Acknowledgement

One of the joys of completing this work is to look over the journey and remember all the friends and family who have helped and supported me during this long but fulfilling road.

First and foremost, praises and thanks to the God, the Almighty, for his showers of blessings throughout the journey of PhD and culminating it in the form of this priceless piece of work.

Words cannot express my feelings I have for my parents and family for their constant and unconditional support. I am extremely grateful to my parents Mr. Kamal Kumar Jain and Mrs. Sunita Jain, for their love, prayers, care, support and sacrifices for my education and preparing me for my future. Their efforts and patience were not less than mine that has been put up in completion of this work.

I offer my sincere gratitude to my guide, Dr. Mini Sheth, “an ocean of positivity and love”, who has supported me throughout my PhD with her patience and knowledge whilst allowing me the room to work in my own way. I attribute the level of my doctoral dissertation to her encouragement and effort and without her this thesis would not have been completed or written. One simply could not wish for a better and friendly mentor. She was always there for me when I used to be stressed out and disappointed. Thank you for being so patient with me and teaching me to be calm and to ignore the irrelevant matters in and around the working environment. Thank you Ma’am once again for being a wonderful guide.

Special thank you and loads of love to Yug Pratap Singh (Shona, Golu, Shoni, Ladoo, Sonpapri, Bandar), for making my last month in this journey so wonderful and stress free. He is the stress buster of life. I wish he would have come to my life from the beginning of my PhD.

I am greatly thankful to my beloved friend Rahul Khandelwal, a friend who understands my words which I never say. Thank you for always hearing me so patiently. There is no one with whom I can share my tears and fears, if you were not here. Thanks for always giving me reasons to be happy and loving me for no reason. You make happiness worth sharing and you make my dreams worth believing. Thanks for being by my side and making my life worth living.

This note of thanks would be incomplete without the mention of my best friend and beloved husband, Jitendra Jain for his calm endurance, motivation and kind understanding of immeasurable extent; he has been ever supporting and my edifice of strength throughout this period. I thank him for his affection, patience, and understanding and for silently witnessing my absence during the course of study and yet gave me strength to pursue this dissertation to its completion.

My earnest thanks to Leena Chauhan, Vashima Veerkumar, Naina Khuraniya, Manisha Sharma, Pawan Kumar Thakur, Dhara di, Aashutosh Pathak, Dr. Rashmi Maheshwari, and Pooja Mehta. Their company always made me feel light and full of laughter and giggles. I would like to extend my heartfelt thanks to my buddies for making me realize that I should complete my work as quickly as possible, for always pushing me
to work fast and giving ideas for improvement, for giving me lessons on life and making me feel proud of my work, for showing their concern and remembering me so often and not letting me feel lonely.

Thanks a lot to Jaya Harjani and Umesh Rohra, for all the long drives, which instantly changed my mood, and prepared me for working more cheerfully next day, for all those ice-creams and coffee, which act as a relaxing tonic throughout my PhD journey.

This note of thanks would be incomplete without the mention of my friend, research co-worker, partner-in-crime, Aparna Di. She is a wonderful person. We were working together and in her company, I learned a lot. Thank you for all the fun we have had in the last four years.

Thanks a lot to my PhD fellows and colleagues at the department, Shriya di, Neha Gupta, Pawan Kumar Thakur, Tanu Shree Singh, Harsha Hirdayani, Abnita Thakuria, Yamee, Mital di, Arti di, Pooja Gaur, Kuhu Roy, Shweta, Shurti di, Vijayata di, kanchi di and Swati di, for their friendship, chit-chat sessions along with super tasty meals and hot tea. Thanks a lot for being wonderful companions.

My sincere and heartfelt thanks to my loving Sister Rinky Jain, brother-in law Nilesh Patni, Brother Abhishek Jain and sister-in law Sneha Lawange, for being my constant source of strength and encouragement. My deep thanks to my entire family.

I take the opportunity for special thanks to our dean of the faculty and former head of the department, Prof. Uma Iyer under whose auspicious presence I got the opportunity to join the Department. She was always there as a supporting pillar in the Department. I express my warm thanks to Prof. Meenakshi Mehan, our head of the department, for her constant encouragement and concern.

At this juncture, my in-laws deserve special mention for their inseparable support and blessings. They have always stood beside me like a strong pillar throughout my research work.

My earnest thanks to the efficient and cooperative staff of Food and Drugs Laboratory (FDL), Vadodara and Analytical and Environmental Services Laboratory (AESL) Laboratory GIDC, Vadodara for providing me off-campus support in laboratory work and permitting me to use their laboratory facilities. I would like to acknowledge the financial support from the Department of Biotechnology, New Delhi (DBT) for partially funding my study.

Furthermore, I would also like to acknowledge with much appreciation the crucial role of the staff of the Department of Foods and Nutrition who helped throughout my doctoral work.

A big “Thank you!” also goes out to everyone who participated in this study as my subjects.

Finally, my thanks go to all the people who have supported me directly or indirectly to complete my research work.

With Love Always...

Nidhi Jain