Contents;

- Arginine................................................................. 1200 mg
- Lepidium (Lepidium meyenii)................................. 100 mg
- Tribulus terrestris.................................................. 250 mg
- Epimedium (Epimedium sp.)................................. 100 mg
- Opuntia ficus indica................................................. 100 mg
- Ginseng (Panax ginseng)........................................ 40 mg
- Vitamin C (L-askorbik asit)................................... 750 mg
- Zinc (Zinc gluconate)............................................. 5 mg
- Folic acide (Pteroilmonoglutamik acide).............. 400 mcg
- Boron...................................................................... 3 mg
ARGININE

• L-arginine causes increased libido both in men and women.
• It has been demonstrated that arginine supplementation regulates sexual activities in men suffering from erectile dysfunction.
• Pre-ejaculatory fluid (semen) is rich in arginine and L-arginine boosts sperm production and sperm motility.(1)
LEPIDIUM MEYENII (MACA)

- Increases male sexual functions.
- Acts as an aphrodisiac.
- Supports sperm production.
- No effects on testosterone were observed during the studies carried out. (3)
- Is a precursor of NO.
- Ensures vasodilatation through the relation of L-arginine - nitric oxide secreted during transition from endothelium to erection.
- In the studies carried out, the production of NO has increased when used together with Pcynogenol (Pinus pinaster bark extract – contains oligomeric proanthocyanidin). (4)
TRIBULUS TERRESTRIS

• A study aimed at examining the results of Protodioscin (Tribulus terrestris) treatment in men diagnosed with infertility and impotency was carried out. It was seen that the Libilov treatment consisting of oral consumption of 3 x 1 to 3 x 2 tablets/day improved spermatozoa concentration and quality in patients with oligoosperm. Besides, it was noted that the men undergoing this treatment experienced improvements in terms of sexual libido, erection, ejaculation and orgasm. Libilov treatment also enhanced spermatogenesis in sertoli and germinal cells and improved the effect of transformation of testosterone into dihydrotestosterone (DHT). Given the fact that the DHT plays an important role in spermatogenesis, muscle development, this physical health contributed to improved circulation of oxygen in the body. This effect indirectly improved sexual functions including libido, erection and orgasm. (Viktorof et al., 1994). A study to understand the effect of Tribulus terrestris (protodioscin) extract in male infertility treatment with idiopathic oligoastenosperm was conducted. The use of Tribulus terrestris (protodioscin) extract in idiopathic oligoastenosperm (OTA) treatment was clinically tested and resulted in success. A double-blind research was carried out with 45 infertile, married men with OTA. 36 men were treated with 500 mg of pure Tribulus terrestris extract (Libilov) 3 times a day during 3 months. 9 men making up the control group were given placebo (candy pills) throughout the same period of time. While the wives of 8 men in the treatment group became successfully pregnant after the treatment of their husbands, no pregnancy was experienced by the wives of the men in the control group. The improvement observed in the existing sperm morphology in contrast microscopy in the conventional phase as well as the improvements of acrosome morphology and reaction were thought to be possibly caused by increased fertility after the treatment. Moreover, it was seen that Tribulus terrestris increased the level of dehydroepiandrosteron (DHEA) and it was thought that with the activation of cell membrane receptors, it may have contributed in the production of weak androgens. In return, it is estimated to have improved fertility through increasing the level of spermatogenesis. (Adimoelja et al., 1995). Protodioscin obtained from the Tribulus terrestris plant enhances sexual functions in men through DHEA. In studies conducted on patients diagnosed with diabetes mellitus (diabetes), an interesting relation between the level of dehydroepiandrosteron-sulfate (DHEA-S) and lack of sexual drive and impotency was discovered. In addition to these, clinical studies were conducted on 30 healthy men with erectile dysfunction (ED), 30 healthy men with no erectile dysfunction (ED) and 15 men with diabetes and erectile dysfunction in order to determine the relation between DHEA-S and erectile dysfunction (ED). These persons were given 250 mg of Tribulus terrestris extract 3 times a day during 3 weeks and their blood and liver values were tested. As a result of the study, a significant increase was observed in the level of DHEA-S of persons who do not have diabetes (Adimoelija and Adaikan, 1997). (6)
EPIMEDIUM

- The plant is particularly used for problems with erection and lack of sexual drive in men. Epimedium is believed to increase sexual activity by reviving sensory nerves and sexual desire. Epimedium contains chemicals which revive blood flow, sexual function and sperm production. An article published in the “Journal of Ethnopharmacology” on December 3rd 2007 revealed that the oral consumption of epimedium is significantly effective in the treatment of holistic erectile dysfunction. Icariin also suppresses the activity of (phosphodiesterase) PDE-5 which is the same as the working principle of Viagra. Suppression of the activity of PDE-5 leads to continuation of erection. The study published in the “Aslan Journal of Andrology” concluded that a 4-week long treatment carried out with Icariin, which is the active ingredient of epimedium, improved erectile functions. An in vitro study carried out in Milano and published in the “Journal of Natural Products” in October 2008 demonstrated that a new molecule synthesized from Icariin prevented phosphodiesterase 5. Studies conducted on animals revealed that epimedium promoted healthy levels of epinephrine, norepinephrine, serotonin and dopamine while it decreased the increased levels of cortisol.
GINSENG

