

Appendix - 2 : Individual data on lipid changes with undernutrition.

rat no.	body weight (g)	brain weight (g)	cholesterol		galactolipids		phospholipids		plasmalogens		gangliosides	
			GM	WM	GM	WM	GM	WM	GM	WM	GM	WM
1	2	3	4	5	6	7	8	9	10	11	12	13
<u>CONTROL (C) GROUP</u>												
1	52	1.500	13.0	27.0	4.58	16.3	29.9	42.8	4.50	10.6	-	485
2	56	1.420	15.0	28.2	4.62	16.4	27.8	42.1	5.11	8.78	-	-
3	46	1.430	13.6	25.7	4.82	-	27.5	-	5.42	8.03	-	533
4	55	1.452	13.2	26.2	-	15.8	28.7	38.4	-	9.07	-	-
5	46	1.370	15.3	-	3.77	16.2	34.6	41.2	3.87	8.67	-	538
6	44	1.415	13.9	25.9	4.83	-	32.5	-	5.15	-	-	-
7	45	1.470	13.1	27.6	5.07	17.2	-	45.0	4.14	11.7	-	542
8	44	1.470	15.6	26.4	4.07	-	29.3	44.5	3.60	9.14	-	-
9	40	1.400	13.4	27.9	3.66	17.3	29.6	42.8	5.51	10.6	-	-
<u>UNDERNOURISHED (UN) GROUP</u>												
10	13.0	1.110	14.6	24.4	4.00	14.4	28.2	32.7	3.78	6.53	-	500
11	14.5	1.225	14.1	25.8	3.23	12.1	29.5	36.4	4.37	7.35	-	-
12	13.0	1.070	15.5	22.4	4.17	15.0	30.8	38.7	4.25	6.83	-	444
13	14.0	1.040	13.2	-	-	11.7	26.6	-	4.65	-	-	242

contd...

Appendix - 2 : contd.

	1	2	3	4	5	6	7	8	9	10	11	12	13
14	12.0	1.015	14.8	24.5	3.51	37.7	27.6	37.7	7.50	-	-	-	-
15	12.5	1.090	15.7	24.6	3.81	12.8	37.0	4.94	5.25	5.85	-	-	585
16	13.5	1.100	-	26.2	4.16	11.7	30.2	-	3.78	5.41	-	-	-
17	14.5	1.140	14.9	-	3.30	29.3	31.3	4.90	-	-	-	-	-
18	14.5	1.145	15.6	22.6	3.97	15.2	39.3	4.61	7.04	5.33	-	-	533
19	15.5	1.140	15.0	25.4	3.92	12.8	26.3	34.0	5.10	5.65	-	-	-
<u>CONTROL (C) GROUP</u>													
<u>9 weeks old</u>													
20	170	1.730	14.0	31.3	4.31	28.0	39.3	57.3	5.10	15.8	964	362	362
21	211	1.770	14.9	27.4	4.00	28.3	-	55.5	4.67	17.8	895	365	365
22	162	1.685	15.6	27.7	4.50	28.0	40.6	-	5.30	15.9	879	340	340
23	160	1.725	16.6	25.4	5.40	26.3	36.0	56.0	4446	18.0	-	383	383
24	180	1.755	13.6	28.4	4.90	26.4	39.2	58.5	4.35	16.7	901	345	345
25	213	1.785	14.1	28.9	4.50	29.7	39.3	55.0	5.52	17.4	846	356	356
26	160	1.660	14.2	27.6	4.04	29.5	38.2	59.7	5.30	15.7	973	371	371

contd...

Appendix - 2 : contd.

	1	2	3	4	5	6	7	8	9	10	11	12	13
<u>9 weeks old</u>													
	<u>CONTROL (C) GROUP</u>												
20	170	1.730	14.0	31.3	4.31	28.9	39.3	57.3	5.10	15.8	964	362	
21	211	1.770	14.9	27.4	3.00	26.3	-	55.5	4.67	17.8	895	365	
22	162	1.685	15.6	27.7	4.50	28.0	40.6	-	5.30	15.9	679	340	
23	160	1.725	16.6	25.4	5.40	26.3	38.0	56.0	4.46	18.0	-	383	
24	180	1.755	13.6	28.4	4.90	26.4	39.2	58.5	4.35	16.7	991	345	
25	213	1.785	14.1	28.9	4.50	29.7	39.3	55.0	5.52	17.4	846	356	
26	160	1.660	14.2	27.6	4.04	29.5	38.2	59.7	5.30	15.7	973	371	
	<u>LOW PROTEIN (UN-LP) GROUP</u>												
27	34	1.240	14.8	28.4	4.72	24.8	40.0	52.6	4.58	17.1	839	460	
28	31	1.220	14.8	28.4	4.27	27.4	41.3	56.0	5.03	16.0	956	440	
29	30	1.240	14.9	28.4	4.63	30.1	37.4	53.3	4.67	15.8	-	387	
30	34	1.140	13.5	27.9	-	29.7	38.1	58.1	5.17	14.6	745	411	
31	37	1.260	15.3	28.2	4.34	27.5	40.8	52.4	5.58	17.0	926	355	
32	30	1.150	15.0	28.3	4.24	25.4	40.4	58.6	5.10	15.0	916	480	
33	34	1.250	14.6	27.9	4.44	24.5	41.5	56.5	5.10	16.8	974	423	

contd...

