat ali in recent years, additional work has been done mostly by Malaysian scientists. This work has been summarized by Associate Professor Dr. Johari Md. Saad, Ph.D., University of Malaya, Malaysia.

For decades, the indigenous populations of South East Asia have been using *Eurycoma longifolia* for its high medicinal value. How the concoction worked for them is difficult to explain, but many swear by its close to supernatural benefits.

In Malaysia, the plant is better known as "Tongkat Ali" which literally means "Ali's walking stick".

Traditionally, it is valued for its aphrodisiac properties and treatment of diverse ailments ranging from cuts and wounds, skin infection, fever, malaria, high-blood pressure, diabetes, and to increase energy and stamina.

Scientific Research

As early as 1968, scientific research was conducted on *Eurycoma longifolia* (Tongkat Ali). At that time, the scientists were looking for natural chemical and have identified the following phytochemical components extractable into the organic solvent, such as methanol, dichloromethane or chloroform:

Terpenoids, stigmasterol, sitosterol, sterol, saponins, quassinoid, campesterol, benzoquinones, alkaloid, scopoletin, piscidinol, nilocitin, methoxycantin-one-oxid, methoxycantine-one, meliane, longilene, longilactone A and B, hydroxyeurycomalactone, hydroxycantin-one-oxid, hydroxycantine-one, hydroxydehydroeurycomalactone, hispidone, eurylene, durylactone, eurycomanone, eurycomanol-oD-glycopyranoside, eurycomanol, eurycomalactone, episelin, dihydroxyklaineanone, dihydroxyeurycomanone, dihydroeurycomalactone etc.

The water-soluble extract contains mainly phenolic components, tannins, high molecular weight polysaccharide, glycoprotein and

mucopolysaccharides. It is believed that these water-soluble components are biologically active in rendering some of the observed properties. Pure water-based tongkat ali extract can be obtained from the Medan, Indonesia-based company Sumatra Pasak Bumi with the web site address www.tongkatali.org. Sumatra Pasak Bumi is a major tongkat ali wholesale company and supports scientific research by providing free tongkat ali extract.

Currently, the above-listed components of tongkat ali are characterized and intensive studies on the properties of these components are being vigorously examined by Malaysian, Japanese and American scientists.

Aphrodisiac Value

More than just an aphrodisiac!

Since 1994, different authorities have carried out various scientific experiments on the aphrodisiac properties of Tongkat Ali. The school of pharmaceutical science, university science Malaysia [Ref. Biological & pharmaceutical Bulletin 21(2) 1998 153-155; Archives of pharmacal research (Seoul), 20(6). 1997 .656-658; international journal of pharmacognosy, 35(2) .1997.144-46; experimental animals (Tokyo), 46(4).1997.287-90]; reported that, in the tests carried out in the laboratory, the extract of Tongkat Ali has an aphrodisiac effect in the experiment on animals. It increased the number of times and length of the sexual performance of the animal under study.

More reports about the biological properties of the water-soluble extract were reported in: prosiding seminar sebatian kimia semulajadi ke 13 FRIM 1997; 22nd Malaysian Biochemistry and Molecular Biology Society Conference 1997; prosiding Konvensyen Kebangsaan Tumbuhan Ubatan FRIM 1995; proceeding 19th Malaysian Biochemistry and Molecular Biologi Society Conference 1994 and some other publications.

Experiments carried out by a team of scientists in the University of Malaya showed the water-soluble extracts from Tongkat Ali have the following effects:

Tongkat Ali / Eurycoma Longifolia Jack references

In vitro tests on human testicular tissue homogenates showed Tongkat Ali water-soluble extract increased the formation of testosterone (male sex hormones) by 4.4 fold.

Studies conducted on animals showed significant changes in the male:female ratio of the offspring, i.e.3:1 ratio in the treated group compared to 1:1 ratio in the untreated group.

Experiments conducted also showed that the water-soluble extract has the ability to increase the sperm concentration, percentage of progressive sperm and the mobility rate. The results obtained suggest that Tongkat Ali water-soluble extract could increase the quality and quantity of the sperm, and therefore, increase the fertility rate.

Tongkat Ali water-soluble extract has the potential of increasing fertility and also helps increase the litter size.

