

## Appendix 1

### PERCEIVED STRESS SCALE

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

Name \_\_\_\_\_ Date \_\_\_\_\_

Age \_\_\_\_\_ Gender (Circle):    **M**    **F**    Other \_\_\_\_\_

**0 = Never   1 = Almost Never   2 = Sometimes   3 = Fairly Often   4 = Very Often**

1. In the last month, how often have you been upset because of something that happened unexpectedly?    0   1   2   3   4
2. In the last month, how often have you felt that you were unable to control the important things in your life?    0   1   2   3   4
3. In the last month, how often have you felt nervous and “stressed”?    0   1   2   3   4
4. In the last month, how often have you felt confident about your ability to handle your personal problems?    0   1   2   3   4
5. In the last month, how often have you felt that things were going your way?    0   1   2   3   4
6. In the last month, how often have you found that you could not cope with all the things that you had to do?    0   1   2   3   4
7. In the last month, how often have you been able to control irritations in your life?    0   1   2   3   4
8. In the last month, how often have you felt that you were on top of things?    0   1   2   3   4
9. In the last month, how often have you been angered because of things that were outside of your control?    0   1   2   3   4
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?    0   1   2   3   4

## DDS

**DIRECTIONS:** Living with diabetes can sometimes be tough. There may be many problems and hassles concerning diabetes and they can vary greatly in severity. Problems may range from minor hassles to major life difficulties. Listed below are 17 potential problem areas that people with diabetes may experience. Consider the degree to which each of the 17 items may have distressed or bothered you DURING THE PAST MONTH and circle the appropriate number.

Please indicate the degree to which each of the items may be pestering in n your life, NOT whether the item is merely true for you. If you feel that a particular item is not a bother or a problem for you, you would circle "1". If it is very bothersome to you, you might circle "6".

	Not a Problem	A Slight Problem	Moderate Problem	Somewhat Serious Problem	A Serious Problem	A Very Serious Problem
1. Feeling that my doctor doesn't know enough about diabetes and diabetes care.	1	2	3	4	5	6
2. Feeling that diabetes is taking up too much of my mental and physical energy every day.	1	2	3	4	5	6
3. Not feeling confident in my day-to-day ability to manage diabetes.	1	2	3	4	5	6
4. Feeling angry, scared and/or depressed when I think about living with diabetes.	1	2	3	4	5	6
5. Feeling that my doctor doesn't give me clear enough directions on how to manage my diabetes.	1	2	3	4	5	6
6. Feeling that I am not testing my blood sugars frequently enough.	1	2	3	4	5	6
7. Feeling that I will end up with serious long-term complications,	1	2	3	4	5	6

no matter what I do.

8. Feeling that I am often failing with my diabetes routine. 1 2 3 4 5 6

9. Feeling that friends or family are not supportive enough of self-care efforts (e.g. planning activities that conflict with my schedule, encouraging me to eat the "wrong" foods). 1 2 3 4 5 6

10. Feeling that diabetes controls my life. 1 2 3 4 5 6

11. Feeling that my doctor doesn't take my concerns seriously enough. 1 2 3 4 5 6

12. Feeling that I am not sticking closely enough to a good meal plan. 1 2 3 4 5 6

13. Feeling that friends or family don't appreciate how difficult living with diabetes can be. 1 2 3 4 5 6

14. Feeling overwhelmed by the demands of living with diabetes. 1 2 3 4 5 6

15. Feeling that I don't have a doctor who I can see regularly enough about my diabetes. 1 2 3 4 5 6

16. Not feeling motivated to keep up my diabetes self-management. 1 2 3 4 5 6

17. Feeling that friends or family don't give me the emotional support that I would like. 1 2 3 4 5 6

## DDS17 SCORING SHEET

### INSTRUCTIONS FOR SCORING:

The DDS17 yields a total diabetes distress score plus 4 subscale scores, each addressing a different kind of distress. To score, simply sum the patient's responses to the appropriate items and divide by the number of items in that scale.

