SCOPE OF INVESTIGATION

CHAPTER 3

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The broad objective of the present study was to carry out "HPLC analysis of selected Indian foods for inulin content, acceptability trials of inulin incorporated recipes and its health benefits in institutionalized elderlies"

Specific objectives include:

Phase I – Determination of Inulin content of selected raw and processed Indian foods.

- To standardize the HPLC technique for inulin analysis
- To analyze the inulin content of selected Indian raw foods belonging to various food groups.
- To determine the inulin content of the processed wheat based foods.

Phase II – Development of inulin incorporated products.

- To develop inulin incorporated popular Indian food products.
- To conduct the Physicochemical and organoleptic evaluation of the developed products.
- To analyze nutrient composition of standard and inulin incorporated products.

Phase III – Effect of supplementation of probiotic and synbiotic fermented milk in diets of institutionalized elderlies.

- To determine the socio-economic status, activity pattern, anthropometric profiles and blood pressure of the institutionalized elderly men and women.
- To assess the nutrient intakes, food frequency and fermented milk consumption pattern of institutionalized elderly subjects.
- To identify the various health problems in terms of gastrointestinal, cardiovascular, respiratory etc and identify the depression levels of elderly subjects.
- To determine the hemoglobin levels, plasma glucose and serum lipid profile of the elderly subjects at baseline.

- To analyze their stool samples by enumeration of gut microflora in terms of *Bifidobacteria, Lactic acid bacteria* and *E. coli.*
- To select hypercholestrolemic elderly subjects for supplementation of probiotic fermented milk and synbiotic fermented milk.
- To supplement hypercholestrolemic elderly subjects with probiotic and synbiotic fermented milk for a period of six week and study its impact on the various parameters as in baseline.