



Appendices

APPENDICES



APPENDIX I

QUESTIONNAIRE TO ELICIT DETAILS REGARDING SOCIO-ECONOMIC BACKGROUND, LIFE STYLE, FOOD CONSUMPTION PATTERN AND HEALTH STATUS OF THE SUBJECTS

Socio-economic background

1. Name of the patient :
2. Age (in years) :
3. Educational status :
4. Sex :
5. Address :

Phone:

6. Occupation :
7. Type of occupation : ☐ Sedentary ☐ Moderate ☐ Heavy
8. Type of family : ☐ Joint ☐ Nuclear
9. Monthly income :
10. Total family income : ☐ Rs. <4500 ☐ 4501-7500 ☐ >7501

Life style pattern

11. Do you perform yoga? ☐ Yes ☐ No
If yes, how long? ☐ Daily ☐ Weekly once
☐ Weekly twice ☐ Any other
 12. Do you exercise? ☐ Yes ☐ No
If yes, Type of exercise Duration min/day Duration min/day

☐ Walking	☐ Jogging
☐ Gardening	☐ Cycling
☐ Household work	☐ Swimming
☐ Games	☐ Squatting
☐ Climbing stairs	☐ Any other
-

-
13. Do you have the habit of smoking? ☐Yes ☐No
If yes, No. of cigar/day.....
☐Regular ☐Occasionally ☐Ex-smoker
Duration of smoking : Years.....Months.....
14. Are you an alcoholic? ☐Yes ☐No
If yes, ☐Habitual ☐Occasionally ☐Ex-alcoholic
Duration of drinking : Years.....Months.....
15. Do you have the habit of chewing : ☐Yes ☐No
If yes, ☐Tobacco ☐Pan masala
☐Betel leaves ☐Ex-chewer
16. Type of toilet used : ☐Indian ☐Western ☐Both

Food consumption pattern

17. Are you a ☐Vegetarian ☐Ova-vegetarian ☐Non-vegetarian
18. How many meals do you consume per day?
☐Below 3 ☐3 ☐Above 3
19. Give your meal pattern :
Early morning :
Breakfast :

Mid-morning :
Lunch :

Tea :
Dinner :

Bed-time :
-

20. Food consumption pattern

D-Daily T-Weekly twice W-Weekly
F-Fortnightly M-Monthly

Food groups	D	T	W	F	M	Food groups	D	T	W	F	M
<u>Cereals</u> Rice Ragi Wheat Millets Any other						<u>Nuts and oil seeds</u> Gingelly seeds Coconut Groundnut Cashewnut Coconut oil Refined oil Any other					
<u>Pulses</u> Bengal gram dhal Black gram dhal Red gram dhal Green gram dhal Green gram Bengal gram Soya bean Any other						<u>Fruits</u> Dates Banana Apple Pomegranate Mosumbi Orange Sapota Guava Amla Grapes Papaya Any other					
<u>Green leafy vegetables</u> Amaranth Drumstick leaves Agathi Mint leaves Coriander leaves Curry leaves Any other						<u>Milk and milk products</u> Cows milk Curd Buttermilk Ghee Panneer Cheese Butter Any other					
<u>Other vegetables</u> Beans Brinjal Drumstick Ladies finger Bitter gourd Ridge gourd Snake gourd Bottle gourd Any other						<u>Sugar and jaggery</u> Sugar Jaggery Honey Palm jaggery Sugarcane Any other					
<u>Roots and tubers</u> Carrot Potato Onion Beetroot Any other						<u>Non-vegetarian</u> Egg Chicken Fish Meat Any other					

21. Cooking methods used in various food preparations:

- | | |
|--------------------------------------|-----------------------------------|
| ☐ Raw / salad | ☐ Roasting |
| ☐ Frying | ☐ Baking |
| ☐ Steaming | ☐ Boiling |
| ☐ Stewing | ☐ Pickles |
| ☐ Any other | |

22. Types of fats and oils used in cooking:

- | | |
|---|---------------------------------------|
| ☐ Ghee | ☐ Butter |
| ☐ Hydrogenated oil | ☐ Gingelly oil |
| ☐ Groundnut oil | ☐ Refined oil |
| ☐ Rice bran oil | ☐ Any other |

23. Do you consume

		No. of cups / day
Coffee	With sugar	
	Without sugar	
Tea	With sugar	
	Without sugar	
Both coffee and tea	With sugar	
	Without sugar	
Health drinks		
Any other		

