

APPENDIX I (i)**THRESHOLD TEST****Sensitivity - Threshold Test**

Name: _____

Date: _____

You are provided with a series of containers having solutions with increasing concentration of one of the taste qualities (sweet, salty). Please start with Sr. No. 1 and continue with the rest. The samples are not allowed to be retested. Please describe the taste or give intensity scores using the scoring pattern shown separately here below.

Intensity Score

Set No.	Description of taste and feeling factors
A	-
B	-
C	-
D	-
E	-
F	-

Scale:

While awarding the intensity scores, take the following basis into account;

0 - None or taste of pure water

? - Different from water but taste quality not identifiable

x - Threshold very weak (Taste identifiable)

1 - Weak taste

2 - Medium

3 - Strong

4 - Very strong

5 - Extremely strong

Signature of Judge

APPENDIX I (ii)

THRESHOLD TEST

(ii) Procedure for preparation of solution required for threshold test

Solution No.	Molarity	Salty (Stock solution 5.845 g of sodium chloride/L) ml of stock solution to be diluted to 1 L	Sweet (Stock solution 34.23 g of sucrose/L) ml of stock solution to be diluted to 1 L	Molarity	Sour (Stock solution 21.015 g of citric acid/L) ml of stock solution to be diluted to 1 L	Bitter (Stock solution 19.41 g of caffeine/L) ml of stock solution to be diluted to 1 L
1	0.0002	2	2	0.0005	0.5	0.5
2	0.0004	4	4	0.0001	1	1
3-	0.0008/	8	8	0.0002	2	2
4	0.0016	16	16	0.0004	4	4
5/	0.0032'	32	32	0.0006	6	6
6	0.0064	64	64	0.0008	8	8
7-	0.0128	128	128	0.0010	10	10
8	0.0256.	256	256	0.0012	12	12
9'	0.0512	2.994 g/L	17.526 g/L	0.0014	14	14
10	0.1024	5.988 g/L	35.052 g/L	0.0016	16	16
11'	0.2048	11.976 g/L	70.103 g/L	0.0032	32	32
12	0.4096	23.953 g/L	140.206 g/L	0.0064	64	64

Source :Jellinek, G. (1964). J. Nutri. Diet. 1:219

APPENDIX II**SCORE CARD FOR PRODUCT EVALUATION****PANELIST NO.** :**NAME** :**PRODUCT** :**DATE** :**TIME** :

- Given are the samples of trial to develop products at household level which may have health benefits
- Please grade the samples according to the instructions. Kindly follow the instructions mentioned on the questionnaire.

Signature

ORGANOLEPTIC EVALUATION

ATTRIBUTES	SAMPLE CODE				
	A	B	C	D	E
Colorand Appearance					
Texture					
Taste & Mouth feel					
After taste					
Overall acceptability					
Total score					

Note: Please grade the following samples by giving scores.

Minimum score – 0

Maximum score - 10

DIFFERENCE TEST

- You are given a reference sample (A) and other test samples to be compared with (A) individually
 - Rate degree of difference in each sample according to the following scale
- Scale:

Degree of difference Direction of difference

0	No difference	1	Equal
1	Very slight difference	2	Superior
2	Slight difference	3	Inferior
3	Moderate difference		
4	Large difference		

ATTRIBUTES	SAMPLE CODE				
	B	C	D	E	F
Colour& Appearance					
Taste & mouth feel					
After taste					
Consistency					
Overall acceptability					

APPENDIX III

QUESTIONNAIRE

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no. :

I. GENERAL INFORMATION

- 1) Name: _____
- 2) Date of birth: _____
- 3) Age (y): _____
- 4) Sex: a) Male b) Female
- 5) Occupation: a) Service b) Business c) Housewife d) Retired e) Others
- 6) Address: _____
- 7) Contact no: _____
- 8) Religion: a) Hindu b) Muslim c) Christian d) Jain e) Others -

- 9) Education: a) Elementary b) High school c) Diploma d) Graduate e) Higher studies
- 10) Family type: a) Nuclear b) Extended nuclear c) Joint
- 11) No. of family members: Adults _____ Children _____
- 12) Total family income: _____ 13) Per capita income

