

## Ayush – Arjuna Heart™

Arjuna Heart is a formulation containing Terminalia arjuna, which in Ayurveda is used primarily as a support for healthy heart function. There are many diseases of our age: diabetes, cardiovascular disease, obesity and cancer, just to name a few. Three out of four of these named are specifically associated to the heart and cardiovascular system. Cardiovascular disease accounts for 40% of all deaths. Dr. Dean Ornish published many studies showing an actual reversal of coronary artery disease using Ayurvedic concepts. Although many Ayurvedic plants have shown to help coronary artery disease, Arjuna (Terminalia Arjuna) by far seems to be the best plant for heart health.

Arjuna heart contains **pyridoxine (Vitamin B6) and folate (Vitamin B9)** as these are cofactors required for homocysteine metabolism. Clinical studies report lowered cardiovascular risk in women with the highest intake of folate and vitamin B6<sup>11</sup>.

### CLINICAL INDICATIONS

- Angina
- Arrhythmias
- Cardiomyopathy
- Congestive Heart Failure
- Ischemic Heart Diseases
- Myocardial Infarction

### ACTIONS

- Reduces the effects of stress and nervousness of the heart
- Has a diuretic and general tonic effect in cases of liver cirrhosis
- Has prostaglandin enhancing and coronary risk modulating properties
- Enhances the elimination of cholesterol by accelerating the turnover of LDL-cholesterol in the liver, increasing HDL cholesterol
- Lowers beta-lipoprotein lipids and the recovery of HDL components in hyperlipidemia
- Promotes effective cardiac functioning by regulating blood pressure and cholesterol
- Relieves hypertension
- Powerful antioxidant, protecting the heart from oxidation
- Anti-coagulant and anti-platelet action prevents blood clotting, comparable to aspirin and heparin  
Reverses damage to myocardium

Arjuna Heart™ is best used for Angina, Cardiomyopathy, Congestive Heart Failure, myocardial infarction. It is effectively used in conjunction with the following products for conditions stated:

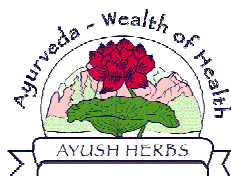
- Choleast/Policosanol/Guggal-Lip™ for raised cholesterol
- Carditone™/Q10 Plus/Taurine for hypertension
- Methylguard for raised homocysteine levels

### Arjuna Heart contains the following:

**Vitamin B6** is an essential water-soluble nutrient and member of the B-complex Vitamins. B6 may decrease the stickiness of platelets, cell fragments in the blood needed for clot formation and thus the tendency to form blood clots. A deficiency in this vitamin has been linked to Atherosclerosis in some instances, due to an accumulation of excessive amounts of an amino acid break down products.

**Folic Acid** is a water soluble vitamin. It is essential for cell division, growth and reproduction. Folic acid deficiency is the most common deficiency in the world. Folic acid is involved in recycling Methionine, an essential amino acid, from Homocysteine. Methionine is required in synthesizing choline, a neurotransmitter to help carry signals between nerve cells.

**Magnesium aspartate** is a major mineral nutrient in the human body. Forty percent is found in tissues like muscles and 60% occurs in bone and teeth. Magnesium is required for all major metabolic processes involving ATP, a source of energy in the cell. Magnesium is essential for the transmission of nerve impulses, for electrical potentials of cell membranes, muscle contraction and maintenance of blood vessels. Magnesium helps in maintaining normal heart function and cardiac rhythm.



**CoQ-10** is also known as ubiquinone, a lipid oxidation-reduction agent found in mitochondria of the cell. Because most cellular processes require energy, coenzyme Q is essential for good health. Deficiency of Coenzyme Q can occur in cardiac conditions, as well as older people with high blood pressure. Coenzyme Q also bolsters the immune system and helps protect against the effects of radiation and chemotherapy. It further improves contractility to the cardiac muscle and prevents LDL oxidation therefore acting as an antioxidant<sup>12</sup>.

