

Angiolaxin

Natural ACE Inhibitor from *Sesamum indicum* | VA-005



Key Features:

- Vegan source of natural ACE inhibitor for maintenance of normal blood pressure.
- Combining pharmaceutical grade, all-trans coenzyme Q10 from yeast fermentation process.
- Can be used to complement and support existing treatments for hypertension and cardiovascular health (eg. prescription drugs, natural health products, and/or healthy diets).

Indications:

- For people with borderline to mild hypertension (130-160/85-105 mmHg).
- For people at risk of or suffering from cardiovascular disease, myocardial infarction, diabetes mellitus, or renal impairment.
- May be used to complement plans to support cardiovascular health, such as prescription drugs, natural health products, and/or special diets under supervision of a health care practitioner.

Description:

There are several classes of antihypertensive drugs available, such as diuretics and beta-blockers. However, angiotensin converting enzyme (ACE) inhibitors are the preferred choice, especially for diabetic patients, because not only are they effective as antihypertensive agents, but their efficacy in the treatment and prevention of heart and kidney failure is also clearly established.

Angiolaxin is a natural anti-hypertension formulation that contains short-chain peptide KM-20 derived from sesame (*Sesamum indicum*) and coenzyme Q10. Sesame peptide KM-20 has been proven in human clinical studies to be effective at decreasing blood pressure gently by inhibiting the activity of ACE.

Sesame peptides work synergistically with coenzyme Q10, the coenzyme most abundant in myocardium, to control blood pressure and strengthen cardiovascular function.

Sesame Peptides (*Sesamum indicum*)

Sesame peptides have been shown in clinical trials to assist in lowering blood pressure. Sesame seeds contain abundant proteins and short chain peptides KM-20 specially hydrolyzed from sesame protein have been reported to contain ACE inhibiting activity.

A human clinical study conducted in Japan to evaluate the efficacy and safety of sesame peptides on blood pressure

Quantity: 112 Vegetarian Capsules

Ingredients (per capsule):

Sesamum indicum peptides KM-20 (seed).....125 mg Coenzyme Q10 (ubiquinone) (KanekaQ10™).....30 mg Vitamin E (6.7 mg ATE).....10 IU (from d-alpha tocopheryl acetate)

Non-medicinal Ingredients: Silicon dioxide, L-leucine, pullulan/ hypromellose (capsule)

Suggested Use: Adults - Take 4 capsules daily, preferably before meals, or as directed by your health care practitioner. Consult a health care practitioner for use beyond 12 weeks. Use for a minimum of 4-6 weeks for noticeable effect.

administered 500 mg of sesame peptides per day for 12 weeks to patients with mild hypertension (SBP 120-170 mmHg, DBP 80-110 mm Hg).³ The treatment produced an anti-hypertensive effect, decreasing average blood pressure from 145 mm Hg to 127 mm Hg in average SBP (systolic blood pressure) and decreasing DBP (diastolic blood pressure) from 89 mm Hg to 78 mm Hg. The study demonstrated that the sesame peptides mitigated high BP (with mildly hypertensive symptoms) to normal BP range.

Coenzyme Q10

Coenzyme Q10 lowers blood pressure by preserving nitric oxide within the endothelium. Since it works through a different mechanism than sesame peptides, it is a useful adjunct to hypertension treatment. A

systematic review of the effect of coenzyme Q10 showed that subjects treated for between 8 and 12 weeks with 100 to 200 mg of coenzyme Q10 per day resulted in decreases of 6 to 19 mmHg systolic and 2 to 16 mmHg diastolic blood pressure.⁴

Fifty percent of the subjects in a study who were treated with coenzyme Q10 were able to cease at least one of their other hypertensive medications.⁴

Another study evaluated the antihypertensive effectiveness



of oral coenzyme Q10 in 83 patients with isolated systolic hypertension during a 12 week trial.² The participants were given 60 mg of oral coenzyme Q10 twice a day for a total of 120 mg/day, which resulted in a SBP reduction of 17.8 ± 7.3 mmHg (mean \pm SEM).

Coenzyme Q10 is also intimately involved in energy production and is a potent scavenger of reactive oxygen species (ROS). It can be used for medical conditions such as congestive heart failure, hypertension, angina, doxorubicin cardiotoxicity, ventricular arrhythmias, cardiomyopathy, breast cancer, acquired immuno-deficiency syndrome, diabetes, muscular dystrophy, periodontal disease and as prophylaxis for heart surgery. A deficiency of coenzyme Q10 appears to be directly related to the severity of these symptoms and diseases.

Vitamin E

Considerable epidemiologic data suggest that dietary consumption of vitamin E reduces the incidence of cardiovascular disease. Vitamin E enhances the bioactivity of nitric oxide, inhibits smooth muscle proliferation, and limits platelet aggregation.⁷ One common mechanism to account for these effects of vitamin E is the inhibition of protein kinase C stimulation. In the setting of atherosclerosis, inhibition of protein kinase C by vitamin E would be expected to maintain normal vascular homeostasis and thus reduce the clinical incidence of cardiovascular disease. Vitamin E is also a fat-soluble antioxidant and combines synergistically with coenzyme Q10 to protect the body against free radical damage.

Reference:

1. Bertrand ME. Provision of cardiovascular protection by ACE inhibitors: a review of recent trials. Current Medical Research and Opinion. 2004; 20 (10): 1559-1569.
2. Burke BE, Neuenschwander R, and Olson RD. Randomized, Double-Blind, Placebo-Controlled Trial of Coenzyme Q10 in Isolated Systolic Hypertension. Southern Medical Journal. 2001; 94 (11): 1112-1117.
3. Nakamura E, Hirakawa Y, Tho Y, Nagaoka H, and Shoji Y. Dose Finding and Safety Study of 12-weeks Repeated Intakes of Sesame Peptides (KM-20) in Mild Hypertensive Subjects. Jpn Pharmacol Ther. 2004; 32 (4): 239-249.
4. Rosenfeldt F, Hilton D, Pepe S, and Krum H. Systematic review of effect of coenzyme Q10 in physical exercise, hypertension and heart failure. Biofactors. 2003; 18: 91-100.
5. Toxicity Test on Sesame Peptide KM-20 by repetitious feeding (PROJECT No. RD-020501). Test Report (Intermediate). Date of Preparation: Sept. 5, 2002.
6. Tran MT, Mitchell TM, Kennedy DT, and Giles JT. Role of Coenzyme Q10 in Chronic Heart Failure, Angina, and Hypertension. Pharmacotherapy. 2001; 21 (7): 797-806.
7. Keaney JF, Simon DI, Freedman JE. Vitamin E and vascular homeostasis: implications for atherosclerosis. FASEB J. 1999; 13: 965-976.

Caution

If you have high blood pressure, do not take Angiolaxin instead of your prescribed medication without the advice and supervision of your health care practitioner. Consult a health care practitioner prior to use if you are pregnant or breastfeeding, or if you are taking blood thinners.

For Education Purpose Only: The entire contents are not intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition. Never disregard professional medical advice or delay in seeking it because of something you have read in this presentation. All statements in this article have not been evaluated by the Food and Drug Administration and are not intended to be used to diagnose, treat, or prevent any diseases.