# CONTENTS

## Chapter- I
Molecular Targets for Nutrients Involved With Cancer Prevention 1
  1.1. A. Introduction to Tumour 3
  1.1. B. Roles of Laboratory Tests 10
  1.1. C. Tumor Markers 12
  1.1. D. Metallothionein as Tumour Marker 24
  1.2. Nutrients Involved With Cancer Prevention 26
    1.2. A. Vitamin D₃ 29
    1.2. B. Selenium 35
  1.3. Objective of the Present Study 40

## Chapter-II
Role of combined supplementation of Selenium & Vitamin D₃ on Morphology and Morphometric Analysis of the Hepatic Cell Lesion during DEN Induced Hepatocarcinogenesis
  2.1. Introduction 42
  2.2. Materials and Methods 45
  2.3. Results 50
  2.4. Discussion 59

## Chapter- III
Chemopreventive Role of Selenium and Vitamin D₃Either Alone or In Combination against DEN-Induced Neoplastic Transformation in Rat Liver and Reflection in Hepatic Antioxidant Status and Xenobiotic Metabolism
  3.1. Introduction 62
  3.2. Materials and Methods 70
  3.3. Results 76
  3.4. Discussion 83

## Chapter- IV
The Cellular and Molecular Changes by Selenium and Vitamin D₃ Actions with the Expression of Metallothioneins on Anticarcinogenicity and Genomic Stability during the Early Stages of Chemically Induced Hepatocarcinogenesis in Rats
  4.1. Introduction 91
  4.2. Materials and Methods 97
  4.3. Results 102
  4.4. Discussion 109

## Chapter- V
  5.1 Bibliography 115