Health status of the subjects

1. How long do you suffer from hyperlipidemia / diabetes mellitus?

2. History of the disease condition in the family? ☐Yes ☐No

- | | | |
|--------------------------|---------------------------------------|--|
| If yes, relationship.... | ☐ Father | ☐ Mother |
| | ☐ Grandparents | ☐ Other relatives |

3. Are you undergoing any treatment? ☐Yes ☐No

If yes, Type of treatment ☐Homeopathy ☐Ayurveda
☐Allopathy ☐Unani
☐Siddha ☐Naturopathy
☐Physiotherapy ☐Any other

4. What medicines do you take?

5. Duration of treatment? Years.....Months.....

6. What are the clinical symptoms experienced?

Clinical symptoms	Initial	Final
Polyuria		
Polydypsia		
Polyphagia		
Insomnia		
Oedema		
Headache		
Excessive sweating		
Nocturia		
Weight loss		
Weight gain		
Constipation		
Fatigue		
Giddiness		
Shivering		
Burning sensation during micturition		
Frequency of micturition		
Hesitancy during micturition		
Visual disturbance		
Inability to work		
Breathlessness		
Palpitation		
Diabetes mellitus		
Obesity		
Hypertension		
Hypercholesterolemia		
Ischemic heart disease		
Myocardial infarction		
Peptic ulcer		
Kidney disorders		
Liver disorders		
Cataract		
Any other		

7. Are you aware that foods can control the disease condition?

☐Yes

☐No

If yes,.....

8. What precautions do you take to control the condition?

☐In selection of foods

☐Number of meals / day

☐Foods included

☐Foods avoided

9. Are you aware that spices can control the condition?

☐Yes

☐No

If yes, Which spice do you consume?

10. Has the condition improved after consumption?

☐Yes

☐No

12. Are you still continuing?

☐Yes

☐No

If No, why?

Anthropometric measurements

	Before	After
Height (cms)		
Weight (Kg)		
BMI		
Waist circumference (cm)		
Hip circumference (cm)		
WHR		
Blood pressure		

Biochemical parameters (from laboratory results)

Biochemical parameters	Before	After
Blood haemoglobin (g/dl)		
<i>Lipid profile</i>		
Total cholesterol (mg/dl)		
Triglycerides (mg/dl)		
HDL cholesterol (mg/dl)		
LDL cholesterol (mg/dl)		
VLDL cholesterol (mg/dl)		
<i>Blood glucose</i>		
Fasting blood sugar (mg/dl)		
Post prandial blood sugar (mg/dl)		
Glycosylated haemoglobin (per cent)		

APPENDIX II

BODY MASS INDEX OF THE HYPERLIPIDEMIC ADULTS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	23.80	23.42	28.73	28.09	23.71	22.77	22.06	21.71	27.18	25.71
2	27.13	25.22	23.53	22.49	24.84	23.96	25.61	25.61	23.85	22.64
3	26.33	25.65	27.51	27.51	24.61	24.61	29.67	29.98	24.46	33.87
4	26.93	26.57	26.90	25.71	27.29	27.69	19.47	19.79	23.04	22.74
5	21.04	20.45	23.36	23.67	28.04	27.36	23.18	23.18	24.49	24.16
6	22.53	21.22	29.41	29.76	19.59	20.24	26.75	26.42	26.30	25.26
7	24.09	23.03	25.91	24.77	34.89	33.43	23.15	23.15	24.76	24.15
8	21.90	21.64	25.34	25.95	29.21	28.40	23.03	22.68	37.95	36.68
9	28.84	28.04	19.45	19.16	27.55	27.55	27.01	26.62	27.29	26.50
10	25.51	25.51	21.26	20.90	24.22	24.52	25.34	25.34	38.79	37.11
11	23.23	21.63	19.98	21.40	22.23	22.95	24.80	24.80	29.41	27.99
12	24.45	23.74	28.48	27.29	18.94	19.27	24.98	24.61	25.21	25.21
13	25.24	26.04	22.68	21.26	19.66	19.35	25.00	25.39	26.90	26.90
14	20.90	20.90	30.36	29.94	24.80	24.80	24.16	24.51	24.45	23.38
15	24.76	24.15	28.26	27.89	25.46	25.10	23.26	23.94	24.45	23.74

