



VASOSTATE

MECHANISM OF ACTION

Niacin - inhibits free fatty acid release from adipose tissue and inhibits cyclic AMP accumulation which controls the activity of triglyceride lipase and hence lipolysis. It also decreases the rate of liver synthesis of LDL and VLDL and increases the rate of chylomicron triglyceride removal from plasma secondary to increased lipoprotein lipase activity. Niacin produces vasodilation of cutaneous blood vessels of the face, neck, and chest, probably mediated by prostaglandins, such as prostacyclin. (1,2)

Vitamin B₆ (Pyridoxine) - is a cofactor for enzymes involved in one of the two pathways for the metabolism of homocysteine. Trans-sulfuration of homocysteine to form cystathionine is catalyzed by cystathione-beta-synthase, which is pyridoxine (vitamin B₆) dependent.

Vitamin B₁₂ - is involved in one of the pathways for homocysteine metabolism. Remethylation of homocysteine to methionine requires folate and the methylcobalamin form of vitamin B₁₂ as a cofactor.

Folic Acid - is also involved in the metabolism of homocysteine. Low folate levels are associated with increased plasma homocysteine levels.

Vitamin C - Water soluble antioxidant. Vitamin C is also involved in a variety of metabolic processes including oxidation-reduction reactions and cellular respiration, carbohydrate metabolism, synthesis of lipids and proteins, catabolism of cholesterol to bile acids, conversion of folic acid to folinic acid, and iron metabolism.

Vitamin E - The major function of vitamin E is that of an antioxidant that prevents the formation of free radicals.

Magnesium - Helps to lower cholesterol levels.

Essential Fatty Acids - Linolenic acid seems to have beneficial effects on the cardiovascular system. Omega 3 fatty acids have been shown to lower fasting triglyceride levels by lowering hepatic triglyceride synthesis and by decreasing the release of triglyceride-rich VLDLs into the blood. (3)

Trimethyl Glycine (Betaine) - helps to reduce homocysteine levels by remethylating homocysteine to methionine. (4,5)

Ginger - The antiplatelet effect of ginger is exerted by its ability to inhibit platelet thromboxane. (6,7)

Betasitosterol - inhibits intestinal absorption of cholesterol by competing for the limited space in mixed micelles, which decreases cholesterol absorption. (8,9)

Policosanol - seems to help lower cholesterol levels by inhibiting hepatic cholesterol synthesis, and increasing the degradation of low-density lipoprotein (LDL) cholesterol. Policosanol also helps decrease arachidonic acid and collagen-induced platelet aggregation. (10,11)

INDICATIONS

Supplement for people with high total cholesterol and/or homocysteine levels.

INTERACTIONS AND WARNINGS

Niacin and niacinamide might exacerbate allergies by causing histamine release. Large amounts of niacin or niacinamide might precipitate gout. Contraindicated in patients with active peptic ulcer disease or in people with liver disease. Concomitant use of niacin with HMG-CoA reductase inhibitors can increase the risk of myopathy. Concomitant use with herbs or drugs that also affect platelet aggregation could theoretically increase the risk of bleeding or bruising.

A flushing reaction can occur with the larger doses of niacin. The reaction can consist of flushing, burning, tingling, and itching, sometimes with pain, as well as erythema of the face, arms, and chest. There may also be increased intracranial blood flow and headache. Onset is highly variable, from within 30 minutes to as long as 6 weeks after the initial dose. The reaction is prostaglandin mediated and related to rising niacin blood levels. Tolerance develops when constant blood levels are reached and prostaglandin levels fall. When starting niacin therapy or increasing the dose, flushing can be minimized by starting with a dose of one tablet and increasing slowly until a dosage of three or four tablets daily. (1)

Betasitosterol can interfere with blood glucose control requiring dosing adjustment of antidiabetic agents. Betasitosterol should not be taken by recipients of foreign organs and tissues, including bone marrow transplants or those with the genetic disorders sitosterolemia and cerebrotendinotic xanthomatosis.

DOSAGE AND DIRECTIONS FOR USE

Take two to four tablets daily.

OTHER COMPLIMENTARY THERAPIES

FoodState Essential Fatty acid Formula
FoodState Vitamin C Complex (non-acidic)



NUTRITION INFORMATION					
Each two tablets contain:					
FoodState[®] blend:					
Vitamin B ₃	100mg	Vitamin C	200mg	Linoleic acid	19mg
Vitamin B ₆	10mg	Vitamin E	50iu	(<i>Omega 6</i>)	
Vitamin B ₁₂	50µg	Magnesium	15mg	Palmitic acid	19mg
Folic acid	200µg	Essential fatty acids		Stearic acid	13mg
		Linolenic acid	50mg	Trimethyl Glycine	250mg
		(<i>Omega 3</i>)		Ginger	200mg
		Oleic acid	30mg	Betasitosterol	60mg
		(<i>Omega 9</i>)		Policosanol	10mg

REFERENCES

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