II. ANTHROPOMETRY

- 1) Height (cm): _____ 2) Weight (kg): _____ 3) BMI (kg/m²): _____
- 4) Waist (cm): _____ 5) Hip (cm): _____
- 6) WHR: _____ 7) Per cent body fat: _____

III. FAMILY HISTORY

Members of family	Obesity	Diabetes	Hypertension	CHD
Single parent				
Both parents				
Brother				
Sister				
Other relation				

IV. MEDICAL HISTORY OF THE SUBJECT

- 1) a. obesity b. diabetes c. HT d. CVD e. Cancer
- f. Severe GI problems: _____ g. Others: _____

- 2) Obesity: Age of diagnosis: _____ (y) Duration of disease: _____ (y)
- 3) Blood pressure measure: _____ Date: _____
- 4) Blood glucose measure: _____ Date: _____
- 5) HTN: Age of diagnosis: _____ (y) Duration of disease: _____ (y)
- 6) CHD: Age of diagnosis: _____ (y) Duration of disease: _____ (y)

V. MEDICATION

Disease	Drugs	Dosage
Diabetes		
Hypertension		
CHD		
Obesity		
Others		

VI. PERSONAL HABITS

Addiction	Yes	No
Alcohol		
Cigarette/bidi		
Tobacco powder		
Tobacco paste		
Snuff		
Tea (>2 cups/day)		
Coffee (>2 cups/day)		
Any other		

VII. BIOCHEMICAL DATA

Parameters	2010-11
GLP-1	
LPS	

VIII. Stool analysis

Parameters	Value
Fecal lactobacilli count	
Fecal Bifidobacteria count	
Fecal Enteric pathogen count	

IX. DIETARY PRACTICES

- 1) Are you: a) Vegetarian b) non-vegetarian c) ovo vegetarian
 2) Number of coffee/ tea per day: _____
 3) Quality of sugar added per cup of tea / coffee: _____
 4) do you artificial sweeteners: _____
 5) If yes, name of the artificial sweetener: _____ Amount per day: _____
 6) How often do you eat outside home?
 a) Once b) Twice c) Thrice
 7) Hunger and Satiety scale

Hunger scale	Meal	Satiety scale
	Breakfast	
	Lunch	
	Evening snack	
	Dinner	
	Total score	

SCORE CARD FOR APPETITE - SATIETY SCALE

Scale	Score
Famished, starving	1
Headache, weak, cranky, low energy	2
Want to eat now, stomach growls and feels empty	3
Hungry - but could wait to eat, starting to feel empty but not there yet	4
Not hungry, not full	5
Feeling satisfied, stomach feels full and comfortable	6
Feeling full, definitely don't need more food	7
Uncomfortably full	8
Stuffed, very uncomfortable	9
Bursting, painfully full	10

Source : Developed by Lisa Burgoon MS, RD, LD, Sports Nutritionist, Sportwell Center, McKinley Health Center, University of Illinois at Urbana - Champaign, 1998 .

IMPACT ANALYSIS QUESTIONNAIRE**I. GENERAL**

Name: _____ Code no. _____

No. of days supplementation: _____

II. ANTHROPOMETRY

Parameters	Baseline value	Post value
Weight (kg)		
Height (cm)		
BMI		
Waist circumference		

(cm)		
Hip circumference (cm)		
WHR		
Body fat %		
BP		

III. BIOCHEMICAL PARAMETERS

Parameters	Baseline value	Post value
GLP-1		
LPS		

IV. MICROBIAL COUNTS

Parameters	Baseline value	Post value
Lactic acid counts		
Bifidobacteria counts		
Enteric pathogen counts		

V. 1) Compliance: a) full
Less (<60 days) b) Partial (>60 days) c)

2) Remarks of the compliance:

3) Consumption pattern: a) substituted b) additional
a) Breakfast b) mid-morning c) lunch d) mid afternoon e) dinner

Remarks of the subjects for the acceptability of prebiotic added food consumption:

APPENDIX IV

DIETARY PATTERN (24 hr. dietary recall method)

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Meal and Time	Foods taken	Ingredients	Amount