Appendix - 2(a) : Individual data on changes in phospholipids with undernutrition.

rat no.	ethanolamine plasmalogens		diacyl GPE		CPG		SM		IPG		SPG	
	GM	WM	GM	WM	GM	WM	GM	WM	GM	WM	GM	WM
1	24(4)	3	4	5	6	7	8	9+(11)	10	11	12	13
<u>3 weeks old</u>												
<u>CONTROL (C) GROUP</u>												
1	-	7.65	-	7.04	11.5	13.5	0.84	3.65	0.98	-	2.19	3.88
2	8.73	7.21	-	7.08	13.5	13.0	0.95	3.74	1.21	-	1.91	4.27
3	10.1	8.19	-	7.55	-	15.7	1.04	-	1.39	-	1.48	4.61
4	-	8.66	-	7.10	15.6	-	1.34	3.76	1.27	-	2.38	3.94
5	-	-	-	5.98	11.7	13.7	0.96	3.10	-	-	1.44	4.27
6	8.48	10.5	-	7.65	14.2	14.4	1.11	3.27	1.35	-	2.31	-
7	-	10.2	-	-	-	-	1.37	3.45	1.71	-	2.28	5.63
8	10.1	8.94	-	7.81	11.4	16.6	0.93	4.52	0.73	-	1.63	5.74
9	10.0	8.62	-	7.60	14.0	14.5	1.20	4.32	0.96	-	1.37	5.05
<u>UNDERNOURISHED (UN) GROUP</u>												
10	7.38	6.22	-	7.71	15.8	14.3	1.29	4.20	1.16	-	2.27	6.33
11	8.43	4.77	-	6.50	13.9	11.1	1.28	2.67	0.90	-	2.35	4.63
12	-	5.59	-	8.22	11.8	12.0	1.45	4.02	-	-	2.09	4.78

contd... 6

Appendix - 2(a) : contd.

	1	2	3	4	5	6	7	8	9	10	11	12	13
13	9.23	5.71	-	7.74	13.9	14.6	13.9	1.48	3.10	1.15	-	1.60	6.08
14	-	6.68	-	-	13.8	-	13.8	-	3.44	0.97	-	2.59	3.90
15	7.92	-	-	7.82	11.5	11.5	-	1.56	-	-	-	-	3.65
16	9.38	5.85	-	7.28	11.7	11.7	11.0	0.84	3.59	1.90	-	2.41	-
17	7.01	4.86	-	8.48	13.4	13.4	11.1	1.12	3.32	-	-	1.55	5.62
18	-	5.45	-	6.11	14.1	14.1	14.1	-	3.31	-	-	1.42	-
19	7.49	-	-	-	13.3	13.6 13.6	13.3	1.15	-	0.84	-	1.76	5.39

9 weeks old

CONTROL (C) GROUP

Fat no.	EFG		CPG		GM		WM		SPG + IPG	
	GM	WM	GM	WM	GM	WM	GM	WM	GM	WM
1	2	3	4	5	6	7	8	9		
20	15.0	23.9	15.5	20.0	-	-	-	-	-	12.6
21	-	-	-	-	2.42	3.20	6.54	-	-	-
22	13.8	23.8	15.7	18.9	2.50	3.50	6.97	12.4	-	-
23	-	22.0	14.6	15.0	2.41	3.70	6.41	10.0	-	-
24	13.4	24.6	14.8	17.7	2.38	5.20	6.23	10.5	-	-
25	14.9	25.0	16.0	15.8	2.39	4.30	7.50	9.1	-	-
26	15.4	22.2	15.3	16.7	-	3.50	6.70	10.2	-	-

Appendix - 2(a) : contd.

1	2	3	4	5	6	7	8	9
27	16.0	23.5	15.8	17.9	2.17	4.00	6.72	11.6
28	14.8	-	16.4	18.7	-	4.20	6.29	11.3
29	14.8	23.2	16.0	17.0	2.58	4.90	6.83	11.0
30	14.5	24.0	15.3	17.0	2.40	4.90	6.80	12.3
31	-	23.3	16.1	17.7	2.37	3.80	6.79	9.83
32	-	22.7	16.0	17.7	2.77	3.80	6.45	-
33	15.0	20.8	15.6	17.0	2.86	4.60	6.80	11.4
<u>FOOD RESTRICTED (UN-HP-R) GROUP</u>								
34	14.9	25.4	17.1	18.0	2.43	4.50	6.86	10.1
35	13.9	22.4	15.6	17.4	2.60	4.10	6.53	10.4
36	15.0	23.8	16.6	17.6	2.50	3.60	7.00	9.91
37	16.3	22.4	16.2	17.8	2.44	5.20	7.88	10.7
<u>REHABILITATED (UN-HP) GROUP</u>								
38	14.9	22.7	15.8	18.3	2.15	3.92	6.45	12.2
39	14.8	23.3	15.4	18.6	2.25	4.30	7.88	10.4
40	14.4	24.7	16.1	18.3	2.44	-	6.88	10.4

contd...

Appendix - 2(a) : contd.

	1	2	3	4	5	6	7	8	9
41	13.7	23.8	15.5	18.1	-	-	7.07	10.5	
42	15.7	20.8	17.0	16.6	2.55	3.30	7.21	9.9	
43	14.1	23.0	-	17.3	2.76	4.70	6.90	12.2	
44	16.0	20.6	15.8	18.9	2.70	4.10	7.18	11.7	