



20. Frequency of food consumption by the subject

Food Items	Frequency of consumption						
	Daily	Weekly		Monthly		Rarely	Not at all
		Once	Twice	Once	Twice		
<b>Cereals and grains</b>							
Rice Wheat Semolina Ragi Oats Barley Sorghum Corn Others specify 1. 2.							
<b>Pulses and legumes</b>							
Bengal gram (whole) Green gram Black gram dhal Green gram dhal Red gram dhal Roasted Bengal gram dhal Cow pea Moth bean Kidney bean Soya bean Peas Others specify 1. 2.							
<b>Green Leafy Vegetables</b>							
Agathi Aarai Keera Amaranth Drumstick Cabbage Mint leaves Coriander leaves Curry leaves Others specify 1. 2.							
<b>Roots and tubers</b>							
Potato Carrot Big onions Small onions Radish Beetroot Yam Garlic Others specify 1. 2.							

<b>Nuts and oil seeds</b>							
Groundnuts Badam Coconut Cashewnuts Others specify 1. 2.							
<b>Fruits</b>							
Apple Banana Pomegranate Orange Custard apple Mango Sapota Pine apple Guava Others specify 1. 2.							
<b>Meat, Fish and Poultry</b>							
Mutton Chicken Fish Crab Beef Egg Others specify 1. 2.							
<b>Sugar and sweets</b>							
Sugarcane Jaggery Honey Others specify 1. 2.							
<b>Oils and fats</b>							
Groundnut oil Coconut oil Palm oil Sesame oil Sunflower oil Corn oil Soyabean oil Mustard oil Butter Ghee Dalda Others specify 1. 2.							

<b>Processed foods</b>							
Pickles Vadam Vathal Pappad Jam Sauce Masala powder Others specify 1. 2.							
<b>Baked products</b>							
Cakes Biscuits Bread Bun Cookies Puff pastries Pizza Burger Others specify 1. 2.							
<b>Fast foods</b>							
Bhale puri Pani puri Mushroom varieties Masala puri Noodles Others specify 1. 2.							
<b>Fried foods</b>							
Chips Bajji Bonda Vadai Fried chicken Others specify 1. 2. 3.							
<b>Pre-cooked foods</b>							
Chappati Paratha Sevai Others specify 1. 2. 3.							
<b>Beverages</b>							
Carbonated beverages Others specify 1. 2.							

21. Do you use extra salt at dining table?

22. What type of salt do you use for cooking?

- a. Iodized salt    b. Non Iodized salt    c. Low sodium salt    d. Potassium salt

23. Name the vegetables do you consume commonly and how often?

S. No	Name of the Vegetable	Quantity	Frequency			
			Daily	Alternate days	Weekly twice	Rarely
1.						
2.						
3.						

24. What are the fruits do you consume commonly and how often?

S.No	Name of the Fruit	Quantity	How often			
			Daily	Alternate days	Weekly twice	Rarely
1						
2						
3						
4						
5						

25. What type of food do you like to eat?

- a. Boiled    b. Steamed    c. Fried    d. Baked    e. Others

26. How often do you eat food in eating outlets?

- a. Daily    b. Weekly once    c. Weekly twice    d. Once in fortnight    e. Once in month  
f. Not at all

27. What type of food do you prefer from outside catering sector?

- a. Fast foods    b. Baked foods    c. Fried items    d. others specify-----

28. What type of snacks do you prefer and how often do you consume that snack?

S.No	Type of the snack	Quantity	How often			
			Daily	Alternate days	Weekly twice	Rarely
1						
2						
3						
4						
5						

29. Do you use medicinal supplements?

- a. Antioxidant    b. Vitamin    c. Minerals    d. Any other specify-----

30. Daily menu pattern (24 hours recall)

Meal	Menu	Quantity / Number
Early morning		
Break fast		
Mid morning		
Lunch		
Evening		
Dinner		
Bed time		

