Micronutrient deficiency constitutes a significant public health problem requiring immediate attention from governments, researchers and health care practitioners. It is inherently associated with poverty, and is thus particularly prevalent in the developing world, where the problem is often exacerbated by limited access to appropriate health care and treatment. In India serious micronutrient deficiency disorders associated with vitamin A, Iron and Iodine are encountered due to dietary insufficiency and are designated as ‘hidden hunger’. One of the most promising way to combat these deficiencies include food based approaches and among the plant foods, green leafy vegetables are the cheapest and locally available foods, rich in micronutrients, especially in beta carotene and iron.

Although India is blessed with a number of vegetables and stands second in vegetable production, hardly two percent of the produce is processed and 30-40 percent is being wasted due to lack of processing, preservation infrastructure and ignorance about the nutritional potential of some of the green leafy vegetables. Thus, there is a need to identify the untapped vegetables, preserve them and utilize them. Hence processing of these vegetables to improve their shelf life and reduce anti nutrient content is essential. Some of the processing techniques include BLANCHING as it stops all life processes, inactivates enzymes, fixes green color and removes certain harsh flavors. Physical methods like drying or dehydration are also commonly used method of preservation as moisture content of the food is reduced and the growth of microorganisms in the dried food is retarded which improves its shelf life.

Hence keeping the above mentioned points in mind the present research work entitled “EFFECT OF PROCESSING ON NUTRIENT COMPOSITION OF SELECTED GREEN LEAFY VEGETABLES AND DEVELOPMENT OF VALUE ADDED PRODUCTS” was planned and the greens researched on included Daucus carota (Carrot) and Brassica oleracea(Cauliflower). Processing techniques like Blanching and Dehydration can be used for improving the nutrient content and shelf life of the perishable green leaves. The processed leaves then can be easily incorporated in different traditional recipes at acceptable levels. They can also be used as a Natural Fortificant in our daily diet for enhancing the micronutrient content.
The results of the investigative study reported in this thesis are carried out by the author in the Department of Home Science, The IIS University, Jaipur, Rajasthan, India. The thesis consists of six chapters. Chapter 1 deals with the basic introductory part of effect of processing on nutrient composition and utilization of processed green leafy vegetables in our daily diet to combat this deficiency with aims and objectives of present work. Chapter 2 covers a review on prevalence of micronutrient deficiency world-wide and laid stress on food based strategies to combat micronutrient deficiency. This chapter also covers a review on the effect of processing on nutrient composition of selected green leafy vegetables. Chapter 3 includes Experimental design, plans, procedures and techniques employed for obtaining appropriate results. Results of the present study has been included in chapter 4 which deals with nutritional estimations of fresh green leafy vegetables; effect of blanching followed by dehydration as well as direct dehydration on nutrient composition was compared. Organoleptic evaluation of value added products, analysis of the effect of cooking on nutrient retention, shelf life studies, nutritive value and cost analysis of most accepted products. The results are depicted in appropriate tables, graphs and pictures to make the learning easy and interesting. The results of the present study have being discussed with concurrent results reported by other authors in Chapter 5. A brief and summarized description of all the previous chapters and important conclusions drawn from present observations are highlighted in Chapter 6. All the references which are followed in the text are alphabetically arranged in the bibliography section. Last section present the list of papers published and presented from the research work carried out under the thesis.