Current research suggests that a mean item score 2.0 – 2.9 should be considered 'moderate distress,' and a mean item score > 3.0 should be considered 'high distress.' Current research also indicates that associations between DDS scores and behavioral management and biological variables (e.g., A1C) occur with DDS scores of > 2.0. Clinicians may consider moderate or high distress worthy of clinical attention, depending on the clinical context.

It is also suggested reviewing the patient's responses across all items, regardless of mean item scores. It may be helpful to inquire further or to begin a conversation about any single item scored > 3.

Total DDS Score:	a. Sum of 17 item scores.	_____
	b. Divide by:	_____17_____
	c. Mean item score:	_____
	Moderate distress or greater? (mean item score > 2) yes__ no__	
A. Emotional Burden:	a. Sum of 5 items (2, 4, 7, 10, 14)	_____
	b. Divide by:	_____5_____
	c. Mean item score:	_____
	Moderate distress or greater? (mean item score > 2) yes__ no__	
B. Physician Distress:	a. Sum of 4 items (1, 5, 11, 15)	_____
	b. Divide by:	_____4_____
	c. Mean item score:	_____
	Moderate distress or greater? (mean item score > 2) yes__ no__	
C. Regimen Distress:	a. Sum of 5 items (6, 8, 3, 12, 16)	_____
	b. Divide by:	_____5_____
	c. Mean item score:	_____
	Moderate distress or greater? (mean item score > 2) yes__ no__	
D. Interpersonal Distress:	a. Sum of 3 items (9, 13, 17)	_____
	b. Divide by:	_____3_____
	c. Mean item score:	_____
	Moderate distress or greater? (mean item score > 2) yes__ no__	

## Appendix 2

### NMB Yoga module











S.No	Name of the practice	Duration
1	<b>Starting Prayer:</b> Asatoma Sat Gamaya	2 mins
2	<b>Preparatory Sukshma Vyayamas and Shithililarana Practices</b> 1. Urdhvahastashvasan (1. Hand Stretch Breathing 3 rounds at 90°, 135°, 180° each) 2. Kati-Shakti Vikasaka (2. 3 rounds each) a. Forward and Backward Bending   b. Twisting 3. Sarvangapushti (3 rounds clockwise, 3 rounds anti-clockwise)	6 mins
3	<b>Surya Namaskara (SN)</b> a. 10 steps fast Suryanamaskara 6 rounds. b. 12 steps slow Suryanamaskara 1 round. <i>(To be avoided by those with knee pain, cardiac problems, renal problem, low back pain, retinopathy and the elderly who are weak and not flexible; instead they can do Chair SN)</i> Modified version Chair SN: 7 rounds	9 mins
4	<b>Asanas</b> (1 minute per asana) 1. Standing (1 minute per asana) Trikonasana, Pravritta Trikonasana, Prasarita Padhastasana 2. Supine Jatara Parivartanasana, Pavanamuktasana, Viparitakarani 3. Prone Bhujanagasana, Dhaurasana followed by Pavanmuktasana 4. Sitting Mandukasana, Vakrasana /Ardhamatsyendrasana, Paschimatanasana, Ardha Ushtrasana At the end, relaxation with abdominal breathing in supine position ( <i>vishranti</i> ), 10-15 rounds (2 minutes)	15 mins
5	<b>Kriya</b> a. Agnisara: 1 minute   b. Kapalabhati <i>(@ 60 breaths per minute for 1 minute followed by rest for 1 minute)</i>	3 mins
6	<b>Pranayama</b> a. Nadishuddhi ( <i>for 6 minutes, with antarkumbhaka and jalandhar bandha for 2 sec</i> ) b. Bhramari (3 minutes)	9 mins
7	<b>Meditation</b> ( <i>For stress management for deep relaxation and silencing the mind</i> ) <b>Cyclic Meditation</b> ( <i>Those who are willing to practice techniques of relaxation evolved by their own institutes may do so</i> )	15 mins
8	<b>Resolve</b> ( <i>I am completely healthy</i> )	1 min
9	<b>Closing Prayer:</b> Sarvebhavantu Sukhinaha...	1 min
	<b>Total</b>	<b>60 mins</b>