**C. Life Style Pattern**

31. Do you have any of the following habit?

- a. Tobacco/Pan chewing   b. Alcohol   c. Smoking   d. Any other   e. None

If yes,  
Alcohol

- a. No. of times ( )   b. Quantity /day ( )   c. Duration of habit : years ( ) / Months ( )

Tobacco/pan masala

- a. No. of times ( )   b. Quantity /day ( )   c. Duration of habit : years ( ) / Months ( )

Smoking

- a. No. of times ( )   b. Quantity /day ( )   c. Duration of habit : years ( ) / Months ( )

32. Do you exercise regularly? Yes / No   If yes,

S.No   Type of exercise   Frequency per week   Duration

I   **Moderate intensity**

- 1   Walking  
2   Gardening  
3   House work  
4   Any other specify

II   **Vigorous intensity**

- 1   Jogging  
2   Cycling  
3   Running  
4   Swimming  
5   Tennis/Shuttle  
6   Volley ball  
7   Any other specify

33. Do you practice any type of relaxation techniques?

- a. Yes ( )   b. No ( )   If yes, mention the technique and its frequency?

S. No	Techniques	Frequency			
		Daily	Weekly once	Monthly once	Others
1.	Yoga and meditation				
2.	Laughing therapy				
3.	Dance therapy				
4.	Music therapy				
5.	Any others Specify -----				

34. What type of life do you have?

- a. Calm and relaxed  
b. Under familial stress  
c. Under occupational stress  
d. Under both familial stress and occupational stress  
e. Others

35. Do you burst out of anger often? Yes /No.

If yes

What will you do at that time?

- a. Shouting   b. Throwing things   c. Keep silence   d. Any other specify ----

36. How often are you able to time between work and family?

- a. Always   b. Often   c. sometimes   d. Never

Do you have experience any emotional imbalance recently? Yes/No   If yes, Reason

**D. Family and personal history**

38. Do any of your family members have history of hyper tension?

- a. Father ( )
- b. Mother ( )
- c. Brother ( )
- d. Sister ( )
- e. Grand father ( )
- f. Grand mother ( )
- g. Any other ( )
- i. No one ( )

39. Do your family members suffer from any of the following health problems?

- a. Diabetes Mellitus b. Cardiovascular problem c. Obesity d. Hypothyroidism
- e. Kidney disease f. Others specify

40. Do you check your blood pressure often?

- Yes ( ) b. No ( ) If yes, What is your Systolic and diastolic BP?

If No, Do you have any of the following symptoms?

- 1. Chronic headaches ( )
- 2. Dizziness ( )
- 3. Blurry or double vision ( )
- 4. Drowsiness ( )
- 5. Nausea ( )
- 6. Shortness of breath ( )
- 7. Heart palpitations ( )
- 8. Fatigue - general tiredness ( )
- 9. A flushed face ( )
- 10. Nosebleeds ( )
- 11. A strong need to urinate often (especially during the night) ( )
- 12. Tinnitus (a ringing or buzzing in the ears) ( )

41. Do you have any of the following health problem?

- a. Diabetes Mellitus b. Cardiovascular problem c. Obesity d. Blood pressure
- e. Hypothyroidism e. Kidney disease f. Others specify

42. What are the symptoms promoted you towards medical attention?

43. How long are you suffering from high blood pressure?

44. Type of treatment undergoing at present

- a. Ayurvedic b. Siddha c. Homeopathy d. Allopathic e. Unani f. Naturopathy
- g. Others specify

46. Is your treatment controls the hypertension?

Yes/No Specify the treatment----- Duration-----

47. Do you aware of the complication of the hypertension when it is not controlled?

- a. Yes / No If yes, What are they?

48. Do you follow any diet pattern to control hyper tension? Yes / No If yes, list the foods

Foods avoided:

Foods included:

49. Do you aware that potassium rich foods can control blood pressure?

Yes/No If yes, Name the food items rich in potassium? How often do you consume it?

