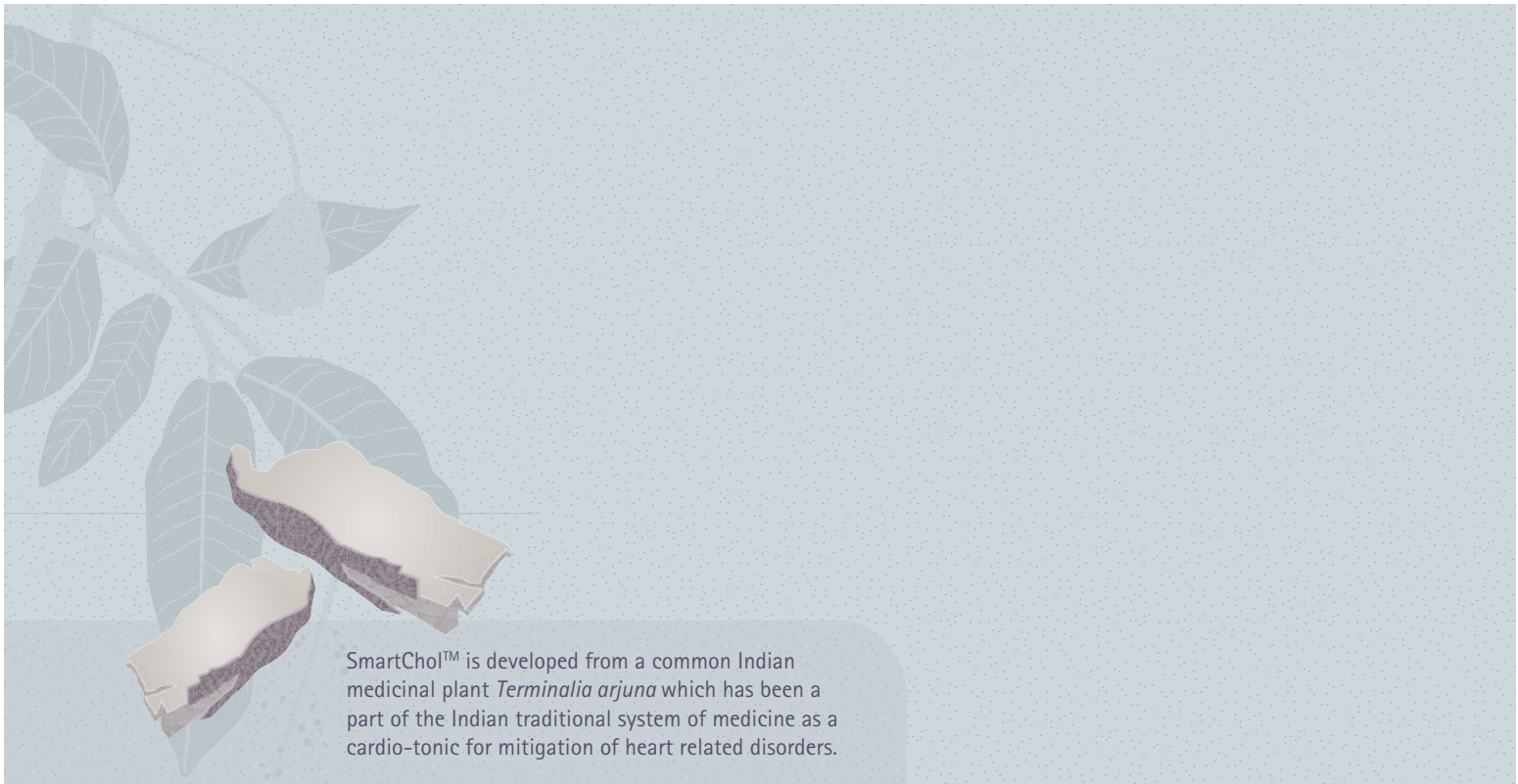




# Smartchol™

Natural Bioactive Based Cholesterol Management





SmartChol™ is developed from a common Indian medicinal plant *Terminalia arjuna* which has been a part of the Indian traditional system of medicine as a cardio-tonic for mitigation of heart related disorders.

arjuna



# Smartchol™

For Cholestrol Management

Chn

**Cardiovascular disease (CVD)** is a leading cause of mortality and is responsible for the deaths of 17 million people each year, approximately one-third of all global deaths annually. Of the estimated 16.6 million deaths attributed to CVD worldwide, 80% is in developing countries. About 75% of the mortality among diabetic men, and 57% among diabetic women, is attributed to cardiovascular disease.

Higher concentrations of Low Density Lipoprotein (LDL) and lower concentrations of functional High Density Lipoprotein (HDL) have been found to be associated with cardiovascular disease as these promote atherosclerosis, leading to myocardial infarction and stroke.

As a first line of intervention as well as during treatment conditions with cholesterol reducing drugs, changes to the lifestyle are recommended. In the recent past functional foods fortified with plant based bioactives and dietary supplements have found increasing focus as adjuvant in cholesterol management.

---

|   |    |
|---|----|
| SmartChol™ Scientific Perspective       | 04 |
| SmartChol™ Developmental Strategy       | 05 |
| Origin of SmartChol™                    | 06 |
| Pharmacognosy Analysis                  | 06 |
| How SmartChol™ Works                    | 07 |
| SmartChol™ Metabolite Fingerprinting    | 07 |
| Cell assays on SmartChol™               | 08 |
| Pre-clinical Efficacy of SmartChol™     | 09 |
| Safety of SmartChol™                    | 10 |
| Patent and Trademark                    | 10 |
| Manufacturing of SmartChol™             | 11 |
| SmartChol™ – For Cholesterol management | 12 |
| References                              | 12 |

Smartchol™ has been reducing cholesterol and triglycerides, thereby managing cardiovascular health

### Scientific Perspectives

SmartChol™ has shown efficacy in cholesterol management and has been thoroughly characterized using metabolite fingerprinting and by testing physical and chemical safety parameters. Animal studies on Hypercholesterolemic Sprague dawley rats have shown SmartChol™ is efficacious in lowering plasma triglyceride and total cholesterol while increased HDL-Cholesterol at concentration of 100 mg/kg body weight.

The safety and toxicity studies showed that SmartChol™ is non-toxic to rats at dose levels of 2000 mg/kg body weight and 5000 mg/kg body weight. Therefore, the LD50 of SmartChol™ is expected to exceed 5000 mg/kg body weight.

Safety and Efficacy studies have proven SmartChol™ as potential lead in Dyslipidemia management.

## Smartchol™ - Developmental Strategy