### Appendix 3






#### INTEGRATED MODULE OF YOGA FOR DIABETESMELLITUS

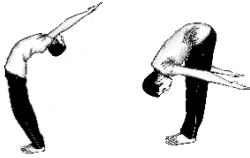
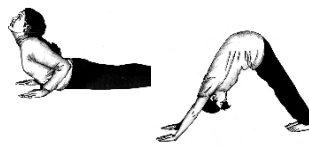














#### (AROGYADHAMA)S-VYASA YOGA UNIVERSITY



#### BREATHING PRACTICES (8-15mins.)

Hands in and out breathing-7(R)		Hands Stretch At 90*,135*,180*Breathing-7(R)	  
Ankle StretchBreathing-7(R)		Rabbit breathing-7(R)	
Sasnkasana Breathing-7(R)		Tiger Breathing-7(R)	
Setubandhaasana Breathing 7(R)		Bhujangasana Breathing 7(R)	

#### LOOSENING and STRETCHING (10-20 mins)

Jogging 4min.		Spinal Twisting 7(R)	
Side Bending 7( R )		Tadasan Twisting 7( R)	 

Forward and Backward Bending 7( R )		Alternate Bhujangasana and Parvatasana	
Pawanamuktasana Kriya-7 ( R ) each		Cycling 7 (R)	
Butterfly 7 (R)		Dorsal Stretch(7)	
TiryakPaschimottanasana 7(R) each		Chakkichālan a 7(R) each	
Bhunamanasana 7 (R) each		Half Butterfly7(R) each	
Bhujangasana Stretching 7(R)		Bhujangasana swimming 7(R)	
Suryanamaskara 7 ( Rounds )		Quick Relaxation Technique (QRT) 2-3 mins.	
St. Leg raise breathing st on edge of bed 7(R) each		Alternate Straight- Leg Raising 7(R)each	







Folded Leg Lumbar Stretch 7(R) each		Janu Sirsasana 7(R) each	
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N.B. Every Dynamic practice should be followed by respective chanting. If you have any complication should beware about that before practice. Feeling on practice with comfort any posture longer and longer is “YOGĀSANA.”





## YOGĀSANA

(10 to 15mins)



### STANDING

Ardhachaticakrasana		Parivruta Trikonasana	
Ardhachkrasana		Padahastasana	
Vriksasana		Uddhyana Bhandha	





### SITTING POSTURE

Ardhamasyendrasan		Paschimottanasana	
Ustrasana		Vakrasana both side	









Vajrasana		Mandukasana	
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### PRONE POSTURE



Bhujangasana		Dhanurasana	
Hamsasana		Naukasana	

### SUPINE POSTURE

Viparitakarani with wall support		Matsyasana	
Pavanamuktasana		Navasana	
Setubandhaasana		Savasana (DRT) -8-10 m.	

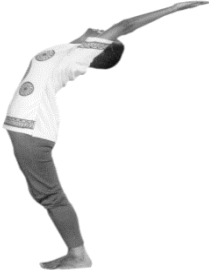

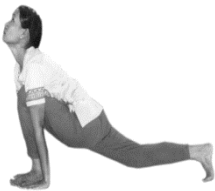
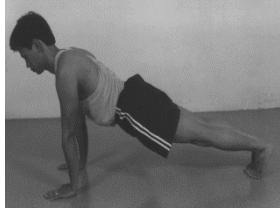




### KRIYAS


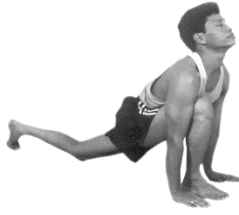

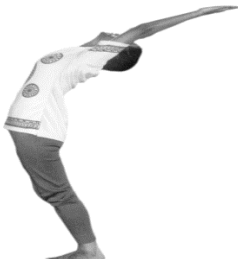
<i>Jala Neti.</i>		Sutra Neti.	
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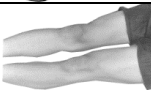