APPENDIX III

BODY MASS INDEX OF THE ADULTS WITH HYPERLIPIDEMIA AND DIABETES MELLITUS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	23.59	22.50	26.90	26.90	27.29	25.71	27.59	27.59	24.02	23.31
2	26.30	24.65	23.74	23.03	24.28	23.60	27.97	26.89	29.76	29.76
3	24.38	23.67	28.93	27.01	23.84	23.84	27.31	26.26	28.48	27.69
4	23.45	22.88	27.92	26.08	27.55	26.45	27.22	26.13	25.69	25.35
5	21.63	21.95	29.05	27.99	27.99	26.37	25.16	25.16	23.59	23.59
6	23.77	23.15	29.38	27.92	26.45	25.71	28.39	27.04	19.11	19.39
7	22.47	21.85	25.65	23.05	24.52	23.63	24.21	23.24	23.41	21.97
8	24.51	24.51	28.88	27.29	22.65	22.99	25.80	24.49	24.52	23.63
9	24.45	24.80	24.93	22.09	23.53	23.53	24.97	24.34	23.37	23.37
10	21.04	21.33	24.22	23.53	29.07	28.40	21.30	20.68	22.69	23.89
11	24.51	24.86	24.97	24.56	26.03	25.35	26.84	23.41	21.79	22.07
12	24.45	24.09	27.29	25.71	22.68	23.03	27.38	27.04	23.24	23.24
13	28.48	25.71	27.99	25.51	21.71	21.71	27.40	26.40	23.66	23.66
14	23.59	23.23	27.69	26.90	26.64	28.72	24.02	24.02	25.06	25.06
15	25.80	24.49	24.80	23.74	25.50	24.21	26.29	26.29	27.59	27.99

APPENDIX IV

WAIST HIP RATIO OF THE HYPERLIPIDEMIC ADULTS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	0.93	0.91	0.91	0.92	1.02	1.10	1.09	0.98	0.91	0.92
2	0.94	0.90	0.96	0.97	1.01	1.04	1.03	0.99	0.96	0.97
3	1.00	1.01	0.98	0.98	1.00	1.03	1.02	1.00	0.98	0.98
4	0.91	0.97	0.93	0.95	1.03	1.08	1.05	0.98	0.93	0.95
5	0.93	0.93	0.93	0.94	1.01	1.08	1.07	0.99	0.93	0.94
6	0.95	0.97	0.89	0.92	1.04	1.12	1.08	0.97	0.89	0.92
7	0.96	0.99	0.92	0.89	0.97	1.08	1.12	1.03	0.92	0.89
8	0.95	0.94	0.95	0.95	1.00	1.05	1.05	1.00	0.95	0.95
9	0.94	0.92	0.94	0.95	1.01	1.06	1.05	0.99	0.94	0.95
10	0.99	1.03	0.93	0.95	1.02	1.07	1.05	0.99	0.93	0.95
11	0.92	0.94	0.90	0.89	0.99	1.11	1.12	1.01	0.90	0.89
12	0.95	0.98	0.86	0.90	1.05	1.16	1.11	0.96	0.86	0.90
13	0.94	0.94	0.96	0.97	1.01	1.04	1.03	0.99	0.96	0.97
14	0.94	0.97	0.95	0.94	0.99	1.06	1.07	1.01	0.95	0.94
15	0.98	1.01	0.96	1.00	1.04	1.04	1.01	0.97	0.96	1.00

APPENDIX V

WAIST HIP RATIO OF THE ADULTS WITH HYPERLIPIDEMIA AND DIABETES MELLITUS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	1.05	1.05	0.97	0.99	0.99	0.99	0.94	0.94	0.95	0.95
2	0.89	0.84	1.03	1.03	0.92	0.92	0.99	0.99	1.00	1.00
3	0.99	0.96	0.99	1.01	0.97	0.95	0.98	0.99	0.97	0.97
4	1.01	1.04	1.03	1.05	0.93	0.88	0.97	0.96	0.98	0.98
5	0.95	0.92	0.99	0.96	1.02	0.91	0.99	0.99	0.98	0.97
6	0.94	0.93	0.97	0.92	1.00	1.01	0.99	0.98	0.98	0.98
7	0.96	0.96	0.99	0.96	0.96	0.96	1.00	0.98	0.98	0.98
8	1.01	0.97	0.97	0.95	0.93	0.93	1.01	1.00	0.96	0.96
9	0.94	0.92	0.97	0.99	0.86	0.86	0.99	0.99	0.98	0.98
10	1.01	1.00	0.95	0.96	0.84	0.86	0.94	0.93	0.89	0.89
11	0.96	0.93	1.05	1.01	0.98	0.98	0.95	0.95	0.96	0.96
12	0.97	0.93	0.91	0.92	0.95	0.94	0.92	0.92	0.95	0.95
13	0.93	0.91	1.01	0.97	0.90	0.90	0.90	0.88	0.92	0.92
14	0.96	0.88	1.03	1.00	0.98	1.01	0.96	0.95	0.95	0.96
15	0.98	0.97	1.11	1.09	0.95	0.95	0.93	0.93	0.96	0.97

