

WinAge

(A product monograph)

Jeevanjyoti Herbaceuticals

HEALTH FOR ALL

NATURALLY

Introduction

Aging is an on going process of human being. As a biological phenomenon all the living tissues in the body undergo aging. This aging affects the working of all the systems of the body and specially nervous system. Due to excessive stress and strain, wrong dietary habits and wrong daily routine humans are earlier exposed to aging process. This directly effects neuro transmitters. Parkinson's and age related disorders are the most prevalent problem of 20th century where no definite answer is yet found. No single molecule is yet found to stop the aging process. An herb having active phyto chemicals give promising results to stop aging and are also used in Parkinson's like disorder. Aging also affects steroidal hormones rendering its effect on male and female libido. It also affects the sexual activity and mood of a person. Thus anti aging medicines are of great need to modern society .

A simple collection and formulation of herb does not mean an Ayurvedic remedy. Herbal formulations of same ingredients do not exert same results as they lack in standardization. Ayurveda prescribes specific processing that enhances the safety and efficacy of the products. A perfect formulation aims at achieving comprehensive treatment with no side effects.

A careful choice of right plant by trained persons is followed by sensible selection of part of the plant. These parts undergo different procedures which are vital and crucial in the view of its pharmacological activity. Jeevanjyoti Herbaceuticals Company blends Ayurvedic principles and expertise with modern medical science and technology which aims to prove the safety and efficacy of our products scientifically. Cap.WinAge is a formulation intended to treat Parkinson's like disorder and sexual debility in males and females.

The philosophy behind the use of active phytochemical from herbal sources rests on the adoption of the natural pharmacodynamic action in the plant itself. In contrast, purifying the phytochemicals to a single agent would simply imitate the chemical production of a synthetic chemical. A single synthetic chemical agent in medicine often affects only a single etiological factor or a mal-mechanism of cell and organ functions. For example, Virag first introduced the synthetic chemical papaverine to relax the cavernosal smooth muscle in the penis to induce erection in ED patients. Followed by the discovery of the mechanism of erection (de Tejada, 1992 and Shirai, 1992), this constituted a breakthrough in the management of ED. However, the instantaneous effect afforded by this chemical requires repetitive injections to

achieve erections. Thus papa-verin as a synthetic vasoactive compound in fact does not cure ED. Relaxing the corporal smooth muscle of the penis addresses only one of the problems in the complicated process of penis erection. This is analogous for other vasoactive compounds such as phentolamine , prostaglandin E1, and other oral synthetic chemicals such as sildenafil citrate , apomorphine , and phenotolamine . These synthetic compounds may indeed offer the benefit of fast action and "instant" erection in ED patients, but in general the uses of these compounds are required each and every time to initiate erection. Erection is only one phase out of the four recognized phases of sexual behaviors in men. These synthetic chemicals do not address the whole ailment by neglecting to treat the disorder holistically. In contrast, many phytochemicals actions are to address the root cause of the imbalance and deficiency that result in abnormal functions of cells and organs in the body

The ingredients used in Cap.WinAge are

Kawacha beej – (*Mucuna prurens*) –200mg equivalent to 2000mg powder
Ashwagandha- (*Withania somnifera*) –200mg equivalent to 1000mg powder
Gokshur – (*Tribulus terrestris*) – 100mg equivalent 700mg powder
Shuddha Kuchala – (*Nux vomica*)-5mg equivalent 50mg powder
Jatiphal – (*Mrystrica fragrans*)- 30mg equivalent 180mg powder

Indications

Parkinson's disorder.
Erectile dysfunction
Early ejaculation
Loss of libido in males and females

Oligospermia
Impairment in FSH and LH
Testosterone deficiency

Kawacha beej – (*Mucuna prurens*)

Habitat and Botany: *M. pruriens* is an herbaceous twining annual. The leaves are trifoliate; the leaflets, broadly ovate, elliptic or thomboid ovate and unequal at the base; the flowers, purple and in axillary, pendulous racemes, the pods, curved, longitudinally ribbed, turgid and densely clothed with persistent pale brown or gray, irritant bristles; the seeds, black, 4-6 in a pod and avoid. This Ayurvedic herb is an annual climbing shrub common in the tropics of India; legumes are eaten as a vegetable.