<i>Vamana Dhouthi.</i>		Laghu Sankha Praksalana.	
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## SURYANAMASKAR

### S-VYASA YOGA UNIVERSITY BENGALURU 4 to 8(R)

Ardhachkrasana Step-1		Padahastasana Step-2	
Eka Pada Aswasanchlana Step-3		Chaturadandasana Step-4	
Sasankasana Step-5		Astangasana Step-6	
Bhujangasana Step-7		Parvatasana Step-8	

Sasankasana Step-9		Aswasanchlana Step-10	
Padahastasana Step-11		Ardhachkrasana Step-12	

Toes Tightening		Ankle Bending	
Patella Movement and Massaging -50R		Knee Extension	
Knee Rotation		Kneecap Tightening- 50R	
Vertical stretching Knee		Savasana (QRT-3m)	

## Section F *Yoga* module

1	NAMASKAR		2	ARDHA-CHANDRA ASANA	
3	SASANKAASANA		4	ASWASANCHALANA ASANA	
5	PAVANAMUKTH ASANA		6	ARDHA-CHANDRA ASANA	
7	SASANKAASANA		8	ASWASANCHALANA ASANA	
9	PAVANAMUKTH ASANA		10	ARDHA-CHANDRA ASANA	
11	SASANKAASANA		12	ARDHACHANDRA ASANA	

Daily Practice Schedule

## YOGA THERAPY PARTICIPANTS DAILY TIME TABLE

Time	Schedule	Venue
5-30 a.m.	Prāṇāyāma & Om Meditation	Prayer Hall
6-30 a.m.	Special Techniques	Sectionwise
7-30 a.m.	Breakfast	Annapūrṇā
8-00 a.m.	Maitri Milan	Mangala Mandir**
9-00 a.m.	Parameters	Sectionwise
9-45 a.m.	Treatments & Counseling	Surabhi or Sections
12-15 p.m.	Lecture	Prayer Hall**
1-00 p.m.	Lunch	Annapūrṇā
2-00 p.m.	Video (As per the Therapist instructions)	Sectionwise
3-00 p.m.	Cyclic Meditation	Prayer Hall**
4-00 p.m.	Special Techniques	Respective Sections
5-00 p.m.	Tuning to Nature, Games	Walking path & Play ground
6-00 p.m.	Bhajan	Prayer Hall
6-30 p.m.	Trataka	Prayer Hall**
7-00 p.m.	M.S.R.T.	Prayer Hall**
7-30 p.m.	Dinner	Annapūrṇā
8-30 p.m.	Happy Assembly	Prayer Hall
9-30 p.m.	Nisha Swasthi	in their respective rooms

\*\* English: Prayer Hall

\*\* Hindi: Anugraha

\*\* Kannada: Vimarśa

\*\* Telugu: Prajwal

## Appendix 4

**Madhumeha Nivantrita Bharata (MNB) – Screening form**

State	District	Village/Town	Area Urban <input type="radio"/> Rural <input type="radio"/>	YIDM-Code	Serial No
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<b>Name:</b>		<b>Age</b>
<b>Gender</b> <input type="radio"/> Male <input type="radio"/> Female <input type="radio"/> Transgender	<b>Marital Status</b> <input type="radio"/> Married <input type="radio"/> Unmarried <input type="radio"/> Separated	<b>Address</b>
<b>Education</b> <input type="radio"/> No formal schooling <input type="radio"/> Primary school <input type="radio"/> High school & higher <input type="radio"/> Secondary school <input type="radio"/> Technical education <input type="radio"/> Undergraduate degree <input type="radio"/> PG degree or above	<b>Occupation</b> <input type="radio"/> Professional /Executive /Manager/Big business <input type="radio"/> Clerical /Medium business <input type="radio"/> Sale <input type="radio"/> Agriculture/Self employed <input type="radio"/> Household & domestic work <input type="radio"/> Services <input type="radio"/> Skilled manual	<b>Residential Phone no</b>  <b>Mobile no</b>  <b>Email ID</b>