Facts Men Need To Know About Their Male

Hormone: Testosterone

Function

Testosterone is the most important representative of the male sex hormones collectively known as androgens produced by the gonads. Its secretion stimulates the differentiation of the male reproductive tract in the embryo, the descent of the testes into the scrotum, the further development of the reproductive tract and penis during puberty and maturation of the sperm. It is also responsible for the development of male secondary sex characteristics such as moustache, beard enlargement of the larynx (deep voice) and increase production of the sebaceous glands, all of which are associated with masculine features. Testosterone also plays a role in the development and maintenance of male libido (sexual desire) and sexual behavior.

Testosterone have other "non-sexual" roles: it serves the important function for protein biosynthesis in accelerating muscle build-up, increases the formation of red blood cells, speeds up regeneration

and recovery time after illness or injury. It stimulates the entire metabolic activity especially in the energy metabolic pathways and burning of body fat.

Testosterone Levels Decline with age.

If you ask any elderly men about their endurance and sexual desire- the answer would be non-affirmative. What is the cause? Aging? The answer is a definite "Yes"! But how is aging responsible for this syndrome? The answer lies in the testosterone level, which declines with age. Research shows that during puberty, its level is peaking. Its level is at their lifetime peak at the age of 25, and steadily decrease with age. Some clinical studies indicate that generally on average, testosterone levels drop as much as 2% on yearly basis after the age of thirty. The rate of decline is very much a factor of lifestyle. Individuals who exercise regularly have a much slower rate of decline. This is due to exercise to a certain extent stimulates the hormone secretion. A more prominent decline was observed in individuals who are heavy smokers and alcoholic.

Testosterone, free testosterone, steroid and tongkat ali resources

Tongkat Ali does not work the same way as other aphrodisiacs

Tongkat Ali does not act in the same way as other claimed aphrodisiacs, which take effects immediately.

Tongkat Ali has to be consumed regularly over time. The mode and mechanism of actions are different.

Tongkat Ali acts through the enhancement of testosterone and also c-GMP productions. As it enhances the synthesis of the hormone it takes a longer time period to exert its effects. The benefits are felt gradually after a period of time. Optimal effectiveness should be felt within a week of continuous uninterrupted use. When the testosterone level increases, the health and vitality are restored.

Tongkat Ali water-soluble extract is not a stimulant. Aphrodisiac effects of Tongkat Ali varied depending on the lifestyle and also the physical and physiological state of the individuals.

Cancer Cells Inhibitor

Researchers in America and Japan reported that some plant chemicals in the group of quassinoid and alkaloids found in Tongkat Ali have the effect of inhibiting the growth of cancer cells in animals in laboratory experiments. Examples of the chemical cells are breast cancer cells, colon cancer cells and leukemia.

Anti-Fever Effects

In 1995, it was reported that the quassinoid extracted from Tongkat Ali has an anti-fever effect. From this experiment, the quassinoid was 2 times more effective than aspirin.

Anti-Malarial Effect

Studies on the biological effects of Tongkat Ali began in the 1980s. Studies showed that the roots of Tongkat Ali have a group of plant chemicals called quassinoid alkaloid and peptide that has the property to kill malaria parasites.

Anti-oxidant Properties

Studies conducted by the Forest Research Institute Malaysia (FRIM) as well as the department of Bio-medical Science, Universiti Kebangsaan Malaysia (UKM) discovered that Tongkat Ali contains SOD (Superoxide dismutase), a kind of anti-oxidant enzyme. The studies showed that Tongkat Ali inhibited the chain reaction of radicals that can be harmful to the body system.

Quality of Tongkat Ali Extract

Most, if not all, Tongkat Ali products available in the market today are pulverized (sawdust) root. Until they are scientifically analyzed in the laboratory, there is no way to verify which plant roots or plant parts are being used. Beside that, the raw roots are fungus-prone. Unless stringently quality controlled, even grounded root powder in capsules

can deteriorate over time and are subject to attack from fungi and microorganisms, which could cause toxic and side effects over long-term usage.

Tongkat Ali is now made available using the latest scientific techniques and the highest quality-controlled methods of extraction. The best quality is from a product with 100% pure Tongkat Ali water-soluble extract, scientifically processed and encapsulated.

Such an extract is currently available through a company in Medan, Indonesia (as Tongkat Ali is now a protected plant). The company is Sumatra Pasak Bumi, with website www.tongkatali.org.

Tongkat Ali water-soluble extract is superior in efficacy and quality. The dosage is standardized and the formulation is based on pharmacokinetic studies and observations, to ensure its effectiveness, safety and efficacy.

Scientists and researchers have shown that the water-soluble extract is very safe and non-toxic, even at relatively high dosage.