

Momentum of Ajwa Dates towards Cardiovascular Diseases

Cardiovascular diseases (CVDs) are the top most cause of mortality around the world. It is predicted that the number casualties from CVDs will increase to more than 24 million till 2030 people. Medicinal plants provide the major raw materials for medicine preparations. They are gaining high consideration due to their effectiveness and increasing cost of modern medicines. Many successful drugs are plant based, including aspirin from the willow bark, morphine from opium poppy, quinine from the cinchona bark, and digoxin from the foxglove. According to World Health Organization (WHO), ~70% to 80% of people around the world rely on herbal sources for the treatment of their disease. Plant sources are endorsed due to the fact that they contain an optimal amount of antioxidants and phytochemicals that help to avoid and treat many diseases.

Phoenix dactylifera L. particularly Ajwa variety, is the most rich in phytonutrients that can benefit to control many cardiovascular diseases. It contains 6 vitamins (vitamin A, C, B1, B2, B3 & riboflavin), high amount of fibers, Potassium, Magnesium and 23 amino acids which play a healthy role towards hypertension, muscular contractions, and blood pressure control. It has been studied that Niacin (B3) helps to control cholesterol and low density lipoprotein levels (LDL), as high cholesterol is the one of the main cause of cardiovascular diseases so, Ajwa could be a vital regulatory source.

According to the findings of Sabbah M. et al., Ajwa extracts significantly improved the DNA integrity and also reduced the cardiomyocytes congestion, edema and the cellular stress wielded on cardiac muscles resulting the restoration of cardiomyocytes architecture in Doxorubicin (DOX) induced cardiotoxicity in rats.

Research done by Alqarni et al., proves that Ajwa extracts has successfully decreased the LDL-C, VLDL-C, and triglycerides concentration. Additionally, treatment with ajwa pulp also improved the HDL-C level and antioxidant enzymes activity. In another invivo study, Ajwa preparation has successfully decreased the diclofenac-induced pulmonary and hepatic instabilities.

Vitamin-K play important role in blood coagulation, and in case of anticoagulant therapy, activity of vitamin-K controlled by drugs (warfarin) that sometimes causes serious side effects. According to the reported data, Salicylic acid is the vitamin-K antagonist and has capability to block the action of vitamin K during the coagulation pathway. Dates contain ~3.75 to 4.50 mg/100 g of salicylic acid. Thus, providing anticoagulation effect too. So, the limelight of the reported data provides an enough reason that plants can be used as primary source of drug designing for the cardiovascular disease. They hold true momentum to address the increasing health diseases, which cannot be lost to distraction or apathy. Fight against the burden of CDVs, is affecting all countries and specially, under developing and the poor countries.

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