**1. Diabetes Information**

	<b>Yes</b>	<b>No</b>	<b>If "Yes" duration</b>		
Have Diabetes	<input type="radio"/>	<input type="radio"/>	___ Yrs ___ Months		
On treatment	<input type="radio"/>	<input type="radio"/>	___ Yrs ___ Months	___ Tabs/day	___ Insulin units/day
Alternative medicine	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/> Ayurveda	<input type="checkbox"/> Homeopathy	Other _____

**2. Indian Diabetes Risk Score (IDRS)**

Age	Physical activity at home/work	Family History	Waist Circumference cm	
			Male	Female
<input type="radio"/> <35 Years =0	<input type="radio"/> Vigorous exercise or strenuous at work=0	<input type="radio"/> Two Non-diabetic parents=0	<input type="radio"/> <90cm=0	<input type="radio"/> <80cm=0
<input type="radio"/> 35-49 Years=20	<input type="radio"/> Moderate exercise at home/work=10	<input type="radio"/> One parent diabetic=10	<input type="radio"/> 90-99cm=20	<input type="radio"/> 80-89cm=20
<input type="radio"/> >= 50 Years=30	<input type="radio"/> Mild exercise at home/work=20 <input type="radio"/> No exercise=30	<input type="radio"/> Both parent diabetic=20	<input type="radio"/> >=100cm=30	<input type="radio"/> >=90cm=30
<b>Scores:</b>				
<b>Total Score:</b>		High Risk >= 50, moderate risk 30-50, low risk < 30		

By signing this form, I am agreeing that I am 18 years of age or older and am agreeing to participate in this project voluntarily.

Date:

Participant's Signature

### 3. Body vitals

Height(cm)				Weight(kgs)				Hip Circumference(cm)			
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Blood Pressure:

First reading		Second reading	
Systolic	Diastolic	Systolic	Diastolic

### 4. Diet Information

a) Oil do you use for cooking?	b) How frequently you are consuming these items generally?			
<input type="radio"/> Mustard	#	Name of item	How much per serving?	How many times in a week?
<input type="radio"/> Coconut	1	Burger/ Chips		
<input type="radio"/> Groundnut	2	Fried items eg: Samosa/Kachori/Bonda etc		
<input type="radio"/> Sunflower	3	Pizza		
<input type="radio"/> Soyabean	4	Cake/Pastry		
<input type="radio"/> Palm	5	Fizzy cold drinks		
<input type="radio"/> Gingelly	6	Chat/Masala Puri		
<input type="radio"/> Others	7	Meat/Chicken		
	8	Fish/Egg		

### 5. Socioeconomic Status

a) Education of Head	b) Occupation of head	c) Family income / month
<input type="radio"/> Profession or Honours	<input type="radio"/> Profession	<input type="radio"/> $\geq$ Rs. 36,017
<input type="radio"/> Graduate or Post Graduate	<input type="radio"/> Semi Profession	<input type="radio"/> 18,000 – 36,016
<input type="radio"/> Intermediate /post high school diploma	<input type="radio"/> Clerical, Shop-Owner, farmer	<input type="radio"/> 14,395 – 17,999
<input type="radio"/> High School Certificate	<input type="radio"/> Skilled Worker	<input type="radio"/> 8,989 – 13,494
<input type="radio"/> Middle School Certificate	<input type="radio"/> Semi Skilled Worker	<input type="radio"/> 5,387 – 8,988
<input type="radio"/> Primary School Certificate	<input type="radio"/> Unskilled Worker	<input type="radio"/> 1,803 – 5,386
<input type="radio"/> Illiterate	<input type="radio"/> Unemployed	<input type="radio"/> <1,802

