LIST OF FIGURES

Fig.No.		Page No.
1	Synaptic transmission	6 - 7
2	Structure of phosphoinositides	9
3	Biosynthesis and catabelism of phospho-inositides.	23
4	Two alternative mechanisms for the agonist (A) - dependent hydrolysis of membrane phosphoinositides by Ca ²⁺ - mobilizing receptors.	74 - 75
5	Possible role of polyphosphoinositides in conduction of nerve impulse along the axon.	79
6	Proposed role of phosphoinositide in the action of mitogenic signals.	8 6 b
7	Biosynthesis and catabolism of Myo-inositol	89
8	Drug induced alterations on phosphoinositide metabolism.	128
9	Experimental Design	141
10	Thin layer chromatographic separation of PolyPI.	159
11	High performance liquid chromatographic separation of perbenzoylated cerebrosides.	164
12	PolyPI levels in rat brain at different times post-mortem.	187
13	Schematic representation of PolyPI pools	189

Fig.No.		Page No.
14	PolyPI levels in developing rat brain	193
15	Proportions of PolyPI pools in developing rat brain.	196
16	Effect of pre-weaning undernutrition on PolyPI pools in rat brain.	211
17	Effect of post-weaning protein undernutrition on PolyPI pools in rat brain.	213
18	Effect of post-weaning nutritional rehabilitation on PolyPI pools in rat brain.	215
19	Effect of continued post-weaning protein undernutrition on PolyPI pools in rat brain.	217
20	Proportions of PolyPI pools in rat brain under varying conditions of nutritional stress.	219
21	Time course of incorporation of ³² Pi into PolyPI of 21 and 63 day old rat brains.	229
22	Effect of pre-weaning undernutrition on the labeling of 32 P ₁ in PolyPI of rat brain.	232
23	Effect of post-wearing protein undernutrition on the labeling of $^{32}\mathrm{P}_1$ in PolyPI of rat brain.	235
24	Metabolism of PolyPI pools in undernourished rat brains.	237-238
25	Effect of pre-weaning undernutrition on PolyPI pools in rat brain regions.	260
26	Effect of post-weaning protein undernutrition on PolyPI pools in rat brain regions.	263

.

Fig.No.		Page No.
27	Effect of post-weaning nutritional rehabilitation on PolyPI pools in rat brain regions.	266
28	Effect of pre-weaning undernutrition on PolyPI pools in rat kidney.	282
29	Effect of post-weaning protein deficiency on PolyPI pools in rat kidney.	284
30	Effect of post-weaning nutritional rehabilitation on PolyPI pools in rat kidney.	286