PREFACE

This thesis deals with one of the most global water related problems—fluoride toxicity. Fluorosis is widespread in many parts of our country with an estimated 66.62 million Indians being exposed to fluoride. Various defluoridation techniques that are available for removal of excess fluoride from drinking water are expensive and unaffordable by rural population. Therefore in order to search for alternative remedial measures, the present investigation was carried with a view to study the efficacy of food supplements in reducing/ameliorating the fluoride induced toxicity.

Our sole intention was to investigate the potential of plant supplementation and dietary modifications in fluoride induced toxicity with reference to carbohydrate, lipid and antioxidant metabolism in albino rats. The aim was not identification, characterization, isolation and quantification of the individual components for that makes a simpler, natural and inexpensive remedy expensive which would rather become unaffordable by the rural populations. Especially in conditions like fluorosis where more number of victims are with poor financial background, the cost-effectiveness is most important aspect to be looked into while resolving this issue.

The thesis starts with Introduction dealing with the work done earlier in this field, with aims and objectives of the present work. The methodology adapted is presented in Materials and Methods chapter. The chapter on Results and Discussion includes the findings of different experiments conducted on the laboratory albino rats followed by bibliography cited for the entire thesis. Section on summary and conclusions deals with salient findings of the work done followed by Publications of Research Articles from my thesis.

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