APPENDIX VI

BLOOD HAEMOGLOBIN OF THE HYPERLIPIDEMIC ADULTS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	14.2	14.4	13.1	13.5	15.4	15.5	12.7	11.9	12.6	12.8
2	12.9	13.3	12.4	13.7	13.5	13.7	15.6	15.2	12	12.1
3	14.3	15.2	14.4	14.8	12.9	13.6	14.7	12.8	12.9	11.9
4	13.9	14.1	12.5	12.8	12.9	13.6	15.1	13.1	14.8	14.9
5	14.4	14.5	13.4	13	13.8	14.2	14.4	14.6	13.5	13.5
6	12.8	13.5	13.4	13.6	14.2	14.2	16.3	16.8	13.6	13.7
7	15.3	13.1	11.5	13	15.4	15.6	12	13.5	15.4	15.5
8	14.5	14.3	13.2	13.9	12.5	13.5	13.6	14	16	16
9	12.6	13.5	14.4	14.6	13.5	14.5	15.4	14.6	13.5	13.2
10	13.5	13.9	13.6	14.3	14.6	14.2	14.2	14	14.5	14.5
11	15.4	15.2	12.7	14.5	12.5	13.5	13.5	14.5	15.2	15.2
12	13.4	14	12.9	13.9	15.4	15	14.8	14.5	13.5	13.2
13	12.6	13.5	14.1	14	13.4	15	13.8	14.6	13.6	13.1
14	13.5	13.8	13.8	14.5	14.2	14.5	15	15	14.6	14.7
15	14.6	14.5	13.7	14.8	13.6	14.2	13.7	14.2	12.3	12.5

APPENDIX VII

BLOOD HAEMOGLOBIN OF THE ADULTS WITH HYPERLIPIDEMIA AND DIABETES MELLITUS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	12.5	12.8	12.8	13.5	12.5	13.1	14.9	14.8	13.5	13.5
2	13.8	14	15.3	14.2	13.4	13.5	15.3	15	13.5	13.4
3	15.3	15.2	15	14.8	13.5	13.9	14.9	14.6	13.4	13.4
4	12.8	13.5	14.9	14.9	13.6	14	12.9	13.5	12.9	13
5	14.5	14.5	13.8	14	13.8	14.2	15.6	15.5	12.7	12.7
6	13.6	13.8	12.8	13.5	15	15	14.5	14.5	13.5	13.5
7	15.1	15.2	14	14.5	13.7	14	13.5	13.5	13.6	13.6
8	15.3	15.2	14.5	14	12.9	13.5	12.9	13	14.5	14.2
9	14.9	15	13.9	14	14.5	14.5	15	14.9	13.6	13.5
10	13.8	14	14.6	14.6	13.5	13.5	12.9	13.5	14.2	14.2
11	13.9	14	12.8	13.5	13.7	13.5	12.8	12.7	15	15
12	12.8	13.5	13.5	13.5	13.4	13.4	13.4	13.4	13.8	13.8
13	13.8	14	12.5	13.9	12.9	13.4	13.5	13.4	12.9	12.9
14	15.1	15.1	13.5	13.8	12.8	13.6	13.9	14	12.7	12.9
15	14	14	14.5	14.5	13.5	13.5	13.1	13.5	12.5	12.5