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APPENDIX V

FOOD FREQUENCY

Food items	Daily	2-3 times a week	Once a week	Fort- nightly	Monthly	Rarely	Never
Cereals							
Bajra							
Barley							
Jowar							
Rice							
Rice, flakes							
Rice, puffed							
Wheat flour, whole							
Wheat flour, refined							
Wheat. Semolina							
Wheat, bread (brown)							
Wheat, bread (white)							
Maize, dry							
Oats							
Pulses							
Bengal gram, whole							
Bengal gram, dhal							
Cow pea							
Green gram							
Lentil							
Moth beans							
Green peas							
Rajmah							
Red gram, dhal							
Soybean							
Valpapdi							
Green leafy vegetables							
Amaranth							
Cabbage							
Celery leaves							
Colocasia leaves							

Food items	Daily	2-3 times a week	Once a week	Fort-nightly	Monthly	Rarely	Never
Coriander leaves							
Fenugreek leaves							
Mint							
Radish leaves							
Spinach							
Roots and tubers							
Beet root							
Carrot							
Colocasia							
Onion							
Potato							
Sweet potato							
Radish							
Turnip							
Yam							
Tomato							
Bitter gourd							
Bottle gourd							
Brinjal							
Cauliflower							
Cucumber							
Drumstick							
Giant chillies							
Ladies finger							
Leeks							
Parwar							
Fruits							
Amla							
Apple							
Banana							
Dates, dried							
Dates, fresh							
Figs							
Grapes							
Guava							
Lemon							
Lime, sweet musambi							
Mango							
Water melon							
Orange							
Papaya							

Food items	Daily	2-3 times a week	Once a week	Fort-nightly	Monthly	Rarely	Never
Pineapple							
Pomegranate							
Raisins							
Sapota							
Seetphal							
Nuts & oil seeds							
Almond							
Arecanut							
Cashew nut							
Coconut							
Gardencress seeds							
Gingelly seeds							
Groundnut							
Walnut							
Fats & oils							
Butter							
Ghee							
Hydrogenated oil							
Groundnut oil							
Gingelly oil							
Mustard oil							
Cottonseed oil							
Mustard oil							
Coconut oil							
Milk & milk products							
Milk, buffalo							
Milk, cow							
Curd							
Mastidahi							
Buttermilk							
Cheese							
Paneer							
Khoa							
Skimmed milk powder							
Shrikhand							
Yogurt							
Sugars							
Sugarcane							
Honey							
Jaggery							
Sago							
Snacks							

Food items	Daily	2-3 times a week	Once a week	Fort- nightly	Monthly	Rarely	Never
Puri							
Pakoda							
Samosa							
Bhajiya							
Cutlet							
Burger							
Hotdog							
Dabeli							
Sandwich							
Pickles							
Papad							
Soups							
Puff							
Pizzas							
Biscuits							
Soft drinks							
Khakhra							
Chutney							
Fruits juices							
Macroni							
Cheela							
Sweets							
Jam							
Jelly							
Ice creams							
Pudding							
Cake							
Peda							
Lapsi							
Kansar							
Mattha							
Basundi							
Kheer							
Fruit salad							
Gulabjamun							
Halwa							
Methiladoo							

APPENDIX VI

PHYSICAL ACTIVITY PATTERN(GPAQ VERSION 2 :WHO 2007)

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. <i>[Insert other examples if needed]</i>. 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 require moderate physical effort and cause small increases in breathing or heart rate.</p>			
Questions	Response		Code
Activity at work			
1	Does your work involve vigorous-intensity activity that causes large increases in breathing or heart rate like <i>[carrying or lifting heavy loads, digging or construction work]</i> for at least 10 minutes continuously? <i>[INSERT EXAMPLES] (USE SHOWCARD)</i>	Yes 1 No 2 <i>If No, go to P 4</i>	P1
2	In a typical week, on how many days do you do vigorous-intensity activities as part of your work?	Number of days <input type="text"/>	P2
3	How much time do you spend doing vigorous-intensity activities at work on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	P3 (a-b)
4	Does your work involve moderate-intensity activity that causes small increases in breathing or heart rate such as brisk walking <i>[or carrying light loads]</i> for at least 10 minutes continuously? <i>[INSERT EXAMPLES] (USE SHOWCARD)</i>	Yes 1 No 2 <i>If No, go to P 7</i>	P4
5	In a typical week, on how many days do you do moderate-intensity activities as part of your work?	Number of days <input type="text"/>	P5
6	How much time do you spend doing moderate-intensity activities at work on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	P6 (a-b)