- **Latin name:** Terminalia arjuna    **Common name:** Arjuna

**Terminalia arjuna** is a deciduous tree found throughout the lower foothills of India growing to a height of 60-90 feet. The bark of the tree has been used in India's native Ayurvedic medicine for over ten centuries, primarily as a cardiac tonic. Extensive phytochemical analysis of this medicinal plant has revealed that it contains the flavone arjunolone, tannins, oxalic acids, arjunic acid, and glycosides such as arjunerin and arjunosides I-IV. Dr. Bharani and his colleagues suggest that ".....the inotropic effects of glycosides and oxygen free radical scavenger properties of tannins and flavones could possibly be correlated to the observed therapeutic benefit."

Some studies have shown the beneficial effect of *Terminalia arjuna*, on stabilizing angina, blood pressure, body mass index, blood sugar, cholesterol and HDL-cholesterol.

- **Latin name:** Dendrogyra cylindricus    **Common name:** Coral Powder

**Coral Powder** found in the Red sea, Persian and Arabian gulfs, Mediteranean Sea and Atlantic Ocean. In appearance, it is a small shrub in a pendant or reverse position. Coral is made of numerous minute pieces which mainly have microcrystalline calcium and magnesium. Coral is purified with the myrobalans, lime juice and then reduced to a fine powder. In Ayurveda, coral powder is considered a cardi tonic and nervine.

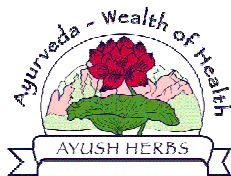
- **Latin name:** Inula racemosa    **Common name:** Pushkarmool

**Inula racemosa** is also known as Pushkarmool in Sanskrit. This plant grows in the northwest Himalayas at the height of 5000-14,000 ft. The active constituents of this plant are Inulin and essential oils. Its essential oil contains Alantolactone. In one study, findings indicated that one of the constituents of *Inula racemosa* may have adrenergic beta-blocking activity. In Ayurveda this herb is known to have cardi tonic activity and has been used in respiratory conditions as well. It has been used extensively in heart disease. It reduced ECG signs of ischemia after exercise in patients with ischemic heart disease<sup>9</sup> therefore, reducing the patient's need for glyceryl trinitrate. Another study indicated significant anti-angina activity, lowering diastolic blood pressure, plasma Cortisol and catecholamines<sup>10</sup>.

### **CLINICAL STUDIES**

- Reduced total cholesterol, triglycerides and raising HDL cholesterol<sup>3</sup>.
- 62% improvement in symptoms of hypertension<sup>4</sup>. Angina: 50% reduction in angina episodes in patients with stable angina<sup>5</sup>. Eighty percent of patients received symptomatic relief. Study indicated *Terminalia arjuna* comparable to nitroglycerine in reversing angina and increasing exercise capacity<sup>6</sup>.
- A double blind, placebo controlled trial on patients with congestive heart failure, resulted in reduced cardiac associated symptoms including dyspnoea, fatigue, oedema and walking tolerance improved. Terminalia was taken concomitantly with standard heart medication<sup>7</sup>.
- Reversed measure of heart failure from NYHA VI to NYHA I (New York Heart Association) and showed significant improvement in ejection fraction and reduction in the left ventricular muscle size.
- Potential anti mutagenic and anti carcinogenic i.e. herpes virus treatment.

**DOSAGE** - 1 capsule TID and is safe to use in conjunction with other medication.



<b>Arjuna Heart Supplement Facts</b>	
<b>Serving Size: 1 capsule    Servings per container: 90</b>	
Vitamin B6	25 mg
Folic acid	400 mcg
Magnesium (as Aspartate)	300 mg
Calcium (Coral powder)	100 mg
Coenzyme Q10	30 mg
Terminalia arjuna extract	300 mg
Coral Powder extract	100 mg
Inula racemosa extract	100 mg
<b>Other Ingredients:</b> Vegetarian capsule (Cellulose and Chlorophyll).	

#### **REFERENCES:**

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