APPENDIX VIII

TOTAL CHOLESTEROL OF THE HYPERLIPIDEMIC ADULTS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	234	201	234	197	229	201	250	207	297	301
2	217	187	276	221	204	198	247	212	268	267
3	201	171	285	216	211	204	233	205	257	268
4	268	158	260	238	257	232	220	232	246	259
5	246	186	225	197	284	206	230	234	238	264
6	254	195	223	184	264	207	241	245	225	225
7	297	176	224	197	259	216	229	254	223	226
8	268	196	269	203	243	212	245	233	243	251
9	257	176	267	201	246	209	256	249	246	248
10	262	185	268	195	238	198	267	245	238	243
11	249	168	249	184	246	213	248	231	246	249
12	268	199	246	189	238	186	265	268	238	241
13	295	213	235	185	246	199	249	240	254	264
14	238	176	254	201	264	235	234	221	248	253
15	249	186	264	199	258	222	254	234	275	288

APPENDIX IX

TOTAL CHOLESTEROL OF THE ADULTS WITH HYPERLIPIDEMIA AND DIABETES MELLITUS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	254	195	254	201	254	234	263	224	240	234
2	245	196	287	213	267	234	254	213	253	256
3	246	186	269	206	243	220	239	201	259	260
4	245	201	249	199	253	212	267	231	254	250
5	264	221	268	199	248	221	254	213	267	270
6	238	198	237	186	267	234	253	223	251	251
7	229	186	259	197	243	212	241	209	243	245
8	245	201	257	201	241	206	267	221	251	259
9	264	197	249	213	229	198	241	201	260	256
10	254	185	267	212	238	205	267	230	241	239
11	267	199	254	215	254	219	251	216	253	250
12	249	189	253	200	258	218	243	229	259	258
13	246	192	257	215	238	215	238	209	257	258
14	253	193	249	215	239	216	260	232	259	249
15	246	200	267	212	264	225	230	203	249	251

APPENDIX X

TRIGLYCERIDES OF THE HYPERLIPIDEMIC ADULTS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	165	125	187	156	202	145	140	142	245	249
2	127	102	164	143	194	186	175	168	197	201
3	234	169	158	126	163	128	206	202	192	186
4	193	142	187	134	197	165	160	146	167	175
5	198	143	183	153	154	114	216	245	267	255
6	215	156	225	161	186	123	186	197	173	171
7	198	166	220	159	197	134	197	205	164	175
8	197	142	219	168	176	146	178	185	186	196
9	192	156	167	125	162	143	195	200	196	185
10	186	148	187	134	186	138	203	215	197	195
11	194	167	197	137	186	134	168	197	168	175
12	159	138	167	125	197	129	155	168	154	165
13	196	146	186	134	197	127	148	156	234	235
14	197	146	173	125	201	142	178	197	193	186
15	204	159	164	134	198	126	169	206	198	187

APPENDIX XI

TRIGLYCERIDES OF THE ADULTS WITH HYPERLIPIDEMIA AND DIABETES MELLITUS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	195	159	192	153	180	162	167	153	192	186
2	168	142	203	161	157	157	159	149	201	201
3	167	143	169	135	169	149	167	159	159	156
4	185	140	159	138	159	143	182	169	183	183
5	192	151	167	139	167	149	173	169	173	192
6	172	142	159	138	160	150	188	169	167	177
7	169	139	157	130	167	146	159	149	169	170
8	161	138	168	139	153	150	167	149	159	157
9	202	153	176	142	160	149	156	150	167	169
10	159	128	186	143	190	177	182	172	183	185
11	167	143	157	126	182	167	191	179	181	185
12	175	120	186	145	173	159	176	161	173	170
13	172	129	173	138	185	162	167	149	176	176
14	170	127	181	143	167	149	169	157	182	180
15	169	126	167	138	171	153	159	149	191	193