Active Compounds: *M. prurens* has been found to contain L-DOPA, 40 mg/g of the plant. (Parikh et al, Indian Drugs, 1990, 27, 353; Chem Abstr, 1993, 119, 234161, 245571). The seeds contain the bioactive alkaloids mucunine, mucunadine, mucuadinine, pruriendine and nicotine, besides B-sitosterol, glutathione, lecithin, oils, venolic and gallic acids. The seeds with seed coat showed the presence of a number of bioactive substances including tryptamine, alkylamines, steroids, flavonoids, coumarins, cardenolides, etc. [Sihna, J Res Educ Indian med, 1992,

11(1), 15, Goyal, J Econ Taxon Bot, 1991, 15, 677]. *Mucuna pruriens* seeds contain about 5% L-dihydroxyphenylalanine, L-Dopa, a compound which is widely used in the management of nervous disorders such as Parkinson's disease. Other compounds in the seeds include bufotenine and serotonin which reduce cholinesterase activity thereby helping to attenuate brain functions. The endocarp of the beans contain the maximum L-Dopa concentration

Pharmacology: In preliminary research, an extract of *Mucuna pruriens* was studied in people with Parkinson's disease, 43% of whom were taking Livodopa before treatment; the remaining 57% were not medicated. Statistically significant reductions in symptom scores were seen from the beginning to the end of the 12-week trial.

The total alkaloids from seeds of *M. pruriens* comprising 5 alkaloidal bases were found to bring about a note-worthy increase in the population of spermatozoa and in the weights of body testes, seminal vesicles and prostate of the treated rats. The exhibited activity was found to stimulate testosterone-enanthate induced androgenic activity observed in another set of treated individuals. (Saksena, S. and Dixit, V.K., Ind. J. Nat. Prod, 1987, 3(1), 3-7).

Lower dose corresponding to the clinical dose significantly decreased the sleeping time, increased the motor activity and gave equivocal results in rotarod test in experimental animals. The high dose (3 times the clinical dose) significantly increased the sleeping time, decreased the motor activity and reduced the time for falling from the rod. Thus the drug possesses CNS stimulant effect at low doses and CNS depressant effect at high doses. (Ahmad, S., et al., Conference of Pharmacology and Symposium of Herbal Drugs. (New Delhi), March 1991, 15, 26.)

L-DOPA is a neurotransmitter precursor, an effective drug for relief in Parkinson's disease. The seed is prophylactic against oligospermia, useful in increasing sperm count, ovulation in women, etc. It prevents male and female sterility and acts as a nervine tonic.

Toxicity: No adverse effects were seen in clinical laboratory reports (Ibid, 1995).

Ashwagandha (*Withania somnifera*)

Habitat Ashwagandha is a small shrub that grows to 1.5 meters tall. It is found in dry areas of India and Africa.

Main Active Constituents: Withaferin, Withanolides, Withanine, sitoindosides, Somniferine, Alkaloids and Ethanolides. Withanolides are believed to account for the multiple medicinal application of Ashwagandha. It stimulates the activation of immune system cells such as lymphocytes. It inhibits inflammation and improves memory. Taken together, these actions support the traditional reputation of Ashwagandha as a tonic or adaptogen.

Ashwagandha root is an herbal remedy from the Ayurvedic tradition of India that has been used for centuries to promote strength and stamina. It is considered an "adaptogen", a term used to describe herbs that improve physical energy, increase immunity to colds and infections, and increase sexual capacity.

Ashwagandha has mainly been used to restore male libido, cure impotence and increase male fertility. Recently, studies suggest that Ashwagandha is also effective in enhancing female libido.

A study published in 2000 by the "Journal of Ethno Pharmacology" found that ashwagandha can increase swimming endurance and act as a cardio-protector and anticoagulant in rats and frogs. One group of German scientists reviewed the evidence on ashwagandha in small-animal tests and concluded that the herb contains steroid-like compounds that may produce resistance to physical, and biological stress. In a study published in "Neurochemistry International", researchers found that withania somnifera enhanced activity in nerve signals in the cortical and basal forebrain of male rats. The report speculated that this might partially explain the cognitive and memory enhancing reputation of the extract. A double blind clinical trial to study the effect of Withania Somnifera on the prevention of the process of aging was conducted by Kuppurajan et al,(1980) in 101 healthy male adults in the age group of 50-59 years. The trial was conducted for a period of 1 year. They observed a statistically significant increase in hemoglobin, red blood cells, and hair melanin in the treated group when compared to placebo group. Suhasini Sharma et al, have studied the effect of long term administration of Withania Somnifera on rats. They found that Ashwagandha promotes growth especially during active growth period, and helps in producing a healthier progeny. It is also devoid of any toxicity even after 8 months of continuously daily administration.

The effects of water extracts of Withania somnifera on ovarian follicular development and serum levels of FSH and LH were studied in immature 17-day-old and 25-day-old-Wistar rats. Water extracts of the plants were given to the animals per os in a dose of 47 mg/100 g body weight for 6 days. Serum levels of FSH and LH were measured by ELISA. Folliculogenesis was studied with a light microscope. In 25-day-old rats, extracts of both plants elicited significant changes in gonadotrophin levels coupled with a significant increase in ovarian weight and profound folliculogenesis. Numerous primary, secondary, tertiary and antral follicles were present. A distinct zona pellucida was not seen and the oocyte was often detached. In 17-day-old animals there was a significant increase-in body weight but without significant changes in the ovarian weight and folliculogenesis.

