

## List of Figures, Plates and Tables

	<u>Title</u>	<u>Page No.</u>
Figure 1.	Body weights (kg) of infants in low and high income groups.	12
Figure 2.	A schematic presentation of the variation of intensity of signs and symptoms in Kwashiorkor and marasmus.	20
Plate 1.	Radiograph photo of right tibia of rats fed dhokla alone.	76
	2. Radiograph photo of right tibia of rats fed dhokla lime treated,	
	3. Radiograph photo of right tibia of rats fed dhokla with calcium salts.	
Plate 4,	Radiograph photo of right wrist and palm	123
5,	of a selected subject from each group.	
& 6.	(Fed, Control and Upper class).	
Table 1.	Dietary intake of pre-school children of the poor class reported from India.	8
Table 2.	Data on weights (kg) of pre-school children in India.	10
"	3. Data on heights (cm) of pre-school children in India.	11
"	4. Hemoglobin (g/100 ml blood) values reported for pre-school children in India.	17
"	5. Values for albumin and protein content of serum reported in preschool children.	18
"	6. Diets evaluated in the animal experiments.	47
"	7. Details of rat experiments described in Table 6.	48
"	8. Diet given at the rural play centre.	49
"	9. Methods of preparation of the diet	50
"	10. Cost and nutritive value of the diets fed at the play centre.	51
"	11. Composition of 100g. of the diet used in animal experiment IV.	52
"	12. Nutritive value of 100g. of the above diet.	52

	<u>Title</u>	<u>Page No.</u>
Table	13. Typical meal consumed by children at home in the different groups studied.	61
"	14. Conversion table used for estimation of raw ingredients in cooked foods.	62
"	15. Composition of the diets with regard to foodstuff and nutrients.	63
"	16. Comparative nutritive value of wheat, bengalgram and the two mixed in different proportions to rats.	64
"	17. Effect of addition of groundnut to a wheat, bengalgram mixture on growth rate and body composition of rats.	65
"	18. Essential amino acid composition of the food mixtures.	66
"	19. Effect of addition of lime water on non acid foods on calcium and vitamin content.	71
"	20. Effect of lime powder incorporation in acid foods on pH, calcium and acceptability.	72
"	21. Effect of lime powder incorporation in acid foods on thiamine and riboflavin content.	73
"	22. Food intake, weight gain and calcium retention in rats fed 'dhokla' with and without lime powder treatment.	74
"	23. Composition of tibia and femur in rats fed dhokla with and without lime treatment.	75
"	24. Vitamin A content of serum and liver in rats fed different leaf greens.	78
"	25. Effect of fermentation on thiamine, riboflavin and niacin content of certain foods.	80

	<u>Title</u>	<u>Page No.</u>
Table 26.	Biological data, cerebral enzymes liver enzymes and psychological performance of rats fed home diet, home plus formulated diet and formulated diet.	81
"	27. Age, sex, height, weight and economic status of different groups at the start of the investigations.	83
"	28. Composition of the diets consumed by different groups at the start of the investigations.	84
"	29. Nutrient content of the diets consumed by different groups at the start of the investigations along with recommended values.	85
"	30. Clinical status of children in the different groups at the start of the investigations.	86
"	30a Criteria used for assessment of clinical status.	87
"	31. Composition of blood and serum of subjects at the start of the investigations.	88
"	32. Composition of urine of subjects at the start of investigations.	89
"	33. - do - (Expressed per gram of creatinine)	90
"	34. Attendance of the children fed at the play centre (1965 Nov. - 1966 April).	92
"	35. Overall dietary intake of fed children, controls and upper class during the experimental period (1965-66).	93
"	36. Nutrient content of the diets consumed by fed children, controls and upper class during the experimental period (1965-66).	94
"	37. Changes in height and weight of fed children, controls and upper class during experimental period (1965-66).	95

	<u>Title</u>	<u>Page No.</u>
Table 38.	Change in the clinical status of fed and control children during 1965 Nov. to 1966 April.	97
"	39. Change in the composition of blood and serum in fed and control children during 1965 Nov. to 1966 April.	99
"	40. Comparative data on the biochemical status of fed children with upper class.	100
"	41. Change in the composition of urine in fed and control children during 1965 Nov. to 1966 April.	102
"	42. Extrapolated values for excretion of selected urinary constituents of fed, control and upper class children.	103
"	43. Comparative data on the urinary excretion of different constituents during 4 hour and 24 hour in a selected subject.	105
"	44. Biochemical status at the end of treatment on the basis of ICNND standards.	106
"	45. Age, sex, height, weight and economic status of different groups at the start of the investigation in 1966.	108
"	46. Clinical status of children in different groups at the start of investigations in 1966.	109
"	47. Attendance of the children fed at the play centre (1966 Oct. to 1967 Feb.)	110
"	48. Dietary intake of fed children controls and upper class during experimental period (1966-67).	112
"	49. Nutrient content of the diets consumed by fed children, controls and upper class during the experimental period (1966-67).	113
"	50. Changes in height and weight of fed children, controls and upper class during experimental period (1966-67).	115

	<u>Title</u>	<u>Page</u> <u>No.</u>
Table 51.	Change in clinical status of fed and control children during 1966 Octo.to 1967 Feb.	116
"	52. Change in the composition of urine of fed and control children during 1966 Oct. to 1967 Feb.	118
"	53. - do - (Expressed per g. creatinine)	119
"	54. Comparative data on the excretion of selected urinary constituents in fed and control children in 1965-66 and 1966-67	120
"	55. Results of the radiological examination of the right wrist and palm of fed, control and upper class children.	121
"	56. Salivary amylase activity of fed and control children.	122
"	57. Psychological performance of fed, control and upper class children.	124
"	58. Increment in weight of fed and control children during periods of feeding and non-feeding.	126
"	59. Ratio of increment in weight (kg) to increment in height (cm) of fed and control children during periods of feeding and non-feeding.	126
"	60. Change in the urinary excretion of fed and control children during period of feeding and non-feeding.	127