APPENDIX XII

**HDL CHOLESTEROL OF THE HYPERLIPIDEMIC ADULTS BEFORE AND
AFTER SUPPLEMENTATION**

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	41	43.4	37.5	40.2	45.1	45.2	39.4	41.0	44.3	42.6
2	44.1	44.2	35.8	39.2	37.3	39.2	36.2	38.6	39.5	41.2
3	44.9	40.5	41.4	43.8	46.10	42.60	39.0	39.8	45.3	41.3
4	43.7	41.8	35.1	42.3	48.7	48.6	38.2	42.4	39.5	41.3
5	42.2	45.8	40.5	42.9	39.9	40.1	36.1	36.5	37.8	37.9
6	39.8	45.6	37.6	39.8	38.5	40.2	45.4	46.0	35.6	35.6
7	38.6	42.1	35.6	39.8	31.9	33.9	44.7	46.7	34.6	34.6
8	34.5	39.7	34.6	38.7	34.6	36.5	38.6	40.5	39.8	40.9
9	42.3	44.6	37.6	41.6	34.5	34.5	45.2	47.6	42.3	43.5
10	42.3	43.9	34.9	39	41.3	41.6	33.2	40.2	46.2	45.3
11	39.5	44.8	36.5	41	43.5	43.5	35.2	38.9	38.9	39.8
12	41.6	44.6	41.2	44	37.8	42.3	36.2	40.2	43.6	44.8
13	37.5	41.5	43	45.6	39.8	44.5	39.4	41.5	38.6	39.5
14	36.6	42.9	38.6	41.9	38.5	35.2	33.8	39.5	34.6	38.6
15	39.4	44.2	34.3	41.8	41.2	43.2	39.6	41.9	38.9	38.6

APPENDIX XIII

HDL CHOLESTEROL OF THE ADULTS WITH HYPERLIPIDEMIA AND DIABETES MELLITUS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	39.5	45.5	41.5	43.5	39.5	40.5	37.9	38.5	39.4	39.5
2	34.0	43.5	39.5	44.5	34.8	36.9	40.2	41.6	34.6	33.9
3	34.6	40.5	37.8	42.1	39.50	40.50	40.5	40.5	38.9	37.9
4	39.5	48.5	41.5	43.9	32.5	33.6	39.4	41.9	40.5	40.5
5	38.4	42.9	39.5	44.8	41.5	42.9	37.6	39	40	40.5
6	34.6	41.9	34.8	43.1	40.9	43.8	40.9	42.1	38.4	39.5
7	38.5	43.9	42.3	46.8	35	39.5	40	40	40	40
8	36.0	41.6	38.5	40.5	38.4	38.9	39.5	41	39.8	40
9	34.5	40.9	34.6	39.8	37.9	40.5	34.6	36.8	39.2	40.2
10	39.0	45.8	38.5	42.5	41	43.5	38.1	39	36.5	34.9
11	35.6	43.9	34.6	39.8	40	42.8	40.9	41.9	40	39.5
12	38.2	44.8	35.3	40.9	38.9	40.9	38.1	39.5	41.8	41.5
13	34.0	46.5	41.5	44.8	35.8	39.5	39.4	40.8	39	39.8
14	38.5	44.5	41	46.1	36.9	39.4	39.4	41.9	38.2	39.4
15	39.4	46.5	43.2	44.9	37.6	39.4	39.4	40.9	37.6	36.5

APPENDIX XIV
LDL CHOLESTEROL OF THE HYPERLIPIDEMIC ADULTS BEFORE AND
AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	160	132.6	159.1	125.6	143.5	126.8	182.6	137.6	203.7	208.6
2	147.5	122.4	207.4	153.2	127.9	121.6	175.8	139.8	189.1	185.6
3	109.3	96.7	212	147	132.3	135.8	152.8	124.8	173.3	189.5
4	185.7	87.8	187.5	168.9	168.9	150.4	149.8	160.4	173.1	182.7
5	164.2	111.6	147.9	123.5	213.3	143.1	150.7	148.5	146.8	175.1
6	171.2	118.2	140.4	112	188.3	142.2	158.4	159.6	154.8	155.2
7	218.8	100.7	144.4	125.4	187.7	155.3	144.9	166.3	155.6	156.4
8	194.1	127.9	190.6	130.7	173.2	146.3	170.8	155.5	166	170.9
9	176.3	100.2	196	134.4	179.1	145.9	171.8	161.4	164.5	167.5
10	182.5	111.5	195.7	129.2	159.5	128.8	193.2	161.8	152.4	158.7
11	170.7	89.8	173.1	115.6	165.3	142.7	179.2	152.7	173.5	174.2
12	194.6	126.8	171.4	120	160.8	117.9	197.8	194.2	163.6	163.2
13	218.3	142.3	154.8	112.6	166.8	129.1	180	167.3	168.6	177.5
14	162	103.9	180.8	134.1	185.3	171.4	164.6	142.1	174.8	177.2
15	168.8	110	196.9	130.4	177.2	153.6	180.6	150.9	196.5	212

