## CONTENTS

CHAPTERS		PAGE NO
1.	INTRODUCTION	1-2
2.	REVIEW OF LITERATURE	318
	<ul> <li>2.1 Milk</li> <li>2.1a Milk production in India and abroad</li> <li>2.1b Composition of milk</li> <li>2.1c Utilization of milk in India</li> </ul>	
	2.2 Yoghurt	
	2.2a Manufacture	
	2.2b Nutritional properties of yoghurt	
	2.3 Fortification of food products	4
	2.4 Fortification of milk and milk products	
	2.5 Fortification of yoghurt	
	2.5a Fortification of yoghurt with calcium	
	2.5b Fortification of yoghurt with folic acid	
	2.6 Storage of yoghurt	
	2.7 Quality parameters of yoghurt on storage	
3.	MATERIALS AND METHODS	19-29
	3.1 Design of the experiment	
	3.2 Yoghurt manufacture	
	3.2a Materials used for the manufacture of yoghurt	
	3.2b Manufacture of yoghurt	•
	3.3 List of equipments	
	3.4 Methods for determination of quality parameters	
	3.4a Moisture content of yoghurt	

	3.4b Ash content of yoghurt
	3.4c Syneresis of yoghurt
	3.4d Titratable acidity of yoghurt
	3.4e Estimation of fat in yoghurt
•	3.4f Estimation of protein in yoghurt
	3.4g Sensory evaluation
4.	RESULTS AND DISCUSSION
	4.1 List of tables
	4.1a Fortification of yoghurt with calcium
	4.1b Fortification of yoghurt with folic acid
	4.1c Fortification of yoghurt with both calcium and folic acid
	4.1d Sensory evaluation of calcium fortified yoghurt
	4.1e Sensory evaluation of yoghurt with folic acid
	4.1f Sensory evaluation of yoghurt fortified with both calcium and folic acid
	4.2 Discussion
5.	SUMMARY AND CONCLUSION51-52
6.	FUTURE SCOPE OF WORK 53
В	IBLIOGRAPHY
A	PPENDIX

## LIST OF TABLES

Table No.	Table title	Page No.
2.1	World's top milk producers	4
2.2	Chemical composition of milk of different species	5
2.3	Summary of utilization of milk in India	5-6
2.4	Nutritional value of yoghurt	7
3.1	Specifications of toned milk (Amul Taaza)	20
3.2	Recipe for 30%, 60% and 90% of RDA of calcium	
	and folic acid per 100 ml of yoghurt mix	21
4.1	Fortification of yoghurt with calcium	30
4.2	Fortification of yoghurt with folic acid	31
4.3	Fortification of yoghurt with both calcium and folic	32
	acid	
4.4	Sensory evaluation of calcium fortified yoghurt	33
4.5	Sensory evaluation of folic acid fortified yoghurt	34
4.6	Sensory evaluation of yoghurt fortified with both	35
	calcium and folic acid	

## LIST OF FIGURES

Figure No.	Figure Title	Page No.
3.1	Image showing the storage of yoghurt at 5°C	23
3.2	Image showing syneresis at room temperature	25
4.1.1	Effect of calcium fortification on moisture content	36
	of calcium fortified yoghurt	
4.1.2	Effect of folic acid fortification on moisture content	36
	of folic acid fortified yoghurt	
4.1.3	Effect of calcium and folic acid fortification on	37
	moisture content of yoghurt simultaneously fortified	
	with both calcium and folic acid	
4.2.1	Effect of calcium fortification on ash content	37
	of calcium fortified yoghurt	
4.2.2	Effect of folic acid fortification on ash content	38
	of folic acid fortified yoghurt	
4.2.3	Effect of calcium and folic acid fortification on	38
	ash content of yoghurt simultaneously fortified	
	with both calcium and folic acid	
4.3.1	Effect of calcium fortification on syneresis	39
	of calcium fortified yoghurt	
4.3.2	Effect of folic acid fortification on syneresis	40
	of folic acid fortified yoghurt	
4.3.3	Effect of calcium and folic acid fortification on	40
	syneresis of yoghurt simultaneously fortified	
	with both calcium and folic acid	

4.4.1	Effect of calcium fortification on titratable acidity	41
	of calcium fortified yoghurt	
4.4.2	Effect of folic acid fortification on titratable acidity	41
	of folic acid fortified yoghurt	
4.4.3	Effect of calcium and folic acid fortification on	42
	titratable acidity of yoghurt simultaneously fortified	
	with both calcium and folic acid	
4.5.1	Effect of calcium fortification on fat content	42
	of calcium fortified yoghurt	
4.5.2	Effect of folic acid fortification on fat content	43
	of folic acid fortified yoghurt	
4.5.3	Effect of calcium and folic acid fortification on	43
	fat content of yoghurt simultaneously fortified	
	with both calcium and folic acid	
4.6.1	Effect of calcium fortification on protein content	44
	of calcium fortified yoghurt	
4.6.2	Effect of folic acid fortification on protein content	44
	of folic acid fortified yoghurt	
4.6.3	Effect of calcium and folic acid fortification on	45
	protein content of yoghurt simultaneously fortified	
	with both calcium and folic acid	
4.7.1	Effect of calcium fortification on flavour scores	46
	of calcium fortified yoghurt	
4.7.2	Effect of folic acid fortification on flavour scores	46
	of folic acid fortified yoghurt	
4.7.3	Effect of calcium and folic acid fortification on	47
	flavour scores of yoghurt simultaneously fortified	

·	with both calcium and folic acid	
4.8.1	Effect of calcium fortification on texture scores	47
	of calcium fortified yoghurt	÷
4.8.2	Effect of folic acid fortification on texture scores	48
	of folic acid fortified yoghurt	
4.8.3	Effect of calcium and folic acid fortification on	48
	texture scores of yoghurt simultaneously fortified	
	with both calcium and folic acid	
4.9	Image showing texture of yoghurt with different	49
T P	fortification levels	
4.10	Image showing appearance and colour of yoghurt	50
	with different fortification levels	