### 6. Yoga

a) Do you practice Yoga?  Yes  No If "Yes" duration \_\_\_ Yrs \_\_\_ Months

#	Name of practice	Hours per week?		Rate your level of yoga practice?
		Hrs	Min	
1	Asanas			<input type="radio"/> Beginner
2	Pranayama			<input type="radio"/> Intermediate
3	Meditation			<input type="radio"/> Advances
4	Bhajans			Style of yoga do you practice?
5	Other			

b) Do you think practicing yoga have any side-effects?  Yes  No

If "Yes" What kinds of side-effects: \_\_\_\_\_

c) Do you think yoga can help in prevention and management of diabetes?  Yes  No

d) Do you think yoga can help in changing your life style?  Yes  No



## Raw Data

**Table – 35 Analysis on diabetes related genetic markers**

<b>Biological Process</b>	<b>Sig P-Value</b>	<b>Fisher Exact</b>
1. Chemokine-Mediated Signaling Pathway	1.90E-04	2.10E-05
2. Platelet Degranulation	2.20E-04	3.20E-05
3. Response to Virus	3.40E-04	5.10E-05
4. Neutrophil Chemotaxis	1.10E-03	1.30E-04
5. Immune Response	1.60E-03	5.30E-04
6. Inflammatory Response	5.60E-03	2.00E-03
7. Type I Interferon Signaling Pathway	7.00E-03	9.80E-04
8. Adaptive Immune Response	8.40E-03	2.00E-03
9. Negative Regulation of Viral Genome Replication	1.20E-02	1.30E-03
10. Platelet Activation	1.20E-02	2.50E-03
11. Cellular Protein Metabolic Process	1.30E-02	2.90E-03
12. Calcium Ion Trans-Membrane Transport	1.40E-02	3.00E-03
13. Innate Immune Response	1.40E-02	5.50E-03
14. Defense Response to Virus	1.40E-02	3.70E-03
15. Central Nervous System Development	1.40E-02	3.10E-03
16. Chemotaxis	1.50E-02	3.40E-03
17. Positive Regulation of Tumor Necrosis Factor Production	1.80E-02	2.30E-03
18. Positive Regulation of Cytosolic Calcium Ion Concentration	2.20E-02	5.40E-03
19. Cell Differentiation	2.20E-02	9.60E-03
20. Blood Coagulation	2.30E-02	6.50E-03
21. Glutathione Derivative Biosynthetic Process	2.80E-02	2.20E-03
22. Integrin-Mediated Signaling Pathway	3.00E-02	6.60E-03
23. Response to Cadmium Ion	3.50E-02	3.20E-03
24. Cellular Detoxification of Nitrogen Compound	3.50E-02	4.20E-04
25. Establishment of Blood-Nerve Barrier	3.50E-02	4.20E-04
26. Lamellipodium Organization	3.50E-02	4.20E-04
27. T Cell Differentiation Involved In Immune Response	3.50E-02	4.20E-04

28. Dentinogenetic	3.50E-02	4.20E-04
29. Neuron Migration	3.60E-02	8.40E-03
30. Positive Regulation of Proteasomal Ubiquitin-Dependent Protein Catabolic Process	4.00E-02	7.10E-03
31. B Cell Differentiation	4.40E-02	7.90E-03
32. Defense Response	4.50E-02	8.30E-03
33. Fc-Gamma Receptor Signaling Pathway	4.70E-02	8.30E-04
34. Nitrobenzene Metabolic Process	4.70E-02	8.30E-04
35. Positive Regulation Of Protein Transport	4.70E-02	8.30E-04
36. Cell Adhesion	4.70E-02	2.20E-02
37. Positive Regulation Of Endothelial Cell Proliferation	4.90E-02	9.20E-03
38. Sodium Ion Transmembrane Transport	5.60E-02	1.10E-02
39. Positive Regulation of ERK1 And ERK2 Cascade	5.70E-02	1.80E-02
40. Regulation of Immune System Process	5.80E-02	1.40E-03
41. Negative Regulation of Dendritic Cell Differentiation	5.80E-02	1.40E-03
42. Positive Regulation of Ion Transport	5.80E-02	1.40E-03
43. Glucose Transport	5.80E-02	7.00E-03
44. Calcium Ion Transport	6.10E-02	1.30E-02
45. T Cell Stimulation	6.50E-02	1.40E-02
46. Positive Regulation of Cell Migration	6.80E-02	2.30E-02
47. Anterior/Posterior Pattern Specification	6.90E-02	1.50E-02
48. Acute-Phase Response	7.80E-02	1.10E-02
49. Xenobiotic Catabolic Process	8.00E-02	2.80E-03
50. Negative Regulation of Norepinephrine Secretion	8.00E-02	2.80E-03
51. Cellular Response To Glucagon Stimulus	8.10E-02	1.20E-02
52. DE phosphorylation	8.20E-02	1.90E-02
53. Platelet Aggregation	8.50E-02	1.30E-02
54. Smooth Muscle Cell Migration	9.10E-02	3.80E-03
55. Negative Regulation of Transposition	9.10E-02	3.80E-03
56. Negative Regulation of Camp-Dependent Protein Kinase Activity	9.10E-02	3.80E-03
57. Positive Regulation of Gene Expression	9.20E-02	3.80E-02
58. Organ Morphogenesis	9.60E-02	2.40E-02