50. Specify the frequency of following food items consumed by you

Food items	Quantity	Frequency		
		Daily	Weekly	Monthly
Banana				
Apple				
Pomegranate				
Papaya				
Guava				
Fresh figs				
Orange				
Lima beans				
Yam				
Spinach				
Kidney beans				
Beet root				
Green peas				
Tomato				
Carrot				
Beans				

**51. Physical examination**

**I Anthropometric measurements**

- a. Weight (Kg) :
- b. Height (Cm) :
- c. Body Mass Index :
- d. Waist circumference :
- e. Hip circumference :
- f. Waist/Hip :
- g. Waist/Ht :

**II Blood pressure (mm of mg):**

**Sys:**

**Dia:**

**52. Biochemical profile:**

- a. Fasting blood sugar level (mg/dl) -
- b. Fasting Total cholesterol -
- Triglyceride levels -
- LDL cholesterol -
- HDL cholesterol -
- VLDL cholesterol -
- c. Serum Potassium level -
- d. Serum Sodium level -

## Appendix - 2

# Global Physical Activity - Questionnaire (GPAQ)

### WHO STEP wise approach to NCD risk factor surveillance

Physical Activity			
<p>Next I am going to ask you about the time you spend doing different types of physical activity in a typical week. Please answer these questions even if you do not consider yourself to be a physically active person.</p> <p>Think first about the time you spend doing work. Think of work as the things that you have to do such as paid or unpaid work, study/training, household chores, harvesting food/crops, fishing or hunting for food, seeking employment. [Insert other examples if needed]. In answering the following questions 'vigorous-intensity activities' are activities that require hard physical effort and cause large increases in breathing or heart rate, 'moderate-intensity activities' are activities that</p>			
Questions	Response	Code	
<b>Activity at work</b>			
1	<p>Does your work involve vigorous-intensity activity that causes large increases in breathing or heart rate like [carrying or lifting heavy loads, digging or construction work] for at least 10 minutes continuously? [INSERT EXAMPLES] (USE SHOWCARD)</p>	<p>Yes 1</p> <p>No 2 If No, go to P 4</p>	P1
2	<p>In a typical week, on how many days do you do vigorous- intensity activities as part of your work?</p>	<p>Number of days <input style="width: 30px;" type="text"/></p>	P2
3	<p>How much time do you spend doing vigorous-intensity activities at work on a typical day?</p>	<p>Hours : minutes <input style="width: 30px;" type="text"/> : <input style="width: 30px;" type="text"/> hrs mins</p>	P3 (a-b)
4	<p>Does your work involve moderate-intensity activity that causes small increases in breathing or heart rate such as brisk walking [or carrying light loads] for at least 10 minutes continuously?</p>	<p>Yes 1</p> <p>No 2 If No, go to P 7</p>	P4
5	<p>In a typical week, on how many days do you do moderate- intensity activities as part of your work?</p>	<p>Number of days <input style="width: 30px;" type="text"/></p>	P5
6	<p>How much time do you spend doing moderate-intensity activities at work on a typical day?</p>	<p>Hours : minutes <input style="width: 30px;" type="text"/> : <input style="width: 30px;" type="text"/> hrs mins</p>	P6 (a-b)
<b>Travel to and from places</b>			
<p>The next questions exclude the physical activities at work that you have already mentioned.</p> <p>Now I would like to ask you about the usual way you travel to and from places. For example to work, for shopping, to market, to place of worship. [insert other examples if needed]</p>			
7	<p>Do you walk or use a bicycle (pedal cycle) for at least 10 minutes continuously to get to and from places?</p>	<p>Yes 1</p> <p>No 2 If No, go to P 10</p>	P7
8	<p>In a typical week, on how many days do you walk or bicycle for at least 10 minutes continuously to get to and from</p>	<p>Number of days <input style="width: 30px;" type="text"/></p>	P8
9	<p>How much time do you spend walking or bicycling for travel on a typical day?</p>	<p>Hours : minutes <input style="width: 30px;" type="text"/> : <input style="width: 30px;" type="text"/> hrs mins</p>	P9 (a-b)
<b>Recreational activities</b>			
<p>The next questions exclude the work and transport activities that you have already mentioned.</p> <p>Now I would like to ask you about sports, fitness and recreational activities (leisure), [insert relevant terms].</p>			
10	<p>Do you do any vigorous-intensity sports, fitness or recreational (leisure) activities that cause large increases in breathing or heart rate like [running or football,] for at least 10 minutes continuously? [INSERT EXAMPLES] (USE SHOWCARD)</p>	<p>Yes 1</p> <p>No 2 If No, go to P 13</p>	P10
11	<p>In a typical week, on how many days do you do vigorous- intensity sports, fitness or recreational</p>	<p>Number of days <input style="width: 30px;" type="text"/></p>	P11
12	<p>How much time do you spend doing vigorous-intensity sports, fitness or recreational activities on a typical day?</p>	<p>Hours : minutes <input style="width: 30px;" type="text"/> : <input style="width: 30px;" type="text"/> hrs mins</p>	P12 (a-b)