• Red ginseng should be used for erectile dysfunction and to support sperm quality.
• Saponins and ginsenosides it contains show activity.
• In the studies carried out, the duration of penis erection was prolonged and libido was increased in persons who use ginseng.
• It joins the secretion of NO through the vein endothelium.
• Relaxes the muscles of corpus cavernosum through NO secretion.
• Reduces the prolactin hormone and increases the levels of serum testosterone. While in some studies no effects were seen on testosterone, in some it was seen that it supported the production of testosterone.
• It has a direct effect on the frontal pituitary lobe and hypothalamic dopaminergic mechanism.
• Its most common side effects are hypertension, insomnia, mastalgia, redness, vaginal bleeding, rash, and diarrhea.
• It may cause depression, personality disorder and confusion in persons with a history of depression.
• It is interactive with MAO inhibitors such as warfarin and phenelzine as well as with alcohol. (5)
VITAMIN C

• The vitamin C (ascorbic acid) is the most important vitamin which has oxidative functions and is water soluble. The levels of vitamin C in semen is directly related to the amount of vitamin C consumed during meals. As there is a connection between low levels of vitamin C and weak fertility, this condition may also increase the rate of genetically defective sperms. Many studies have demonstrated that a daily consumption of 200 mg of vitamin C may lead to substantial increase in the sperm number. (7)
ZINC

• Zinc is an effective trace element in the production of more than 200 enzymes. It does not only have a vital importance in male fertility but it also plays a key role on the production of testosterone which is the male sex hormone of the body.

• Various studies were conducted which demonstrate the notable positive effects of zinc on sperm production. Men with a sperm number less than 8 million/ml (the regular sperm number should be at least 20 million/ml) were given a 24 mg dose of zinc on a daily basis.

• Three months after the zinc therapy, the men’s number of sperms increased to 20 million/ml. Thus, the regular sperm concentration in accordance with the WHO standards was reached.

• An increase in the level of testosterone was also observed, thus increasing the basic sexual drive. As a result, nine pregnancies were achieved. (10)
FOLIC ACIDE

- Approximately the 80% of the population suffers from lack of folic acid, i.e. vitamin B9. Folic acid is important for cell division and as a cellular energy source. It is commonly known that the lack of folic acid in the first weeks of pregnancy increases by four times the risk of birth defect, in particular birth with spina bifida.

- Low levels of folic acid in men leads to an increase in the number of genetically defective sperms. It was seen in many studies that folic acid supplement improve sperm mobility. (8)

- It has been demonstrated that it is necessary for sperm health. The chromosomes of the sperms develop less in case of lack of folate. Embryo grown in ova fertilized by sperms with lack of folic acid, the child may grow with anomaly, such as Down syndrome, or there may be a miscarriage. It is a type of vitamin B needed for the formation of DNA. When its amount in the body decreases, the number and mobility of sperms decrease significantly. In men cannot have a child, the number of normal sperms were increased by 74% through the use of a combination of zinc and folic acid.(9)
Opuntia ficus-indica

- The Indian fig (Opuntia ficus-indica [L.] Miller) can be treated as a food which has nutraceutical and functional importance due to the high amount of chemical compositions it contains which are characterized with nutritional and health-improving features. (Piga 2004). As a result of the treatment of innutritious ingredients such as potentially active antioxidant phytochemicals contained by the Indian fig, the positive effects of the in vivo digestion of this fruit (reduction of oxidative stress in the human body and protective effects on the cardiovascular system, anti-ulcer in rats and protective effects on the liver) were scientifically proven.
SCIENTIFIC RESOURCES

1) DR. MUSTAFA YILMAZ ADÜTF BİYOKİMYA AD. 2005
3) http://eczacininsesi.com/?yon=haber&id=9044 SİTEDE ORJİNAL KAYNAK VAR
4) http://eczacininsesi.com/?yon=haber&id=9044 SİTEDE ORJİNAL KAYNAK VAR
5) http://eczacininsesi.com/?yon=haber&id=9044 SİTEDE ORJİNAL KAYNAK VAR
6) T.C. SAĞLIK BİLİMLERİ ENST. TRIBULUS TERRESTRIS L. (ÇOBAN ÇÖKERTEN) (ZYGOPHYLLACEAE) TÜRÜ ÜZERİNDE FARMASÖTIK BOTANİK YÖNÜNDE ARAŞTIRMALAR
   “Askorbik asitin erkek doğurganlığı üzerindeki etkisi.” Ann NY Acad Sci 1987;498:312-323
SCIENTIFIC RESOURCES

- Coenzyme Q10 and α-tocopherol reversed age-associated functional impairments in mice Rise of Herbal and Traditional Medicine in Erectile Dysfunction Management
- Association between serum folic acid level and erectile Dysfunction
- Red ginseng for treating erectile dysfunction: a systematic review
- Levels of L-arginine and L-citrulline in patients with erectile dysfunction of different etiology
- Sexual Enhancement Products for Sale Online: Raising Awareness of the Psychoactive Effects of Yohimbine, Maca, Horny Goat Weed, and Ginkgo biloba
- THE INFLUENCE OF MACA (LEPIDIUM MEYENII) ON THE GLUCOSE METABOLISM AND ERECTILE FUNCTION IN TYPE 1 DIABETIC RATS
- A Double-Blind, Randomized, Pilot Dose-Finding Study of Maca Root (L. Meyenii) for the Management of SSRI-Induced Sexual Dysfunction
- Blood and seminal plasma concentrations of selenium, zinc and testosterone and their relationship to sperm quality and testicular biometry in domestic cats
- Effect of dietary selenium on boar sperm quality
- Evaluation of the efficacy and safety of Tribulus terrestris in male sexual dysfunction—A prospective, randomized, double-blind, placebo-controlled clinical trial
- Pro-sexual and androgen enhancing effects of Tribulusterrestris L.: Fact or Fiction
- Ameliorative effect of antioxidants (vitamins C and E) against abamectin toxicity in liver, kidney and testis of male albino rats