The main function of Ashwagandha is that it delays the release of cortisol by the adrenals. This prevents the negative effects like long term cortisol production on the body and prevents the adrenals from becoming exhausted, a direct antistress effect which has been reported by many researchers. Ashwagandha also has a sedative effect which claims the adrenaline fueled anxiety that accompanies stressful life styles, thereby dealing with another factor that is a result, and a cause of stress indeed. Ashwagandha has often been used to treat primary anxiety states. Thus in cases of anxiety or depression induced loss of libido and ED it is most useful herb. It has been found that Ashwagandha increases the number of immune cells known as T cells and B cells – helping to fight infections. All these actions directly oppose the effects of stress. It increases red blood cell counts, improves hemoglobin level, increases endurance and stamina and increases lean weight.

Contraindications, Toxicity, Cautions and Safety: Safe for human and animal use. This herb has been used safely by children in India and even by pregnant women. When taken in small quantities as a tonic. During lactation it increases the flow of mother's milk.

No side effects have been reported with Ashwagandha

Gokharu (Tribulus terrestris)

Tribulus terrestris is a herbal plant native to India, Bulgaria and China that has a long history as a powerful aphrodisiac and as a traditional medicine for treating male infertility. Recently, a chemical compound isolated from Tribulus terrestris called protodioscin has been identified, purified and standardized as a phytochemical agent. In a multi-center, placebo-controlled, randomized, double-blind clinical trial, protodioscin proved to be an effective form of treatment for male infertility. The fruit and root of Tribulus contain pharmacologically important metabolites like flavonoids, alkaloids and glycosides. These active components have a stimulating effect on the immune, sexual and reproductive systems. It has a 5,000 year-old history of medicinal use in India. There it has been used for boosting hormone production in men and women, Urinary tract problems, Itchy skin and blood purification.

Cooling, Diuretic, Tonic, Aphrodisiac, used in painful micturation, calculus infection of urinary tract discharges and impotence. It is used to increase the sperm count. The reproductive systems of both men and women receive beneficial results from Gokharu. Aphrodisiac action in Gokharu is due to the presence of Saponin. It boosts the hormones in the body. Hormones produced by the body or taken in as Phyto steroids do not accumulate in tissue and are easily broken down by our bodies. Therefore the body does not metabolize a large quantity of hormones at any stage

Gokharu stimulates increase in hormone production in the body and also stimulates its effect. Its health benefit of hormone supplement action from anti-aging to anti-oxidants is well known. One group of natural sources for hormones is the plant steroid (i.e. Plant that have been laboratory proven to contain steroid hormones). Gokharu is the plant of choice

Protodioscin is a phytochemical agent derived from Tribulus terrestris. It has been clinically tested extensively, and is found to improve sexual drive and to enhance erection in men. The mechanism of protodioscin's action is suspected to involve its conversion to dehydroepiandrosterone (DHEA) as well as testosterone.

Many research efforts have suggested that, protodioscin acts as a precursor to a key hormone dehydroepiandrosterone (DHEA). DHEA levels in diabetic patients, especially those with ED, are much lower than that found in normal men. Even in normal healthy men, the DHEA level steadily declines after reaching middle age. As DHEA is hypothesized to be required for proper maintenance of cell membrane integrity and functions, its lowered amount may result in some aspects for aging, including lowered sex drive and poor erection.

The restoration of sex drive and enhancement of the quality of erection by protodioscin seem to involve its conversion to DHEA and testosterone. Increased DHEA level, in turn prevents the loss of epididymal cells which results in the improved spermatogenesis and increased fertility.

There is an intriguing possibility that DHEA may prevent premature loss of cell membrane integrity. It may also restore the function of endothelial cells lining of corporal sinuses by rejuvenating membranes of those cells. This may lead to a natural anti-aging therapy, which is of particular interest for the aging population. This possibility warrants a more detailed trial of the connection of protodioscin to DHEA.

Apart from the above herbs Cap.WinAge also contains standardized extracts of *Nux vomica* and *Myristica fragrans* which helps as nervine tonic and for ED. According to Ayurveda, Herbs are taken in combination with other herbs to neutralize the toxicity of one herb with the opposing effect of the other or to enhance the particular effect of one herb with the help of other. Ingredients in Cap.WinAge work in synergy to stop aging and improve libido in humans.

Dosage – Capsule WinAge is advised in a dose of 1 bid prior to meals .

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