59. Antigen Processing and Presentation Of Exogenous Peptide Antigen Via MHC Class II	9.60E-02	2.40E-02
60. Positive Regulation of Interleukin-6 Production	9.90E-02	1.60E-02

Molecular Functions that were differentially expressed in Yoga as compared to non- Yoga group are tabulated below (table 3.10)

**Table- 36: Molecular markers**

<b>Molecular Function</b>	<b>P-Value</b>	<b>Fisher Exact</b>
61. E-box binding	6.80E-03	6.00E-04
62. C-C chemokine receptor activity	8.00E-03	3.00E-04
63. transmembrane signaling receptor activity	1.20E-02	3.40E-03
64. receptor activity	1.30E-02	3.70E-03
65. chemokine receptor activity	1.60E-02	9.00E-04
66. scaffold protein binding	1.70E-02	2.20E-03
67. carbohydrate binding	2.50E-02	7.60E-03
68. bHLH transcription factor binding	2.80E-02	2.20E-03
69. cAMP binding	3.00E-02	2.50E-03
70. extracellular matrix binding	3.50E-02	3.20E-03
71. deoxycytidine deaminase activity	4.50E-02	7.80E-04
72. calcium channel activity	4.60E-02	8.60E-03
73. identical protein binding	4.90E-02	2.60E-02
74. protein C-terminus binding	5.80E-02	1.90E-02
75. kinase activity	5.90E-02	2.10E-02
76. glutathione transferase activity	6.00E-02	7.50E-03
77. calcium ion binding	6.80E-02	3.70E-02
78. protein binding	7.20E-02	6.40E-02
79. protein homodimerization activity	7.60E-02	4.20E-02
80. protein dimerization activity	9.30E-02	3.00E-02
81. cAMP-dependent protein kinase inhibitor activity	9.80E-02	4.50E-03

Cellular Components that were differentially expressed in Yoga as compared to non- Yoga group are tabulated below (table 3.11)

**Table 37 Diabetes related cellular components**

<b>Cellular Component</b>	<b>P-Value</b>	<b>Fisher Exact</b>
82. plasma membrane	6.10E-09	3.40E-09
83. integral component of plasma membrane	2.70E-05	1.20E-05
84. external side of plasma membrane	3.50E-05	6.70E-06
85. platelet alpha granule lumen	4.00E-04	3.80E-05
86. extracellular space	3.00E-03	1.60E-03
87. neuronal cell body	3.40E-03	1.10E-03
88. integral component of membrane	3.90E-03	2.90E-03
89. platelet alpha granule membrane	9.30E-03	3.90E-04
90. cell surface	9.60E-03	4.00E-03
91. extracellular exosome	1.00E-02	7.10E-03
92. B cell receptor complex	3.40E-02	3.90E-04
93. lysosomal membrane	3.80E-02	1.40E-02
94. endocytic vesicle membrane	4.00E-02	7.00E-03
95. voltage-gated calcium channel complex	4.30E-02	4.40E-03
96. extracellular region	7.10E-02	4.70E-02
97. dendrite	9.00E-02	4.00E-02
98. nucleosome	9.30E-02	2.30E-02
99. blood micro particle	9.60E-02	3.10E-02