Physical Activity (recreational activities) contd.			
Questions	Response	Code	
13	Do you do any moderate-intensity sports, fitness or recreational (leisure) activities that causes a small increase in breathing or heart rate such as brisk walking, (cycling, swimming, volleyball) for at least 10 minutes continuously? [INSERT EXAMPLES] (USE SHOWCARD)	Yes 1 No 2 If No, go to P16	P13
14	In a typical week, on how many days do you do moderate-intensity sports, fitness or recreational (leisure) activities?	Number of days <input type="text"/>	P14
15	How much time do you spend doing moderate-intensity sports, fitness or recreational (leisure) activities on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	P15 (a-b)
<b>Sedentary behaviour</b>			
The following question is about sitting or reclining at work, at home, getting to and from places, or with friends including time spent [sitting at a desk, sitting with friends, travelling in car, bus, train, reading, playing cards or watching television], but do not include time spent sleeping. [INSERT EXAMPLES] (USE SHOWCARD)			
16	How much time do you usually spend sitting or reclining on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs min s	P16 (a-b)

## Appendix - 3

### Institutional Human Ethical Clearance Certificate

#### INSTITUTIONAL HUMAN ETHICS COMMITTEE



*Avinashilingam*

Institute for Home Science and Higher Education for Women

*University*

(Estd. u/s 3 of UGC Act 1956)

#### **Chairman**

Dr. S. Ramalingam  
Principal, PSG Institute  
of Medical Sciences  
& Research, Coimbatore

#### **Member Secretary**

Dr. P. R. Padma  
Professor, Department of  
Biochemistry, Biotechnology and  
Bioinformatics

#### **Members**

Dr. P. Santhanakrishnan  
Mr. C. G. Kumar (Legal Expert)  
Dr. S. Premakumari  
Dr. A. Saraswathy  
Mrs. S. Radha Devi  
Dr. N.S. Rohini  
Mrs. Judith Justin  
Dr. S. Kowsalya  
Dr. Subhashini K. Sripathi

24<sup>th</sup> December 2014

To  
Ms. Swarnalatha A  
Department of Food Science and Nutrition  
Avinashilingam Institute for Home Science and  
Higher Education for Women  
Coimbatore – 641 043

Dear Madam,

Ref : Our letter dt. 21<sup>st</sup> February 2014 in response to your proposal  
No. AUW.IHEC.2013:34 entitled "Effect of functional foods  
and life style modifications on hypertensive women"

With reference to the above letter, in continuation with the  
documents submitted by you in support of your proposal and the  
revisions made in the work plan, as per the suggestions made by the  
IHEC, the Institutional Human Ethics Committee of our University  
hereby grants approval to your research proposal  
No. AUW.IHEC.2013:34 entitled "Effect of functional foods and life  
style modifications on hypertensive women". The Approval number  
for the same is AUW/IHEC-13-14/FHP-07.

We wish you all the best in your research endeavours.

Regards,

Dr. P. R. Padma  
Member Secretary