APPENDIX XV

LDL CHOLESTEROL OF THE ADULTS WITH HYPERLIPIDEMIA AND DIABETES MELLITUS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	175.5	117.7	174.1	126.9	178.5	161.1	191.7	154.9	162.2	157.3
2	177.4	124.1	206.9	136.3	200.8	165.7	182.0	141.6	178.2	181.9
3	178.0	116.9	197.4	136.9	169.7	149.7	165.1	128.7	188.3	190.9
4	168.5	124.5	175.7	127.5	188.7	149.8	191.2	155.3	176.9	172.9
5	187.2	147.9	195.1	126.4	173.1	148.3	181.8	140.2	192.4	191.1
6	169.0	127.7	170.4	115.3	194.1	160.2	174.5	147.1	179.2	176.1
7	156.7	114.3	185.3	124.2	174.6	143.3	169.2	139.2	169.2	171.0
8	176.8	131.8	184.9	132.7	172.0	137.1	194.1	150.2	179.4	187.6
9	189.1	125.5	179.2	144.8	159.1	127.7	175.2	134.2	187.4	182.0
10	183.2	113.6	191.3	140.9	159.0	126.1	192.5	156.6	167.9	167.1
11	198.0	126.5	188.0	150.0	177.6	142.8	171.9	138.3	176.8	173.5
12	175.8	120.2	180.5	130.1	184.5	145.3	169.7	157.3	182.6	182.5
13	177.6	119.7	180.9	142.6	165.2	143.1	165.2	138.4	182.8	183.0
14	180.5	123.1	171.8	140.3	168.7	146.8	186.8	158.7	184.4	173.6
15	172.8	128.3	190.4	139.5	192.2	155.0	158.8	132.3	173.2	175.9

APPENDIX XVI
VLDL CHOLESTEROL OF THE HYPERLIPIDEMIC ADULTS BEFORE AND
AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	33	25	37.4	31.2	40.4	29	28.0	28.4	49	49.8
2	25.4	20.4	32.8	28.6	38.8	37.2	35.0	33.6	39.4	40.2
3	46.8	33.8	31.6	25.2	32.6	25.6	41.2	40.4	38.4	37.2
4	38.6	28.4	37.4	26.8	39.4	33	32.0	29.2	33.4	35
5	39.6	28.6	36.6	30.6	30.8	22.8	43.2	49.0	53.4	51
6	43	31.2	45	32.2	37.2	24.6	37.2	39.4	34.6	34.2
7	39.6	33.2	44	31.8	39.4	26.8	39.4	41.0	32.8	35
8	39.4	28.4	43.8	33.6	35.2	29.2	35.6	37.0	37.2	39.2
9	38.4	31.2	33.4	25	32.4	28.6	39.0	40.0	39.2	37
10	37.2	29.6	37.4	26.8	37.2	27.6	40.6	43.0	39.4	39
11	38.8	33.4	39.4	27.4	37.2	26.8	33.6	39.4	33.6	35
12	31.8	27.6	33.4	25	39.4	25.8	31.0	33.6	30.8	33
13	39.2	29.2	37.2	26.8	39.4	25.4	29.6	31.2	46.8	47
14	39.4	29.2	34.6	25	40.2	28.4	35.6	39.4	38.6	37.2
15	40.8	31.8	32.8	26.8	39.6	25.2	33.8	41.2	39.6	37.4

APPENDIX XVII

VLDL CHOLESTEROL OF THE ADULTS WITH HYPERLIPIDEMIA AND DIABETES MELLITUS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	39.0	31.8	38.4	30.6	36.0	32.4	33.4	30.6	38.4	37.2
2	33.6	28.4	40.6	32.2	31.4	31.4	31.8	29.8	40.2	40.2
3	33.4	28.6	33.8	27.0	33.8	29.8	33.4	31.8	31.8	31.2
4	37.0	28.0	31.8	27.6	31.8	28.6	36.4	33.8	36.6	36.6
5	38.4	30.2	33.4	27.8	33.4	29.8	34.6	33.8	34.6	38.4
6	34.4	28.4	31.8	27.6	32.0	30.0	37.6	33.8	33.4	35.4
7	33.8	27.8	31.4	26.0	33.4	29.2	31.8	29.8	33.8	34.0
8	32.2	27.6	33.6	27.8	30.6	30.0	33.4	29.8	31.8	31.4
9	40.4	30.6	35.2	28.4	32.0	29.8	31.2	30.0	33.4	33.8
10	31.8	25.6	37.2	28.6	38.0	35.4	36.4	34.4	36.6	37.0
11	33.4	28.6	31.4	25.2	36.4	33.4	38.2	35.8	36.2	37.0
12	35.0	24.0	37.2	29.0	34.6	31.8	35.2	32.2	34.6	34.0
13	34.4	25.8	34.6	27.6	37.0	32.4	33.4	29.8	35.2	35.2
14	34.0	25.4	36.2	28.6	33.4	29.8	33.8	31.4	36.4	36.0
15	33.8	25.2	33.4	27.6	34.2	30.6	31.8	29.8	38.2	38.6