Travel to and from places			
<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. <i>[insert other examples if needed]</i></p>			
7	Do you walk or use a bicycle (<i>pedal cycle</i>) for at least 10 minutes continuously to get to and from places?	Yes 1 No 2 <i>If No, go to P 10</i>	P7
8	In a typical week, on how many days do you walk or bicycle for at least 10 minutes continuously to get to and from places?	Number of days <input type="text"/>	P8
9	How much time do you spend walking or bicycling for travel on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	P9 (a-b)
Recreational activities			
<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 (<i>leisure</i>), <i>[insert relevant terms]</i>.</p>			
10	Do you do any vigorous-intensity sports, fitness or recreational (<i>leisure</i>) activities that cause large increases in breathing or heart rate like <i>[running or football]</i> for at least 10 minutes continuously? <i>[INSERT EXAMPLES] (USE SHOWCARD)</i>	Yes 1 No 2 <i>If No, go to P 13</i>	P10
11	In a typical week, on how many days do you do vigorous-intensity sports, fitness or recreational (<i>leisure</i>) activities?	Number of days <input type="text"/>	P11
12	How much time do you spend doing vigorous-intensity sports, fitness or recreational activities on a typical day?	Hours : minutes <input type="text"/> : <input type="text"/> hrs mins	P12 (a-b)

Physical Activity (recreational activities) contd.			
Questions		Response	Code
13	Do you do any moderate-intensity sports, fitness or recreational (<i>leisure</i>) 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)	<p>Yes 1</p> <p>No 2 If No, go to P16</p>	P13
14	In a typical week, on how many days do you do moderate-intensity sports, fitness or recreational (<i>leisure</i>) activities?	Number of days <input type="text"/>	P14
15	How much time do you spend doing moderate-intensity sports, fitness or recreational (<i>leisure</i>) activities on a typical day?	<p>Hours : minutes <input type="text"/> : <input type="text"/></p> <p>hrs mins</p>	P15 (a-b)
Sedentary behaviour			
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?	<p>Hours : minutes <input type="text"/> : <input type="text"/></p> <p>hrs min s</p>	P16 (a-b)

APPENDIX VII

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hu>“ Sensory evaluation of fructooligosaccharide (FOS) added foods and its impact on gut health and biochemical parameter in obese industrial employers of rural Vadodara” nam4l iDpa3RmeN3 Aof fuŠs AeND NyuiŠxn,fekL3l Aof femlll AeND koMyuin3l sayNsIs, Aem.Aes.yuinvisR3l Aof broDa. vDoDra 1ara ha4 2ravnara pl.Aec.Dl s>xo2n ma> Svy>sevk trlke wag leva ma3e rajlquxl 4l marl s>mit Aapu 0u>.

sdr Awyasma nlcenl babtono smavex 4xe Aenl mne smj Aapvama> Aavl 0E.

1. >Maare marl jlvnxEll An eAahar s>b>2l babtonl ivgt Aaptl p/Äotrl wrvanl rhexe.
2. Maara xrlrna }>ca[,vjn, kmr no 2eravo Ane BID p/exrna Aa>K s>b>2l mapnl no>2 levama> Aavxe.
3. Maara m5na nmUnama> sU(m jlva`UAaonl]piS2it s>b>2l tpas p` krvama> Aavxe.
4. Je k[lebores3rl tpas krvama> Aavxe tena> pir`amonl–te AsamaNy hxe to p` - mne ja` krvama> Aavxe te hU ja`u> 0u>.]pra>t Awyasna wag rUp marl pase je k>{ maihtl me5vvama> Aavxe te s65l s>pU`R rlte guPt raqvama> Aavxete p` mne j`avvama >AaVyu> 0e.

tarlq:

S45:

APPENDIX VIII

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Compliance Card

Name: _____

Subject Code: _____

Period: _____

1	2	3
4	5	6
7		

- Please make a circle on each day on which you consumed the given sachets.
- Please return empty and unconsumed sachets.