APPENDIX XVIII

FASTING BLOOD SUGAR OF THE ADULTS WITH HYPERLIPIDEMIA AND DIABETES MELLITUS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	153	111	168	121	175	146	168	159	167	168
2	161	109	167	119	157	139	176	161	159	152
3	149	108	159	124	149	138	159	140	168	165
4	168	120	167	128	167	139	149	139	176	176
5	179	116	172	127	183	142	163	159	149	149
6	162	119	149	119	146	129	172	159	167	168
7	154	128	168	128	159	138	167	140	157	159
8	159	109	176	124	176	138	159	140	153	154
9	161	119	159	129	167	140	176	155	157	157
10	175	118	157	127	149	121	178	158	177	177
11	176	112	156	128	156	129	179	159	166	165
12	158	118	155	120	169	138	156	138	167	166
13	157	109	164	119	149	131	157	139	169	169
14	153	107	173	126	176	140	150	149	179	178
15	150	106	169	124	175	139	167	140	177	177

APPENDIX XIX

POST PRANDIAL SUGAR OF THE ADULTS WITH HYPERLIPIDEMIA AND DIABETES MELLITUS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	256	201	276	223	259	221	256	249	256	260
2	267	213	248	196	268	246	286	256	268	268
3	259	216	286	224	248	213	274	258	275	269
4	267	219	294	234	269	235	268	256	249	241
5	276	206	275	240	288	246	290	283	268	259
6	249	199	267	215	267	239	253	238	238	221
7	268	216	249	219	259	238	239	216	269	260
8	249	200	280	216	276	246	238	219	258	249
9	253	196	263	224	291	238	246	209	247	248
10	267	189	291	229	273	243	258	238	274	271
11	249	199	230	189	281	253	268	241	285	281
12	286	216	237	188	269	221	273	239	246	246
13	268	213	268	216	288	239	253	229	245	239
14	276	218	249	209	267	239	268	241	257	254
15	249	198	267	213	249	208	249	220	258	254

APPENDIX XX

GLYCOSYLATED HAEMOGLOBIN OF THE ADULTS WITH HYPERLIPIDEMIA AND DIABETES MELLITUS BEFORE AND AFTER SUPPLEMENTATION

S.No.	Cinnamon		Cloves		Garlic		Turmeric		Control	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	7.6	5.6	7.5	7.3	7.5	7.2	7.9	7.9	7.6	7.6
2	8.5	6.4	8.5	6.9	7.9	7.4	8.5	8.4	7.8	7.8
3	7.2	5.9	7.6	7.1	8.4	8.6	7.6	7.6	7.5	7.4
4	7.3	5.6	8.1	6.8	8.6	8.6	9	8.5	7.2	7.3
5	7.9	6.9	7.5	7.3	7.6	7.5	7.6	7.3	8.1	8.2
6	7.6	6	7.9	8.6	8.9	8.5	7.5	7.4	7.6	7.6
7	8.2	5.9	7.6	7.6	7.2	7.1	7.8	7.8	7.2	7.3
8	8.5	5.6	8.2	6.9	7.6	7.5	8.5	8.1	8.2	8.1
9	8.6	5.9	8.4	6.4	8.6	8.5	7.9	7.6	8.3	8.2
10	7.9	6.1	8.6	6.8	8.5	8.2	8.6	8.5	8.4	8.4
11	8.6	5.6	8.9	6.9	8.5	8.3	7.9	7.5	7.9	7.9
12	7.7	5	8.7	7	7.9	7.5	8.2	8	8.6	8.6
13	8.4	4.9	8.3	8.1	8.1	8	8.1	7.9	7.6	7.6
14	7.1	5	8.2	8.1	8.5	8.3	8.6	8.4	8.1	8.1
15	7.6	5.6	7.5	7	8.6	8.1	8.5	8.3	7.6	7.5